



# **HANA**

## **56-1 ONE REPORT 2023**

**Microelectronics Public Company Limited**  
บริษัท ฮานา ไมโครอิเล็กทรอนิกส์ จำกัด (มหาชน)



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# The Group Financial Highlights

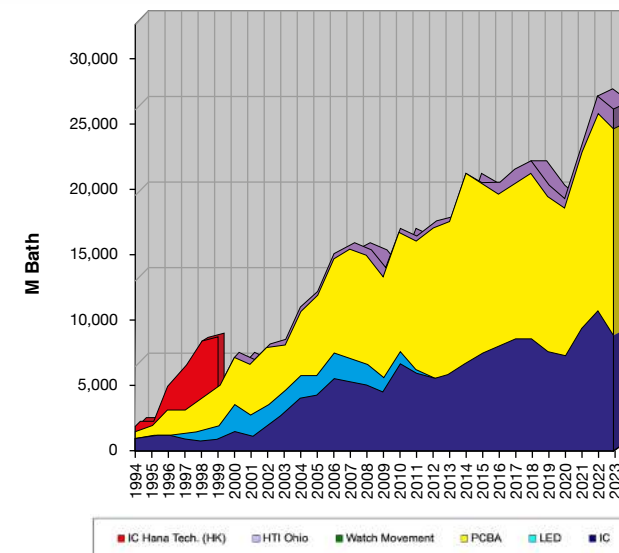
(Unit : Million Baht)

	2023	2022	2021	2023/2022 % change
Total Revenue	26,632	27,656	24,137	-4%
Sales Revenue	26,152	27,167	23,780	-4%
Gross Profit	2,980	3,661	3,287	-19%
Earnings From Operations	1,787	2,422	2,219	-26%
Net Profit before Non Recurring Items	1,747	2,398	2,274	-27%
Net Profit (Loss) for the year	1,761	2,102	1,545	-16%
Recurring EBITDA*	3,490	4,052	3,520	-14%
Total Assets	35,306	29,703	27,853	19%
Total Liabilities	6,159	5,841	4,795	5%
Shareholders Equity	29,147	23,862	23,058	22%
Net (Cash**) Debt / Equity	(0.27)	(0.15)	(0.26)	
Net Profit (after tax) % Sales	7%	8%	6%	-13%
Recurring EBITDA Margin	13%	15%	15%	-11%
Return on Equity	6%	9%	7%	-31%
Dividend per share (from the profits of)	1.00	1.00	2.00	0%
Payout ratio	50%	38%	104%	31%
EPS before Non Recurring Items	2.13	2.98	2.83	-29%
EPS after Non Recurring Items	2.14	2.61	1.92	-18%
Book Value per share	32.92	29.65	28.65	11%
Net Number of shares outstanding (year end)	885.37	804.88	804.88	10%

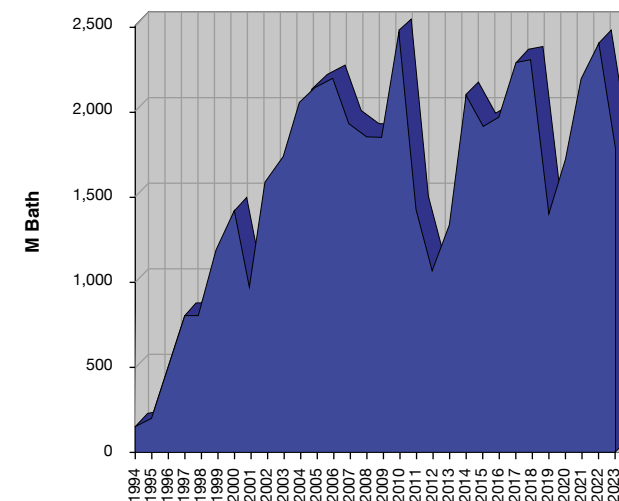
\* Operating revenues before deducting of finance cost, income tax expenses, depreciation and amortization

\*\* Cash: Cash and cash equivalents and short-term investments

Sales Revenue



Operating Profit





# Chairman's Statement

## Dear Shareholder,

We started 2023 with concerns for US consumption as the U.S. Federal Reserve Board continued its interest rate hikes but hoped that it would be counterbalanced by an about turn in China's COVID-19 lock down policy. In the end it turned out the opposite as US consumer demand brushed aside higher rates and the Chinese economy slowed in the face of a significant property slump. It was against this backdrop that our key industrial exposures were influenced.

Both our Outsourced Semiconductor Assembly and Test (OSAT) operations in Ayutthaya and Jiaxing came under pressure especially in the second half of the year as we saw a reversal in demand and without the strong US dollar tailwind both of those divisions underperformed. Despite the overall weakness in demand, our focus on cost control and productivity in the face of rising utility costs and minimum wage increases ensured we remained financially positive.

In contrast our Electronics Manufacturing Services (EMS)/Printed Circuit Board Assembly (PCBA) activities continued to see robust demand led by our automotive, industrial and consumer customers despite rising interest rates. This strong demand continued throughout the year underpinned by a record performance from our Hana Lamphun operation. In addition, we saw rising demand from our medical and Radio Frequency Identification (RFID) customers. The latter performing well due to a return to demand for our RFID tyre tags, access control and our new 'inlay' activity produced at both our US & China operations.

In order to cope with this rising demand in RFID inlays, we completed at the year-end a new expansion in Ohio for Hana Technologies Inc, tripling our manufacturing floor space which will position us for growth in 2024 and beyond.

I am pleased to report that we became operationally profitable in Cambodia after a re-engineering of our operations and bringing Hana Cambodia under the management of Hana Lamphun team. The excellent support and teamwork between the two plants has had a positive impact and the outlook for Hana

Cambodia now looks bright as we introduce more U.S. Trade Agreements Act (TAA) certified activities and more western customers look for China Plus One solutions.

Our key financial performances were as follows:

- Revenues down 4 % from THB 27,167 million in 2022 to THB 26,152 million in 2023
- Operating income down 26% from THB 2,422 million in 2022 to THB 1,787 million in 2023
- EBITDA income down 14% from THB 4,052 million in 2022 to THB 3,490 million in 2023
- NPAT down 16 % from THB 2,102 million in 2022 to THB 1,761 million in 2023
- Cash and financial investments up from THB 3.6 billion at 2022 to THB 7.8 billion at 2023.

During 2023, we invested THB 2,689 million in capital expenditure. A large percentage of which was focused on bringing our latest division, Power Master Semiconductor (PMS) in Korea to mass production. In October we undertook a private placement offering 80.48 million Hana Microelectronics PCL shares raising THB 4.58 billion gross in order to support our capital expenditure for Power Master and our main core activities. This has placed the group on a much stronger financial footing to invest in our future growth.





## Chairman's Statement

During the year PMS was unable to meet its planned growth trajectory due to the weak Chinese economy upon which we depended for our silicon (Si) product lines. In 2023 Si remained more than 80% of our output. However, demand for Silicon Carbide (SiC) remained strong and with our new equipment coming in during Q4/23 and onwards in the first three quarters of 2024, we believe the expansion of SiC will drive PMS back on track towards meeting our growth targets in 2024 and beyond.

At our Jiaxing OSAT operation, we have been developing a new range of power packages to support the demand of PMS and other customers with a focus on the fast emerging Electric Vehicle (EV) industry. These discrete and module assemblies some of which have been patented, have been well received by a number of interested companies. We believe this will help to reposition our OSAT activities in China in the years to come.

Our proprietary expansion into the fast emerging RFID inlay market has been timely as retailers switch over from passive to active tags for inventory management. This is a high compound annual growth rate (CAGR) industry still at an early phase and is expected to drive growth at Hana Technologies, Inc., USA.

Looking ahead, whilst the FED has signaled possible rate cuts in 2024 in the face of receding inflation data, we are concerned this suggests the higher for longer rates are now really starting to have their intended impact on the US consumers and we may start to see the effects in 2024. It is also possible that China will finally implement more economic support to boost their flagging economy and we could see a reversal of growth trajectories. With geopolitics moving quickly and unexpectedly, the outlook remains

hard to project. However, we believe the semiconductor cycle is beginning to turn and we begin to see some 'green shoots' emerging as the mobile phone industry starts to come off its lows with new model launches helping to lift demand. Whilst it may not be a V-shaped recovery, we are optimistic that the worst is now more behind than in front of us.

I would like to thank my fellow board members, customers, suppliers, all stakeholders and of course our loyal and hardworking employees of the Hana Group for their tireless efforts during a challenging 2023. We face the future with a united and strong "One Hana" team.



**John Thompson**  
Chairman of the Board of Directors



# Operation Review

## Hana Microelectronics Public Co., Ltd. (Lamphun)



The year 2023 was a remarkable year for Hana Lamphun. With the world still grappling with significant geopolitical issues from the Ukrainian conflict and the recent Israel-Hamas war, impacting inflation and higher energy costs, we didn't expect to achieve record results. However, with solid customer demand, and our strong focus on productivity and automation, we hit record revenues and operating profits.

Whilst the supply chain constraints from the post COVID-19 global economy were mostly behind us, there were still certain challenges which had to be overcome. However, with effective planning we were able to meet all of our customer's delivery targets whilst lowering our logistic costs.

The automotive sector remained strong throughout the year and we also saw a doubling of medical product demand. Industrial and consumer sectors continued to trend higher in 2023 whilst the computer sector was weak due to personal computer sector demand continuing to decline post COVID-19. The

telecommunication sector, impacted by weak global demand, also remained weak.

In 2023, we kept an intense focus on further developing our automation production processes resulting in a major contribution to productivity and quality. We are proud to have been awarded "Top Performance Award 2023" from the Technology Promotion Association (Thailand-Japan), a once-every ten-year award event. Over the past 20 years, we have received an outstanding number of awards; 101 awards from Technology Promotion Association (Thailand-Japan) alone. In 2023, we also received another 20 awards for Corporate Social Responsibility "CSR", technology, health & safety, as well as society and labor relations recognitions.

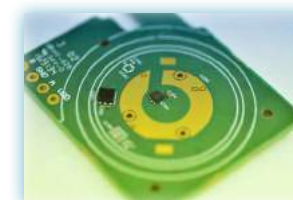
Looking ahead, we have expanded our production floor space further as we map out our future expansion plans for the next five years and beyond. Also with a sufficient land bank, we are ready to expand further when the next up-cycle comes. Nonetheless, the 2024

outlook remains uncertain with pivotal elections in the US, continuing global conflicts and an uncertain Chinese economy. However, we remain cautiously optimistic that with our continued focus on operational excellence, we will continue to contribute further to the Hana group's performance.

Hana Lamphun's management spirit and teamwork are our underlying strength and with our "One Hana" philosophy, we are confident of overcoming any future headwinds. I would like to thank all the Hana Lamphun staff for their dedication and hard work to enable us to achieve record financial performances in 2023 and we look forward to 2024 with confidence to meet the new challenges.

**Mr. Wichai Sukprasertkul**

Vice President and General Manager





# Operation Review

## Hana Semiconductor (Ayutthaya) Co., Ltd.



The year 2023 was a very challenging one for the semiconductor industry. After unprecedented demand seen during the Covid-19 years of 2020 and 2021, which led to material shortages, long lead times and potentially unrealistic demand on the supply chain, the market underwent an inventory correction from the later part of 2022 which continued through 2023. Further, global conflicts further aggravated this situation resulting in a significant correction.

During the dynamic and challenging time, the Hana-AYT team has been resilient and continued to focus on improving the core fundamentals of technology, quality and productivity. Our semiconductor operation in Thailand is uniquely positioned to benefit from the global supply chain realignment direction and we have been focused on addressing and leveraging these opportunities.

Hana-AYT's continuous investments in automation not only improves productivity but also supports our zero product defect targets. This focus has helped Hana-AYT win accolades from customers and also opens up additional opportunities to win business requiring stringent quality.

Our focus on innovation to enhance our differentiation from competitors continued in 2023 with a number of US patents granted for specific packaging solutions. This focus in using "innovation as a differentiation" will continue in 2024. Our New Product Development (NPD) Team and New Package Introduction (NPI) Team have been very engaged and actively working with our key customers on leading-edge packaging solutions which will further accelerate in 2024 due to the global supply chain realignment issue and this bodes very well for the future of Hana-AYT.

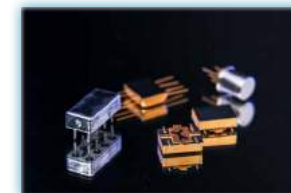
While 2023 was challenging, we are cautiously optimistic and enthused by what awaits us in 2024 and beyond. This optimism is fueled by the extensive enquiries we are seeing from our current customer base and also from potentially new customers to engage with Hana-AYT due to our technology offerings, our extensive experience in some key market areas, our quality and location. The team is geared up to leverage these opportunities and contribute to the continued growth of Hana-AYT.

A big thank you to the staff of Hana-AYT whose unflinching loyalty to Hana is the cornerstone of our success and also the reason that Hana-AYT is confident to address any challenges that may come up in the future. The team is fully committed to our "One Hana" philosophy and works seamlessly with all Hana locations to provide the maximum benefit for our customers and for our group.

After a challenging 2023, the outlook for 2024 is one of cautious optimism. We expect that for all the reasons mentioned above, Hana-AYT will continue to attract lots of new opportunities and increase our market share. However, at the same time we also do believe that due to all the ongoing global complexities, the timing of the business rebound remains uncertain. No matter what, we are passionately committed to ensuring that we provide a value added differentiation to our customers.

**Mr. Sanjay Mitra**

Executive Vice President and General Manager



# Operation Review

## Hana Microelectronics (Jiaxing) Co., Ltd.



Hana Jiaxing started 2023 strongly but as the year progressed, our challenges grew ending overall a difficult year. In 2023 we achieved the highest first half in revenue for the past five years. However, from the 3rd quarter of the year, the EMS business saw a sharp decline in demand from a few of our top five customers, whilst our standard Outsourced Semiconductor Assembly & Test (OSAT) business remained weak throughout the year. At the same time, a few new projects with significant potential planned for increased sales in the second half of the year were delayed to 2024.

We foresee that it will still take some time before we see demand rebounding from our major EMS clients which are mostly Europe and USA based. There also has been no clear sign when we may see the loading recovery for the standard IC business from our local and Taiwan customers who rely heavily on the China consumer electronics market, given the current weak economic situation.

Whilst the current outlook continues to be challenging for Hana Jiaxing, we remain optimistic for the longer term for the following reasons:

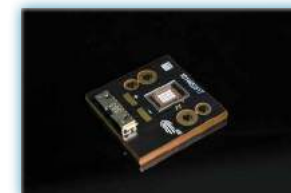
- 1) We believe demand from our long-term customers will return after the market has consumed the excessive inventory.
- 2) We expect our new RFID inlay assembly business developed alongside Hana Technologies, Inc. (HTI) will start to ramp up in 2024.
- 3) The investments made over the past two years - developing a range of advanced power packages in conjunction with Power Master Semiconductor (PMS) will start to go into mass production in the second half of 2024, and
- 4) The delayed new projects awarded to Hana Jiaxing during 2023 for SMT/PCBA customers will gradually step into the phrase of transition into production.

In 2023, we continued to improve our Joint Development Manufacturing (JDM) capability to serve the increasing needs of our customers. We continued to focus on cost improvement through optimizing our supply chain, automation and Value Analysis/ Value Engineering (VA/VE) activities. We launched a companywide Continuous Improvement Process (CIP) program and we reoptimized both the Printed Circuit Board Assembly (PCBA) and IC buildings creating additional manufacturing space needed for expansion in the next few years.

I would like to thank all our employees in Hana Jiaxing for their hard work and dedication during a challenging 2023. Whilst the outlook for 2024 still remains uncertain, we remain confident that we will overcome the situation together.

**Mr. Steven Lee**

Vice President and General Manager





# Operation Review

## Hana Technologies, Inc.



Year 2023 was another year of growth for Hana Technologies (HTI). Despite an overall slowing of the world economy, HTI realized increases in two out of three of its core markets, with the third just falling slightly off record highs. With Covid-19 issues and critical labor shortages falling to low levels, HTI was able to focus on supply-chain issues and stabilizing its workforce. The overall retail market, of which much of HTI's RFID activity is aligned with, continued to be over saturated with inventory in 2023. Despite these challenges, HTI was able to achieve double digit increases in both sales and profit in Y2023.

HTI increased overall revenues by 14% over Y2022. The increase came primarily from RFID tire tag sales, where HTI shipped nearly 75% more tire tags in 2023 versus the prior year. RFID inlays sales also increased, with HTI shipping 18% more product in 2023. This was the industry that was most affected by the retail slow-down and over-supply during the pandemic years, but was showing signs of getting back to its higher growth rate later in the

year. Microelectronics/Liquid Crystal on Silicon (LCOS) sales declined in 2023 off the record high in 2022, but still remained 30% higher than the total of year 2021.

HTI was able to achieve financial performance improvement, stabilize its workforce and contain the challenges of the current chaotic global supply chain all while moving our main operation from the rented facility at Twinsburg, Ohio to a significantly larger purchased facility that we fitted out during the year, at Solon, Ohio. The new facility offers HTI the freedom to grow significantly in all its chosen fields. As of Q3 2023 all of the RFID programs (Tire Tags, Inlays and Labels) were moved and were producing products at the new site. By early Q4 the core administration and development teams had relocated, and all shipping and receiving was being done in the new building. There remains a small section of products still being produced at the old facility. That activity will finish up and the facility will be closed down in early Q2 of 2024.

The level of sales generated by HTI for its sister companies within the Hana Group grew again in 2023. Tire tag production in Lamphun lead the way in percentage growth and revenue volume, as has been true for the last several years. It grew by 11% in 2023. Consumer Electronics Assemblies in Lamphun and IC Packaging in Ayutthaya both fell in 2023. With the new engagement of Hana's Jiaxing factory to produce HTI's RFID Inlay products and service the Asian Inlay market, Jiaxing becomes a significant partner to HTI.

HTI is looking forward in 2024 to growing further its core RFID product markets of Tire Tags and Inlays, while continuing to support and maintain its microelectronics/LCOS customers.

**Dr. John Erdmann**

President and Chief Executive Officer



# Operation Review

Hana Microelectronics (Cambodia) Co., Ltd.



During 2023 Hana Cambodia saw significant changes. Revenues more than doubled, due to a combination of a change to turnkey billing plus new projects. Additional investments were made to increase both capacity and capability to support our growth trajectory. The focus was on automation to reduce cost and improve quality, facility upgrades to prepare for new higher value added activities and employee training to reduce wastage. With the significant support from our sister company Hana Lamphun to implement all of the above, Hana Cambodia turned operationally profitable for the first time.

Hana Cambodia made significant operations and productivity improvement during 2023. With our cost competitiveness and the ability to offer the U.S. Trade Agreements Act (TAA) compliant assemblies, we expect to see new opportunities in 2024.

Our focus in 2024 will be to continue with our productivity and automation programs and to execute on the new opportunities which we expect will drive our growth. We shall also continue to upgrade our facilities in order to attract higher value added work. During 2023, with the close assistance of Hana Lamphun, we prepared to implement the latest ERP system (SAP S/4HANA) which is targeted to go live in January 2024.

We look forward to 2024 which will bring new challenges. We know we need to continue to develop and adapt to the aggressive competition but with the continued support from Hana Lamphun under our “One Hana” team work philosophy, the future looks bright.

I would like to thank all the staff at Hana Cambodia for their acceptance and willingness to implement all the necessary changes during 2023. It was a very busy year of changes and improvement but this re-engineering has proven to be the right way forward.

**Mr. Wichai Sukprasertkul**

Vice President and General Manager





# Operation Review

Power Master Semiconductor Co., Ltd.



The year 2023 seemed to start well for PMS, with our main market China, reversing their austere Covid-19 lock down policy. It was thought that, the Chinese economy, the world's engine for growth was re-starting. However, it was not to be. The Covid-19 lockdown policy had a much higher impact on its economy than was first understood and an imploding property industry, was finally coming to roost. Throughout 2023 the Chinese economy continued to slow and without any meaningful policy support being implemented, the negative impact on growth was substantial.

During 2023, PMS relied predominantly on our range of Silicon (Si) devices launched in 2022 pending the ramp-up of our Silicon Carbide (SiC) devices. Whilst the market for Si power devices are well established and significantly larger than SiC,

this mature market is also very competitive. With the drop in the Chinese economy, the impact was quick and brutal with demand drying up which impacted our 2023 forecasted plans significantly. China, as the world's largest producer and consumer for EV cars & chargers and other renewable energy industries, all of which are key growth drivers for our SiC devices, will remain our main market focus.

IC equipment supply has been seriously constrained over the last couple of years and it was only in mid-Q4 of 2023 that the supply of key bottle-neck SiC equipment started to be delivered. Looking ahead, PMS will take deliveries of additional SiC equipment, substantially increasing our capacity over the first three quarters of 2024. The demand of SiC power devices continues to remain strong, despite the continuing weak Chinese economy, as

those S-Curve industries (EV, PV & Data centers, etc.) are supported and promoted by the Chinese administration.

My thanks to all the hardworking team at PMS during a challenging and dynamic year. Looking forward to 2024 we are all focused on ramping up our capacity to meet the demands of the fast growing SiC market.

**Mr. Insuk Kim**

Chief Executive Officer (Acting)



## Hana Board of Directors



**1. Mrs. Sunun Thongbai**

Independent Director

**2. Mr. Insuk Kim**

Executive Director

**3. Mr. Stephanus Josephus Hedrikus Brader**

Independent Director

**4. Mr. John Thompson**

Chairman of the Board of Directors and Independent Director

**5. Mr. Richard David Han**

Executive Director

**6. Mr. Sanjay Nirendra Mitra**

Executive Director

**7. Mr. Terrence Philip Weir**

Executive Director

**8. Ms. Pornphan Abhamongkol**

Independent Director



## Hana Executives



**1. Mr. Insuk Kim**

Executive Vice President, Chief Operating Officer for Microelectronic and Chief Technical Officer

**2. Mr. Terrence Philip Weir**

Executive Vice President and Chief Financial Officer

**3. Mr. Richard David Han**

President and Chief Executive Officer

**4. Mr. Sanjay Nirendra Mitra**

Executive Vice President, Chief Operating Officer for Semiconductor, and Chief Marketing Officer

**5. Ms. Achara Chaicharncheep**

Senior Manager of Financial and Accounting

**6. Mr. Wichai Sukprasertkul**

Vice President and General Manager Hana-Lamphun and Hana-Cambodia

## Management Team



### Hana Microelectronics Public Co., Ltd. - Headquarters Management



1. **Mr. Ki Myung Yoon**  
Strategic Packages & Products Development Senior Director
2. **Ms. Achara Chaicharncheep**  
Financial and Accounting Senior Manager
3. **Mrs. Tappawong Na Tarlang**  
Corporate Human Resources, Business Partners, Training & Administration Senior Director

4. **Ms. Jirapa Kongmanee**  
Internal Audit Senior Manager
5. **Mr. Peter Wuei Hwang**  
Business Development Director



## Management Team



### Hana Microelectronics Public Co., Ltd. - Lamphun Management

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- |  |  |  |
|--|--|--|
| 1. <b>Mr. Wasan Suthum</b><br>Operation Director                       | 8. <b>Ms. Krongtong Wannawichit</b><br>Human Resources Senior Manager  | 15. <b>Mr. Samart Kosolchaiyabutr</b><br>Engineering Senior Manager                        |
| 2. <b>Mr. Wichai Sukprasertkul</b><br>Vice President & General Manager | 9. <b>Mr. Nikorn Tolongtong</b><br>Customer Service Senior Manager     | 16. <b>Ms. Kittima Kongsing</b><br>Production & Material Control Senior Manager            |
| 3. <b>Mr. Chukiat Suksatian</b><br>Operation Director                  | 10. <b>Ms. Chonsita Kitisrivorapot</b><br>Store Senior Manager         | 17. <b>Mr. Amorntat Chaiprasert</b><br>Finance Senior Manager                              |
| 4. <b>Mr. Seksit Mulachiwa</b><br>Procurement Senior Manager           | 11. <b>Ms. Tipawan Duangkaew</b><br>Customer Service Senior Manager    | 18. <b>Ms. Phiang-Amporn Ongwisit</b><br>Traffic Senior Manager                            |
| 5. <b>Mr. Yuthana Suyanan</b><br>Engineering Senior Manager            | 12. <b>Mr. Virush Prasatporn</b><br>Production Senior Manager          | 19. <b>Mr. Thawatchai Kumprasert</b><br>Management Information System (MIS) Senior Manager |
| 6. <b>Mr. Chana Srisuttha</b><br>Manufacturing Senior Manager          | 13. <b>Mr. Pattarapol Kantawang</b><br>Customer Service Senior Manager | 20. <b>Mr. Arkhom Kaekool</b><br>Industrial Engineering (IE) and Facility Senior Manager   |
| 7. <b>Mr. Ratchakul Kuldilok</b><br>Quality Management Senior Manager  | 14. <b>Ms. Hataitip Mongkonsawat</b><br>Operation Senior Manager       |  |

# Management Team



## Hana Semiconductor (Ayutthaya) Co., Ltd. Management

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1. **Mr. Lim Swee Sen**  
Quality & Reliability Assurance (QRA) Senior Manager
2. **Mr. Sangwang Pichitpreecha**  
Test IC Operation Senior Manager
3. **Mr. Wanakorn Nonkhunthod**  
Supply Chain Management Director
4. **Ms. Areenee Kittisupornpong**  
Management Information System (MIS) Director
5. **Mr. Punsak Eammongkolchai**  
IC & Hybrid Operations Senior Director
6. **Mr. Pongsak Klongjai**  
IC Assembly Operations Senior Manager
7. **Ms. Sirirat Silapapipat**  
CSO Operations Director
8. **Mr. Seri Sukchean**  
Facility, Industrial Engineer,  
Environment & Safety Senior Manager
9. **Ms. Praphaphun Naradilok**  
Human Resources and Plant Training Director
10. **Mr. Damrongdet Chupaob**  
IC Engineering & New Product Introduction (NPI)  
Senior Manager
11. **Mr. Sanjay Nirendra Mitra**  
Executive Vice President, Chief Operating Officer  
Semiconductor and Chief Marketing Officer
12. **Ms. Suparin Kengradomkij**  
Logistics & Store Senior Manager
13. **Mrs. Rhodora F. Ceballo**  
IC Assembly Engineering Director
14. **Mr. Vanapong Kwangkaew**  
Technology Development & Customer Services  
Senior Manager
15. **Mrs. Thawanvaree Pichitnorakarn**  
Purchasing Senior Manager
16. **Ms. Samantha Kulasinghe**  
Manufacturing Support, Industrial Engineer & Customer Services  
Senior Director
17. **Mr. Anake Wannathong**  
Test CSO Operation Senior Manager
18. **Mrs. Saowanee Rachatakarn**  
Finance Director
19. **Mr. Pongsakorn Jangsatian**  
Quality & Reliability Assurance (QRA) Director
20. **Mr. Paitoon Kungsaranuwat**  
Test Operations Director



# Management Team



## Hana Microelectronics (Jiaxing) Co., Ltd. Management



- |  |   |   |
|--|---|---|
| <b>1. Ms. Lucy Guo</b><br>Human Resources & General Affairs Director                                       | <b>5. Mr. Steven Quah</b><br>Quality & Reliability Assurance (QRA) Senior Manager | <b>9. Mr. SC Ding</b><br>Production & Materials Control (PMC) Director    |
| <b>2. Mr. Steven Lee</b><br>Vice President & General Manager   | <b>6. Mr. KY Chew</b><br>Marketing & Account Management Director                  | <b>10. Mr. Marlon Sango</b><br>Microelectronics Operations Senior Manager |
| <b>3. Ms. Jane Li</b><br>Finance & Logistics Director  | <b>7. Mr. Andy Shen</b><br>Microelectronics Operations Senior Director            |   |
| <b>4. Mr. Fairy Duan</b><br>Supplier Chain Management & Management Information System (MIS) Senior Manager | <b>8. Mr. Felix Zheng</b><br>IC Operations Director                               |   |

## Management Team



### Hana Technologies, Inc. Management



**1. Mr. Timothy Andel**

Controller

**2. Mr. D Scott Worthington**

New Product Development Vice President

**3. Mr. Valentijn Peters**

Marketing Vice President

**4. Mr. Matthew Bucholtz**

Operations Vice President

**5. Dr. John H Erdmann**

President and CEO

**6. Mr. Michael Hetrick**

Sales and Marketing Senior Vice President

**7. Mr. Paul R Brown, Jr.**

Microelectronics Sales Vice President

**8. Mr. Steve Gargalianos**

Program Management Senior Director

**9. Mr. Edward M Stiles**

Quality and Information technology (IT) Vice President



## Management Team



### Hana Microelectronics, Inc. Management



1. **Mr. Ralph Klouda**  
Business Development & Account Management Senior Manager
2. **Mr. Thang Bui**  
Business Development and Customer Support Senior Director
3. **Mr. Mike Griffin**  
Business Development & Account Management Senior Director
4. **Mr. Sanjay Mitra**  
President – HMI (USA)

5. **Mr. Mike Graveille**  
Business Development & Customer Support Director
6. **Mr. Mark Wadekamper**  
Business Development & Account Management Director
7. **Mrs. LeAna Bui**  
Account Manager

## Management Team



### Hana Microelectronics (Cambodia) Co., Ltd. Management



1. **Mr. Horn Borey**  
Supply Chain Section Manager
2. **Mr. Prathuang Pankham**  
Operation & Human Resources Senior Manager
3. **Ms. Kim Montha**  
Human Resources Section Manager
4. **Mr. Wichai Sukprasertkul**  
Vice President & General Manager
5. **Mr. Phasakorn Sriwicha**  
Supply Chain & Management Information System (MIS) Senior Manager
6. **Mr. Narhit Muangnakin**  
Quality & Reliability Assurance (QRA) & Facility Senior Manager
7. **Mr. Suthep Lafuay**  
Engineering Section Manager



## Management Team



### Power Master Semiconductor Co., Ltd. Management



- |   |   |
|---|---|
| 1. <b>Mr. Nan Jin Kim</b><br>Sales and Marketing Senior Director                            | 5. <b>Mr. Insuk Kim</b><br>Executive Vice President and Chief Executive Officer (Acting)                    |
| 2. <b>Mr. Choon Bae Park</b><br>Quality Director  | 6. <b>Mr. Soo Seong Kim</b><br>Chief Executive Officer and Representative Director                          |
| 3. <b>Mr. Hee Sung Jang</b><br>Process Development and Equipment Management Senior Director | 7. <b>Mr. Jae Hong Kim</b><br>Sales and Marketing / Procurement Executive Director (Chief Security Officer) |
| 4. <b>Mr. Sung Yong Shim</b><br>Finance and IT Senior director (Chief Financial Officer)    | 8. <b>Mr. Jae Gil Lee</b><br>Technician Development Executive Director                                      |

## 2023 Awards and Recognition



### 2023 Corporate Governance Report

Hana achieved “excellent” in Corporate Governance Rating (CGR) or 5-star corporate governance assessment in 2023 honored by the Thai Institute of Directors Association (IOD) for the 10th consecutive year, reaffirming Hana’s continuous development of good corporate governance to steer the organization towards sustainable growth and enhance investor confidence.



### 2023 SET ESG Rating

Hana has ranked by the SET ESG Rating of “AA” for the year 2023 from the Stock Exchange of Thailand (SET), the award was formerly known as Thailand Sustainable Investment (THSI). The result underscores Hana’s sustainable business operation on the basis of good corporate governance principles with social and environmental responsibility.



## 2023 Awards and Recognition



### 2023 ESG100 Certificate

Hana received an outstanding sustainability performance on Environmental, Social and Governance (ESG) recognized by Thaipat Institute as one amongst selected TOP 100 listed companies assessed for the year 2023 which reflects our commitment and success in integrating ESG with our business strategy toward sustainability.



### 2023 AGM Checklist Rating

Hana achieved a perfect 100 score for the third year in a row from the Annual General Meeting Assessment (AGM Checklist) in 2023, assessed by The Thai Investors Association and the Federation of Thai Capital Market Organizations.

## 2023 Awards and Recognition



### 2023 Thailand's Top Corporate Brands

Hana has been selected as the outstanding company with the highest corporate brand value in Thailand for the year 2023 in electronic component sector which Hana's brand value is THB 13,938 million worth, awarded by Chulalongkorn University, the Stock Exchange of Thailand (SET) and the Manager Media group. This research served as a tool to be aware of the corporate brand value in financial numbers and their executives can contribute to the sustainable growth and success in the long run through principles of good governance.



### 2023 Sustainability Disclosure Award

Hana was honoured with the Sustainability Disclosure Award 2023 from Thaipat Institute, presenting a testament to Hana's consistent efforts in sustainable information disclosure covering ESG to the maximum benefits of stakeholders and responding to Sustainable Development Goal 12.6.



## 2023 Awards and Recognition



### 2023 Top Performance Award

Hana was selected as 1 of 4 excellent organizations that won the Top Performance Award from the Technology Promotion Association (Thai-Japan): TPA on the occasion of its 50th anniversary. This esteemed award was given to organizations having outstanding performance in organizational management and applying management philosophy throughout the organization to achieve efficient excellence and maximum effectiveness.



### 2023 CSR-DIW Continuous Award

Hana was granted the CSR-DIW Continuous Award 2023 from Department of Industrial Works (DIW), the Ministry of Industry, emphasizing Hana's steadfast dedication to corporate social responsibility standard for the development and elevation of industry in driving the local economy while prioritizing the quality of life for people and the environment, allowing us to coexist sustainably with communities.





**1993** HQ BKK, Thailand



**2017** Chungcheongbuk-do,  
South Korea



**1994** Lamphun 1,  
Thailand



**2014** Lamphun 2  
Thailand



**1999** Ohio, USA



**2013** Koh Kong, Cambodia



**2003** Jiaxing, China



**1999** Ayutthaya,  
Thailand

## Business Overview

Hana Group is one of South East Asia's leading independent "Electronics Manufacturing Service" (EMS) producers. The Company's headquarters is located in Bangkok and there are 7 manufacturing facilities in Thailand, China, USA, Cambodia and Korea. There are sales representative offices located in major parts of the world.

HANA has been certified by internationally recognized standards: ISO9001, IATF16949, ISO13485, ISO14001, ISO45001, ISO/IEC 27001, etc.



## 1. Organizational Structure and Operations of the Group of Companies

### 1.1 Policy and Business Overview

Hana Microelectronics Public Co., Ltd. is the parent company. Initially, the Company was established under the name of Hana Microelectronics Co., Ltd. on 28 February 1978 and then was registered to be a public company limited on 26 July 1993 and the name changed to Hana Microelectronics Public Company Limited.

### Overview of the Vision, Objectives, Goals and Business Strategies

#### Vision, Mission and Corporate Objectives

In 2023, the Board of Directors annually reviewed and approved the Company's vision, mission and corporate objectives/the long-term goals as below.

#### Vision

To become the electronics manufacturing services company of choice, by providing world-class quality manufacturing through a diverse field or related disciplines.

#### Mission

To create long-term shareholder value in a manner which minimizes fluctuations in earnings; to develop and promote our employees' wellbeing; to create strong customer satisfaction; to be a good corporate citizen maintaining high corporate, environmental and social practices for the benefit of all stakeholders, and to enable a culture of innovation enhancing business, social and environmental success.

#### Corporate Objectives / Long-Term Goals

1. Develop and foster our human resources base for continuous expansion and in order to meet the ever-changing demands of the market and for their own personal career paths
2. Build strong and long relationships with our core customers to foster continuous growth
3. Understand our customer demand and endeavor to meet them
4. Continuously diversify our customer base, geographic and industry exposure in order to cope with fluctuations in economic cycles
5. Create and grow shareholder value through the distribution of profits and increasing returns

6. Conduct business with responsibilities, maintain integrity through business ethics and respect the rights of all groups of stakeholders
7. Promote innovative ways to enhance employees' creativity focusing on social responsibilities, reducing environmental impacts and challenges adaption while developing business opportunities towards sustainability

### Major Changes and Development of the Company

Major changes and development of the Company and subsidiaries in the past 3 years are as follows.

- |             |  |
|-------------|--|
| <b>2021</b> | <ul style="list-style-type: none"> <li>Hana Microelectronics Enterprise Co., Ltd. additionally invested in 101,706,697 ordinary shares of Power Master Semiconductor Co., Ltd., amounting to USD 43.99 million or equivalent to THB 1,413.65 million, representing 100% of the issued and paid-up share capital of that company.</li> </ul>  |
| <b>2022</b> | <ul style="list-style-type: none"> <li>Hana Microelectronics Enterprise Co., Ltd. additionally invested in 256,959,297 ordinary shares of Power Master Semiconductor Co., Ltd., amounting to USD 103.59 million or equivalent to THB 3,565.50 million, representing 100% of the issued and paid-up share capital of that company.</li> <li>Hana Microelectronics Enterprise Co., Ltd. additionally invested in ordinary shares of Hana Microelectronics (Jiaxing) Co., Ltd., amounting to USD 65.0 million or equivalent to THB 2,345.68 million, representing 100% of the issued and paid-up share capital of that company.</li> </ul>  |
| <b>2023</b> | <ul style="list-style-type: none"> <li>Hana Microelectronics Public Co., Ltd. additionally invested in 15,000 ordinary shares of Hana Microelectronics (Cambodia) Co, Ltd., a subsidiary of the Company in amount of USD 15 million or equivalent to THB 546.18 million.</li> <li>As of 31 December 2023, the Company has total investment of 20,000 ordinary shares of Hana Microelectronics (Cambodia) Co., Ltd. amounting to USD 20 million or equivalent to THB 702.13 million, representing 100% of the issued and paid-up share capital of the subsidiary.</li> <li>Hana Microelectronics Public Co., Ltd. issued and allocated the newly-issued ordinary shares by means of a general mandate in the amount of 80,478,800 shares, at the par value of Baht 1.00 per share for the purposes of offering for sale in the private placement at the offering price of Baht 57.00 each or a total of Baht 4,587.80 million. The Company received payment for such shares and registered the increase of its paid-up capital with the Ministry of Commerce on 19 October 2023.</li> </ul> |



## 1.2 Nature of Business

### Revenue Structure

- Revenue Breakdown by Product Segments

(Unit: Million Baht)

Product	Company	Location	% of shareholding by the Company	2023		2022		2021	
				Revenue	%	Revenue	%	Revenue	%
<b>1. PCBA</b>			100%	12,312	47%	11,121	41%	10,196	44%
	HM-JX	China	100%	3,250	12%	3,806	14%	3,121	13%
	HMC	Cambodia	100%	395	2%	199	1%	108	0%
Total PCBA				15,957	61%	15,126	56%	13,425	57%
<b>2. IC</b>	HS-AYT	Thailand	100%	7,318	28%	9,038	33%	8,182	34%
	HM-JX	China	100%	915	3%	1,319	5%	1,162	5%
	PMS	South Korea	100%	480	2%	345	1%	50	0%
Total IC Assembly				8,713	33%	10,702	39%	9,394	39%
<b>3. RFID &amp; Microdisplay</b>	HTI	USA	100%	1,482	6%	1,339	5%	962	4%
Total Sales Revenue				26,152	100%	27,167	100%	23,780	100%
Dividend and Other Income				439		456		357	
Total Revenues				26,591		27,623		24,137	

Remark:

HM-LPN: Hana Microelectronics Public Co., Ltd. (Lamphun)

HS-AYT: Hana Semiconductor (Ayutthaya) Co., Ltd.

HM-JX: Hana Microelectronics (Jiaxing) Co., Ltd.

HTI: Hana Technologies, Inc.

HMC: Hana Microelectronics (Cambodia) Co., Ltd.

PMS: Power Master Semiconductor Co., Ltd.



• Domestic and Export Sales Revenue

(Unit: Million Baht)

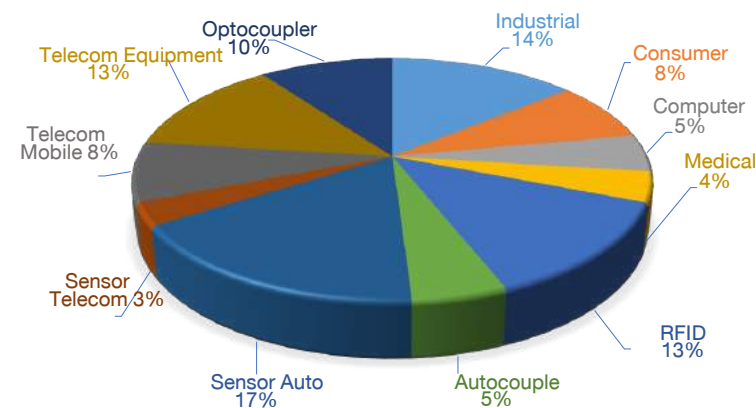
Sales Revenue	2023	2022	2021
Domestic Sales	202	282	280
Export Sales	25,950	26,885	23,500
Total Sales	26,152	27,167	23,780
Ratio of Export/Domestic Sales	99%	99%	99%

• Sales Revenue by Geographical Customers

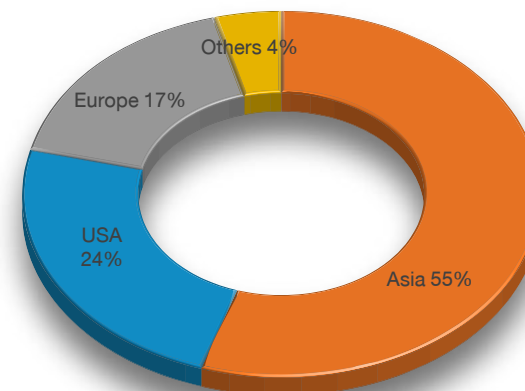
(Unit: Million Baht)

Revenue from External Customers	2023	2022	2021
SINGAPORE	6,432	6,889	3,540
USA	6,260	5,823	5,088
CHINA	3,175	3,395	2,979
MALAYSIA	3,063	2,930	4,763
GERMANY	1,128	634	790
BULGARIA	757	623	503
SWITZERLAND	645	1,333	834
HONG KONG	589	852	635
TAIWAN	563	596	877
AUSTRIA	504	615	867
IRELAND	492	614	596
Others	2,544	2,861	2,308
Total	26,152	27,167	23,780

• Sales Revenue by Industry of Product End Application



• Sales Revenue by Continent





## Hana Product Information

### Hana Manufacturers and Key Products

Hana Microelectronics Public Co., Ltd. and its subsidiaries provide Electronics Manufacturing Services (EMS) to OEM customers and manufacture the products based on the customers' specifications and designs. Hana Group's business operations are primarily the assembly of components, sub-assemblies and small electronics finished products. The major product groups are Printed Circuit Board Assembly (PCBA), Integrated Circuit (IC) assembly and test, and RFID (Radio Frequency Identification) & Microdisplay with our factories currently located in Thailand, China, USA, Cambodia and South Korea providing a wide scope of assembly processes serving a diverse range of electronics industries.

No.	Company Name	Manufacturing Location	Product Segment	Key Product Packages	Production Floor Space & Utilization in 2023	ISO Certification
1.	Hana Microelectronics Public Co., Ltd.	Plant 1: Northern Region Industrial Estate (EPZ), Lamphun, Thailand	PCBA	RF (Radio-Frequency Device), Automotive Sensor, PCB Assembly including High Frequency Telecommunication Device, Computer Component, Medical Device, Industrial Box Build Product	14,953 SQM (84% Utilization)	ISO 9001 ISO 13485 ISO 14001 ISO 45001 IATF 16949
2.	Hana Microelectronics Public Co., Ltd.	Plant 2: Sahapat Group Industrial Park (Free Zone), Lamphun, Thailand	PCBA	Optical Mouse Sensor, Proximity Sensor, Computer Component, Tire Tag, Inkjet Cartridge, Wafer Probe, RFID	13,652 SQM (69% Utilization)	ISO 9001 ISO 14001 ISO 45001 IATF 16949
3.	Hana Semiconductor (Ayutthaya) Co., Ltd.	Hi-Tech Industrial Estate (EPZ), Ayutthaya, Thailand	IC	Integrated Circuit Assembly & Test, Optical Sensor and Module, QFN, SOT, SIP, MEMS, LGA, Smart Card Module, Flip-Chip, OPTO, RF (Radio-Frequency Device), Open Cavity QFN, Power QFN, Cu-Clip, Power Package Dual Cool, TO-247TE Dual Cool	24,500 SQM (91% Utilization)	ISO 9001 ISO 14001 ISO 45001 ISO 13485 IATF 16949 ISO/IEC 27001 ANSI/ESD S20.20





No.	Company Name	Manufacturing Location	Product Segment	Key Product Packages	Production Floor Space & Utilization in 2023	ISO Certification
4.	Hana Microelectronics (Jiaxing) Co., Ltd.	Xincheng Industrial Park, Jiaxing, China	PCBA, IC	PCBA, COB & CIB Assembly, Wireless Radio Frequency Product, Micro Coil Winding, Flexible Circuit Board, Surface- Mount Technology (SMT), Integrated Circuit Assembly & Test, LED, DC-DC Converter, OPTO, Power Module and Power Discrete with IGBT or SiC Dies, LED, Power Module	19,180 SQM (99% Utilization)	ISO 9001 ISO 13485 ISO 14001 ISO 45001 IATF 16949 IECQ QC 080000 ISO/IEC 27001
5.	Hana Microelectronics (Cambodia) Co., Ltd.	Koh Kong Special Economic Zone, Koh Kong, Cambodia	PCBA	Remote Control, Security/Access Control Reader (Secure Reader Box Build), RFID Reader, Smart Card Reader, USB Token Security, Cable Harness, Telecommunication Device, Computer Component and Pre-Assembly: Semi-Electronics, Transformer (IPD)	7,400 SQM (55% Utilization)	ISO 9001 TL 9000
6.	Hana Technologies, Inc.	Twinsburg, Ohio, USA	RFID & Microdisplay	RFID (Radio Frequency Identification), Microdisplay	929 SQM (100% Utilization)	ISO 9001
		Solon, Ohio, USA	RFID	Inlays, Tire Tag	3,716 SQM (40% Utilization)	ISO 9001
7.	Power Master Semiconductor Co., Ltd.	Chungcheongbukdo, Republic of Korea	IC	SiC MOSFET SiC DIODE HV SJ MOSFET	4,539 SQM (80% Utilization)	ISO 9001 ISO 14001 IATF 16949

## Hana Product Segments

### 1. Print Circuit Board Assembly (PCBA)



Printed Circuit Board Assembly (PCBA) is the IC and other electronic components assembling on a printed circuit board which holds electronic parts to create a useful electronic circuit. In providing high quality with high precision and high accuracy as the components are getting smaller, we have invested in the up-to-date technology equipment to meet customers' requirement and aim towards zero defect manufacturing approach to provide our customers with PCBA solutions and services worldwide.

The PCBA operations of Hana are located in Lamphun province, Thailand and Jiaying city, China and Koh Kong city in Cambodia where our business includes Printed Circuit Board (PCB) manufacturing and electronic contract manufacturing service.

#### PCBA – HANA LAMPHUN

The PCBA factories in Lamphun, Thailand provides manufacturing services for the following products:

##### A) COB (Chip-on-Board) Assembly

COB (Chip-on-Board) Assembly is die-assembly onto printed circuit board directly that does not operate die as package before installing which facilitates to reduce operation steps and cost of production. This method is suitable for less circuitry using products such as automotive sensor products, household products, consumer products, telecommunication devices and medical products, etc.

COB and PCBA are used as the component parts of electric appliances and other electronic devices such as:

- Circuit Board in automotive sensors for pressure sensor applications
- Circuit Board in personal computers (PC) and notebooks
- Circuit Board for hearing aid devices to help a wearer hear certain sounds better
- Circuit for adding memory management unit in computer industry

##### B) Wireless High Frequency Product

The product is a high frequency telecommunication device for infrastructures and test accessories. It needs technology for signal check technology, high frequency check equipment and requires high delicacy for this assembly operation as material part is very highly delicate and costly. Also professional competency workmanship is crucially required. High frequency device receives and sends Microwave and Millimeter wave signal of telecommunication device that using for mobile phone network station and all other related infrastructures.

##### C) Electric Part Product for Interface Device

Electric part product for interface device is the product for supporting in demand transmitting between users and electronic equipment (such as PC, laptop, mini-stereo, server, mobile phone or safety equipment) which users can touch demand transmitting equipment via computer screens, keyboards for selecting information, changing places for information, signal or option setting.

##### D) Other Electronic Devices include:

- Air Pressure and Temperature Control product is an electronic device for air pressure controlling of vehicle's brake system, air bag system and electronic device for temperature measurement and controlling including other pressure measurement meters (for water and gas).
- Medical Devices to assist the hearing aid purpose
- Wireless Sensor product is an equipment for sending and receiving light signal that using with other electronic equipment such as optical mouses, printers, mobile phones, etc.







## PCBA – HANA JIAXING

The PCBA operation in Jiaxing, China provides manufacturing services for the following products:

### A) COB (Chip-on-Board) and CIB (Chip-in-Board) Assembly

COB (Chip-on-Board) assembly is die-assembly onto printed circuit board directly that has the advantage of lower-cost die component comparing with IC package mounting. The process is quite similar to conventional IC process. The only difference is instead of using lead frame, printed circuit board is used as substrate. This method is suitable for products with moderate circuitry complexity such as consumer electronics e.g. Software Copy Protection Devices, circuit boards in personal computers (PC) and notebooks, etc. Aside from using printed circuit boards, a flexible printed circuit may also be used. This is highly recommended for products requiring thin and flexible profile not attainable using conventional printed circuit boards. Typical application of this is in the area of RF cards, BLE (Bluetooth Low Energy) cards, tags, hearing aid devices, etc.

CIB (Chip-in-Board) assembly process has the same technology as above but for those products that thickness is critical, the die itself is mounted at the substrate below its surface level.

### B) Wireless Radio Frequency Product

Wireless Radio Frequency Product from low, high, and ultrahigh frequency telecommunication devices. This involves using expensive electronic equipment to perform signal level and data integrity check. The wave-length used can range from Millimeter wave to Microwave and the applications are mainly for mobile phone network station.

Not limited to the above, the needs for low power consuming electronic devices had led to BLE technology that can send and receive signals to multiple devices at short ranges.

### C) Electronic Devices

- Air pressure and temperature control product is an electronic device/MEMS for air pressure controlling of vehicle's brake system, air bag system, air flow and measurements for medical applications, gas and air quality detectors, and electronic devices for temperature measurement and controlling including other pressure measurement meters (for water and gas).
- Fiber optic device is a connector equipment between computer equipment and fiber optic thread which sends and receives light signal from fiber optic thread and sends to computer equipment.

- Wireless sensor product is an equipment for sending and receiving light signal that using with other electronic equipment such as optical mouses, imaging sensors, printers, mobile phones, health-monitoring devices, base stations/routers, remote controls for drones and UAV, etc.
- Smart card product is used for telecommunication, entertainment, controlling equipment, payment transactions, other electric appliances, employee cards, student cards, etc.
- LED assembly product such as LED boards for vehicle's rear lighting, trucks, traffic LED light boards which offers brighter light than ordinary light bulbs and electronic backlight.
- Medical devices such as hearing aid and accessories, pregnancy test kits and dosimeters.
- Card readers and embedded modules which may include RFID technology for door entrance/ access system for residences, offices, transportation vehicles, manufacturing and government facilities, hotels, public areas, asset tracking, etc.
- Bluetooth low energy devices used for child care, mobile phones, controlled door access, routers/extenders, card readers, programmable cards, audio/acoustic devices, building administration system, etc.
- System in Module and/or System on Chip are ultra-compact devices/modules offer efficient computing core for variety of leading edge IoT applications for professional camera platforms, multi-display, video conferencing, and/or advanced AI drone/robotics, 3D printing products as provide multiple specialized processing cores for AI engine, ISP, GPU, and DSP processing needs.
- Power controllers for power distribution system operators offer end-to-end multipurpose intelligent solutions for smart grids and power distribution systems used on railways, power grids, EV charging stations, etc. where remote control is needed.
- Home security products that offers 24-hour monitoring, surveillance, and alarm either standalone or cloud based security systems for any sign of movements and/or force intrusions. The products integrate with known home kits applications that may come along with home automation integration.

#### D) Flexible Circuit Board

Flexible circuit board product is the assembly of IC or other electronic parts onto flexible circuit boards for more convenience of using such as RFID tags and low profile dimension products which is adapted for using in commercial work for inventory and selling which is replaced of old bar code system, using in traffic section, transportation, personal identification and building security and asset tracking.

#### E) Electric Part Product for Interface Device

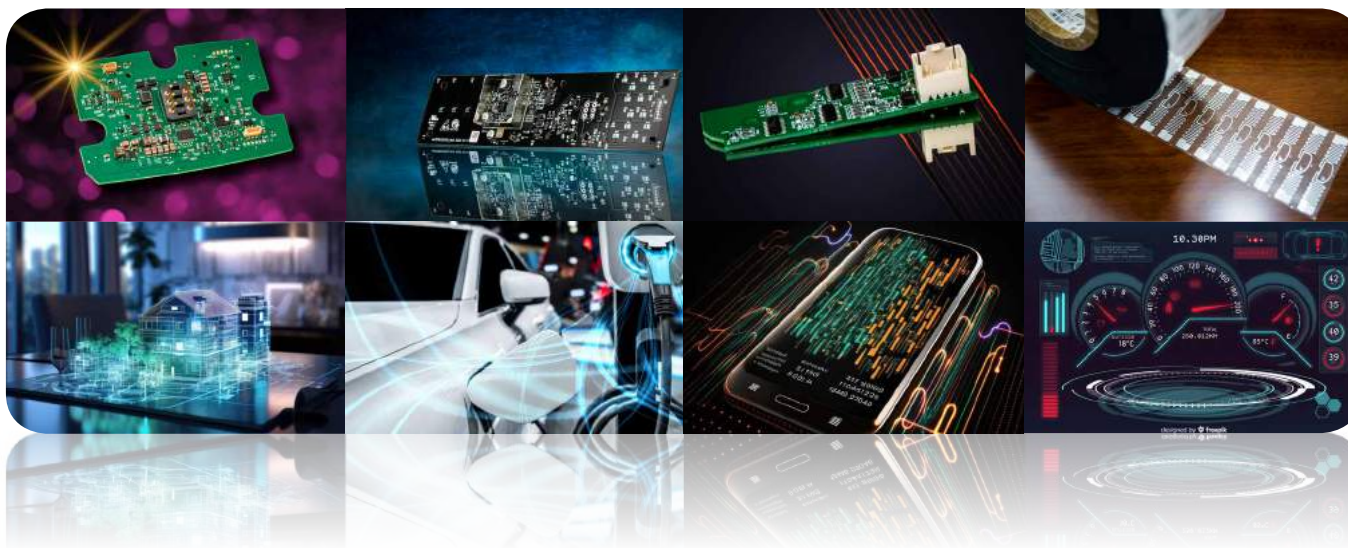
Electric part product for interface device is the product for supporting of data transmission demand between users and electronic equipment (such as PC, laptop, mini-stereo, server, mobile phone or safety equipment) which users can use the touch screen as transmitting equipment via computer screens, keyboards for selecting information, changing places for information, signal or option setting, either by using wired, RF wireless, or BLE protocol.

#### F) Micro Coil Winding Assembly

A coil is the key component used in wireless transmission and communication such as smart cards, RFID cards, security readers, sensors, etc.

#### G) Surface-Mount Technology (SMT)

SMT is a method for constructing electronic circuits (IC) in which the components are mounted directly onto the surface of printed circuit boards (PCB) or flexible printed circuit (FPC) boards by automated equipment. Applications are mainly in equipment and/or products used in telecommunication, measuring equipment, industrial and security services, automotive and medical field of use.





## PCBA – HANA CAMBODIA

The PCBA operation of Hana Cambodia provides manufacturing services for the following products:

### A) Secure Reader Box Build Assembly

Smart Card Product is used for telecommunication, entertainment, controlling equipment, other electric appliances, employee cards, student cards, etc.

#### 1. RFID Readers

Contactless RFID Card Reader Modules for door entrance/access system for residences, offices, transportation vehicles, manufacturing and government facilities, hotels, public areas, asset tracking, etc.

#### 2. Smart Card Readers

Contact Smart Card Readers Modules is used to support demand transmitting between users and electronic equipment (such as PC, laptop or safety equipment).

### B) Cable Harness

Cable Harness is used for secure reader box build, telecommunication devices, computer components and automotive cable wire harnesses.

### C) USB Token Security

Multi-Factor Authentication Token with added security in accessing online accounts.

### D) Ultra Switch

RF/microwave switches are used in a wide variety of signal routing applications for test and measurement systems.

### E) Remote Control

Remote Control for cable TV control box and satellite control box.

### F) Transformer (Integrated Passive Devices)

RF Transmission Line Transformer in a low-cost surface mount package, ideally suited for all CATV/Broadband and FTTx application.



## 2. Integrated Circuit (IC) Assembly and Test



Integrated Circuit (IC) is a semiconductor chip consisting of circuit components such as resistors, capacitors, inductors, transistors, diodes, etc., which are connected with wires. Electronic circuits are developed by getting smaller size but more power and safety to incorporate them into devices. We have invested in the up-to-date technology equipment to meet customers' requirement and aim towards zero defect manufacturing approach to provide our customers with a wide range of integrated circuit solutions.

The IC operations of Hana are located in Ayutthaya province, Thailand and Jiaxing city, China where our business includes IC Packaging and Assembly and electronic contract manufacturing service.

### IC – HANA AYUTTHAYA

The IC operation of Hana Ayutthaya, Thailand provides manufacturing services for the following products:

#### A) IC (Integrated Circuit) Assembly

IC is a part of electronic devices consisting of Chip IC (Integrated Circuit) that compounding as IC package for assembling to other electronic device parts.

Optical Sensors and Modules	Used in a variety of applications, including mobile, electronic appliances, and retail automation
Leadless Packages: QFN, DFN, Multi Row/Routable QFN, MCM on QFN	Used for mobile phones, tablets, industrial/power, electric appliances & PlayStation
Leaded Packages: VSOP, MSOP, SOIC, SOT, SC70, SOT5x3, SOT9x3, SOD723	Used for telecom industry, notebooks, computers, tablets, electronic appliances, home appliances, appliances, mobile phones & quick battery chargers

Laminate Packages: SIP, MEMS, LGA	Used for mobile phones, digital cameras, DVD readers/appliances & power management
Smart Card Modules	Used for RFID cards, credit cards, security cards & consumer tags
Power Packages: Flip-Chip, Cu-Clip, Soft Solder, Heavy Al Wire	Used for home appliances, motor drivers, UPS & power management

#### B) DC-DC Converter Assembly

A DC-to-DC converter is an electronic circuit that converts a source of direct current (DC) from one voltage level to another. The DC-DC Converter is used in general electronic devices such as computers and medical products.

#### C) Optocoupler Assembly

An optocoupler is an electronic component that transfers electrical signals between two isolated circuits by using light. Optocouplers prevent high voltages from affecting the system receiving the signal. Two parts are used in an optocoupler: an LED that emits infrared light and a photosensitive device that detects light from the LED. Optocouplers are used in industrial, computing, consumer, communication, and automotive markets.

#### D) RF, Microwave, Millimeter Wave and Optical Component Assembly

RF, Microwave, Millimeter Wave and Optical Component are semiconductor products that used in satellite, radar, wired & wireless networks, automotive, industrial, medical, and mobile devices.

#### E) Die Sales

This type of business is to support customers who do not have capability on wafer probe, back grind, wafer dicing & die inspection, Hana will service & provide sawn dice put in wafer rings, waffle packs, antistatic chip trays.





## IC– HANA JIAXING

IC Division of Hana Jiaxing in China has offered variety of IC assembly and test services as follows:

### A Standard IC Products

QFN/DFN/LGA/Flip-Chip Packages	Used for consumer electronics (like smart phone, tablet, sensor and touch pad, etc.), industrial and automotive applications
SC, SOT, TSOT, MSOP	Used for consumer electronics (like mobile phone, digital camera, computer, etc.), industrial and automotive applications

### B) Power Modules and Power Discrete with IGBT or SiC (Silicon Carbide) Dies

Used for industrial welding machine, UPS, EV Charging Station, PV inverter, electrical vehicle, hybrid electrical vehicle and wind turbine.

### C) Wafer Level Chip Scale Package (WLCSP)

WLCSP is driven by a strong push for cost reduction and miniaturization. Hana Jiaxing offers wafer level chip scale packaging services for handheld and portable servers and automotive products.

### D) LEDs and LED Modules for Automotive Lighting and Projector Light Sources

Automotive lighting designers can utilize the small size and distinctive look of LUXEON LEDs to rethink lighting applications and lighting engineers can take advantage of the efficiency, robustness and power savings that the small, light-weight emitters deliver. For example, headlamps, high and low beam, break lights, turn signals, position and marker lamps, etc. High power LED modules are used in light sources for projectors, screenless TV and heads-up display. UV LED modules are used in 3D printing and sterilization.



## IC- POWER MASTER

Integrated power device manufacturer, Power Master Semiconductor with FAB and R&D center in Korea, provides manufacturing services for the following products:

### A) SiC MOSFET

650V/1200V e SiC MOSFET is an advanced Power Master Semiconductor's SiC MOSFET family. This technology provides design flexibility for high system efficiency, higher switching frequency for system size reduction with higher reliability thanks to its extremely low switching losses, low FOM [QGx RDS(ON)], no reverse recovery losses of body diode and high ruggedness.

### B) SiC Diode

650V/1200V/1700V e SiC Diode is an advanced Power Master Semiconductor's SiC Diode family by utilizing MPS technology. This technology combines the benefits of high surge current capability and excellent performance with lower VF and QC for both low and high frequency applications.

### C) HV SJ MOSFET

600V/650V e MOS 7 series is an advanced Power Master Semiconductor's Super-Junction MOSFET family. e MOS 7 series classified by two products.

The e MOS E7 technology provides well-balanced performance, ease of use (e.g. low ringing) with an excellent switching performance in hard-switching topologies for high efficiency and high-power density power conversion system.

The e MOS UF7 technology provides extremely lower QRR and robust body diode performance for higher system efficiency and improve reliability for resonant topologies and bridge topologies for various applications.

The end application covers system solution especially in automotive, Cloud, energy infrastructure and consumer applications.





### 3. RFID & MICRODISPLAY



#### RFID & MICRODISPLAY – HANA USA

Hana Technology Inc. (HTI) in Twinsburg and Solon, Ohio, USA manufactures microelectronics products such as Microdisplays, camera modules and RFID (Radio Frequency Identification) passive tags.

A Microdisplay is a device used for transferring electrical signals to high-resolution visual images that can be highly magnified. These products can be LCOS (Liquid Crystal on Silicon), MEMS, or HTP (High-Temperature Polysilicon) based devices, and are incorporated in a wide variety of products such as virtual and augmented reality goggles, multimedia projectors, rear-projection televisions, adaptive optics, and telecommunication devices.

An RFID (Radio Frequency Identification) device is used to transfer information in a fast and wireless mode. HTI manufactures passive tags where these tags can be queried by a reader. The tags are programmed with identification, security, and other historical information that is

of interest in the particular applications. The information can also be modified on the tags (write mode) by the RFID readers. The tags consist of an IC that contains the vital information and an antenna. The antennas that are primarily used are thin conductors that are either printed or etched onto a plastic web so that they can be manufactured in a high-speed, flip-chip manufacturing mode. HTI is the world leading's producer of RFID tire tags.

The new product line of HTI is RFID Inlays comprised of RFID chip (IC), tag antenna and substrate, typically on a film face. An RFID inlay is the functional part of an RFID label. The inlay can be used alone by simply attaching it to the target asset. RFID inlays become the best option particularly for retailers and other small-scale users for tracking, identification, and inventory management. RFID Inlays will drive HTI future growth. HTI customers are mainly based in the North America and Europe, with some having product drop-shipped to other countries for post-assemblies.

Product end applications for RFID technology are listed here:

- Inventory tracking
- Asset tracking
- Attach with cloth for thief preventing in shops (anti-theft tags)
- Anti-Counterfeit
- Car parking cards
- For research and study in consumer behavior
- Tire Tags
- Supply chain management
- Microchips used in pets
- Movie cards
- Anti-theft equipment for car's key
- M-commerce via mobile phones instead using credit cards
- Logistics



## Operation Processes and Technology



The Company manufactures products based on customer's orders. We focus and provide the best manufacturing options for cost competitiveness as well as increase the efficiency of production and quality. The Company also has high capabilities to design and develop the test systems in order to test assembled products and their reliability before delivery to our customers.

Currently, Hana has the main technologies to manufacture the products to the customers as follows:

- 1) **SMT (Surface-Mount Technology)** is the main technology which is used for most of the company's products. This technology is to connect of electrical circuits and other semiconductor devices onto the surface of printed circuit boards (PCB). The SMT is useful for both design and manufacturing since it can save space in the assembly of electronic components onto PCB. SMT lines also cover the technology of BGA (Ball Grid Array), flip-chip assembly as well as other higher technologies of SMD (surface mount devices), together with fully integrated with advanced AOI (Automated Optical Inspection) machines.

The advance SMT & flip-chip combination technology can support extensive array of printed circuit assemblies including to build automotive high performance sensors. Many of our capabilities are considered proprietary and serve world-class automotive customers.

- 2) **Through-Hole Technology (THT)** is a technology for assembling electronic components by inserting into holes in the printed circuit boards (PCB), and then the boards go through the wave soldering to attach the components. In recent years, we have upgraded our quality by introducing selective soldering which can reduce the heat effect on neighboring components.
- 3) **COB (Chip-on-Board) Technology** is the bonding of bare (unpackaged) integrated circuit die to the printed circuit board and applying a blob of epoxy to protect the bare die. This type of technology is popular for smaller products which are low cost and limited in the area of electronic product assembly. The Company also provides the gold wire bonding as an additional technology to aluminum wire bonding.
- 4) **IC Assembly Technology** is the process of electrically connecting I/O bond pads on the packaged IC to the corresponding bond pads on the lead frame or substrate base. The package can be a single chip package, a multichip package, or a system level board. Such an assembly process involves three interfaces: metallurgical bond pad interface on the IC, metallurgical bond pad interface on the lead frame or substrate, and electrical interconnection between these two interfaces. The Company also provides pure copper, copper/palladium & copper/palladium/gold wire bonding as additional bonding technologies.

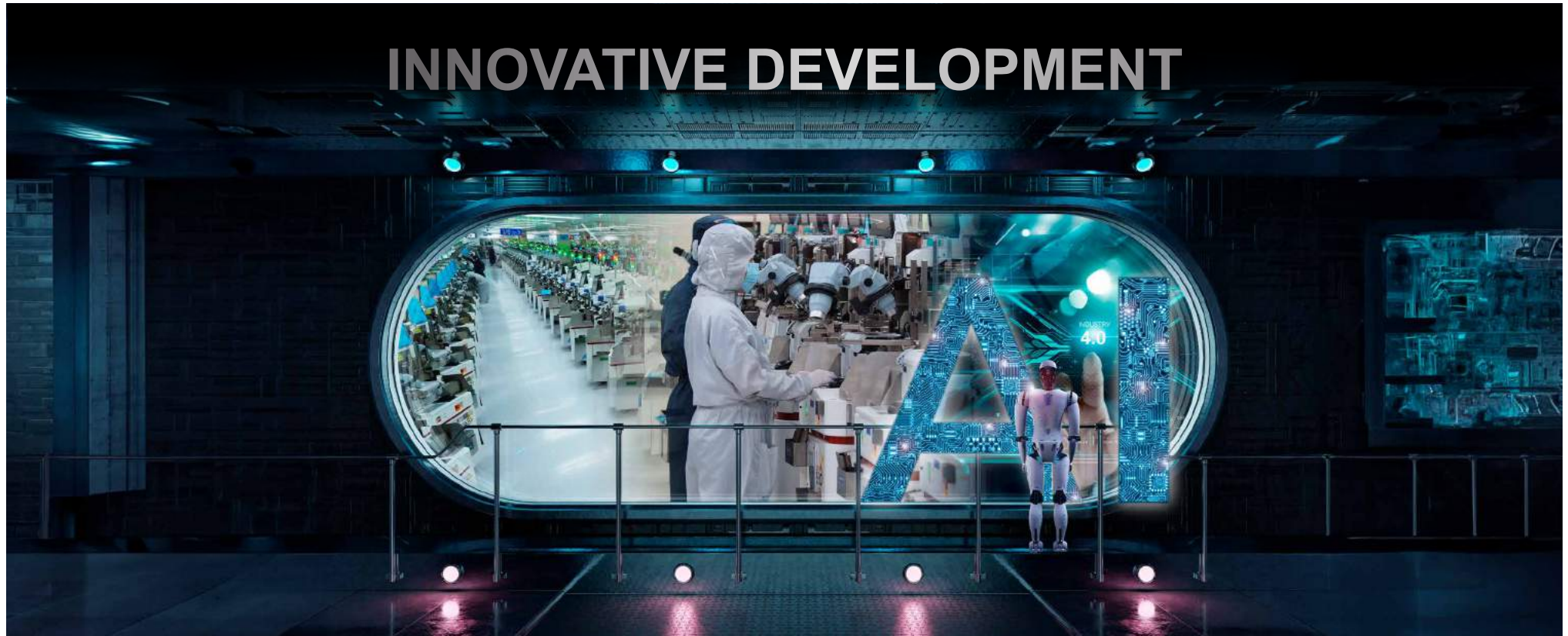
### Promotional Privileges from the Board of Investment (BOI)

The Company and a subsidiary, Hana Semiconductor (Ayutthaya) Co., Ltd., have granted promotional privileges under the Investment Promotion Act B.E. 2520 as approved by the Board of Investment. The significant promotional privileges are disclosed on part 3: Financial Statements Note 29.





# INNOVATIVE DEVELOPMENT



Hana core activities are to offer high quality products and services by ensuring customers' satisfaction through relentless improvement activities. Hana places great emphasis on the innovative organization in order to create value to the business, society and environment by creating innovation atmosphere, providing opportunities for everyone in the organization to generate and apply their knowledge, skills, critical thinking or bring in technological know-how contributing to the development and improvement of working processes, equipment or products to foster the vision of innovation culture in the organization.

Our major innovative development is as follows.

- **Machine Automation & Industry 4.0**

Hana has continuously invested in manufacturing automation projects as to modify the traditional manufacturing processes to automation toward industry 4.0 which can increase the competitiveness advantage of the Company by improving product quality, increasing operating efficiency, reaching lean production, enhancing employees' capabilities, responding to higher customer requirements, managing labor issues in regards to both labor costs and labor shortages, as well as reducing waste and environmental impact.

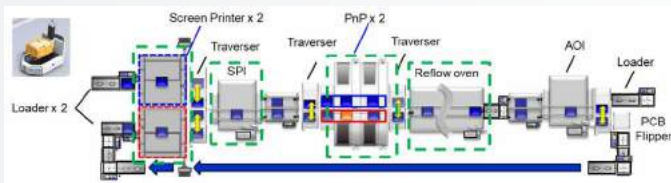


## HANA 4.0 Roadmap

**Manual to Automation**

Automate manual processes to achieve continuous quality control (input and output) of zero defect at manufacturing stage

01

**Streamline**

Implement the shop floor automation system with streamline manufacturing process for a more efficient, faster and better quality production that resulted in greater productivity and optimal resource utilization

02

**System Integration and Control**

Machine-to-machine communication is integrated so allow devices to exchange information with each other.

03

**Big Data Analysis**

Use the system applications to control and monitor production process abnormality through data analytics for high-level decision-making

04

### Summary of the Consolidated Manufacturing Automation Projects of Hana Lamphun, Ayutthaya and Jiaxing Operations in the Past 3 Years:

Project Implementation	No. of Project			No. of Machine			Cost Saving (Thousand USD)			Operator Reduction (Person)			Total Investment (Thousand USD)		
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
1. Manual to Automation	54	75	93	121	174	411	973	1,190	1,932	53	108	189	403	1,622	1,938
2. Streamline Process Management	9	5	7	13	8	16	0.5	142	411	2	8	52	0	80	382
3. System Integration and Control	27	28	35	0	243	396	117	622	386	3	4	24	196	80	136
4. Big Data Analysis	4	5	5	2	25	141	12	598	70	0	0	0	0	14	13
<b>Total</b>	<b>94</b>	<b>113</b>	<b>140</b>	<b>136</b>	<b>450</b>	<b>964</b>	<b>1,102.50</b>	<b>2,552</b>	<b>2,799</b>	<b>58</b>	<b>120</b>	<b>265</b>	<b>599</b>	<b>1,796</b>	<b>2,469</b>

- Use of Advanced Enterprise Resource Planning (ERP) system:**

Hana Lamphun has implemented the new SAP S/4HANA ERP system which enables the workflow of information more efficient, enabling cost controlling including increased productivity by reducing time and effort employees need for completing their day-to-day activities, eliminating manual processes, and automating new information fast and in real-time planning, execution, reporting and analytics with the integration and streamlining business functions: sales, planning, purchasing, finance, inventory, and logistics into one central database. A modern ERP system helps Hana to enable innovation, optimize resources, and streamline operations.





- **Process Development**



Hana Ayutthaya has developed the technical competency encouraging our customers to continue to load significant number of new package development activities in 2023. This implementation has boded very well for the business outlook in 2023 and beyond since all of these development and NPI activities will translate into increased production over the next 12-24 months. We have also continued to file our intellectual property (IP) on some of our custom package developments. Our focus on IP will continue in 2023 and beyond to further differentiate Hana Ayutthaya.

Our technology development focuses areas on the following:

**Optical Sensors:**

We focus the sensor development to build the sensor products to be smaller and thinner to sustain our positioning in this area. R&D also focuses to enhance the working temperature of the sensors to be higher in order to cover more market sectors. In addition, there is also a focus to enhance the light sensing to be higher accuracy and precision for next generations of applications in the future.

Development in 2023 focused on the following enhanced application and product reliability robustness to meet automotive AEQ class2 specification.

- Light diffuser material to make lighting more uniformity as it reaches the sensor area
- Visible light clear encapsulation material
- Defined design rule to avoid package warpage for clear oLGA 0.3 mm

**Power Packages:**

We focus on power package development to have more functionality & thermal improvement. Packages developed to have multi-chip options as well as different cooling options like bottom side cooling or top side cooling or both sides cooling called dual cool. In addition, there are improvement on isolation developed especially for future and higher voltage requirements.

Development on the enhanced thermal cooling packaging solution take advantage of the Cu-clip with DBC (Direct Bond Copper) technology and exposed pad QFN.

Recent developments in 2023 focused on new process capabilities to support Power module devices utilizing GaN and SiC wafer technology as well as Low K wafers for CMOS/MEMs application.

- Laser grooving process for GaN on Silicon and Low K wafers.
- Full cut laser dicing for SiC that eliminates edge chipping.
- Solder die attach for Multi-die GaN modules.
- Vacuum reflow for better control of solder voids <5%.

**Multichip Modules (MCM):**

We focus on IC packaging with complex designs to integrate more functionality while trying to reduce also the overall package size. Development in combining different technologies in IC assembly to have multiple systems in a package with multiple active dice, whether stacked die or side-by-side configuration.

New MCM products released to production on various custom package/product designs and complex processes.

- Flip Chip for stack bumped die MEMs on CMOS on 1.1 x 1.2mm DFN package.
- Custom product with 5 dies and Ceramic DBC solder attach.
- Stack die SiC on Ceramic Direct Plated Copper for automotive application.

**SIP (System-in-Package)/SMT (Surface-Mount Technology) Modules:**

Demand for more functionality in a small package size also drives SIP & SMT modules combining technology for IC packaging for active components & SMT package with passive component.

These packages also have some additional requirements for its functionality improvement, for example, metal shield for EMI protection.

**Commodity/Standard IC Packages:**

The commodity or standard IC package also gets to be improved & developed further using new supplier capabilities to increase lead frame/substrate density, combined with new BOM selection to improve capabilities to support latest customer requirements.

Introduction of new optimized BOM set per MSL capability to meet customer product reliability requirement will be able to provide cost effective solution.

- Ultra high density LF for QFN and selected Leaded packages
- Brown oxide roughening to replace roughened PPF LF on QFN and SOIC
- Alternate BOM set for adhesive epoxy, Copper wire, and mold compound

- **Continuous Improvement in Manufacturing**

The electronic products of Hana particularly for IC are difficult for handling and visual quality checks by human because of the size, product variety, and production volume whereas defects may occur anywhere on the products and could be of any size. Hana Ayutthaya continues to upgrade the fundamentals of manufacturing to be Smart Manufacturing with free-error proofing concept by developing Equipment Management System (EMS). The in-house EMS initiated by the Hana development teams has been successfully deployed plant wide to achieve perfect production output as equipment information is integrated throughout the production process for real-time equipment monitoring to check equipment status, production output, and product quality. Poka-Yoke approach has been implemented to ensure the process is designed to prevent mistakes before they occur particularly preventing defects to be occurred in the first place. Early Warning System (EWS) in the production process has been designed to detect and provide timely monitoring of early detection of key equipment excursion. With advance traceability system, the system will generate paperless logs that enable troubleshooting and traceability. This smart manufacturing platform increases efficiency and productivity, eliminates points of weakness, increases delivery performance, reduces labor, energy and material usage, and improves customer satisfaction.

- **Capability Enhancement Projects**

Hana Jiaxing has established in-house capabilities instead of outsourcing process so enabling to meet the customers' specific requirements. Hana Jiaxing has further put in place more advanced equipment to optimize process improvements while reducing the risks of defection that might impact quality (higher productivity) with a new level of efficiencies and responsiveness to customers. In 2023, Hana Jiaxing completed 40 projects for capability enhancement of Test Development in providing high performance of test equipment which can achieved USD 405K cost savings and improve customers' satisfaction.





## Silicon & Silicon Carbide Power Management Devices

Silicon Carbide (SiC), is a new material, a compound of Silicon and Carbon which can operate at very high temperatures allowing much higher voltage, higher switching frequency with lower power losses than traditional Silicon semiconductors so it is perfectly suited to power applications for smarter power designs in a broad range of high-end consumer electronics, consumer white goods, telecommunications, cloud computing & especially EV-inverter/OBC (On-Board charger) and renewable energy (solar and wind sectors), where faster re-charging speeds are required. Because of these physical properties, SiC is more difficult to manufacture and costlier. However, we will also produce standard Silicon for devices that do not require such high performance levels but are lower in cost to produce as there is high demand for both types.

- Hana has invested the necessary equipment to produce in mass production scale the products of Silicon & Silicon Carbide Power Management devices through its subsidiary Power Master Semiconductor (PMS) in Korea. After installation of equipment, Hana's subsidiary PMS will have the capability to produce Silicon & Silicon Carbide Semiconductors to be sold directly to end customers or further processed at Hana's existing IC Assembly & Test factories in Thailand and/or China into packaged IC or Power Modules.

This will support the growth of Hana's existing IC Assembly & Test business to enter into the fast growing market for EV cars & EV chargers and other uses of Power Management devices.

- Strategic Products and Package Developments (SPPD) in Hana Jiaying which has been established in July 2021 focusing on power semiconductor packaging solution for emerging renewable energy saving application market like Electric Vehicles (EV) traction module, On-board charger, EV charging station, using SiC MOSFET, Diode and Si IGBT, Diode. This research and development organization is capable semiconductor packages design, predict its electrical and thermal performance by simulation software, as well as thermo-mechanical stress and mold flow, also Hana Jiaying's pilot line can provide prototype and pre-production samples to customers.

These packages targeted Halogen free EMC, robust delamination solution, heavy Aluminum wire up to 20 mil and Clip Bonding capability. These discrete power packages reliability qualification is following AEC-Q101.

Power semiconductor package solution to electric vehicle is most focused activities. For Semiconductor Packaging Research and Development, Hana established Finite Element Analysis (FEA) capabilities. These simulation solutions will predict products and packages thermal, electrical, thermo-mechanical performance by proposed and given design by Hana Jiaying, also to minimize trial and error, learning cycles, preventing failures, saving customer resource and development cycles.

Automotive qualified SiC product release (1200V SiC Diode) in 2023

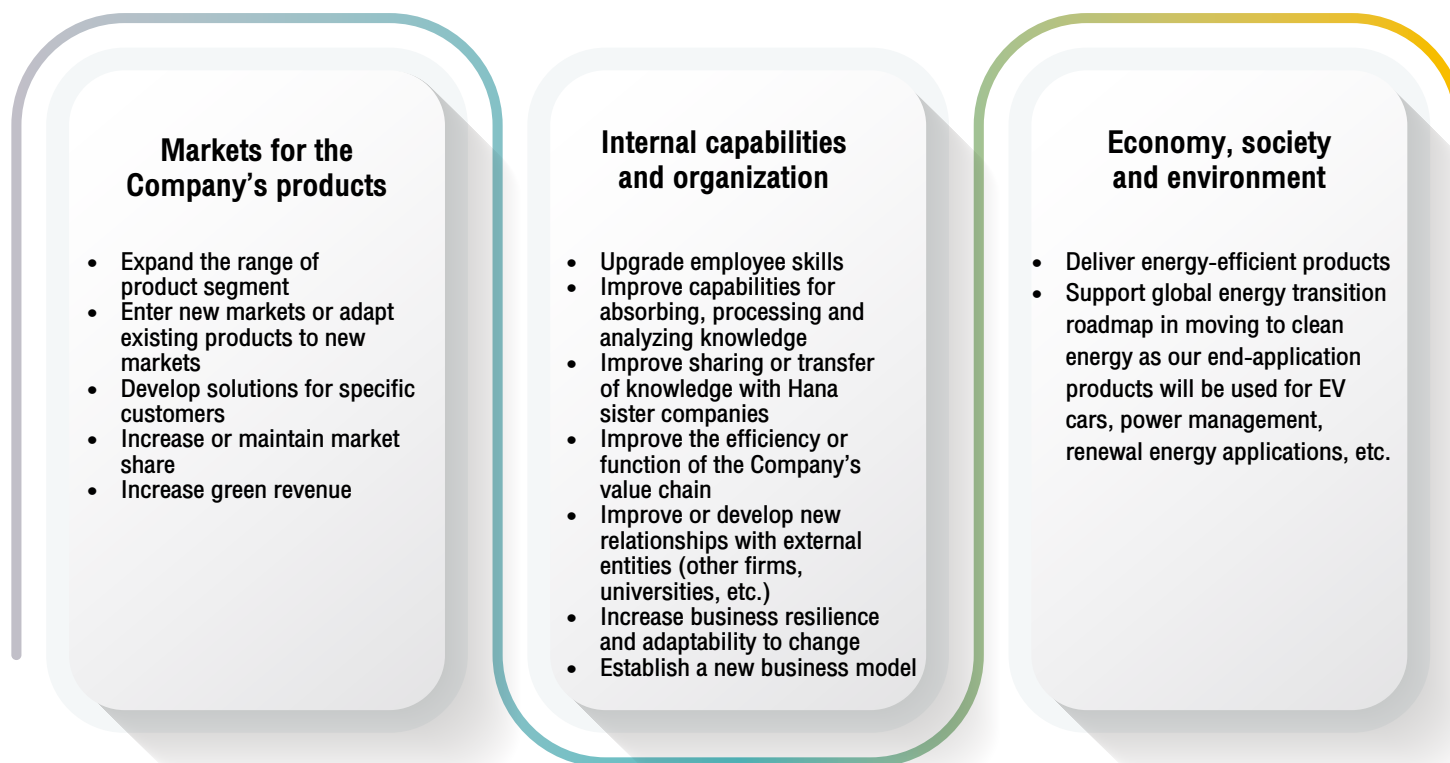
Automotive qualified SiC product release (1200V SiC MOSFET Gen1 21/80 mega ohm, Gen2 16/40 mega ohm) in 2024

The investment of Research and Development for power semiconductor device technology in the past 3 years:

(Unit: Million Baht)

2023	2022	2021
131.5	161.3	94.2

Benefits arising from having Silicon & Silicon Carbide Power Management Devices:



## Marketing, Industry Status and Competition

### Electronics Market in 2023

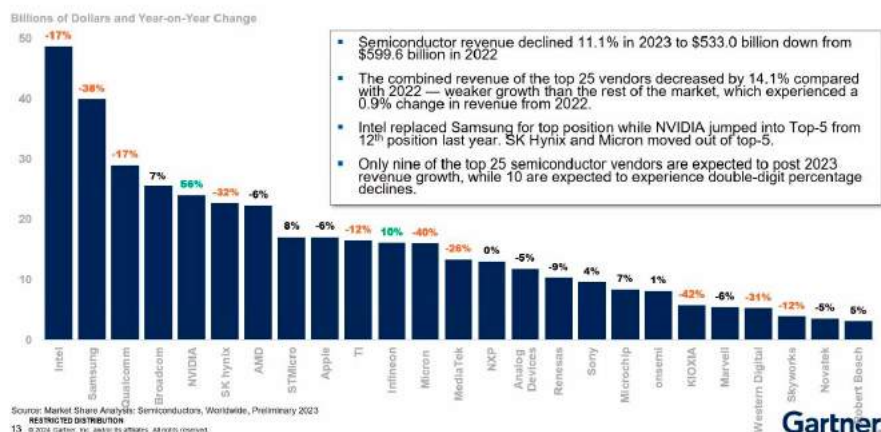
2023 was a dynamic year for the electronics and semiconductor market. The post COVID-19 period had contributed to a non-sustainable and abnormal high market demand and supply chain shortages. Even though we are now well past the COVID-19 period, we're still seeing uneven recovery across industries, component types, and geographic regions as excess inventories in various markets are consumed.

The environment remains delicate, global macroeconomic and geopolitical factors are emerging as the dominant forces shaping the semiconductor industry. Rising interest rates, high inflation, lower consumer confidence, and tech-led stock market retreats have led to uneven market demand.

The semiconductor market faced a slowdown in 2023, with a projected double-digit decline compared with 2022. According to Gartner, the Worldwide Semiconductor Revenue declined 11% in 2023 with memory revenue poised to record one of the worst downturns in history. Worldwide semiconductor revenue in 2023 totaled \$533 billion, a decrease of 11.1% from 2022, according to preliminary results by Gartner, Inc. Only 9 of the top 25 semiconductor companies posted revenue growth in 2023, with 10 experiencing double-digit declines.

The combined semiconductor revenue of the top 25 semiconductor companies declined 14.1% in 2023, accounting for 74.4% of the market, down from 77.2% in 2022.

### Preliminary: 2023 Semiconductor Market Share



The memory market is particularly hard-hit, with a 37% drop, while the logic, analog and discrete markets have remained relatively flat.

Following the underperformance of memory companies in 2023, the ranking of the top 10 semiconductor companies changed year-over-year (see Table 1).

- Intel reclaimed the No.1 spot from Samsung, after two years in the No. 2 position. Intel's 2023 revenue totaled \$48.7 billion while Samsung's revenue reached \$39.9 billion.
- Nvidia's 2023 semiconductor revenue grew 56.4% to total \$24 billion, propelling the company into the top five for the first time ever. This is due to its leading position in the artificial intelligence (AI) silicon market.
- STMicroelectronics moved up three slots to secure the No. 8 spot – the same position it held in 2019. Its revenue increased 7.7% in 2023, largely driven by a strong position in the automotive segment.

Table 1. Top 10 Semiconductor Vendors by Revenue, Worldwide, 2023 (Billions of U.S. Dollars)

2023 Rank	2022 Rank	Vendor	2023 Revenue	2023 Market Share (%)	2022 Revenue	2023-2022 Growth (%)
1	2	Intel	48.664	9.1	58.436	-16.7
2	1	Samsung Electronics	39.905	7.5	63.823	-37.5
3	3	Qualcomm	29.015	5.4	34.780	-16.6
4	6	Broadcom	25.585	4.8	23.868	7.2
5	12	NVIDIA	23.983	4.5	15.331	56.4
6	4	SK Hynix	22.756	4.3	33.505	-32.1
7	7	AMD	22.305	4.2	23.620	-5.6
8	11	STMicroelectronics	17.057	3.2	15.842	7.7
9	9	Apple	17.050	3.2	18.099	-5.8
10	8	Texas Instruments	16.537	3.1	18.844	-12.2
Others (outside top 10)			268.853	50.7	294.729	-8.8
Total Market			533.025	100.0	599.562	-11.1

Source: Gartner (January 2024)



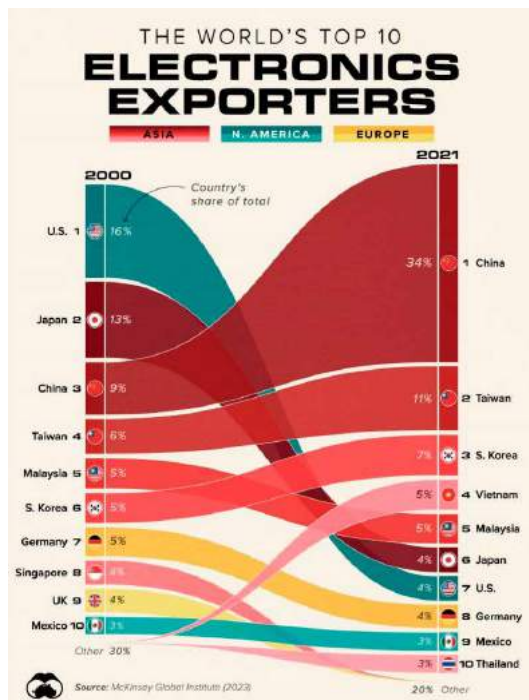
## Memory Revenue Declined 37% in 2023

Revenue for memory products declined 37% in 2023, experiencing the biggest decline of all the segments in the semiconductor market. "Smartphone, PC and server, three of the largest segments for DRAM and NAND, faced weaker than expected demand and excess channel inventory, especially in the first half of 2023.

## Nonmemory Revenue Declined 3% in 2023

Nonmemory revenue fared better and declined 3% in 2023. The market witnessed weaker demand and excess channel inventory negatively impacted the segment throughout the year. Throughout 2023, the industry has witnessed shifts in consumer preferences post-pandemic, the remarkable ascent of generative AI and increased integration of the connected world and internet of things (IoT).

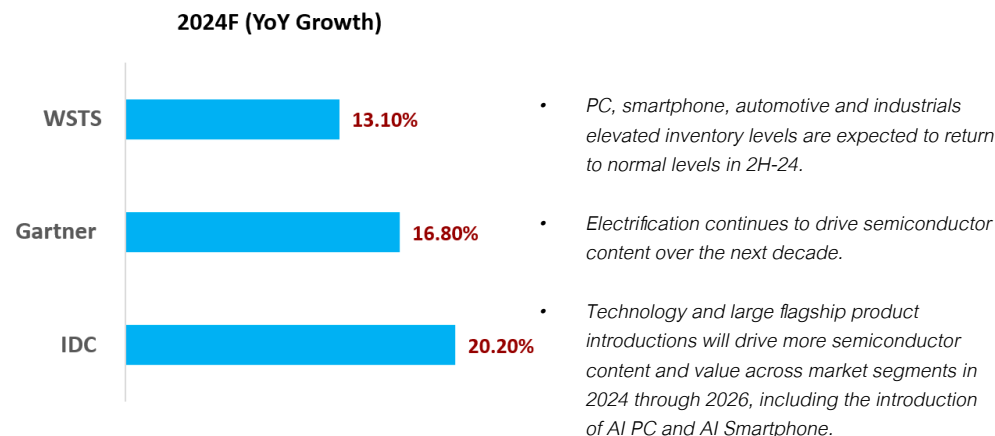
Looking to 2024, a significant paradigm shift is on the horizon. The rapid adoption of new technologies has started to uncover digital delayers, highlighting the need for enterprise-wide transformation in the consumer electronics and white goods sectors.



## 2024 Outlook and Projections

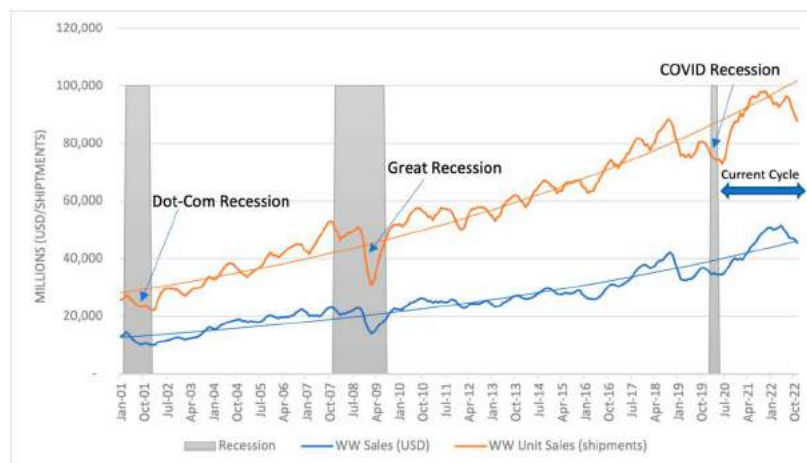
Overall 2023 was a difficult year for the semiconductor business but moving forward the outlook looks optimistic.

### Double-Digit Growth for Semiconductors Market Forecast in 2024



In the quarters since the pandemic, the semiconductor market has faced fluctuations influenced by factors such as supply chain disruptions, geopolitical tensions, and shifting consumer demands. Despite these challenges, the industry has showcased resilience and adaptability. The long-term trend over the last two decades reveals consistent growth, with annual sales soaring from US\$139 billion in 2001 to US\$573.5 billion in 2022 - a 313% increase.

The semiconductor market's current state and the projections for global sales show that this crucial sector is on the brink of transformative changes. Exceeding spring projections, the market experienced slightly better results in the second and third quarters last year, prompting a revised forecast by World Semiconductor Trade Statistics (WSTS). The outlook anticipates a single-digit contraction of 9.4% in 2023, reflecting the industry's response to ongoing challenges.



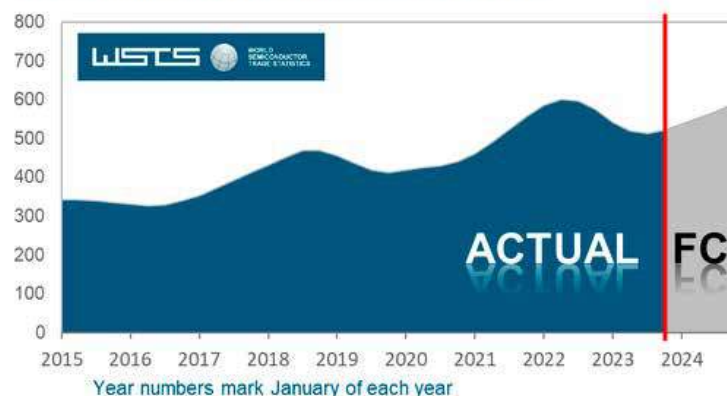
Source: WSTS and SIA analysis

### Progress of the Semiconductor Market

This year's updated market valuation is estimated at US\$520 billion, and the upward trend persists. "The outlook for 2024 points to a vigorous upswing in the worldwide semiconductor market, with projections indicating a 13.1% increase, reaching a valuation of US\$588 billion".

The industry growth is expected to be primarily fueled by the memory sector, which is on track to soar to around US\$130 billion in 2024, representing an upward trend of over 40% from the previous year. "The majority of other principal segments, including discrete, sensors, analog, logic, and micro, are also expected to record single-digit growth rates".

Global semiconductor billings (billion US\$) – 12MMA



Source: The World Semiconductor Trade Statistics (WSTS) (www.wsts.org)

From a regional standpoint, all markets are poised for ongoing expansion in 2024. "The Americas and Asia Pacific, in particular, are forecasted to demonstrate significant double-digit growth on a year-over-year (YoY) basis," WSTS highlighted.

Similarly, even SEMI, in partnership with TechInsights, reported in the Semiconductor Manufacturing Monitor that the global semiconductor industry appears to be nearing the end of a downcycle and is expected to begin its recovery in 2024.

Fall 2023	Amounts in US\$M			Year on Year Growth in %		
	2022	2023	2024	2022	2023	2024
Americas	141,136	132,536	162,154	16.2	-6.1	22.3
Europe	53,853	57,048	59,480	12.8	5.9	4.3
Japan	48,158	47,209	49,275	10.2	-2.0	4.4
Asia Pacific	330,937	283,333	317,455	-3.5	-14.4	12.0
<b>Total World-\$M</b>	<b>574,084</b>	<b>520,126</b>	<b>588,364</b>	<b>3.3</b>	<b>-9.4</b>	<b>13.1</b>
Discrete Semiconductors	33,993	35,951	37,459	12.0	5.8	4.2
Optoelectronics	43,908	42,583	43,324	1.2	-3.0	1.7
Sensors	21,782	19,417	20,127	13.7	-10.9	3.7
Integrated Circuits	474,402	422,174	487,454	2.5	-11.0	15.5
Analog	88,983	81,051	84,056	20.1	-8.9	3.7
Micro	79,073	76,579	81,937	-1.4	-3.2	7.0
Logic	176,578	174,944	191,693	14.0	-0.9	9.6
Memory	129,767	89,601	129,768	-15.6	-31.0	44.8
<b>Total Products-\$M</b>	<b>574,084</b>	<b>520,126</b>	<b>588,364</b>	<b>3.3</b>	<b>-9.4</b>	<b>13.1</b>

Source: IDC

### The Americas and Asia Pacific are anticipated to showcase substantial double-digit growth year-over-year.

"Market indicators point to a semiconductor industry bottoming at the end of the first half of 2023, and the industry has since started a recovery, setting the stage for continued growth in 2024. All segments are projected to log year-over-year increases in 2024, with electronics sales surpassing its 2022 peak," SEMI's report indicated.

The most upbeat outlook is from International Data Corporation (IDC), forecasting a turnaround and accelerated growth in the coming year. But for 2023, IDC believes worldwide semiconductor revenue will grow to US\$526.5 billion, down 12% from US\$598 billion in 2022. For 2024, IDC sees YoY growth of 20.2% to US\$633 billion, up from US\$626 billion in the previous forecast.



IDC's optimism stems from the belief that the US market will show demand resilience, and China is expected to begin its recovery by the second half of 2024 (2H24).

#### Gartner Forecasts Worldwide Semiconductor Revenue to Grow 17% in 2024

- Semiconductor Revenue to Total \$624 Billion in 2024
- Semiconductor Revenue to Decline 11% in 2023
- Deployment of Workload Accelerators in Servers to Increase to More Than 20% by 2027

Global semiconductor revenue is projected to grow 16.8% in 2024 to total \$624 billion, according to the latest forecast from Gartner, Inc. In 2023, the market is forecast to decline 10.9% and reach \$534 billion.

Strong demand for chips to support artificial intelligence (AI) workloads, such as graphics processing units (GPUs) is not going to be enough to save the semiconductor industry from double-digit decline in 2023. Reduced demand from smartphones and PC customers coupled with weakness in data center/hyperscaler spending are influencing the decline in revenue last year.

However, 2024 is forecast to be a bounce-back year where revenue for all chip types will grow driven by double-digit growth in the memory market.

**Figure 1. Semiconductors Revenue Forecast, Worldwide, 2021-2025 (Billions of U.S. Dollars)**



Source: Gartner (December 2023)

#### Which semiconductor market will see sales growth in 2024?

As per IDC, improved visibility in semiconductor growth as the extended inventory correction concludes in major market segments like PC and smartphone.

IDC also projected elevated inventory levels in the automotive and industrial sectors will normalize in 2H24, driven by the ongoing electrification trend that enhances semiconductor content over the next decade.

**PC Refresh Cycle:** The vast and aging installed base of commercial PC surpassing the four-year mark by 2024 is expected to necessitate a refresh, coinciding with the pressing demand to migrate toward Windows 11. The total PC market of 2024 should see growth of 3.4% compared to 2023.

**AI Integration:** The integration of AI capabilities into PC is expected to serve as a catalyst for upgrades, hitting shelves in 2024 and at first aimed toward certain segments of the enterprise PC market. Over time, further advancement in use cases and cost reductions could spread to the broader market.

#### Continued Evolution and Recovery of the Consumer Installed Base

The collective influence of these factors positions 2024 as a pivotal year for the PC market, offering a respite from recent challenges. Beyond 2024, growth is expected to surpass pre-pandemic shipment levels and culminate in 285 million units by 2027.

#### Worldwide Personal Computing Device Forecast by Market Segment: Shipments, Year-Over-Year Growth, and 2023-2027 CAGR

(Shipments in millions)

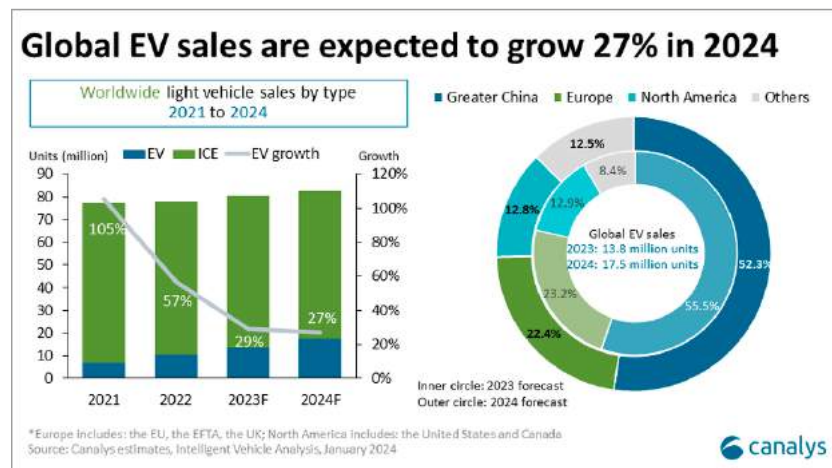
Segment	2023 Shipments	2023/2022 Growth	2027 Shipments	2027/2026 Growth	2023-2027 CAGR
Consumer	113.9	-14.8%	125.5	1.4%	2.4%
Education	29.6	-15.4%	35.0	0.8%	4.2%
Commercial (ex. Edu)	108.3	-12.2%	124.6	2.6%	3.6%
<b>Total</b>	<b>251.8</b>	<b>-13.8%</b>	<b>285.0</b>	<b>1.8%</b>	<b>3.1%</b>

Source: IDC Worldwide Personal Computing Device Tracker, December 21, 2023

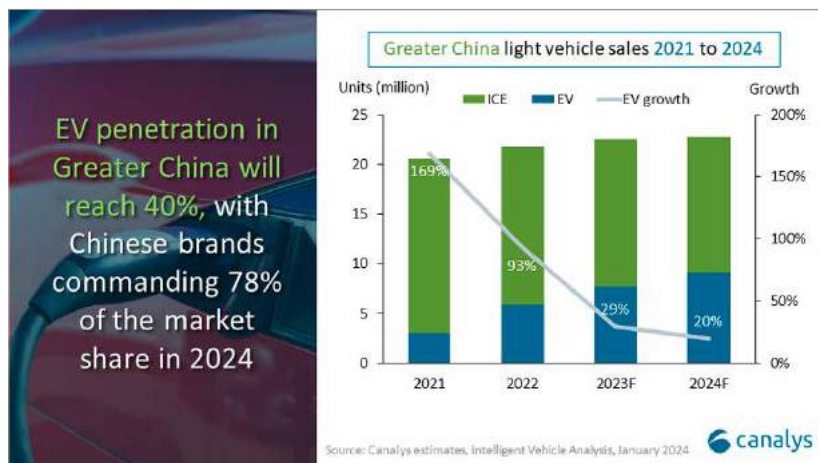




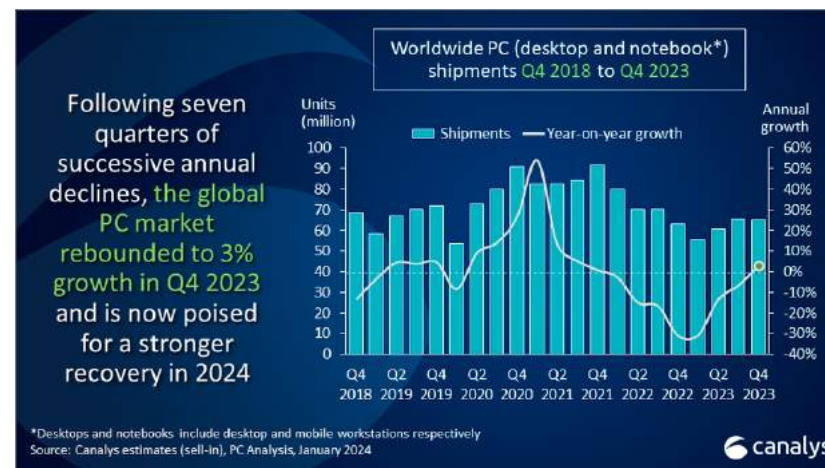
## Global EV Market Forecasted to Reach 17.5 Million Units with Solid Growth of 27% in 2024



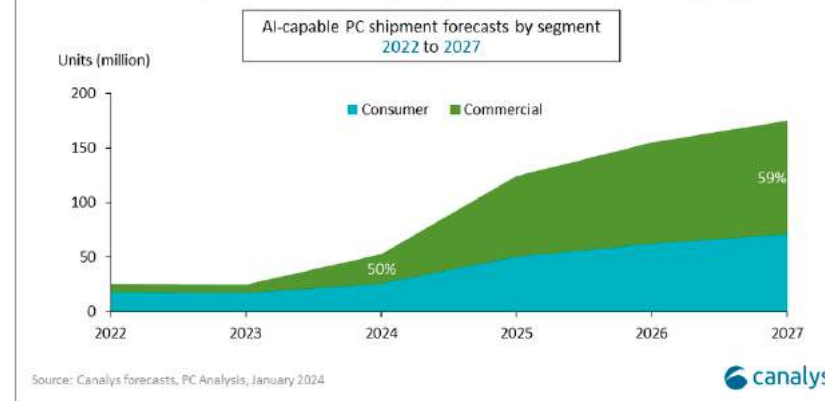
- Global electric vehicles (EVs) sales projected to grow 29% and reach 13.7 million units, equating to a penetration rate of 17.1% in 2023.
- Greater China remains the largest EV market, shipping 7.6 million units with 55.5% market share in 2023
- Canalis forecasts the global EV market will grow by 27.1% in 2024, hitting 17.5 million units
- EVs are the core growth driver for the vehicle market in Greater China. EVs from Chinese carmakers, which are expected to take up 78% of the market in 2024



## Global PC Market Returns to Growth in Q4-2023



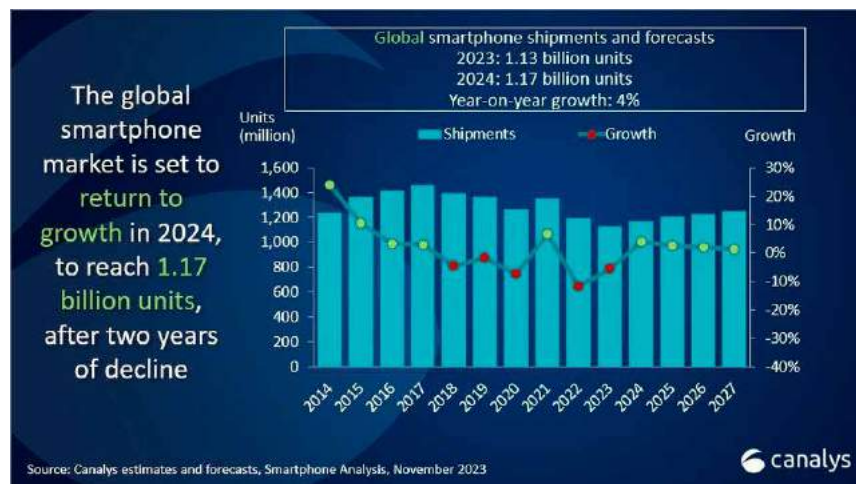
## Most AI-capable PCs deployed commercially by 2025



- The worldwide PC market ended its streak of annual shipment declines in the last quarter of 2023, posting a modest year-on-year growth of 3%. For the full year 2023, PC shipments totaled 247 million units, marking a 13% drop compared to 2022. The market is now poised for growth, with AI-capable PC set to provide an additional boost during the ongoing refresh cycle and beyond

## Smartphone Market to Recover with Easing Decline at 5% in 2023

The global smartphone market hints at early signs of recovery after declining 12% in 2022, according to new forecasts from Canalys. While shipments are still expected to drop 5% in 2023, the softening decline points at stabilization as regions like the Middle East, Africa and Latin America return to growth at 9%, 3% and 2%, respectively this year. In the full year 2023, 1.13 billion smartphones will be shipped, which is expected to grow 4% to reach 1.17 billion units in 2024. The smartphone market is expected to ship 1.25 billion units in 2027, achieving a CAGR (2023 to 2027) of 2.6%.

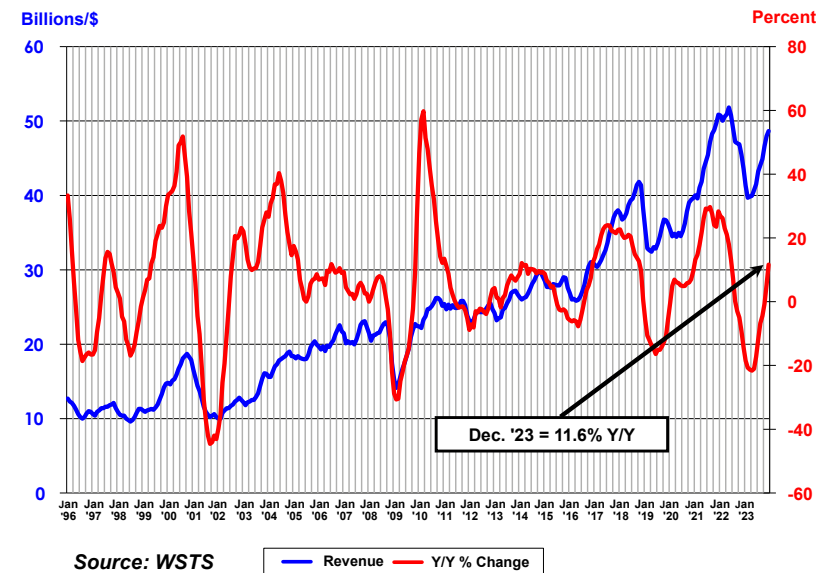


One in three smartphones in 2024 will be sold in the Asia Pacific, driven by strong upgrade demand in emerging markets



## Worldwide Semiconductor Revenues

Year-to-Year Percent Change

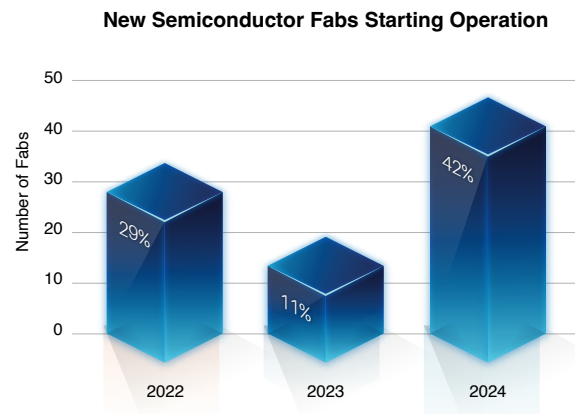


A new WSTS industry—endorsed by SIA—annual global sales decreased 8.2% in 2023 but increase 13.1% in 2024. The industry's worldwide sales were \$526.8 billion in 2023, down from the 2022 sales total of \$574.1 billion.

In 2024, global sales are projected to reach \$588.4 billion.

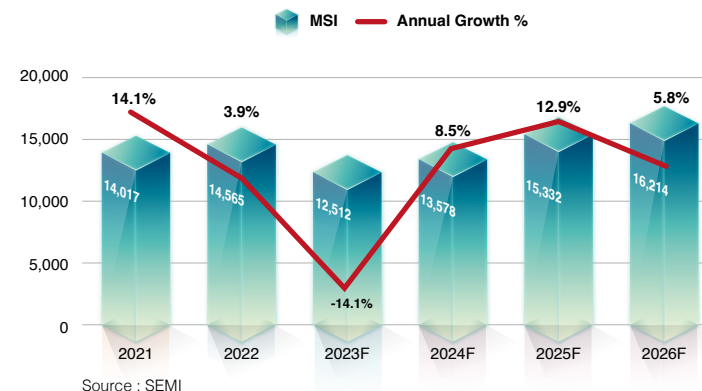
Regionally, month-to-month sales increased in China (6.1%), Asia Pacific/All Other (4.9%), the Americas (2.9%), Japan (0.6%) and Europe (0.2%). Year-to-year sales were up in Europe (6.6%) and Asia Pacific/All other (0.4%), but down in the Americas (-1.6%), China (-2.5%), and Japan (-3.1%).

## The Global Semiconductors Capacity Projected to Reached Record High 30 Million Wafers per Month in 2024



- Global semiconductor capacity is expected to increase 6.4% in 2024 to top the 30 million wafers per month (wpm) mark for the first time after rising 5.5% to 29.6 wpm in 2023.
- The 2024 growth will be driven by capacity increases in leading-edge logic and foundry, applications including generative AI and high-performance computing (HPC), and the recovery in end-demand for chips.
- The capacity expansion slowed in 2023 due to softening semiconductor market demand and the resulting inventory correction.
- In the discrete and analog segments, vehicle electrification remains the key driver of capacity expansion. Discrete capacity is forecast to grow 10% to 4.1 million wpm in 2023 and 7% to 4.4 million wpm in 2024.
- Analog capacity is projected to grow 11% to 2.1 million wpm in 2023 and 10% to 2.4 million wpm in 2024.

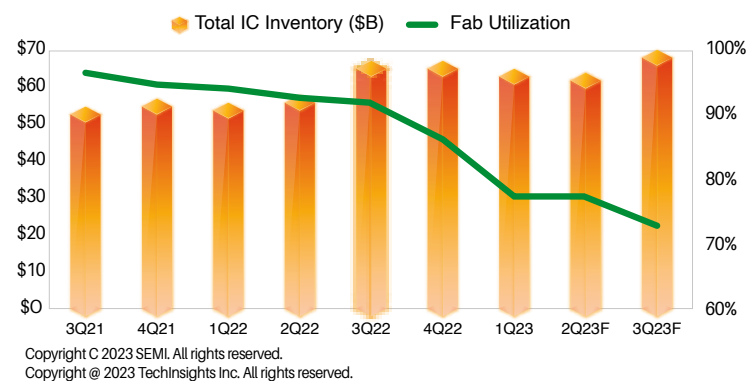
## SEMI: Silicon Wafer Shipment Rebound in 2024



According to the trade organization, global silicon wafer shipments are forecast to decline by as much as 14% to 12,512 million square inches (MSI) from the record from 2022 of 14,565 MSI. The decline is due to softness in demand for semiconductors as well as continued macroeconomic and geopolitical conditions.

The better news is the rebound will continue through 2026 as wafer shipments set new highs with silicon demand increasing due to artificial intelligence, high-performance computing, 5G, Electric and connected vehicle and industrial demand.

## Total IC Inventory Versus Utilization



With sequential IC sales declines beginning to moderate, the global semiconductor industry appears to be nearing the end of a downcycle and is expected to begin to recover in 2024, SEMI, in partnership with TechInsights, reported in the Semiconductor Manufacturing Monitor.



## Hana's Marketing Policy:

Hana's marketing policy is to provide 'best-in-class' assembly services with a focus on quality and attentive customer services.

In the future we will evolve to develop our own products also and/or help design a better solution for our customers but we are and will remain a predominantly manufacturing services-oriented company.

We believe in forming trusted relationships with our customers over the entire organization so that all of Hana's operations are well known to our customers with a focus on forming strategic partnerships with customers by providing the turnkey solutions.

This relationship of trust and mutual support leads to a long-term partnership. All of our top 10 customers have greater than 10 years of history with Hana. The growth of Hana over the years has been organic and hence this further solidifies our core value of building trusted relationships with our customers.

Our customers are electronic component companies, original equipment manufacturers (OEM) and contract manufacturers for printed circuit assemblies and components/IC that go into a wide range of electronic end applications, such as telecommunication, automotive devices, computers/ cloud computing, mobile phones, medical devices, RFID, industrial applications, consumer electronics and test and measurement. Our customers range from the largest multi-national global companies to the smallest start-ups. No single customer represents 30 percent or more of the group's revenue.

Hana manufactures all products according to the customers' specifications and requirements and ships such products directly to our customers or customers' designated locations. All of Hana's assembled parts are exported to three main regions: USA, EU, and Asia.

## Hana's Value Proposition and Competitive Advantage:

Hana focuses on providing our customers an overall competitive cost of doing business and does not just focus on price but on quality, capability and flexibility. This remains the corner stone of our long relationship with our customers and leads to a mutually beneficial and symbiotic partnership with our customers. Hana continues each year to increase the technical capabilities at each of our manufacturing facilities. This continuous development is another key attraction for all our customers.

Hana's strategic competitive advantage is to provide a diversified Electronics Manufacturing Service (EMS) to an international customer base. Our diversification includes Integrated Circuit (IC) Packaging and Test, Chip-on-Board, Surface-Mount Assembly "PCBA", Hybrid-Assembly, Micro-Coil, etc., which can provide "One-Stop-Shopping" for most of our customers. This broad range of services is a key competitive advantage for Hana and this integration proves to be extremely useful due to the merging of the semiconductor devices and module level assembly.

## Our Competitors:

In the contract manufacturing industry, Hana is now classified as one of the top 50 world EMS companies. In Thailand, there are only few companies doing similar business as Hana. The major competitors outside Thailand in the EMS sector are IMI, Flextronics, Solectron, Plexus, and Pemstar. Whilst they are competitors, Hana avoids direct competition with these competitors by focusing on the manufacturing of microelectronics components and sub-assembly, while most competitors focus on box build assembly.

In terms of the semiconductor sector, the major competitors outside Thailand are Unisem, Carsem, Amkor, MPI and ASE.

Inside Thailand, companies in the PCBA field include Benchmark, Fabrinet, SVI and SMT. However, we focus at different business sectors. In the IC assembly and test semiconductor segment, there are UTAC and Stars Microelectronics Thailand as our direct competitors.

## To compete with our competitors:

1. Hana (Thailand) is positioned towards higher technology and better infrastructure than those in the more labor-intensive countries, such as India and Vietnam. Even with the recent wage increase, Thailand can still remain competitive.
2. The US/China trade conflict benefits Thailand industries.
3. The COVID-19 crisis and the resulting disruptions have led to many customers looking for alternate sources who have the ability to scale and meet their demand. Hana's solid balance sheet allows itself to expand and support the needs of our customers.
4. Hana (China) also provides a competitive geographic location but with more corporate technical and administrative support to distinguish them from local competitors. This also strengthens our domestic market inside China.
5. Hana through its Cambodian facility targets labor intensive work.

6. Hana provides a wide range of products and processes in various locations to distinguish itself from other competitors who also have multiple factory sites but a smaller product range.
7. Even with the recent fluctuations in the worldwide economy, Hana has maintained a strong cash flow.
8. Hana has multiple sites which provide alternative production facilities in case any one site has difficulty.

### Future Projects in Plan

In 2024, expansion will be based on the industry momentum and customer needs. We will however continue to support investments in capability and technology.

In the semiconductor divisions in both China and Thailand, we continue to focus on high value-added opportunities by leveraging our technical competencies and enhanced quality performances.

We will also keep our focus on developing next generation packaging technology to help capture more opportunities and continue our growth. However, investment in the semiconductor packaging divisions will remain subdued in 2024 due to the current downcycle in the semiconductor industry.

In the microelectronics division in Lamphun, we shall continue to broaden our capabilities and increase automation to maintain a competitive cost structure. Hana Technologies, Inc in Ohio, USA will continue to expand its proprietary UHF inlays products in 2024 and Power Master Semiconductor in Korea will continue to expand capacity for its Silicon Carbide power devices.

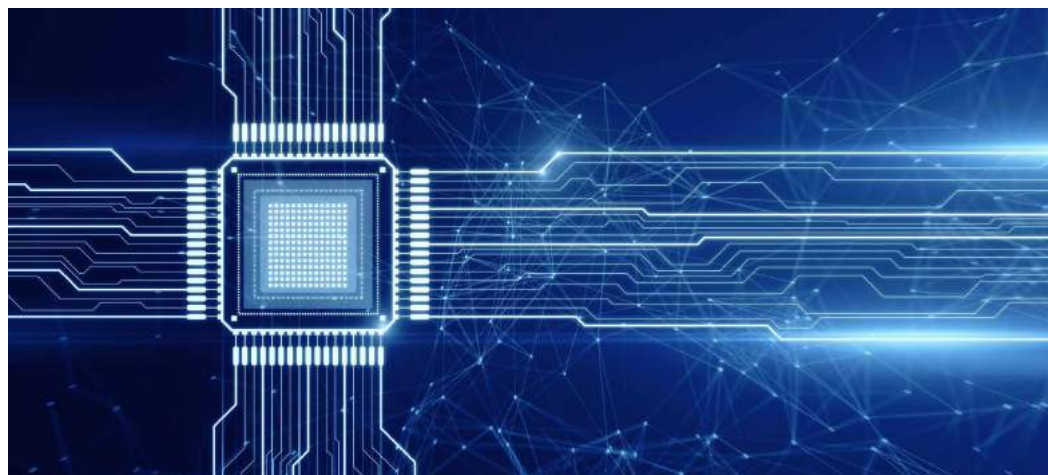
## Procurement of Products or Services

### Production Capacity

(Unit: Million Pieces/Year)

Manufacturing Plants	2023		2022		2021	
	Production Capacity	Actual Production	Production Capacity	Actual Production	Production Capacity	Actual Production
<b>A) PCBA</b>						
• Lamphun Plant*	1,200	611	1,200	800	1,400	1,190
• Jiaxing Plant	45	33.4	42	35	39	25
• Cambodia Plant	15	8	10	6	5	3
<b>B) IC</b>						
• Ayutthaya Plant	6,392	4,640	6,344	6,050	5,767	5,072
• Jiaxing Plant	2,461	990	2,766	1,073	2,241	1,722
<b>C) RFID &amp; MICRODISPLAY</b>						
• USA Twinsburg Plant	200	100	800	350	500	180
• USA Solon Plant	800	325				

\*Remark: The production capacity and actual of 2023 was lower from prior years due to product mix changes and different sizes of PCB for different products.



## Product Distribution and Raw Materials

Hana manufactures all products according to the customers' specification and requirements and sells such products directly to our customers. The major raw materials come directly from suppliers and/or are consigned by our customers. Our Thailand and Cambodia operations imported most of our major raw materials used in production either directly or through distributors with the ratio of values 95% from overseas and 5% from domestic suppliers, whereas our China operation imported from overseas 70% and 30% localize sourcing. For US operation, 20% domestic suppliers and 80% from overseas. Our operation in Korea imported raw materials from overseas 90% and 10% from local suppliers. Hana group has more than 1,300 suppliers of raw materials and no purchase of raw materials from any one supplier valued more than 30% of the total purchases. Our major suppliers, who are in the approved vendor list, have the long term relationship with Hana ranged from 7 to 26 years.

The Company orders materials in relation to our customers' orders using planning software systems to match the customer demand. The raw materials are mainly for industrial use and most of them are common in the market. Our major raw materials are wafer, die/ASIC, lead frames, PCB, capacitors, connectors, gold/copper wires, epoxies, metal parts and plastic parts. The major raw materials are imported from Singapore, Malaysia, Belgium, Hong Kong, China, Japan, Taiwan, USA, etc. For most of our customers, wafers are consigned by the customers with their proprietary designs but are used solely on their own products.

Some materials are based on world prices market such as gold, copper, steel prices which may fluctuate. The Company has managed various ways to cope with the price fluctuation such as finding second source of substitute raw materials, advanced planning for material ordering in conjunction with our suppliers and customers.

Hana values the importance of product quality and standard as priority, we employ rigorous testing procedures for all incoming materials before releasing them to the assembly lines in order to ensure that production high standards will be maintained in accordance to international standard requirements.

## Assets Used in Business Operating

The property, plant and equipment of the Company and subsidiaries as of 31 December 2023 are presented as below.

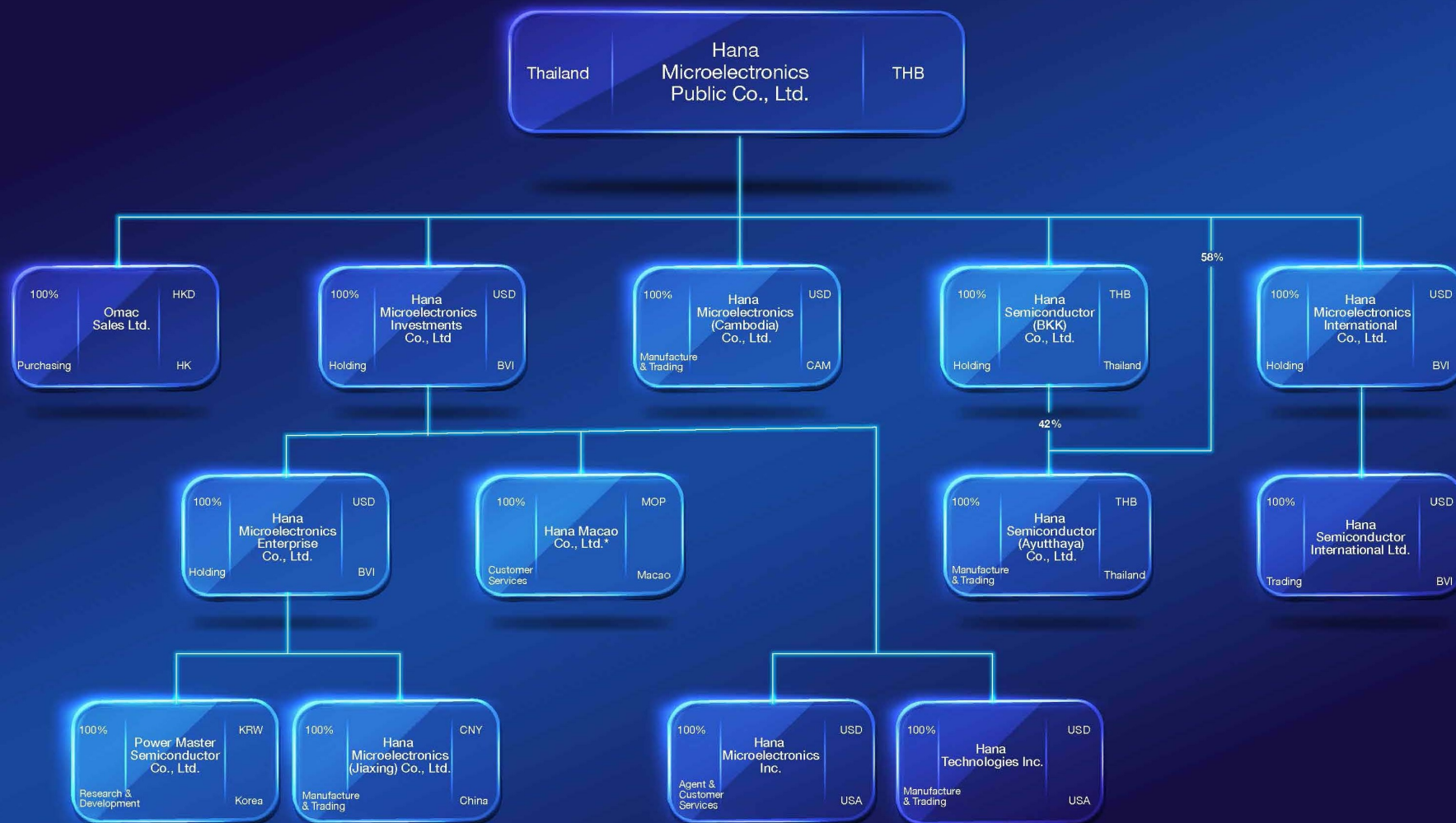
(Unit: Million Baht)

No.	Description	Net Book Value
1.	Land*	529
2.	Building*	2,132
3.	Leasehold Improvement*	34
4.	Fixtures	323
5.	Machinery and Equipment*	6,683
6.	Office Furniture and Equipment	152
7.	Vehicles	12
8.	Construction in Progress and Machinery under Installation	1,836
<b>Total</b>		<b>11,701</b>

\*Remark: For further detail reference, it is provided in Attachment 4.



## Hana Group Structure



## 1.3 Shareholding Structure

### Business Operating Policy

Hana has the policy to diversify its business to multiple manufacturing locations strategically based in low-cost country wherever possible and setting up the necessary companies for customer service, purchasing center, trading and holding companies to serve the group requirements.

The list of subsidiaries categorized by business type is as follows:



**Shareholding in subsidiaries which the Company holds shares of them directly and indirectly 10% up:****Holding shares by the Company directly:**

Company	Address	Business Type	Paid-up Shares	Registered Shares	Type of Stock
Hana Semiconductor (BKK) Co., Ltd.	65/98 Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Lakxi, Bangkok 10210, Thailand	Holding	99,999,994	100,000,000	Common stock
Omac Sales Ltd.	Unit B1, 10/F, Block B, HK IND. Centre 489-491 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong SAR, China	Purchasing of electronic components and equipment	100,000	100,000	Common stock
Hana Microelectronics International Co., Ltd.	Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands	Holding	2	2	Common stock
Hana Microelectronics Investment Co., Ltd	Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands	Holding	2	2	Common stock
Hana Semiconductor (Ayutthaya) Co., Ltd.	100 Moo 1, T. Baan Lane, A. Bang Pa-in, Ayutthaya Province 13160, Thailand	Manufacturing and trading of electronic components	69,999,993	120,000,000	Common stock
Hana Microelectronics (Cambodia) Co., Ltd.	Neang Kok Village, Pakkhleng Commune, Mondul Seyma District, Koh Kong Province, Cambodia	Manufacturing and trading of electronic components	20,000,000	20,000,000	Common stock



**Holding shares by the Company's subsidiaries:**

Company	Address	Business Type	Paid-up Shares	Registered Shares	Type of Stock	Shareholding by
Hana Semiconductor International Ltd.	Rua De Pequim No. 126 EDF, Commercial I TAK C18, Macao	Trading of electronic components	1,851,283	10,000,000	Common stock	Hana Microelectronic International Co., Ltd.
Hana Technologies, Inc.	29000 Aurora Road, Solon, Ohio 44139, USA	Manufacturing and trading of electronic components	437,752	437,752	Common stock	Hana Microelectronics Investment Co., Ltd.
Hana Microelectronics, Inc.	3140 De La Cruz Blvd., #107, Santa Clara, CA 95054, USA	Agent and customer services	1,000	1,000	Common stock	Hana Microelectronics Investment Co., Ltd.
Hana Microelectronics Enterprise Co., Ltd.	Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands	Holding	2	2	Common stock	Hana Microelectronics Investment Co., Ltd.
Hana Macao Co., Ltd.	Rua De Pequim No. 126 EDF, Commercial I TAK C18, Macao	Customer services	1	1	Common stock	Hana Microelectronics Investment Co., Ltd.
Hana Microelectronics (Jiaxing) Co., Ltd.	No#18, Hengnuo Road, Xingcheng Industrial Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, 314000, P.R. China	Manufacturing and trading of electronic components	65,000,000	95,000,000	Common stock	Hana Microelectronics Enterprise Co., Ltd.
Hana Semiconductor (Ayutthaya) Co., Ltd.	100 Moo 1, T. Baan Lane, A. Bang Pa-in, Ayutthaya Province 13160, Thailand	Manufacturing and trading of electronic components	50,000,001	120,000,000	Common stock	Hana Semiconductor (BKK) Co., Ltd.
Power Master Semiconductor Co., Ltd.	79-20, Gwahaksaneop 4-ro, Oksan myeon, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Republic of Korea	Manufacturing and trading of electronic components	256,959,297	256,959,297	Common stock	Hana Microelectronics Enterprise Co., Ltd.

### Policy of Supervision of Subsidiaries and Associated Companies

The Company has authority to manage and oversight the subsidiaries and associated companies. Operating sections of each subsidiary shall be responsible by General Manager which shall report to the Chief Executive Officer. Capital expenditure and financial control management shall be handling by the Executive Committee which is reviewed by the Board of Directors.

### Persons who may have conflicts of interest in shareholding in subsidiaries and affiliated companies

None

### List of Major Shareholders

The first top 10 shareholders and shareholding proportion of the Company as of the latest closing registration book on 29 November 2023 is as follows:

No.	Shareholders	No. Of Shares	% Holding
1.	Omac Limited, Omac (HK) Limited, Rainbow Joy Limited		
	1. Omac (HK) Limited	172,480,000	19.48%
	2. Omac Limited	40,939,360	4.62%
	3. Rainbow Joy Limited	40,000,000	4.52%
	<b>Total Same Group</b>	<b>253,419,360</b>	<b>28.62%</b>
2.	LGT Bank (Singapore) Ltd.	87,989,000	9.94%
3.	Thai NDVR Company Limited	70,155,389	7.92%
4.	South East Asia UK (Type C) Nominees Limited	28,194,260	3.18%
5.	The Bank of New York Mellon	20,004,905	2.26%
6.	Tisco Master Pooled Registered Provident Fund	9,128,600	1.03%
7.	BNP Paribas, London Branch	8,600,700	0.97%
8.	Thai Life Insurance Public Company Limited	7,366,100	0.83%
9.	Mr. Moong Chu Hui	6,090,000	0.69%
10.	UBS AG London Branch	5,840,200	0.66%
11.	Others	388,578,146	43.89%
	<b>Total</b>	<b>885,366,660</b>	<b>100.00%</b>

Remark:

- No. 1 are the related companies under Section 258 of the Securities and Exchange Act (No. 4) B.E. 2551
- Han Family hold shares in Omac Limited which is a holding company, equivalent to 66.66%. The shareholders of the company consist of:
  - Ms. Janine Margaret Han holds 120,000 shares or equivalent to 33.33% of the total issued shares.
  - Ms. Ayna Sylvie Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.
  - Mr. Oliver Edward Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.
  - Mr. Rupert George Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.
- Mr. Richard David Han takes a position of the director of Omac Ltd., Omac (HK) Ltd. and Rainbow Joy Limited. These 3 companies engage in holding business.

These foresaid 3 companies are the same group of shareholders in accordance to Section 258 of the Securities and Exchange Act of Thailand (No. 4) B.E. 2551

## Relationship with the Business Group of Major Shareholders

The major shareholders of Hana Microelectronics Public Co., Ltd. are Omac Limited, Omac (HK) Limited and Rainbow Joy Limited, all of 3 companies holding shares total of 253,419,360 shares, equivalent to 28.62%. Those companies have no relationship or related to any other businesses with the Company.

## 1.4 Amount of Registered Capital and Paid-up Capital

As of 31 December 2023, the Company has a registered capital of THB 885,366,746 and the paid-up capital is THB 885,366,660 divided into 885,366,660 ordinary shares with par value of THB 1.00 per share. The Company has no preferred shares.

## 1.5 Issuance of Other Securities

The Company does not issue any other securities besides ordinary shares as stated above.

## 1.6 Dividend Policy

The Company's dividend policy to pay shareholders is approximately 30 - 100% of its consolidated net income after deduction of all specified reserves, subject to the Company and its subsidiaries' cash flow and investment plans, including justifications and other considerations as deemed appropriate. The dividend policy of the subsidiaries to pay the Company is 0 - 100% of appropriated earnings.

Dividend Payment	2023	2022	2021
Interim Dividend (Baht/share)	0.50	0.50	1.00
Annual Dividend (Baht/share)	0.50	0.50	1.00
Total Dividend Payment (Baht/share)	1.00	1.00	2.00
Total Amount Paid (Baht)	885,366,660	804,878,860	1,408,538,005
Earnings per Share (EPS)	2.14	2.61	1.92
Payout Ratio	47%	38%	104%



## 2. Risk Management



### 2.1 Risk management policy and plan

The Risk Management Committee has formulated risk management policies as following purposes:

- To enable the Company to manage any probable risks in an efficient manner, with such management procedures implemented in a sound and systematic manner.
- To promote preventive risk management procedures to be carried out in a swift, transparent, accurate, and complete manner on a systematic and consistent basis.
- To encourage and develop all employees and management members at all levels to have thorough understanding and recognition of the significance of risk management procedures, while promoting participation in said risk management system throughout the organization.
- To facilitate risk management procedures to be implemented in an appropriate manner well conforming to the Company's mission and policy.

As part of good corporate governance, the Board of Directors is to ensure the appropriate system of risk management in line with the Company's objectives and strategies and intend to identify, control and promote the mitigation of risks. The risk management framework is to identify risks, assess and prioritize those risks, set up a proactive monitoring process that will focus on mitigating risks and regularly report to the Board of Directors.

**Risk Management Structure:** With due recognition by the Board of Directors of the various risk factors posing as possible threats to the Company's business operations, the Board therefore assigned the Risk Management Committee to be responsible for formulating policies and guidelines for risk management, overseeing risk management to ensure that the risk management process is appropriate, adequate and effective.

The Risk Management Committee consists of 4 members which composed of independent directors as the majority. The Risk Management Committee is responsible for performing duties and report to the Board of Directors. The Executive Committee has the direct duties and responsibilities to manage risks, determine risk management direction for the organization, plan, and monitor important risks. The Corporate Risk Officer has been assigned the duties to gather, analyze, assess risks, and report risk management profiles to the Executive Committee and Risk Management Committee. Each Hana business unit as the risk owner is responsible for risk assessment in their respective areas of responsibility including manage and report the mitigation and internal control measures. The CEO is the highest ranking person with dedicated risk management responsibility on an operational level.

**Risk Culture:** Risk management has been put in our Quality System Management Manual. The Company's policy risks and opportunities are analyzed in each process by using risk analysis tools such as SWOT, PESTLE, Process Approach, Risk-Based Thinking, Turtle Diagram, Failure Modes and Effects Analysis (FMEA), etc. to be used as a strategy for risk management as a major part of the occupational health, safety and environmental system including the environmental management system.



**Business Continuity Plan:** The Company has a business continuity plan to deal with significant risks particularly reducing the impact on disruption of production and delivery. With crisis management and communication plans, there are various execution measures to reduce damage to production buildings due to natural disasters, correct conditions that cause storage warehouse and finished goods damage, prevent loss of production capacity due to failures of machinery and/or human errors, ensure raw material supplies, and keep utilities operated. The Company has prepared emergency plans to support those various situations by requiring a Crisis Management Team to manage and communicate in such crisis.

## 2.2 Risk factors on business operation

Those risk factors likely to have impacts on the group operations could be summarized as follows:

### 2.2.1 Risk Factors which effect to the Company Group's Business

#### A) Strategic Business Risk

- **Change in Major Customers Risk**

The largest risk management perceived is significant changes within our major client base which may be brought about due to any number of external factors such as a change in their ownership, or a change in their product program. Whilst Hana's key strategy is to maintain a diverse base of customers with different industry exposures; significant changes from any one of our major clients can affect the group's performance. Market conditions resulting from changes in economic growth rates of economies will also affect prices and demand for the Company's services.

**Managing risks:** To minimize the impact of customer risks, the Company has a broad spread of customers selling into a spread of end user markets, with the largest major customer contributing not more than 20% of the group's sales revenue.

- **Global Economic Risk**

The Company's selling prices and demand for products and services can be affected from economic condition of global markets derived from the impact of Covid-19 outbreak, trade war, inflation, interest rate, recession, and global energy crisis which lead to the weakness in global demand.

**Managing risks:** The Company maintains a diverse base of customers and wide product portfolio to minimize the impact of global economic downturn. The Company and tries to maintain a low cost structure and adequate cash reserves to enable it to compete and survive within possible difficult environments. Change in US trade policy entails the business disadvantage for our China manufacturing base; however, the trade war created an opportunity for Thailand, Cambodia and South Korea. The Company and subsidiaries stand ready to make timely adjustments in response to possible changes.

#### B) Operational Risk

- **Supply Chain Risk**

The electronics component market could persist with some shortages, particularly IC components for Printed Circuit Board Assembly "PCBA", ICs for RFID Inlays, and lead frames and customer's IC dies for Integrated Circuit "IC" production. The supply chain risk also includes failure to secure cost effective, reliable supply of bare wafers for producing the Company's power package devices. Although the semiconductor crisis is largely resolved, the chip supply situation still carries a degree of uncertainty. Pressure on the supply chain remains with risk of further disruption as geopolitical trade risks remain high and the semiconductor supply can still be affected by future moves from either side.

**Managing risks:** With global supply chains becoming increasingly complex and integrated, each Hana division works closely with our long-term suppliers/distributors in building strong relationships with suppliers particularly for those of key components and raw material supply. Our supplier collaboration includes regular communication, joint problem-solving sessions, on-site visits, supplier award program, and share technology platforms to strengthen partnership. In increasing supplier collaboration and visibility, the suppliers can better support our needs to cope with potential disruptions in the future by providing timely response to changing conditions. Hana also work with some customers on alternate sources or multi-sourcing options including localized sourcing of alternative parts to diversify supplier base, spreading the risk and reducing dependency on one entity.



- **Workforce and Labor Risk**

Hana Group employs more than 8,000 people worldwide with the majority of whom are employees who work directly in productions. The Company may face skilled labor shortage or unable to manage to get enough workforce to meet the demand. The increase in labor costs from the minimum wage adjustment will also contribute the challenge resulting in the high turnover rate, higher production costs and the competitive disadvantage.

**Managing risks:** The Company promotes the integration approach by improving production's automation along with human capital development to upgrade labor skills along with technology innovation as to reskilling and upskilling the future ready workforce for Industry 4.0. In addition to provide educating and training to employees, the Company encourages our personnel at all levels to participate in Continuous Process Improvement Programs by giving opportunities for them to practice the analytical thinking process, working as a team for process improvement and send them to exchange their development on the competition stages as their pride so encouraging a culture of collaboration and teamwork by recognizing and rewarding team contributions and successes. To consider the welfare of workers, the Company has a labour relations system to review and improve employees' welfares appropriately and fairly. In addition, the employees' quality of life in the workplace has been developed through the safety management, occupational health, and working environment to promote and maintain physical and mental health which brings quality of working life of employees.

- **Cybercrime**

Cybercrime is a potentially high impact risk from which part of the Company's IT software and data could be compromised. The Company could be affected by cyber-attacks affecting hardware, systems, network, customer data and intellectual property that can cause damage to our business, affect our bottom line, business disruption as well as our reputation as a reliable supplier and customer trust.

**Managing risks:** The Company has developed the Cyber Security Policy and Cyber Attack Guideline Information Technology System including Personal Data Protection Policy covering security incident response plan and security incident respond team, which have been approved by management. Our Hana Ayutthaya and Hana Jiaying have been awarded ISO 27001 certification which is the international standard for information security management which is a risk-based approach to corporate information security risk management that addresses people, processes and technology. Further, we have the expert review and assess the associated risks with our cyber security control along with proper management actions to reduce identified risks.

- **Hazard Risk**

A factory could be partially or wholly destroyed by fire, flood or earthquake. Whilst the Company has multiple factories, there would be a loss of customers and a period of months to years to install new equipment and recover customer orders.

**Managing risks:** The Company mitigates this risk through having multiple production sites in multiple countries. The Company further reduces facility risks at each factory with numerous measures to minimize the risk of a facility being damaged by such events. The management regularly reviews and audits the measures taken to minimize fire and flood risk. Furthermore, the Company has insurance for property damage and business interruption to further mitigate the risk from facility damage. However, insurance cover for flood risk at the Ayutthaya factory is limited due to the 2011 floods. At the group's major facilities in Thailand the Company has additional flood protection to reduce the risk of damage from flood and has been re-assessed by insurance experts on a yearly basis.

- **Key Management Risk**

The Company employs a number of expatriate management in key positions. Whilst the Company does not have any individual staff or management who are key to the survival of the business, loss of senior management and the Company's ability to replace key management could affect the Company's market value and business performance.





**Managing risks:** The Company minimizes management risk through not having key man issues and sufficient management depth to be able to continue to operate the Company in the event of management turnover. The Company also has a succession plan at executive level which focuses on replacing the incumbents of key positions particularly at the senior management and executive level.

## C) Financial Risk

### • Foreign Exchange Rate Risk

In 2023, the Group had gain on exchange rate amounting to THB 41,283,448 and loss on derivatives amounting to THB 49,418,425. Below is the summary of the past 3-year of gain (loss) on exchange rate and derivatives.

(Unit: Million Baht)

	2023	2022	2021
Gain on exchange rate	41	(320)	(274)
Loss (gain) on derivatives	(49)	30	(35)
Total	(8)	(290)	(309)

The main risk of financial impact is the exchange rate movements of the Thai Baht and Chinese Yuan compared to the US dollar. However, both the Company's sales revenues and material costs are almost wholly in USD which provides a natural hedge. Capital expenditure is also in USD for machinery which is mostly imported.

All of the Company's sales revenue are in foreign currency (primarily USD) and USD currency costs are 60% percent of sales revenues, the Group operating profit sensitivity to change in the Thai Baht/USD and Chinese CNY/USD exchange rates is currently about Baht 200 million per quarter for every 10% of change in the average Baht/USD and CNY/ USD rates (i.e.  $(1 - 0.60) \times \text{Sales Revenue} \times 10\%$ ).

**Managing risks:** To reduce the risk of volatile exchange rate, USD 120 million is hedged using foreign exchange forward contracts to buy THB and sell USD on a rolling 3 to 6 months basis.

The Company currently has no net interest bearing borrowings and therefore is not negatively affected by potential interest rate increases.

### • Group Financial Investment Risk

As at 31st December 2023, the group had THB 7.8 billion in cash and financial investments. Part of the cash reserves are invested in corporate bonds and short term debt funds to provide investment income return. The chance that an outcome or investment's actual gains may differ from an expected outcome or return.

**Managing risks:** The financial investments risk is mitigated through investing in investment grade financial instruments such as deposits, bonds and similar funds which are investment grade at the time of purchase. The financial investment portfolio invests in a diversified range of corporate bonds and short term debt in a diversified range of industries and countries which minimizes the risk if a country and/or industry is impacted by certain economic events.

## D) Compliance Risk

### • Regulatory risk

As Hana group operates its businesses in different countries, our compliance with wide array of regulations and laws both local and in new foreign business locations could have the possibility of violating such laws.

**Managing risks:** In regard to the statutory compliance, the Company and its subsidiaries recognize the importance and the need to adhere to local laws and regulations when entering a foreign market, and will not intentionally violate those rules. Ongoing adherence to local rules are regularly assessed and monitored.

## E) ESG Risk

### • Environmental Risk

Our manufacturing business activities will have an impact on the environment through the pollution, using natural resources and greenhouse gas emissions.



**Managing risks:** The Company promotes the renewable energy. Solar panels totaling 5.8 MW output have been installed on the roof of the Companies' facilities in Lamphun, Ayutthaya, HQ, and Jiaxing. In 2024, the additional phase of solar rooftop and solar floating will be installed at Hana Thailand facilities. The use of renewable energy will reduce the use of electricity that comes from burning fossil fuels and reduce greenhouse gas emissions.

The Company ensures the quality of wastewater before releasing into the treatment system. There is a project to change the aeration pump of the aeration system in the wastewater treatment system in order to increase the efficiency by receiving consultations and funding from the Ministry of Energy. The Company ensures the air treatment system regularly checked along with a maintenance system to be able to operate continuously and efficiently. Waste management to reduce the volumes of waste and control waste streams according to the hierarchy for different methods of treatment has been executed. The Company has been implementing various projects to reduce the use of electricity and organize campaigns for all employees to realize the conservation of the environment by strengthening the culture of environmental preservation and provide knowledge and training to staffs on the environment and various activities in accordance with the specified policies and plans.

- **Human Rights Risk**

Our business activities can infringe human rights of our employees, customers, our supply chains, communities if not manage properly.

**Managing risks:** The Company employs only legally qualified persons in each country that it operates and has assessed human rights risk. The Company has been regularly assessed by the customers to ensure compliance with the Electronic Industry Coalition (RBA) Code of Conduct which covers labor and human rights, self-assessment audits done by the internal auditors where the findings and corrective actions are reported to management and to the Audit Committee regularly. In addition, the Company has been certified the ISO 45001 Occupational Health and Safety standard. The Company has required our Suppliers to sign compliance with the Supplier's Code of Conduct. In addition, Hana Lamphun received an award from the Department of Industrial

Works for the seventh year in a row in recognition of the Company's commitment towards sustainable corporate social responsibility. The Company also provides an open channel for employees and the third party to filing compliant/suggestion for areas that need improvement.

- **Corruption Risk**

The potential risks of corruption may vary among different locations and operating units of Hana Group, which could incur higher costs as well as reputation of the Company if not properly manage and monitor.

**Managing risks:** The anti-corruption policy and program have been implemented and monitored. The key internal controls are in place by having proper work flow establishment for key risk activities and ensure compliance with legal requirements, requiring the concerned management to confirm that the anti-corruption policy, putting in place the monitoring through the internal audit plan, etc.

- **Business Partner Risk**

Our risks from the business partners/suppliers include the economic aspect, which is a reliance on a few suppliers to supply the key raw materials and the risk from receiving products/services that are not met the quality standard. For social and environmental related risks, the suppliers may not comply with the Company's Supplier Code of Conduct and the Responsible Business Partner (RBA) Code of Conduct which has set standards to ensure a working environment in the electronics industry or other industries that have electronic components as the main component including the supply chain of such industries is safe for employees. Employees are treated with respect and dignity so to ensure the suppliers conduct their businesses with responsibilities towards society, environment, and the codes of conducts.

**Managing risks:** Our suppliers of the key raw materials have been approved or qualified by the customers with the supplier qualification program, which the process covers identifying and mitigate the associated supply risks of raw materials and services including having second sources and alternative parts to reduce reliance on a few suppliers. Hana also promotes localized suppliers as part of our supply



chain management strategies. Our supplier management program includes onsite visit, supplier recognition program, sharing production technology in order to develop potential suppliers, improve quality, and reduce raw material costs. Hana also focus on the supplier relationship management to strengthen relationship between the company and suppliers, including supplier assessment on their performance in social responsibility, code of conduct practices, and environmental impact.

## 2.2.2 Shareholder Concentration Risk

- **Risk from the Company having a major shareholder of more than 25%**

As at 29 November 2023, the Company's major shareholder was the Han family with a shareholding ratio of 28.62% of the total number of shares issued. As a result, they can exercise their right to object or disapprove the resolutions of the shareholders' meeting on matters as specified in the Company's Articles of Association or related laws requiring a vote of not less than three-fourths of the shareholders' meeting who attended the meeting and voted.

**Managing risks:** In order to ensure transparency and in compliance with the principle of good corporate governance, we have an organization structure consisting of competent management and have clearly defined the scope of powers and duties including the Audit Committee comprising of independent directors to ensure that stakeholders are treated fairly according to their rights and the right balance of management and transparent leadership. The company's Board of Directors comprises 50% independent directors and the Chairman of the Company is an independent director.

## 2.2.3 Risk of Listing in Foreign Securities Markets

Hana does not have any securities listed in foreign markets.

## 2.2.4 Emerging Risks

- **Climate Change**

Climate change and its associated impacts are an operational risk. Climate change brings warmer temperatures from the greenhouse effect, resulting in more frequent

and extreme weather events such as floods and storms which may cause severe impacts to our business including loss of customers, pressure on energy costs, carbon tax implications, and government regulation in our countries of operation and our customer's countries.

**Managing risks:** The Company therefore emphasizes on the management and control of risks toward climate change with both short and long term actions as well as monitoring the emerging climate related risks. To prepare and manage of climate change, the Company and its subsidiaries are pursuing a range of adaptive practices to identify, respond to, and stay ahead of current and expected legislation. We are endeavor to reduce consumption of, and reusing, resources.

The Company has been investing in automation technology transformation for to make changes in production and resource consumption to create environmental improvements compared with the processes used in the past. The Company supports the investment in renewable energy projects and investment to reduce GHG emissions and we shall regularly assess new areas for innovation and collaboration to help fight climate change.

- **Technological Development and Cybercrime**

The Company identifies advances in technologies which enable machines to talk to other devices at rapid speed, presenting opportunities for automation manufacturing transformation. However, technology innovation also creates opportunities for cybercriminals to find loopholes and to commit crimes. Threats and cyberattacks are likely to increase in severity.

**Managing risks:** The Company continue to implement and upgrade security software and procedures to minimize cybercrime risks and adhere to Personal Data Protection Act and applicable laws and regulations while enhancing cyber security management to strengthen information security system including enhancing employees' information security awareness to ensure users can do their jobs as well as keep the organization secure.





- **Pandemic Risk**

The Covid-19 and possibly future pandemic crises may persist where the effects will be the threat to global economic and the Company's business.

**Managing risks:** The Company has learned from experiences and prepared an emergency response plan to prepare for future crisis. The outbreak management includes tracking news, government policy, guidelines from the Ministry of Public Health, outbreak control measures, outbreak communications within organization and with customers and partners to lay down measures to cope with business operations that must be performed in accordance with various policies and measures strictly, including preventive measures and taking care of the safety and well-being of employees in order to avoid business interruption or suffer with minimal impact.

- **Geopolitical Risks**

Trade friction between USA and China will lead to a separation of the global supply chain for electronics as USA and China want to reduce reliance on each other throughout the supply chain. Geopolitical risks of the Russia-Ukrainian led to the increase the costs of global supply chain and impact the global trade structures.

**Managing risks:** Hana has pursued a diversification strategy to have multiple production bases in various countries: China, Thailand, USA, Cambodia and South Korea as to serve customers covering business sectors. Hana has also adapted its business model whereby our factory in China is focused on serving local or domestic demand which shall be less reliance on foreign demand while other factories will support the needs of customers outside China. The Company has monitored the situation on-going to view the business implication and prepare for adoption with close coordination with customers and our business partners.





### 3. Business Sustainability Development



HANA

Our ways to a more sustainable future

### 3.1 Policy and Objectives of Sustainability Management

Hana recognizes that our long-term success depends on our ability to manage our operations soundly, efficiently in an increasingly complex environment, to create value for our stakeholders and to further contribute to society whilst minimizing the impact to the environment.

**Policy:** The Board of Directors commits that Hana shall conduct its business with respect to Environmental, Social and Governance (ESG) responsibilities, as well as for all group of stakeholders. It is the board policy that we endeavor to conduct the business with high professional standards under the principles of good corporate governance for continuous and sustainable growth. We shall uphold the importance of protecting human rights, consumer rights, environmental management, compliance with applicable laws, regulations and contribute to community development for long-term success of the Company, society and stakeholders. Our commitments focus on creating long-term shared value for the environment and our stakeholders.

**Sustainable Business Development Goal:** Hana aims to grow the business while balancing between economic growth, environmental care and social well-being and integrating the United Nations Sustainable Development Goals (SDGs) into the organizational sustainability practices.

**Vision:** To operate our business in harmony with society and environment for the mutual benefit of our stakeholders, community and our planet

**Our move:** Hana's business environment is highly competitive. The Company seeks to grow and to continually improve the capabilities and productivity of its production processes. Whilst doing so the management and staff are mindful of sustainable development and review each change to ensure compliance with the sustainability objectives with regards to the economic, social and environmental impacts. The Company has established the Corporate Governance and Sustainability Committee with the sub-committee representatives from different departments to deploy the Company's policy, goals, action plans and practices. The sustainability reporting main content is to review, discuss, and approve by the Corporate Governance and Sustainability Committee.

### Strategy and Framework

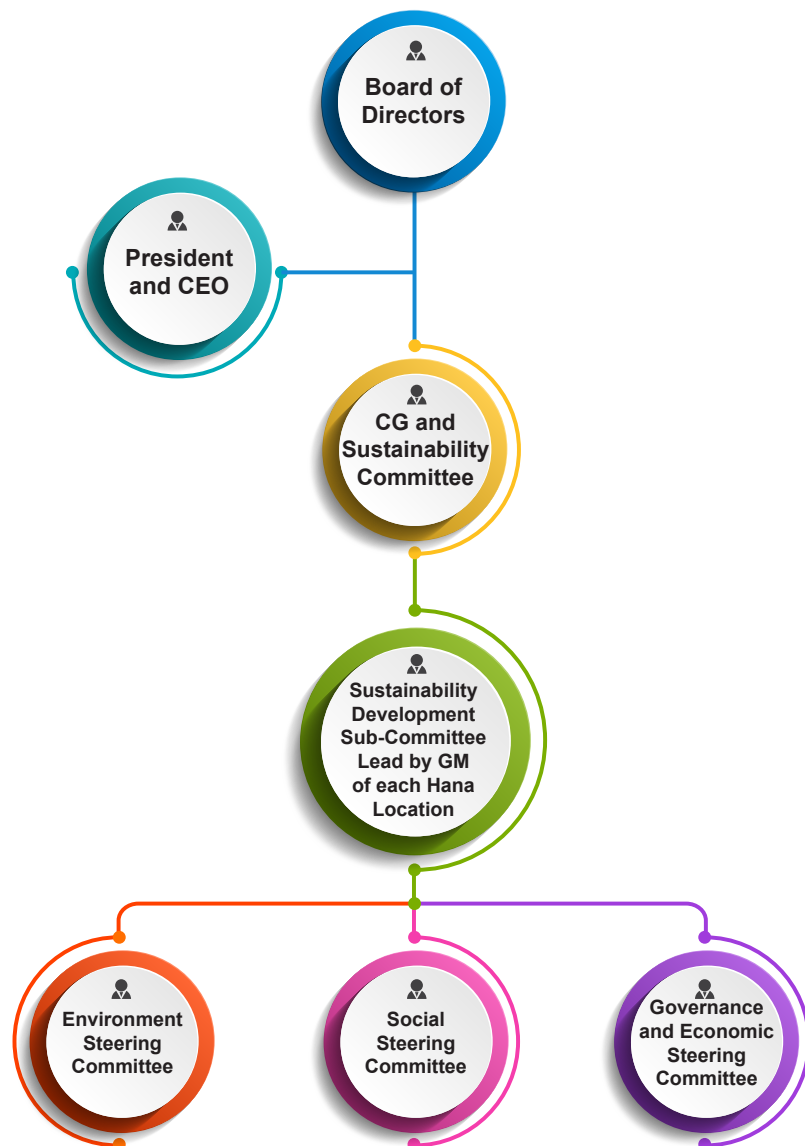


**A Responsible Business of the Future** - Conducting business with good governance, integrity and accountability, managing business performance with profitable growth and shareholders return, and innovation for efficient process, product quality and service as well as making positive contribution to the organization towards sustainable development

**A Society for Our Future** - Respecting human rights, non-discrimination, developing human capital with knowledge and skills, creating a healthy and safe workplace, social and community engagement as well as promoting career development for people on low incomes and underprivileged

**A Better Environment with a Future** - Stimulating the transition into the circular and low-carbon society, managing greenhouse gas emissions, improving resource usage efficiency, preventing and minimizing pollution, as well as protecting and improving ecosystems





## Sustainable Development Structure

A board-level Corporate Governance and Sustainability Committee has been established with the majority of independent directors to help the board discharge their responsibilities by delegating to the Committee to set the Company's sustainability policy, framework, goals, strategy and oversee the implementation and monitor the progress. GM of each Hana location is responsible for managing and governing the implementation and execution in accordance with the sustainability policy of the Company, and report to the Corporate Governance and Sustainability Committee.



## UN Sustainable Development Goals (SDGs)

The 17 UN Sustainable Development Goals are the fundamental goals continuing an ongoing effort in working towards a sustainable future for economically, environmentally and socially. Hana promotes the stakeholder participation through its various activities by integrating the United Nations Sustainable Development Goals (SDGs) into the organizational sustainability practices. We have reviewed our progress on the SDGs and our strategy in actions which lately cover 12 goals as follows.



### Goal 3: Good Health and Well-Being

Promote employees' health and safety in the workplace: drug-free workplace program, disease-free workplace program, healthy workplace happy for life program



### Goal 6: Clean Water and Sanitation

Implement improvements in water quality by reducing pollution and controlling water quality, reducing water consumption by increasing the reuse of wastewater from production processes



### Goal 4: Quality Education

Scholarship program with the aim to enhance educational opportunities for the child of low-income employees, internship program for students to promote practical learning and knowledge to enhance their skills necessary for future careers by ensuring application and training provided equally to all women and men



### Goal 7: Affordable and Clean Energy

Increase the proportion of renewable energy, increase energy and technology efficiency



### Goal 5: Gender Equality

Hiring, employee development and promotion that take into account the individual's abilities, gender equality, non-discrimination, which is contributed to the stability of the staff career



### Goal 8: Decent Work and Economic Growth

Respect human rights, fair treatment of employees, promote safe and secure workplace including promote career development for people with disabilities







### Goal 9: Industry, Innovation and Infrastructure

Industrial trend toward automation and industrial 4.0, promote staff at all levels to participate in innovation and improvement projects through Kaizen and Quality Control Cycle (QCC) group activities



### Goal 12: Responsible Consumption and Production

Manage the efficient use of natural resources, reduce landfilled waste, reduce the emission of toxic chemicals and waste into the nature with waste management principles: Reuse, Reduce, Recycle (3Rs) including green procurement



### Goal 10: Reduce Inequalities within and among Countries

Promote social inclusion policies for all employees regardless of age, gender, disability, race, ethnicity, origin, religion, and economic status



### Goal 13: Climate Action

Continuously improve the efficient use of internal resources within the organization, implement renewable energy project to drive a low-carbon society as part of climate change mitigation



### Goal 11: Sustainable Cities and Communities

Green industry initiative, eco-factory, eco-excellent, CSR-DIW aiming for sustainable development towards ESG



### Goal 16: Peace, Justice and Strong Institutions

Anti-corruption certification and the implementation of the principles of good corporate governance

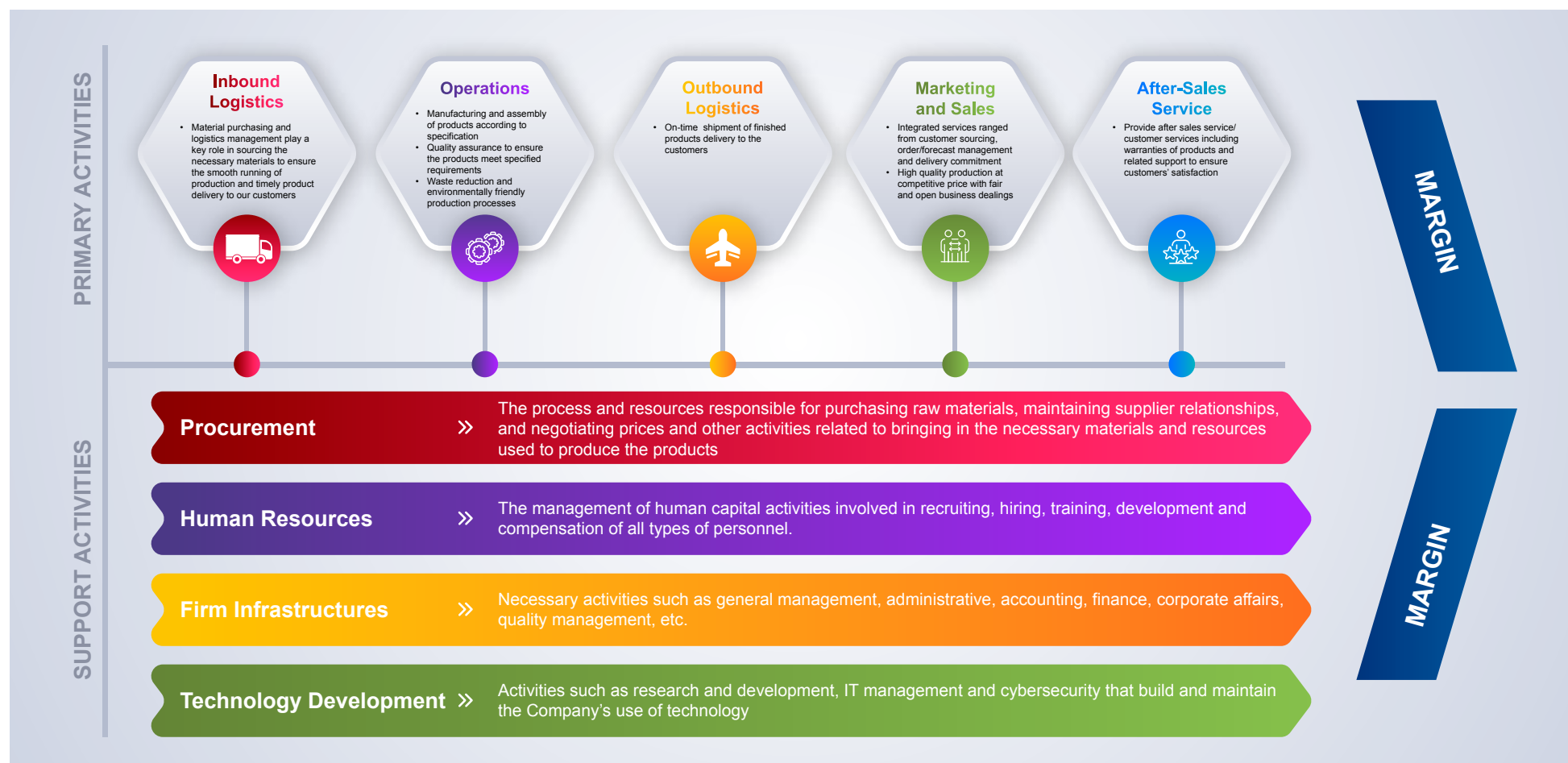




## 3.2 Management of Impacts on Stakeholders in the Business Value Chain

### Hana Business Value Chain

Hana is an EMS provider where the Company's activity mainly focuses on product manufacturing serving to customers around the world whereby we shall strive to operate sustainability across the value chain which is classified as primary activities and support activities to ensure responsible business practices and to meet the expectations of stakeholders inside our own organization and across our entire value chain.





## Stakeholder Engagement

The Company has the policy to provide opportunities for stakeholder involvement with those who are affected by or may affect from the business activities of the Company. The stakeholder feedbacks are used to assess key issues in order to find ways for mutual benefits.

Stakeholders	Engagement Approach	Expectation/Concerns	Implementation
<b>Internal Stakeholders</b>			
<b>Shareholder/Investor</b>	<ul style="list-style-type: none"> <li>Analyst Meeting</li> <li>Annual General Meeting of Shareholders</li> <li>56-1 One Report, Press Release</li> <li>ESG Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>Consistent dividend payment</li> <li>Steady growth</li> <li>Environment, Social and Governance</li> </ul>	<ul style="list-style-type: none"> <li>Dividends paid each year based on the Company's cash flow</li> <li>Company vision for constantly strives to grow and be competitive</li> <li>Corporate governance scorecard</li> <li>Environmental management</li> </ul>
<b>Employee</b>	<ul style="list-style-type: none"> <li>Employee satisfaction survey</li> <li>Orientation, exit interview</li> <li>Training and workshop</li> <li>Complaint channels</li> <li>Operation meeting</li> <li>Risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate compensation and welfare</li> <li>Occupational health, safety and environment</li> <li>Career development</li> </ul>	<ul style="list-style-type: none"> <li>Employee Relations Committee</li> <li>Occupational health, safety and environment</li> <li>Career development program</li> </ul>
<b>External Stakeholders</b>			
<b>Customer</b>	<ul style="list-style-type: none"> <li>Customer audits</li> <li>Customer satisfaction survey</li> <li>Customer visits</li> <li>Risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>Quality products with on-time delivery and competitive product pricing</li> <li>Ethical and environmentally responsible</li> <li>Occupational health, safety and environment</li> </ul>	<ul style="list-style-type: none"> <li>Quality management system</li> <li>Supply chain management</li> <li>Code of conduct and The Responsible Business Alliance (RBA)</li> <li>Occupational health, safety and environment</li> <li>Green product</li> <li>Productivity improvements</li> <li>Cost reduction programs</li> <li>Working to grow with new and existing customers</li> </ul>
<b>Business Partner/ Supplier</b>	<ul style="list-style-type: none"> <li>Supplier audit</li> <li>Supplier quality management</li> <li>Risk assessment</li> </ul>	<ul style="list-style-type: none"> <li>Fair and transparent supplier selection</li> <li>Payment on time</li> <li>Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>Code of conduct</li> <li>Treatment of creditors</li> <li>Supply chain management</li> </ul>



Stakeholders	Engagement Approach	Expectation/Concerns	Implementation
<b>Community</b>	<ul style="list-style-type: none"> <li>Activities conducted outside the Company</li> <li>Advice/feedback from Industrial Estate</li> <li>Community visit program</li> <li>Recruitment</li> <li>Procurement</li> </ul>	<ul style="list-style-type: none"> <li>Operate with no impact to the environment</li> <li>Support low-income and disadvantaged communities</li> <li>Employment opportunities for local people</li> <li>Support local business</li> </ul>	<ul style="list-style-type: none"> <li>Environmental management</li> <li>CSR to support community project</li> <li>Hiring local people when qualified</li> <li>Products and services purchased from local business when qualified</li> </ul>

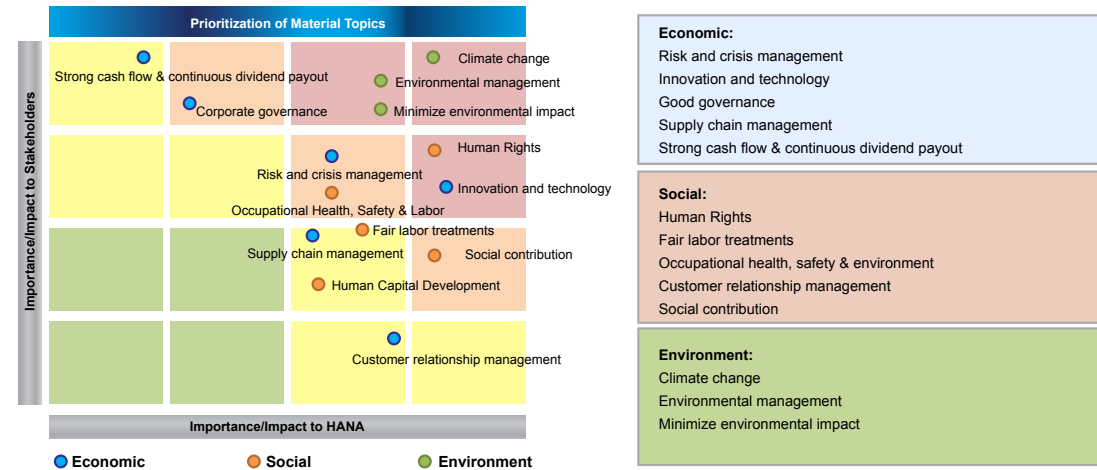
## Materiality Processes



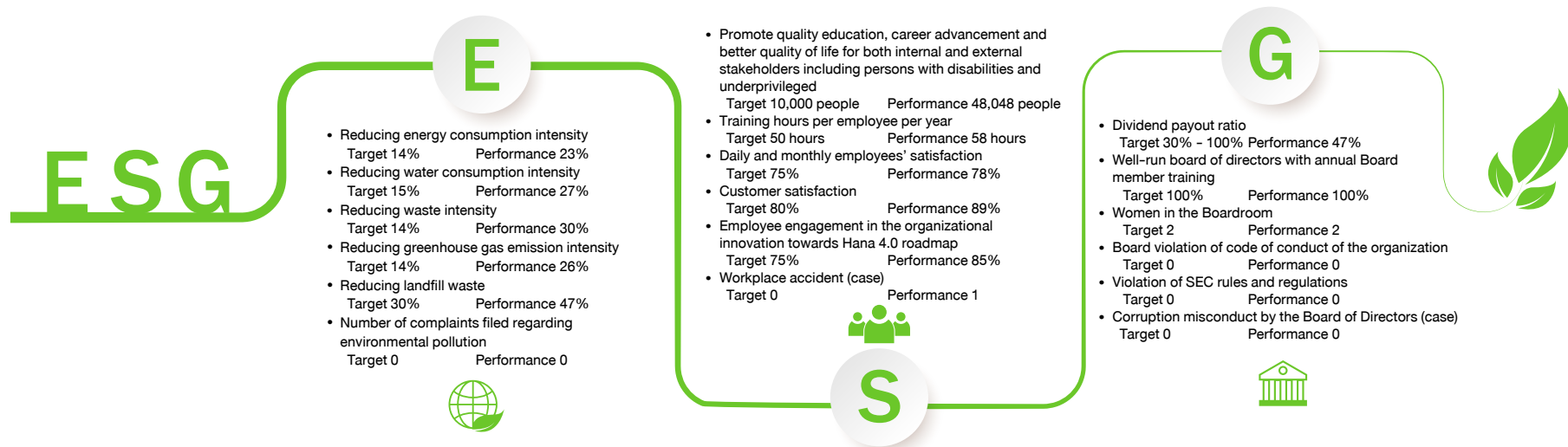


## Materiality Prioritization

Prioritize material topics based on the strategic importance to the business, importance to stakeholders and the economic, social and environmental impact of each topic in the value chain were reviewed and approved by the Corporate Governance and Sustainability Committee as follows.



## Status towards Sustainable Goals in 2023





### 3.3 Management of Environmental Sustainability



#### 3.3.1 Environmental Policy and Guidance

To ensure sustainable development and response to climate change that threatens both economic and social sustainable development, Hana's environmental policy is approved by management to suit the context and support the strategic direction of the organization in showing its commitment to protect the environment, use resources efficiently, reduce the impact on the environment including complying with legal requirements and continuously promoting employee participation in environmental management initiatives.

#### Hana's Occupational Health, Safety and Environment Policy

Hana is committed to preserving the environment, caring for our employees regarding occupational health, safety and environment as well as adhering to the social and labor accountability with respect to the business. We aim to:

- Provide safe and healthy working conditions for the prevention of work-related injury and ill health according to OH&S risks and opportunities
- Eliminate hazards and reduce OH&S risks
- Support OH&S consultation and participation of workers and workers' representatives
- Protect environment for sustainable resource use, enhance applicable technology to reduce negative environmental aspects of our business, prevent pollution and utilize less hazardous substances in every production process
- Fulfill and comply with related OHS&E legal and other specific commitment/obligations relevant to the context of organization (e.g. The Responsible Business Alliance (RBA) Code of Conduct, social responsibility and sustainable development goals)
- Enhance the continual improvement of environmental and OH&S management system and activities

The main content of this policy has been communicated to employees at all levels through the Company's noticeboards, the intranet, and guidelines for employees to perform their work. In addition, the Company's policy has been released to the public by posting in front of the factory and communicating to business partners outside the Company.

### Climate Change Governance Roles and Responsibilities

As climate change has emerged as one of the global challenges facing the world, Hana recognizes the importance of prioritizing sustainability and environmental responsibility in our business stewardship with the climate change governance roles of responsibilities as follows.








The climate change coordinator is responsible for supporting the climate change leader and the sub-committee with activities related to the implementation of the climate change agenda, including leading on specific climate change related areas or projects.



## 2030 GOALS

Hana is committed to take actions to improve the environmental impact and actions that can help slow the rate of climate change. The United Nations Sustainable Development Goals (SDGs) serve as a framework for our development in regard to an environmental dimension (Planet) with a focus on protecting and preserving natural resources and climate for the next generation of global citizens whereby Hana Thailand has set the targets within 2030 from the base year 2020 as follows:

SDGs					
Environment Management	Energy Management	Water Management	Waste Management	GHG Emission	
Hana Lamphun and Hana Ayutthaya	40% Energy intensity reduction	45% Water intensity reduction	40% Waste generation intensity reduction	40% GHG emissions intensity reduction (scope 1&2)	
Navigating the Roadmap	Synergies between renewal energy and energy efficiency	Taking a sustainable and holistic approach to water management	Waste-to-Energy and waste management improvement projects	Clean energy and resource efficiency innovation including carbon credit projects	

## 3.3.2 Environmental Operating Results

### Energy Management

Major focus areas of energy consumption reduction projects are as follows:

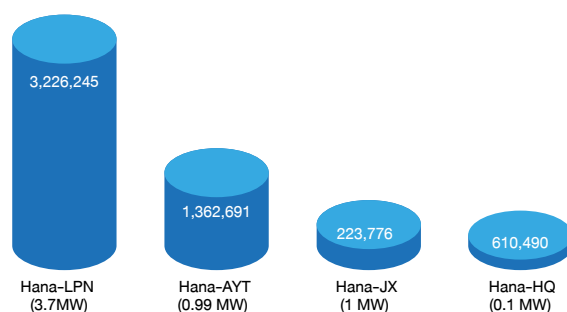
- Energy-Efficiency Programs:** The Company has assessed the energy conservation potential of its major machineries and equipment and undertaken actions by investing in projects to upgrade the operational efficiency to save energy. The Company also has implemented energy conservation projects each year to reduce electricity consumption. Electricity reduction projects in 2023 of more than 20 projects were implemented such as replacing the old model chiller to magnetic-bearing chiller compressor which is oil-free and digital control as magnetic bearings reduce friction and eliminate the need for oil lubrication so low maintenance cost with more energy efficiency, replacing a new UPS with high efficiency model and a smaller size, longer lifespans, and environmental sustainability, replacing more energy efficient scrubber exhaust fan, replacing high efficiency exhaust scrubber fan with cost-effective pollution control technology, installing variable speed drive on the utility machine resulting in energy and cost savings when the motor speed is allowed to modulate in response to demand, and etc. resulting in a total annual energy savings of 3,813,314 kWh, which can reduce greenhouse gas emissions 1,706 Ton CO<sub>2</sub>eq electricity cost saving to the Company amounting to THB 13.5 million per year.

- Renewable Energy Strategy:** The Company recognizes the importance of renewable energy as one of the necessary strategies to make our environment sustainable and help mitigate climate change. Solar panels were initially installed on the roofs of three Hana factories in Lamphun and Ayutthaya since 2020. In 2023, additional solar panels were installed at 2 Lamphun factories, Hana Jiaying facility, and Hana Headquarters with the total 5.8 MW capacity. Our sustainable integration of renewal energy will be in our focus to climate change mitigation efforts. There will be additional projects in 2024 and the near future.

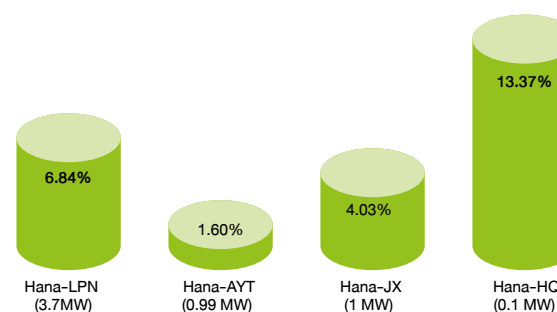
The renewable energy consumption reduction is summarized as follows:

Energy Saving from Installing Solar Panels	2020 (Base Year)	2021	2022	2023
Units of energy reduction (kWh)	1,420,485	4,215,712	4,171,324	5,423,202
Electricity cost reduction (THB per year)	2,107,508	6,354,895	6,954,554	9,894,915

2023's units of energy reduction after installing solar panels  
(kWh)



2023 % energy usage reduction after installing solar panels

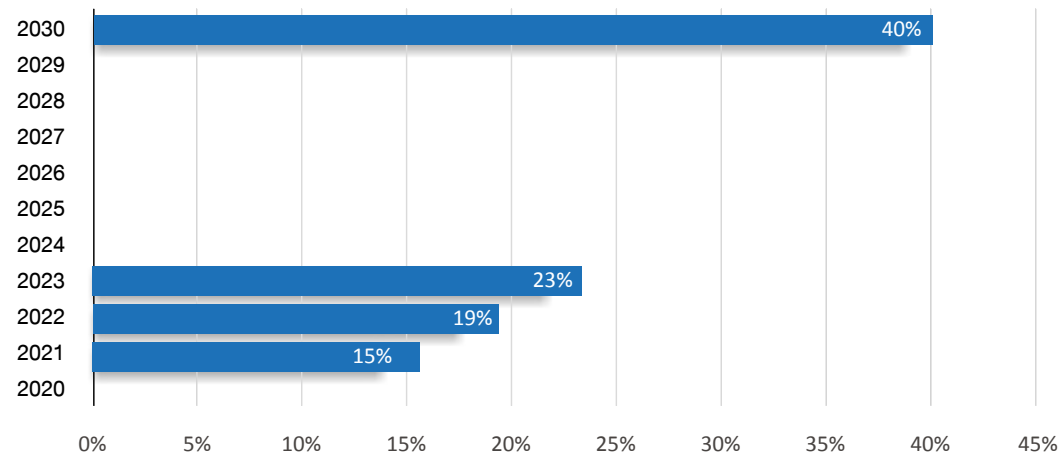




**Energy Consumption Performance in 2023 Compared to the Base Year of 2020 of the Company (Hana Lamphun)  
and its Subsidiary (Hana Ayutthaya) for Short and Long-Term Targets**

Year	Energy Intensity (kWh: Million THB of Sales Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (Base Year)	5,859	13,966	19,825		
2021	4,749	12,121	16,870	-5%	-15%
2022	4,332	11,631	15,963	-10%	-19%
2023	3,765	11,427	15,192	-14%	-23%

**Status to the Target  
(% Energy Intensity Reduction)**







## Water Management

**Water Quality Measure** - The Company records water consumption, the amount of wastewater, water balance, water use intensity and wastewater intensity by having waste water continuously improved every year. The operation of the wastewater system is monitored on a daily basis including checking the quality of the effluent that is discharged from the factory each month to ensure that the wastewater treatment is under control and better than the government standards.

**Water Resource Management** - The Company has implemented the 3Rs strategies of water conservation: Reduce, Reuse, Recycle as to reduce water supply consumption and minimize wastewater discharge.

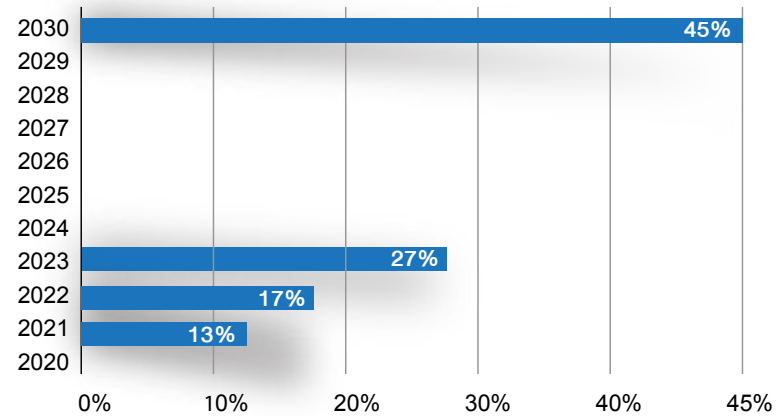
- **Water “Reduce”** by removing excess water usage from machines and flow back by adjusting the pressure, “zero chemical usage project” to reduce the drainage of the cooling tower system as well as the project to upgrade the chiller system to reduce the use of water supply. The additional solution in 2023 is to reduce the water consumption at the Scrubber System and the Cooling Tower System by changing the make-up water to low conductivity for adding water cycle time and changing conductivity blowdown set-point and pH blowdown set-point and installing RO concentrated water recovery system by using RO concentrated water passed through Reverse Osmosis membrane to get more RO water 200 cubic meters per day.
- **Water “Reuse”** by reusing wastewater from RO (Reverse Osmosis) and DI (Deionized Water) supply system, reusing RO and DI reject water from production lines, and reusing the rainwater in the gutters around the factory to water landscaping and gardening.
- **Water “Recycle”** by improving wastewater quality through Reverse Osmosis System and flowing back to the chilled water loop, Wet Scrubber System and plant watering systems, recycling wastewater from RO Brine and retreating through Reverse Osmosis (RO) for reuse, including the use wastewater from Sawing production process and re-treating through Ultrafiltration System to be reused in the air-conditioning Cooling Tower System, installing ultrafiltration in wastewater system to reuse wastewater to reduce the use of tap water, and further utilize recycled water in manufacturing to minimize the city water consumption.



**Water Consumption Performance in 2023 Compared to the Base Year in 2020 of the Company and its Subsidiary  
for Short and Long-Term Targets**

Year	Water Consumption (Cubic Meters per Million THB of Sales Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (Base Year)	48.72	130.30	179.02		
2021	32.30	123.57	155.87	-5%	-13%
2022	28.46	119.32	147.78	-10%	-17%
2023	26.55	103.53	130.08	-15%	-27%

**Status to the Target  
(% Water Intensity Reduction)**





## Waste Management and Pollution Control

Hana is committed to sustainable waste management for resource-efficient consumption both in the production process and the supporting departments, by promoting awareness among those involved both inside and outside organization as well as the campaign to raise awareness among employees to effectively reduce waste and promote better waste management.

**Waste management** - The Company has the waste inventory, waste profile, waste flow diagram including the waste management and hazardous waste separation where the waste is collected separately from the production buildings and is disposed of by a licensed company authorized by the Ministry of Industry. The Company has implemented its waste management system in accordance with the 3Rs principle (Reduce, Reuse, Recycle) as a guideline for managing unused materials in the factory, hazardous substances control towards environmentally friendly production processes, projects to reduce the amount of waste and create value-added as well as contributing to the most efficient use of resources.

**Air pollution** - The Company has managed to monitor and control the amount emission of air pollution in the production process and throughout the organization in order to minimize impact on society and environment through the air pollution control system i.e., the high efficiency wet scrubber technology method that can eliminate more than 99% of airborne particulate matter. The air emission monitoring has been conducted regularly to measure pollutant levels in the surrounding and outdoor air and compare to clean air standards in order to effectively and timely improve air quality, protect public health, and ensure compliance with regulations and the customers' standard requirement.

**Water pollution** – With the 3Rs strategies of water conservation: Reduce, Reuse, Recycle as to reduce water supply consumption and minimize wastewater discharge, our energy-efficient technology wastewater treatment system takes a key part to remove as much of the chemical and contaminants as possible before the remaining water, so called effluent, is discharged back to the environment. The quality of wastewater effluent has been conducted regularly to ensure the performance of wastewater treatment in line with regulations and the customers' standard requirement.

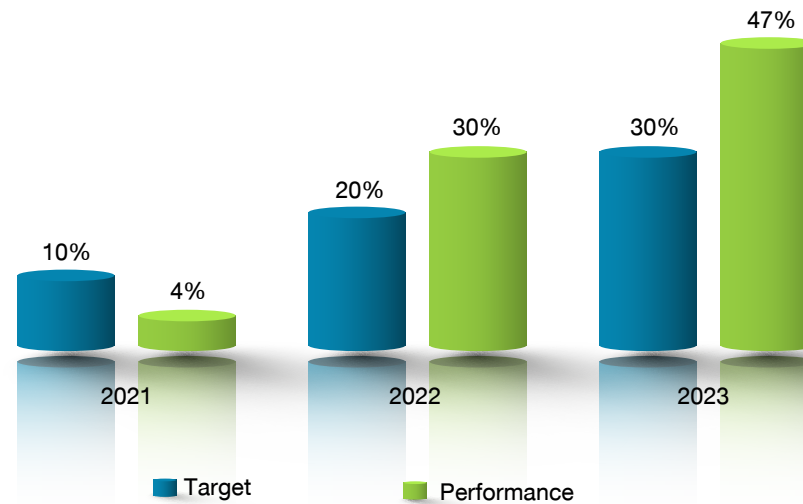
Hana has operated and driven waste and pollution management through following actions:

- Waste sorting procedure to segregate waste for reuse or recycle
- Process improvements to minimize the amount of waste and pollution
- Efficient resource consumption to reduce waste volume
- Improve waste management and minimize waste disposal to reduce landfill waste, i.e., the waste disposal project of carrier tapes (one of electronic packaging), which used to dispose to landfill in Saraburi but change to combustion process in Lampang to obtain Refuse Derived Fuel (RDF) at a temperature of 1,450 – 2,000 degrees which is the efficient industrial waste combustion. The gases produced by this method are completely eliminated within 2 seconds and ash from the incineration process can be consumed as a raw material for cement. This waste recycling into RDF through Waste-to-Energy technology has been widely adopted in Europe resulting in reducing environmental impact from landfill waste and reducing landfill pit area sustainably.
- Control hazardous substances and the production processes to be environmentally friendly production and increase the disposal value by converting to the new products (Recycle) as much as possible and reduce the type of hazardous waste of electronic equipment



**Waste and pollution management performance in 2023:**

- The amount of waste that can be recovered for reuse was 92% of the total waste from the target of 80%.
- Air emission discharge quality has met all the target performance by not exceeding the limit discharge standards.
- Effluent wastewater quality from wastewater at all discharge points has met all the target performance by not exceeding the wastewater discharge limit standards.
- Zero oil and chemical spill
- Reduce landfill waste by 47% from the target 30% in 2023

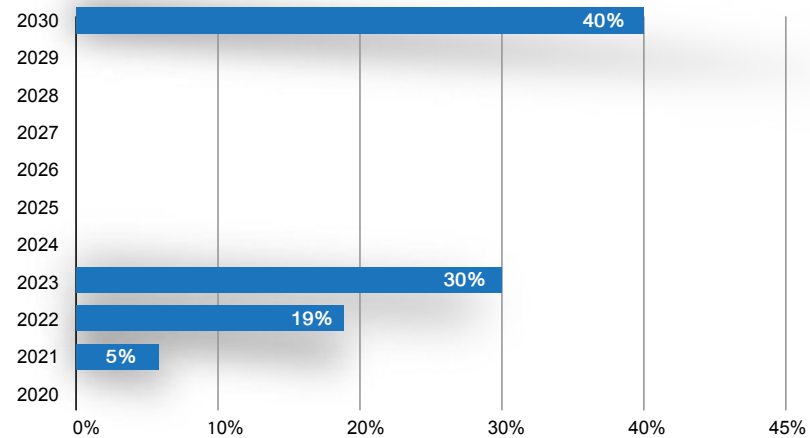
**% Landfill Waste Reduction**



**Waste Management Performance in 2023 Compared to the Base year in 2020  
of Hana Lamphun and Hana Ayutthaya for Short and Long-Term Targets**

Year	Waste Generation (Weight in Kg per Million THB of Sales Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (Base Year)	57.32	231.66	288.98		
2021	61.38	214.12	275.50	-5%	-5%
2022	43.29	189.36	232.65	-10%	-19%
2023	38.30	163.61	201.91	-14%	-30%

**Status to the Target  
(% Waste Generation Intensity Reduction)**





## Greenhouse Gas (GHG) Emissions Reduction

To reduce the carbon footprint of operations and the value chain, Hana has focused on mitigation solutions and projects to reduce its contribution to global warming and environmental degradation.

Here is an overview of our ways to reduce greenhouse gas emissions for a low-carbon economy in 2030.



The major activities of the business generated greenhouse gas emissions are from the use of electricity in the production process and supporting functions. In 2020, Hana factories in Thailand had installed renewable power capacity for the solar panels on the roof at 3 Hana factories as part of our mitigation to reduce the negative environmental impacts and continue to achieve our long-term goals for low carbon society. In 2023, the investment has been approved to increase the proportion of renewable energy by installing additional solar rooftop at Hana Lamphun and Hana Jiaying factories including Hana Headquarters the office base. The Company continues to place the important of energy conservation by improving production process technology to be more efficient according to the Hana 4.0 strategy, as well as joining the greenhouse gas reduction network with the Industrial Estate Authority of Thailand (IEAT) with the aim towards carbon neutrality in line with the policies of the nation that have been expressed their intentions to the United Nations Framework Convention on Climate Change, and also participating in pilot project “GHG Reduction for Net Zero Emissions” of the Thailand Greenhouse Gas Management Organization (TGO).

In 2023, Hana Ayutthaya was selected as 1 of 6 out of 600 organizations to win the Outstanding GHG Mitigation Award from the Industrial Estate Authority of Thailand for the achievement in reduction over 5,000 tons of greenhouse gas emission annually through various projects.



To reflect the commitment and ensure reliability of GHG emission data, the Company and its subsidiary in Thailand had prepared the carbon footprint reports according to the standard of the Greenhouse Gas Management Organization (TGO) in 2023 as the third year, which its data monitoring period was from 1 January 2023 – 31 December 2023 and had been verified by the reviewers who are registered with the TGO. Our carbon footprint covers the emissions of 7 GHG gases: Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF<sub>6</sub>) and Nitrogen Trifluoride (NF<sub>3</sub>) with the purpose to be used in determining effective ways to reduce the organization's greenhouse gas emissions. The Company's greenhouse gas emissions are prepared covering three scopes: Scope 1 (Direct Emissions), Scope 2 (Indirect Emissions from Use of Purchased Electricity) and Scope 3 (Other Indirect Emissions).





In 2023, the Company and its subsidiary have 3 manufacturing plants in Thailand with the greenhouse gas emission data was as follows.

Greenhouse Gas Emission (Ton CO <sub>2</sub> eq)						
GHG Protocol	2021 (Verified)		2022 (Verified)		2023 (Verified)	
	Hana - LPN	Hana - AYT	Hana - LPN	Hana - AYT	Hana - LPN	Hana - AYT
Scope 1 - Direct emission	533	3,139	502	1,125	500	381
Scope 2 - Indirect emission	23,332	40,644	23,271	42,992	22,022	34,709
	23,865	43,783	23,773	44,117	22,522	35,090
<b>Total GHG Emission of Hana Thailand Factories</b>	<b>67,648</b>		<b>67,890</b>		<b>57,612</b>	

Remark: The GHG reporting scope covering 3 Hana factories.

1. Two factories located at Northern Region Industrial Estate and Saha Group Industrial Park, Lamphun Province (combine)
2. One factory located at Hi-Tech Industrial Estate, Phra Nakhon Si Ayutthaya Province

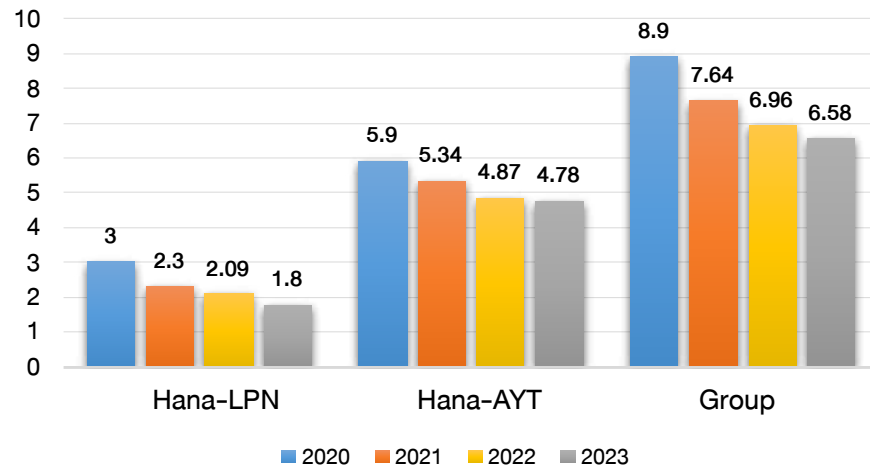
Name list of the qualified consultants and the reviewers of the carbon footprint preparation who registered with the Greenhouse Gas Management Organization (TGO) for the carbon footprint reports of the Company and its subsidiary in 2023 are as follows.

Company	Qualified consultant	Qualified reviewer
Hana Lamphun	Mr. Wasan Puttiput	Associate Prof. Dr. Saksit Imman and Asst. Prof. Dr.Nopparat Suriyachai SEEN School of Energy and Environment, University of Phayao
Hana Ayutthaya	Mr. Samart Sukman	VGREEN KU Co., Ltd.

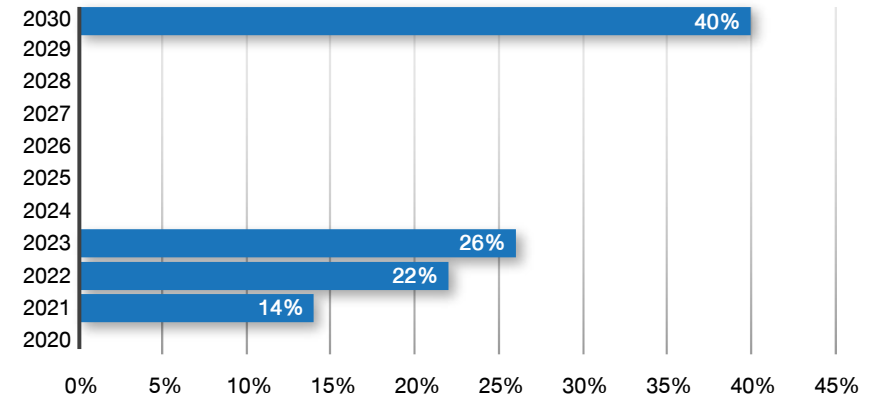


**Greenhouse Gas Management (Scopes 1 and 2) Performance in 2023 (Verified by the Reviewers)  
vs 2020 Base Year (Reviewed by the Consultants):**

**GHG Emission Intensity Scope 1 & 2 (Ton CO<sub>2</sub>eq)  
per Sales Revenue (Million THB)**



**Status to the Target  
(% GHG Emission Intensity Reduction)**



## 3.4 Social Sustainability Management



### 3.4.1 Social Policy

Hana conducts the business with social responsibility to reduce the impacts arising from the business activities by adhering to the principles of accountability, transparency, ethics, respect for human rights and focus in the needs and expectations of stakeholders throughout the value chain.

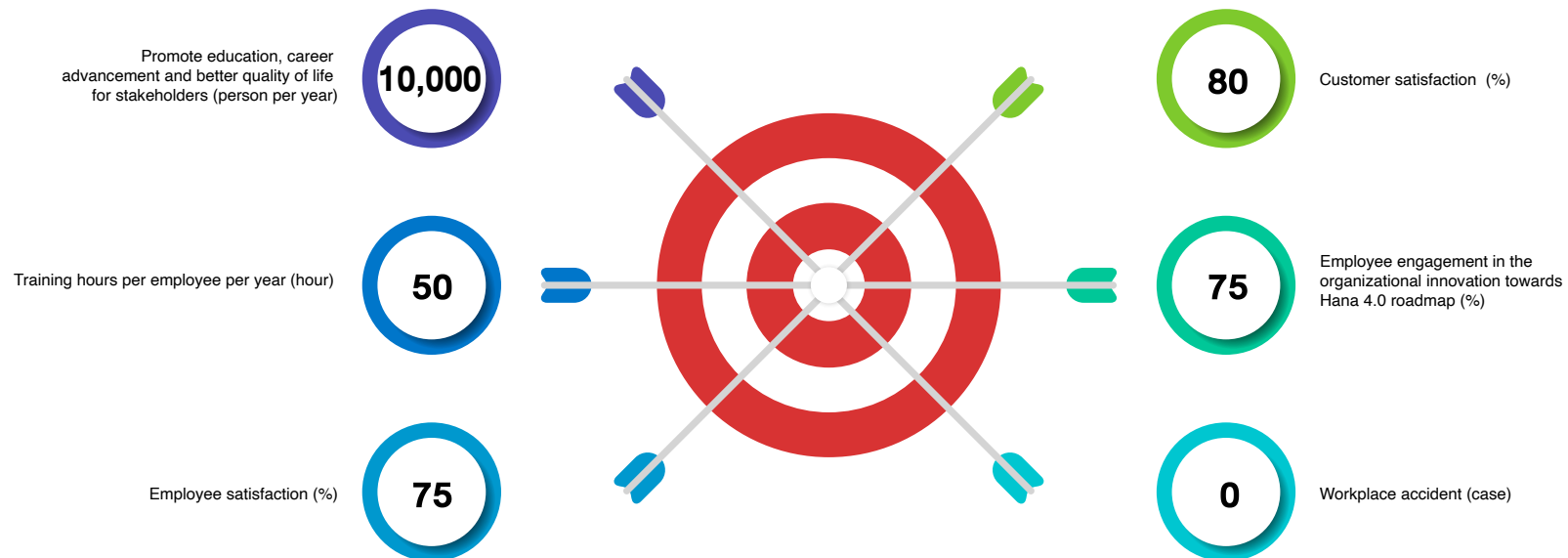
The Company endeavours to meet sustainable development goals by providing high quality products and services to meet customer satisfaction whilst contributing to community development and the promotion of the well-being of society, as well as improving the environment and complying with applicable laws, regulations and relevant international guidelines.

## Social Sustainable Goals

Hana is committed to operating a socially responsible business which works towards the Sustainable Development Goals (SDGs) to serve as a direction for the development of the social dimension (People).



### SOCIAL GOAL AND KPI





## 3.4.2 Social Operating Results

### Respect Human Rights

Hana aims to conduct its business with ethics holding on to our responsibility to society and all groups of stakeholders based on the corporate governance principles and the code of conduct. For human rights protection, the Company has complied with laws and international standards especially giving support to and complying with Universal Declaration of Human Rights (UDHR), United Nations Global Compact (UNGC), United Nations Guiding Principles on Business and Human Rights (UNGP) and the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work. The Company recognizes and has put in place labor practices by respecting human rights in regard to the fairness, equality and non-discrimination both in terms of employment, compensation, promotion, training and development without discrimination of age, gender, educational institution, race and religion, as well as supporting employment for disadvantaged groups in order to create opportunities, career path and a more income with the goals achieving the Sustainable Development Goals (SDGs).

**Child Labor** - Hana has a policy of prohibition of employment of children below the legal age in each country we operate and do not support child labor within our supply chain which is in line with the Responsible Business Alliance (RBA) Code of Conduct in the Electronic Industry Citizenship Coalition (EICC), which has set standards to ensure that working conditions in the electronics industry or industries in which electronics is a key component and its supply chain are safe for employees. Child labor is not to be used in any stage of manufacturing, and Hana has been audited by our customers annually where we have never come across child labor. For our suppliers/contractors, the Company requires all suppliers to sign an acknowledgment of the business code of conduct policy which covers anti-child labor. The construction contracts also address a provision not to use child labor or forced or involuntary labor to oblige our suppliers to follow these standards through contracts. In addition, the screening check is to ensure their validity before coming to work in the company's premises. In 2023, the Company has not received any complaints or detected the use of child labor.

**Conflict-Free Minerals Sourcing** - Hana supports the responsible sourcing of minerals from such conflict-affected or high-risk areas e.g., Democratic Republic of Congo and its neighboring countries by providing mineral due diligence support and continue to collaborate with customers and suppliers to implement measures such as mineral identification within the supply chain including supporting the use of mineral resources that meet the requirements under the supervision of the Responsible Business Alliance (RBA/EICC) to uphold human rights across our supply chain. In 2023, the raw material suppliers were required to sign to participate in responsible sourcing of minerals.

To ensure the Company's business is free from human rights violation, the Board of Directors has approved the Human Rights Policy to prevent violation of human rights in every activity of the Company's business including the Company's business partners. Employees' training, risk assessment, and measure to monitor on the complaint related to human rights violation have been implemented.

In 2023, the Company has not received any complaints or reports of human rights violation from employees, business partners, or local communities.

### Empowering Human Capital

#### Employees

Employees as internal stakeholders within the organization play an important role in contributing to the long-term success and performance of the corporation. Our key focus is to retain deserving and talented employees while employee satisfaction is important for them to remain happy and also deliver their level best.

Our guidelines and operating results with responsibility towards employees are as follows:

### Fair Labor Treatment:

**Employment/Termination** - Hana supports the principles of equal opportunities in employment, promotion or termination and is opposed to all forms of discrimination, including those on the grounds of race, nationality, color, religion, gender, age, disability, marital status, political affiliation, union membership, or any other status protected by the country laws. All employees will be treated as individuals solely according to their ability to meet job requirements. The Company has implemented the procedures starting with the recruitment process by not having on the employment application form any requirement for candidates to complete the specific information of age, religion, gender, nationality, and disability in order to avoid discrimination in hiring.

**Women in the Workplace** - Hana promotes women's human rights and no gender-based discrimination in terms of employment, compensation, promotion, training and development of employees.

Gender information disclosure of employees classified by level in 2023 is as follows.

Level	Hana Microelectronics Public Co., Ltd.		Hana Semiconductor (Ayutthaya) Co., Ltd.		Total	
	Female	Male	Female	Male	Female	Male
Executive	1	3	-	2	1	5
Management	39	56	38	74	77	130
Employee	2,135	905	2,158	1,039	4,293	1,944

**Disability Inclusion at Work** - Hana supports projects of the government to protect the rights of disabled persons to provide them with employment opportunities. The Company employs persons who are disabled and arranges the appropriate job matching to their capability. The Company also improved workplace environment to enable employees with disabilities easier access to the Company's facilities. Furthermore, Hana also arranges a place for disabled persons to open shops in the factory compound at no cost, which gain the good support from employees.

According to Empowerment of Persons with Disabilities Act, B.E.2550 (2007) Section 33 and 35, the number of hiring persons with disability of the Company and its subsidiary in Thailand greater than the hiring ratio (1 disabled person to every 100 non-disabled employees – 1:100) stipulated by law as follows.

Number of Disabled Employees per Total Workforce (as at the Report Date to the Department of Empowerment of Persons with Disabilities)				
Hana Thailand	2023	2022	2021	Pay Money to the Fund for Empowerment of Persons with Disabilities during the Past 3 Years
Hana Microelectronics Public Co., Ltd.	32 : 3,179	35 : 3,327	40 : 3,767	-
Hana Semiconductor (Ayutthaya) Co., Ltd.	54 : 3,382	60 : 4,292	56 : 4,116	-
Total Hiring People with Disabilities	86 : 6,561	95 : 7,619	96 : 7,883	-

In addition, our Hana Jiaxing in China has continued hiring people with disabilities to suit their job positions even no legal obligation. In 2023, Hana Semiconductor (Ayutthaya) Co., Ltd., a subsidiary of the Company, received a prize of “The excellent organization that support persons with disabilities” given by Mr. Srettha Thavisin, Prime Minister, as being recognized by the Ministry of Social Development and Human Security as a business organization that supports people with disabilities for 11st consecutive years including being selected as 1 of 3 excellent organizations to be granted the highest prestigious award of empowerment for persons with disabilities at an honorary level from the Ministry of Social Development and Human Security. This esteemed award was given to organizations having outstanding performance in giving excellent support to persons with disabilities for the five years in a row which is greater than required by laws with resulting in empirical outcome in potential and quality of life development of persons with disabilities. This represents our commitment to promote and create opportunities for hiring people with disabilities and improving their well-being.

**Employee Remuneration** - The Company has a policy on remuneration and welfare for employees.

The employee performance appraisal is used as a method for regular review of an employee's job performance evaluation with specified criteria and feedback on their work taking into account the duties and responsibilities, economic conditions, living conditions, legal wage rate to justify employees' remuneration. Compensation paid to employees is complied with all applicable wage laws, including those relating to minimum wages, overtime payment, and legally mandated benefits. For remuneration process, aside from semi-annual individual employee performance appraisals and benchmark with employees in the same group along with the aforementioned conditions, our Corporate Human Resources Department also conducts an employee remuneration survey, on a yearly basis, in collaboration with the Electronic and Computer Employers' Association and the independent consulting firms for the remuneration survey with the same industry in consideration as the fairly basis of employees' remuneration adjustment to be in line with the industry and labor market conditions.

The Company has provided the long-term welfare benefits that retain and motivate employees, particularly for the retirement benefits and the provident fund to help employees to save a portion of their salary in the event of retirement, disability, sickness or unemployment. The Company's provident fund is an alternative saving scheme for retirement where employees contribute a portion of their salaries and the Company makes the contribution equal to the rate of the employee's savings. Employees will benefit from the savings provided by the provident fund management in the form of investment. In summary, the Company has provided various welfare programs for employees to provide them with better life, to make them happy and satisfied, to keep the moral and motivation of employees high, and to raise their standard of living so as to retain our employees for longer duration.



Summary of welfare program provided to employees:

Economic Betterment	Healthcare Improvement	Family Support	Amenities and Others
<ul style="list-style-type: none"> <li>Retirement benefits</li> <li>Provident fund</li> <li>Social security fund</li> <li>Hana cooperative fund</li> <li>Shift allowance</li> <li>Attendance allowance</li> <li>Incentive for employees who contribute to CIP (Continuous Improvement Program)</li> <li>Long service award</li> <li>Outstanding Employee awards</li> </ul>	<ul style="list-style-type: none"> <li>Life and accident insurance</li> <li>Annual physical check-up and specific test in case the work environment can affect health</li> <li>Influenza/Covid-19 vaccination</li> <li>Medical benefits</li> <li>Nursing room for first aid clinic</li> <li>Fitness center and stadium</li> <li>Health promotion programs such as employee training on hypertension and high cholesterol, cancers in women, pulmonary tuberculosis and training for pregnant and child care</li> <li>Provide helmets to employees for safe driving</li> </ul>	<ul style="list-style-type: none"> <li>Right to leave for vacation, sick leave, maternity leave, etc.</li> <li>Employee assistance program, i.e. maternity benefit, employee death benefit, disaster victim, etc.</li> <li>Child education support</li> </ul>	<ul style="list-style-type: none"> <li>Uniform</li> <li>Canteen and low-price consumer goods</li> <li>Dormitory</li> <li>Transportation</li> <li>Recreation activities</li> </ul>

In addition, the Company provides the compensation to employees in line with their performance in both the short term such as bonuses and the long term performance through Career Development Program which has been continuously provided to employees in order to define the development of skill sets and identify how individuals move through the organization. The career development process has considerable benefits from both an individual employee and an overall organizational perspective. The Company has set the policy and the committees to assess potential candidates, identify the core competencies and perform assessment to verify candidates' abilities and determine strengths and weaknesses to match with currently holding position and the readiness for advancement of each candidate, and plan for training and other development tools.

**Employee Training and Development** - Hana has always recognized the need to develop its employees as the most important asset in the organization through employees' development program and employees' training program as follows.

**Human Resources Development Policy** - Hana is committed to equal opportunities and to ensure that individuals are treated equally and fairly based on the assessment of employee's development needs, competencies, organizational needs irrespective of their gender, age, marital status, disability, race, color, ethnic or national origin or sexual orientation. Employees are expected and encouraged to take ownership and responsibility for their personal training and development including training evaluation/effectiveness monitoring in relation to their works, within the framework of support provided by the organization. This is to ensure that the employees have the competences to perform their jobs effectively and to encourage the employees to maximize their potential and contribution supporting the overall strategic business plan and objectives in short and long term. Besides, the Company has provided the employees of all levels the understanding of their future career opportunities. This leads to increased motivation, morale and job satisfaction among the employees.

**Career Path Development Program:** To ensure sustainable business growth, the Company has continued the development program called "Career Path Development Program" or CPDP Program since 2011 and Talent Program since 2016. Employees reaching senior staff level (M1/T1 up) have equal chance to undergo the development program which includes the assessment and development activities. The participants have the opportunities to share their expertise, interests and perspectives with management. The program aims to align between the Company's expectation, goals and strategies, and the employee strength and contribution. Since start the programs, total 617 employees have been selected for training and development whereby 37 employees participated in the program, representing 6.4 % of total employees at M1/T1 level in 2023.



**Technician and Line Leader Development Program:** To increase potential of employees whose duties required specialized expertise including a group of junior-level supervisors to grow further, the Company has initiated development programs for both potential groups to strengthen their skills in performing tasks and growing along with the organization. There were 87 and 91 employees selected to undergo the training programs in 2023, representing 33% and 74% respectively of employees in the same groups.

**Competency-Based Development:** The Company has provided training to employees both daily and monthly employees at all levels, including operators, staff and managers. The training focuses on short-term and long-term development, consists of new employee orientation in order to familiarize the employees to new organizational culture and environment, and other training needed for work such as quality system, health and safety at work, 5S, Code of Conducts, etc. from internal and external instructors to upskill and reskill the employees to effectively perform current job functions and to be prepared for future changes and work opportunities. In addition to external training from outside professional trainers, the Company also encourages expertise across departments by turning our employees into trainers with the goals to promote learning organizational culture including enhancing the competency of personnel in the organization. In 2023, there were more than 100 internal instructors who provide in-house knowledge sharing.

### Money Management Course for Employees' Wealth Management by Hana Lamphun Senior Management

The Company places the importance on financial strength both the firm and employees for financial sustainability. This course is organized to encourage employees to save and manage their money with effective discipline program.

Internal Instructors



### Cyber Security Courses by MIS Team

Technology has fundamentally changed the modern world, making it easier to connect computer technology with internet network both in manufacturing and office areas. The Company recognizes the importance of cyber security to reduce the risk of cyberattacks and protect sensitive information. Hence, the in-house trainings were organized for employees to realize the importance of information security systems and how to protect data and various cyber security measures, including the standard ISO/IEC 27001 for information security management systems.



Internal Instructors

**Teacher Day** – As the internal training program brings numerous advantages to the business, the Company utilizes experienced in-house resources to provide learning opportunities to employees and keep employees engaged even during their regular work hours as well as ample opportunities for collaboration between employees who work together in the same location. This can strengthen their professional relationships and enable them to work as a cohesive team. In order to honor employees who devote their time to volunteer as teachers or trainers to fellow employees, the Company organized the Teacher's Day to express gratitude towards internal teachers who contribute value to the organization.



**E-Learning and Online Training:** Online training on the internet has been promoted as an advance technology by moving from the traditional training method which offers more convenience for employees to participate in more flexible training or seminar conducted by various organizations which can gain the learning outcomes according to the corporate objectives. In addition, employees can gain knowledge through Hana's E-Learning website to minimize time constraints and restriction of place. The instructors can customize learning ideas in numerous methods while learners can choose topics of study fitting their own interest on Hana's website which is to provide essential e-materials, VDO clips and self-test evaluation as options and opportunities for employees to learn anytime.





**Training Need Survey:** The Company arranges the annual survey of training need from the opinion survey of management and supervisors in consideration of both internal and external factors. The internal factors are job positions, performance assessment according to the competency of each job position, project evaluation such as CPDP Program, technician and line leader development program and business strategic plan. The external factors are customers' requirements, technological advancement, requirement of legal and international standards and etc.

In addition, the Company provides opportunities for employees to participate in the introduction of useful training courses through the suggestion box and employee satisfaction survey forms. The result of the surveys is considered and carried out for annual training plan as well as individual development plan (IPD).

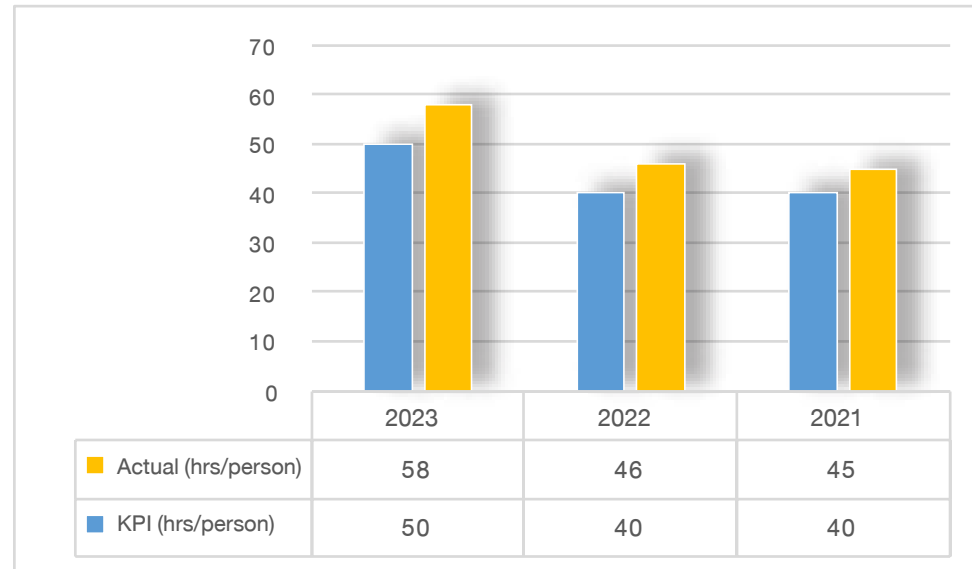
**Training Courses and Training Hours:** Hana Lamphun and Hana Ayutthaya have organized a variety of training courses that are in line with business plan and strategies along with the needs and requirements of our customers including taking into account the needs of supervisors and individual training needs. In 2023, a wide range of courses was provided to employees, which can be broken down into the following categories:

Training Courses	Number of Training Hours			%
	Daily Employees	Monthly Employees	Total Hours	
Professional Re-Certification	155,787	10,668	166,455	50.96
Technical Skills	30,606	23,612	54,218	16.60
Quality	17,581	24,036	41,617	12.74
Management Skills	2,053	23,233	25,286	7.74
Safety & EMS	6,766	6,303	13,070	4.00
General	5,305	9,183	14,488	4.44
Computer Skills	1,908	5,266	7,174	2.20
Multi-Skills	3,265	631	3,896	1.19
Job Transfer	449	12	461	0.14
<b>Total</b>	<b>223,722</b>	<b>102,943</b>	<b>326,665</b>	<b>100</b>



The average training per person per year for monthly and daily employees versus the KPI in 2023 is as follows.

### Average Training Hours per Person







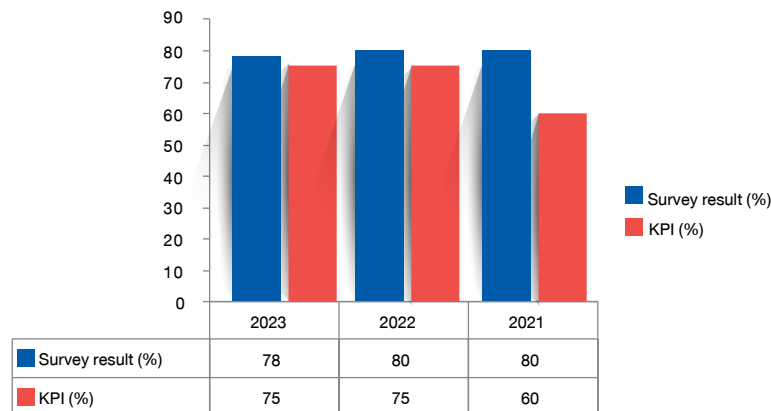
**Benefits of Employee Training and Development:** The Company evaluates the benefits that employees and the Company obtain from our human resource development which are important to both employees and the organization such as:

Training/ Development Program	Objective	Value to the Organization	Value to Employees
<b>CDPD and Technician and Line Leader Development Program</b>	<ul style="list-style-type: none"> <li>Identify, select, and develop key employees to assume critical roles and prepare the organization for the future</li> <li>Attract and retain high potentials in the organization</li> <li>Career path development</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate smooth and efficient internal promotion development plan</li> <li>Reduce turnover rate of target employees to 0.1% out of monthly turnover rate of 0.49%</li> <li>Growth rate of target group average 2% per month</li> </ul>	<ul style="list-style-type: none"> <li>Develop skills, abilities and expertise necessary to align with individual career goals</li> <li>Job stability and economic security encouraging opportunities to develop oneself along with the company's growth</li> <li>In 2023, employees received a job promotion with the average 15% of total employees.</li> </ul>
<b>Sharing Expertise across Departments by Internal Trainers</b>	<ul style="list-style-type: none"> <li>Enhance employees' knowledge and skills to perform relating to their roles and responsibilities</li> <li>Improve employees' level of awareness, expertise, experiences</li> </ul>	<ul style="list-style-type: none"> <li>Boost cross-team collaboration which support a culture of collaboration</li> <li>Cost-effective training method</li> <li>Can connect training to organizational goals, culture and challenges better than outsider trainers</li> </ul>	<ul style="list-style-type: none"> <li>Enable trainers to build their skill sets from sharing knowledge and experience with colleagues</li> <li>Enable employees to understand insight with more tailored implementation</li> </ul>

**Labor Relations** - Hana's Welfare and Employee Relations Policy is committed to social responsibility and adheres to the good labor practices: listen to every voice of employees fairly, strengthen culture and working atmosphere, encourage teamwork, and realize that every employee is important and valuable to the Company's success and sustainable growth. The Welfare and Labor Relations Committee is to facilitates collective bargaining at the workplace including employee benefits and privileges, provide opportunities for executives and employees to discuss, make suggestions, file complaints, and suggest ideas with management for decision-making and problem solving. In 2023, the Company did not have any significant labor disputes.

**Employee Satisfaction Survey** - Hana realize the importance of employee satisfaction. The Company conducts the employee satisfaction surveys for both daily and monthly employees twice a year to encourage them to provide comments and suggestions as to improve the organization in various areas covering wages and welfare, work environment, job assignment, career advancement, supervisor, colleague, etc.

**Employee satisfaction survey vs. KPI of 2023 compared with the previous years were as follows:**



The result of employee satisfaction survey has been summarized and communicated to employees through public relations boards, canteen bulletin boards, radio communication and the Company's intranet.

**Employee Satisfaction Survey Results** - The Company has analyzed the employee satisfaction survey results for further improvement plans. The improvement project from employees' feedback in the latest year was about workplace related facilitation by providing food containers for employees who bring their own food. In addition, the Company has considered shortening the probation period of new hired employees from 119 days by law to be 90 days to secure employees and stability at work and employees are eligible for benefits as full-time employees earlier. The Company also has additional facility improvement projects to enhance employees' quality of working life.

**Social Protection** - Our compensation policy is fair and reasonable according to employees' capability by considering the packages with the same industry and in accordance with their position, experience and their performance in the Company as well as the economic and social situation. Moreover, the Company provides various employees' welfare for example annual vacation, overtime with the consent of employees, medical treatment, employees' cooperatives and other welfares such as group life and accident insurances, annual health check, special vaccination such as Influenza vaccine, employee fitness center, library at certain location, etc. More importantly, the Company provides the children education allowance for children of low income employees.

**Long Service Award** - The Company recognizes the importance of employee engagement. There are also long service awards annually held to promote the morale and pride of employees who are dedicated to working with the Company for long time and are the important part of the success and growth of the Company. In 2023, the group of companies, both domestically and internationally, has a total of 641 employees who received awards, classified by service years as follows:



Service years	Number of employees
40 years	1
35 years	1
30 years	37
25 years	73
20 years	105
15 years	96
10 years	328
<b>Total</b>	<b>641</b>





**Safety, Health and Environment at the Workplace** - The Company gives priority for employee development and focuses on their well-being, both physical and mental health. The Company was certified for both OHSAS 18000 and TIS 18001 which were an international and Thai's occupational health and safety management systems since 2005 and changed to a new ISO 45001 since 2019. The Company is committed to developing environmental and safety, health of employees and those involved, as well as upholding social responsibility and labour, along with operating the business and making continuous improvement.

**Improve Health and Well-Being at Work** - A workplace health and safety plan and its program have been set and approved by management on a yearly basis for managing the prevention of work-related injuries and diseases in the workplace including creating a healthy organization. In 2023, specific activities undertaken by improving employees' health and well-being included the training and awareness-raising about health and safety in the workplace, the implementation, monitoring and evaluation.

**Epidemic Prevention Measures** - To comply with the Company's epidemic prevention measures, the preventive actions were implemented at the Company in 2023 as follows:

- Provided Influenza vaccination: achieved 85% of all employees
- Stimulated the third dose of Covid-19 vaccine booster shots: achieved 91% of all employees
- Regularly cleaned and disinfected common areas and conducted screening measures for respiratory diseases by medical personnel

With regard to our care and concern for employee health, the Company contributed to plenty of health promotion and awareness activities through various accessible methods for the benefit of employees with all ages, like for instance, health promotion training, safety in workplace, recreation activities to reduce tension and stress in working and to strengthen concrete relationship among coworkers and between employees and management including with specific disease information training courses, for example cancer education, NCDs (Non-Communicable Diseases) education, preparation for pregnancy and pregnancy care, long-term consequences of Covid-19 infection, insulin resistance and post-Covid skin disease education, and first-aid, CPR and AED.

**Provide Training to Promote Employee's Safety and Health** - In 2023, the Company provided occupational health, safety and environment training for newly hired and existing employees, including our partners and subcontractors to ensure full awareness of safety, occupational hazards and environment at work and relevant safety laws in order to encourage and promote safety in the workplace as follows:

**Safety, Occupational Health and Environment Training for Newly Hired Employees** - The Company aims to equip newly hired employees with the basic knowledge to ensure they have the skills, knowledge and attitudes to make them competent in the safety and health aspects of their work. There were 279 newly hired employees attending the training in 2023. Their level of knowledge regarding health, occupational health and environment was measured by means of a questionnaire distributed before and after the session.

**Safety, Occupational Health and Environment Training for Suppliers and Contractors** - The Company provided training to 609 people for suppliers and contractors in 2023, as well as other related people to ensure the primary stage of the effective working conditions and safe working environment in reducing the risk of injuries and accidents at work.

**Prevention of Musculoskeletal Disorders in the Workplace** - The ergonomic training was provided to 142 employees that help lessen muscle fatigue, increase productivity and reduce the number and severity of work-related musculoskeletal disorders such as office syndrome.

**Publishing Information to Promote Well-Being** - The Company provided health and nutrition information/news on the bulletin boards to promote health care and good nutrition.





**Health and Safety Implementation** - The Company has provided a safe and healthy workplace that is suitable for our employees such as quality of light, sound/noise level, air, humidity and temperature to be in accordance with the standards and requirements. The Company further supports the good health of employees both physical and mental health by furnishing Hana Sport Complex available as a gym and/or fitness related activities for employees to get greater health benefits and reduce stress. In addition, the Company provides flexibility of working hours and workplace (e.g. female employees are able to work at home along with taking care of kid). Pregnant employees are not allowed to work overtime or work on holidays. The Company also facilitates “Breastfeeding Corner” and breast milk refrigerator in the workplace to help breastfeeding women feel more at ease during working hours and also protect the milk from infectious diseases. Work from home and flexible working arrangement during Covid-19 have been implemented to help provide a quality work-life balance for employees and reduce the risk of spreading infection in the workplace.

**Workplace Environment Measurement** - The Company regularly monitors the extent to which employees are protected from work-related hazards and risks by measuring physical, chemical and biological hazards present in the workplace that may affect employee well-being such as the noise level, temperature, light intensity, humidity, ventilation, concentration of substances to ensure employees working in a safe and healthful environment. In 2023, the result of work environment measurement is as follows.

Workplace Environment Measurement	Total Areas Checked	Results
Light	1,065 areas	All areas met the standards by law.
Sound/Noise	81 areas	There were 5 areas greater than 85 dB(A) over the standards.
Heat	88 areas	All areas met the standards by law.
Chemical	50 areas	All areas met the standards by law.

**Managing Excessive Noise Level in the Workplace:** There are certain areas exposed to noise level above the standard due to the running of equipment whereby has been arranged to locate in isolated areas. The Company took the control measures and preventive measures by implementing a hearing conservation program with the warning signs are posted and workers in posted noise hazard areas must wear hearing protection throughout the working hours, providing hearing test for new employees and all employees exposure to noise on an annual health check-up in order to monitor and follow up to evaluate the impact of their health including regular maintenance of equipment and machinery. The level of noise that exceeds the standard is limited to specific areas in the factory and have no impact to the community.

**Workplace Accidents or Injuries:** The accident statistic report is posted on the bulletin board by detailing the target and accident statistics and being updated every day. In 2023, there was totally 1 accident which was a small accident that employees did not need to take leave and no accident death. When an accident occurs, a report describing the circumstances is submitted, and steps are taken to identify the cause and implement necessary improvements. With the trend of accident in working increasingly during the past years, the Company further reviewed the safety risk management, improvement of accident prevention processes and monitoring mechanism enhancement in order to prevent accidents at work and reduce the number of accidents that could occur in the future. The Safety Management Program has been established to reduce work-related accident risks which is led by the safety officer to review and investigate to correct and prevent accidents to meet the target.

Workplace Accidents or Injuries (Case)	KPI	2023	2022	2021
Total number of injury (case)	0	1	2	4
Total number of lost-time injury (case)	0	0	2	2
Lost Time Injury Frequency Rate of Employee (LTIFR) per 1,000,000 hours worked	0	0	0.19639	0.1802

## Product and Customer Responsibility

**Quality Assurance** – Hana is accredited with ISO standards as our commitment to adhere to the industry best practice in aspects of quality management, environmental management, information security management, process improvement, regulation compliance, and continuous monitoring to maintain a high level of quality of the products and our manufacturing operations. Below is our key ISO certification.

- ISO 9001 is a quality management system where the Company can demonstrate procedures to consistently provide products that meets customer, applicable statutory and regulatory requirements.
- IATF 16949 is a quality management system for automotive industry which focuses on the technical production of high quality automotive parts.
- ISO 13485 is a quality management system used in the medical device industry which mostly focuses on the products' quality and safety for the consumers and related personnel.
- ISO 14001 is the environmental management system (EMS) as part of the management system used to manage environmental aspects, make businesses strive beyond environmental compliance by focusing on pollution prevention and environmental preservation.
- ISO 45001 is an occupational health and safety management system emphasizing the importance of preventing accidents and occupational diseases to reduce the risk in the workplace and create safe working environment for employees and those who are involved.
- ISO/IEC 27001 is an international standard to manage information securing emphasizing requirements for establishing, implementing, maintaining, and continually improving information security management systems.



**Responsible Sourcing** – The Company's product is manufactured to meet all applicable standards and the customers' specification and requirements. Hana established the responsible sourcing of raw materials policy to ensure procurement of material not containing Conflict Minerals (Tin, Tantalum, Tungsten, Gold, Cobalt, Mica and other relevant minerals) contributing to abuses of human rights in Democratic Republic of Congo and adjoining countries and being consistently followed the guidelines of relevant regulations. Hana also requires our suppliers not to supply aforesaid minerals acquired from these conflict areas by collaboration with the customers and suppliers to identify their sources of origin in compliance with the requirements throughout the supply chain as well as communicating our Conflict Minerals Policy on the principle of the Responsible Minerals Initiative (RMI)/Conflict Minerals.

**Quality Improvement and Innovation Development** - Hana is committed to sustainable growth in recognizing the importance of the “quality” of our products supplied and services rendered as to meet customer expectations and satisfactions as well as end-consumer product safety by ensuring the quality put in place throughout the value chain starting from raw material procurement, production process until delivery and after-sales service. By integrating people development and continuous improvement, the Company continues its efforts towards Continuous Improvement Program (CIP) as a fundamental framework to achieve improvements of processes and product quality. Quality Control Circle (QCC) by small group activity is a systematic and step-by-step process for solving problems whereby create an effective incentive program for employees. Poka-Yoke measurement system is also implemented and developed both in mechanics and software to eliminate all human dependent factors and to get high quality and reliability. In addition, the Kaizen principle has been implemented to continuously develop and improve to their own work processes efficiency. This is a clear policy and concrete support from the management that results in the success of Hana. Our quality improvement programs have been continuously developed and recognized by both internal and external organizations. Hana also places importance on corporate innovation development to increase competitiveness in business including with expansion of creativity and innovation towards the sustainable growth.



**Internal Recognition:** In order to promote quality awareness mindset to all employees, the recognition aims to honor those with quality awareness that emphasizes quality at all stages of their works to produce products to meet the standards and customer requirements. The Company promotes innovation projects in the organization and award those as the organizational innovation and invention promotion are valued to encourage our employees to initiate new body of knowledge, products and work procedures as well as serve the customer needs as the customers will gain from our development of our products and services at every step of our production until delivery for maximum customer satisfaction and benefits. It can also result in changing customer's perception of Hana from a manufacturing service provider to be a reliable partner having product design capabilities.

Hana Ayutthaya has been able to invent alternative designs of proximity sensors that can be installed in wireless earbuds and underneath OLED displays of smartphones which received U.S. Patents in 2022 and 2023. These products have been designed to be manufacturing friendly and fit into our machinery and production processes, resulting in better overall product quality, reduce customer's costs of design and production including greater competitive advantage of Hana in the global market.



**Customer Recognition:** Regarding our responsibility to our products and customers, we are committed to develop, improve and be ultimately responsible for the highest standard of product quality and safety to enhance customer satisfaction and trust as to robustly grow further as a reliable partner along with our customers' journey. Hana never stops innovating to improve production processes to serve the customers beyond their expectation enhancing the utmost satisfaction.

In 2023 Hana Lamphun is proud to present that we have achieved the Engineering Innovation Award from our world's well known customer of "Radio Frequency Instrument". This esteemed award was given to Hana Lamphun as the business partner having the most innovative continuous process improvement (CPI) initiatives that are novel in ideas and breakthrough the technology to support and escalate the customer productivity to fulfill the target of product quality improvement, capacity increase, product mix flexibility and on-time delivery efficiency. Hana is the winner of Poka-Yoke Measurement System Project and won 6 out of 21 novel CPI initiatives covering automation, data and material management and improvement, reaffirming Hana's tirelessly effort in consistency and sustainability in quality development, intelligent operation and global technology.





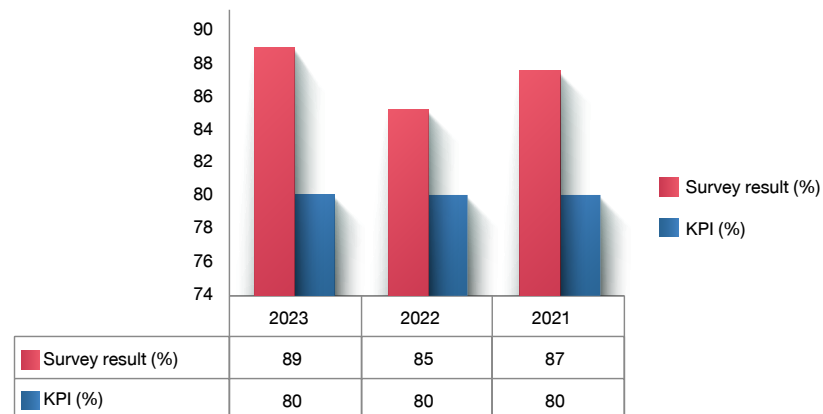
**National Recognition:** Our employees participated in group activities for Thailand Quality Prize and Thailand Kaizen Award organized by Technology Promotion Association (Thailand-Japan) whereby Hana Microelectronics Public Co., Ltd. have been received 101 awards since 2009 to 2023 with long journey of striving for organization of excellence, efficiency, sustainable growth and quality administration.

In 2023, the Company received totally 8 prizes consisting of 1 diamond, 2 golden and 1 silver awards of Thailand Quality Prize Award (QCC) and 1 diamond, 2 golden and 1 silver awards for Thailand Kaizen Award (Kaizen). Those are the performance of small groups of staffs working together to contribute to the improvement of production processes aiming for waste reduction or zero defect enabling the cost reduction to the Company more than Baht 102.88 million per year. The group activity program leads to employees' involvement and participation at all levels working toward common goals for continuous quality improvement as an approach to identify, investigate, analyze and solve their work-related problems so enhance productivity and quality while achieving customer satisfaction. CIP program is also a tool to increase the morale of employees, promote human relations, reduce accidents at work, improve two-way communication with the management and encourage both employees and management at all levels to focus on continuous improvement of our manufacturing processes.

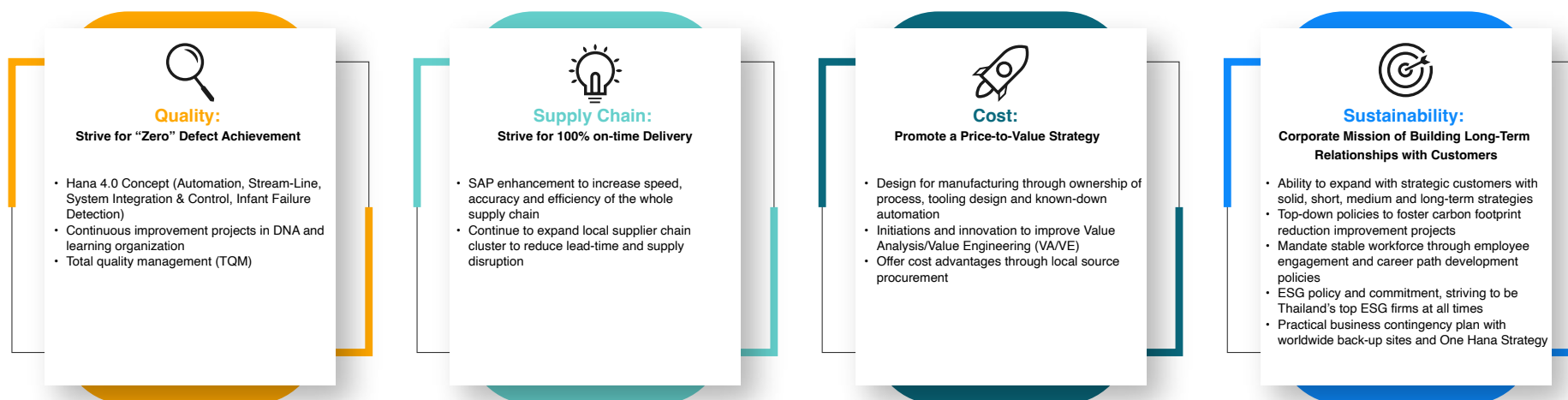


**Customer Relationship Management** - Customer satisfaction surveys are conducted annually to improve the Company's products, services and other business processes in order to meet or exceed the customers' needs and requirements enabling the Company to maintain and expand its customer base in the long term. Our guiding principle to our customers is to operate our business in compliance with applicable laws, rules and regulation as well as compliance with Responsible Business Alliance (RBA) which is the code of conduct for electronic industry best practices.

**Customer satisfaction survey vs. KPI of 2023 compared with previous years were as follows:**



The results of customer satisfaction survey are evaluated so we can provide further improvement on the key items our customers find important. The continuous improvement metrics we use to increase our customer satisfaction are as follows.



## Social and Community Development

The Company engages employees at all levels to participate in the community and social activities and promote the volunteer spirits to realize the importance of caring for the environment both internal and external and to improve better quality of lives with social contribution.

Our sustainable development strategies continue to focus on self-reliance as one of approaches of effective social and community development by increasing academic ability through education, developing careers, improving the quality of life of those in need in society, and protecting natural resources and environment. In 2023, the Company supported employee involvement in community and social development activities as follows:

### Empowering Education

**Employee Scholarship Program** – To develop professional skills and career advancement of our employees and to support Hana 4.0 strategy in line with Thailand 4.0 development plan, the Company has signed a memorandum of understanding (MOU) with the Faculty of Engineering, Rajamangala University of Technology Lanna, Chiang Mai, aiming to promote cooperation in human resources development project qualitatively and sustainably. In 2022 Hana Lamphun granted scholarships to 20 employees for Bachelor of Engineering Program in Electronics Engineering and Automatic Control Systems. In 2023, Hana Lamphun additionally granted 10 scholarships to employees for Bachelor of Engineering Program in Software Engineering. Therefore, there are totally 30 employees received scholarships worth of 2.5 million Baht.



**Child Scholarship Program for Low-Income and Disabled Employees** - Hana has supported scholarships to children of low-income and disabled employees. In 2023, the Company has granted 964 scholarships amount to Baht 1.647 million.

**Internship Program** - Hana recognizes the importance of education and career exploration for college and undergraduate students. Our internship program gives students the opportunity to apply knowledge from their fields of study and gain real work experience in preparation for future work. In 2023, Hana Lamphun and Hana Ayutthaya granted a total of 214 internships from undergraduate and college students.



**Internship Add Value:** In 2023, the interns and Hana Lamphun technical team jointly set up a project to separate the cap out of the panel with the purpose of employee safety during operating, preventing defect from cutting and sorting and reducing working lead time for 0.044 minutes/panel. This project can also save the cost approximately Baht 61,700 per year. It can also be applied to 5 other products with 7-month payback period.



## Career Advancement

The Company promotes social engagement and development with the strategy aiming the communities to be self-reliant in a sustainable manner as follows.

**Support Project “Careers for Persons with Disabilities under Act Section 35”** - The Company made the donation and necessary items to persons with disabilities including their families in Lamphun to develop their careers and sustainable income totally 4 projects: a coin-operated washing machine and 3 service contract projects. Those 4 individuals were granted and expected to raise their income by Baht 478,880.

**Bakery Learning Center and Smart Farm for Sustainable Community** - The Company has organized the bakery learning center and smart farm for sustainable community for Wat Nam Phu School and nearby communities in Lamphun by renovating the old school building and providing materials, equipment and bakery oven including installing solar panels and automated water system to create a learning center within the school. The Company has organized training on the application of solar energy systems and automation in agriculture, mushroom care, and bakery baking to practice vocational skills, enabling 200 people benefit to this project with expect to generate extra income for students and communities by Baht 50,400.

**Smart Vegetable Farms for Sustainable Community** - The Company jointly with Banklang Municipality 1 Shool and Banklang Community, Muang District, Lamphun to build a smart vegetable farming learning center for the community and provide knowledge sharing on solar energy system innovation and automation to increase the efficiency of farming for the community. This project can support school lunches, promote food sustainability including energy sustainability by using renewal energy from solar. The project can create jobs to 1,080 people and additional income for the community about Baht 12,000.







## Promoting Quality of Life and Well-Being Community

- **Financial Support for Hospitals** - The Company provided financial support for the purchase of medical equipment and medical development for Lamphun Hospital and Sansai Hospital, Chiang Mai for treating and helping people with illness.
- **Influenza-Free Community** – To reduce the spread of influenza both at the workplace and in communities, the Company foresaw the need to protect the public health by providing vaccines to 85% of all employees.
- **Blood Donation** – Hana employees joined with the Thai Red Cross in donating blood, organs and body for the public benefit. In 2023, there were 979 employees and the blood donated was totally 337,400 milliliters.
- **We Care Activity** – To continuously support the Drive Safe campaign, the Company promoted safety awareness among employees and their families by offering low-cost helmets to provide protection from severe injuries for the 10th consecutive year.
- **Oral Health Awareness** – The Company cared about the oral health of employees so jointly collaborated with Lamphun Health Office in “Fun Dee Campaign” by offering in-house oral check-up for employees. In 2023, the number of employees participated in oral check was 91 employees.
- **Employee and Family Support** – The Company together with employees at all levels collaboratively raised fund and stuff to assist co-workers faced with accidents and serious illnesses, e.g., Leukemia and kidney disease including with those confronting with natural disasters.
- **Employee Initiative Projects** - Hana Lamphun arranged “Rest Area We Care” from the survey of their needs by facilitating rest areas while waiting for shuttle bus service for employees and to provide more green areas to reduce heating and lower stress levels and to renovate smoking area separately to promote their quality of working lives, increase morale and make them happy by using the available space within the factory to maximize benefit as well as bringing greater connection between employees and management in doing activities together.
- **Community Volunteers** - The Company organized volunteer activities with employees to install solar panels for remote communities in Mae La Noi District in Mae Hong Son, and to promote Covid-19, dengue fever and Leptospirosis infection prevention and oral health to school students through information activity and notice boards at Wat Nam Phu School in Lamphun.
- **Financial Support for Local Communities** - Hana Cambodia together with employees provided financial support to the local communities i.e., purchasing school supplies and construction cement to the needed primary school, making merit to the local temples, donation to support Union of Youth Federations of Cambodia (Koh Kong Provincial Hall) for support their efforts of youth freedom related projects.



## Promoting Environmental Conservation

• **SET Environmental Conservation Project** - The Company seeks to contribute to improve the quality of life and reduce inequities for the underprivileged in society. Mr. Terrence Philip Weir, an executive director, made the cash donation and 850 old desk calendars which were donated by employees from Hana HQ, Lamphun and Ayutthaya, to the Education Technology for the Blind Center, Foundation for the Blind in Thailand under the Royal Patronage of Her Majesty the Queen. For those old desk calendars, the Foundation will use them to produce Braille word cards as well as educational materials for students of the Bangkok Blind School. This project is one of the projects that help reduce waste in the organization with the principles of 3Rs - Reduce, Reuse, Recycle, in line with the Stock Exchange of Thailand environmental project.



• **SAY NO TO FOAM & NO PLASTIC PROGRAM** - The Company joined the government sector in signing a Memorandum of Understanding Ceremony for reducing or banning foam food. The Company has further enhanced the project “HANA NO PLASTIC PROGRAM” along with awareness raising and communication campaign including training provided to all employees to reduce plastic consumption such as plastic cups, plastic bags and switch to use reusable cups/bags/bottles to promote a healthy and safe environment.

• **General Waste Management Project** - The Company promotes the waste and energy reduction to increase green spaces and reduce greenhouse gas emissions by raising awareness to employees to realize the environment is not far away and is a matter for everyone. All must take care of the globe for sustainability. Throughout 2023, we have enhanced the process of bringing waste to recycle disposal and other non-recyclable materials turn into fuel.

• **Recyclable Waste Donation Project** - The Company donated recyclable waste to Banklang Municipality, Lamphun, for its fund of environmental management and development of elderly and people with disabilities' quality of life.

• **Tree Planting**- Employees participated in volunteer activities by planting forests to restore moisture and green space to the community in Donchai Temple, Chae Son District, Lampang.

• **Build a Natural Dam**- The Company and the Office of the Industrial Estate Authority of Lamphun and Makhua Chae Municipality joined the activity to build a natural dam according to the Royal Initiative Project together with participation of teachers and students of Banklang Municipality 1 School.

## Engaging Employees in Sustainability

**Employee engagement in the organizational innovation towards Hana 4.0 roadmap** - This program has been initiated to allow employees at all levels to support Hana 4.0 strategy sustainable business growth by promoting continuous improvement across the organization, develop analytical thinking skills in a systematic way, conscious of cost and quality teamwork, applying technology and innovation to improve work process efficiency (process innovation) which supports the Hana 4.0 strategy to sustainably develop the production process to be friendly to the environment and society (eco process) through Continuous Improvement Project (CIP) and Diamond Polishing Project (Employee Potential Development).

From aligning employees with the Company's strategic goals, their level of commitment and passion to the projects with solutions designing a new system, method, tools in meaningful to the organization, environment and community as seen by examples as follows:

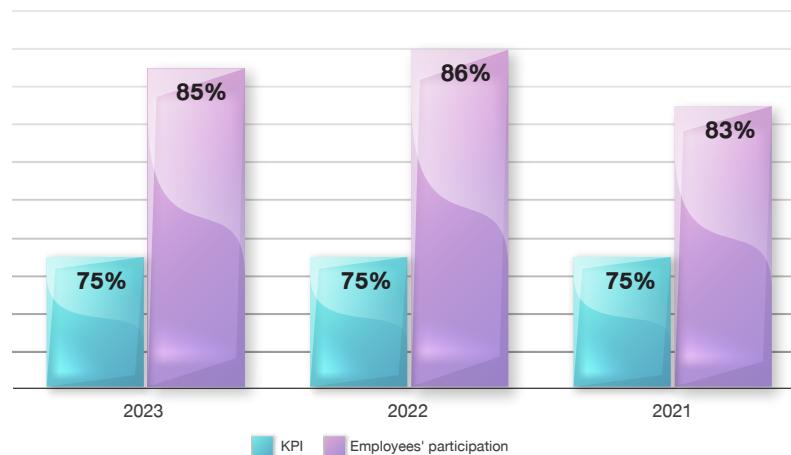
• **Paperless Solution** - An innovation that brings the organization into digital transformation, enhance work efficiency by transition from paper-based processes to paperless both in the office and production. The responsible team consists of management, staff of each department and concerned departments played a key role in supporting and driving the paperless initiative. This made the working process more clear because all workflows are systematic including improve speed and increase efficiency and most importantly saving costs to the Company while reducing the use of natural resources resulting in the reduction of greenhouse gases, as follows.

Paperless project	2023	2022	2021
Cost reduction:			
Labor cost	1,462,738	1,840,704	1,120,247
Print/copy fees	327,832	735,785	298,317
Paper cost	25,824	27,860	11,350
<b>Total cost savings (baht/year)</b>	<b>1,816,393</b>	<b>2,604,349</b>	<b>1,429,914</b>
<b>Reduce greenhouse gas emission (kgCO2e)</b>	<b>1,861</b>	<b>2,008</b>	<b>818</b>

• **Sustainable Waste Disposal Improvement** - Certain packaging waste was non-reusable from the production process. Before improvement taking place, a method of landfill waste disposal in Saraburi incurred negative factors i.e., transportation costs, landfill disposal costs, labor costs, and pollution. A group of employees has then analyzed to find ways for improvement by design and selection of waste compactor machine that can compress large quantities of waste enabling environmentally friendly disposal. As a result, the Company can save costs by 50% compared to prior method and can create value for waste to be reused as fuel and cement components so reduce emissions from landfills and reduce the impact on the community. The project initiative by our staffs is part of our goal towards zero landfill waste.



In summary, the Company has set the main goal for sustainable growth through innovative organization by aiming employee engagement in the Hana 4.0 strategy with the goal and performance as follows.



### Employees' Participation of Innovative Organization Program

**External Knowledge Sharing** - The Company continued to empower employees to transfer knowledge to the community. The quality management system and organizational management under the Hana 4.0 strategy has been provided to the teachers and students of Rajamangala University of Technology Lanna. In addition, knowledge sharing regarding to economic information exchange among the Bank of Thailand and other private organizations was also arranged including with product and technology knowledge sharing training and seminars with suppliers and customers for up-to-date information and understanding to contribute to innovation, eradicate working obstacles and enhance working efficiency.



## Summary of Social and Environmental Performance in 2023



- Hana Lamphun received the Eco-Factory award for Eco-Excellence level which honors industrial factories that focus on business and industry development to grow together with the community and the environment by adhering to environmentally friendly business operations for sustainable development covering 5 dimensions: physical, economic, social, environment and management.
- Hana Lamphun and Hana Ayutthaya received the Green Industry Award Level 4 (Green Culture) from the Ministry of Industry as a result of environmentally friendly operations in all aspects of business operations towards green industry and sustainable development.
- Hana Lamphun received the IEAT Green Star Award in recognition of outstanding performance on environmental management, safety, and social responsibility.



- Hana Lamphun received the award for the prevention the Department of Labor. This award is achieved by that provides policies and supports in all dimensions, measures with the excellent support from Lamphun Labor agencies.
- Hana Lamphun received the award for the cooperation the opportunity in the workplace from the Department of employers and employees on social responsibility in cooperation promotion in the workplace.



and solution of drug problems in the workplace from cooperation from all departments both management team including employees complying with the drug preventive Protection and Welfare Office and related government

of drug problem solving in giving drug users and addicts Labor. This award is achieved by cooperation between labor to raise employee quality of life, productivity and



- Hana Lamphun received CSR-DIW Continuous Award from the Department of Industrial Works for sustainable development for the seventh consecutive years.
- Hana Lamphun received the certificate for “The National Award for Safe, No Disease, and Happy Workplace” from the Department of Disease Control, the Ministry of Public Health, for the sixth consecutive year.



- Hana Lamphun received the gold awards for excellent Safety, a country level, given by the Ministry of Labor for the sixth management of Safety, Occupational Health and Environment in the Company was granted the award for the road safety. This award is achieved by cooperation from all departments in all dimensions, including employees complying with Lamphun Labor Protection and Welfare Office and related



Occupational Health and Environment in the workplace at consecutive years which demonstrates the systematic the workplace to international standard level. In addition, measure implementation from the Department of Labor, both management team that provides policies and supports the road safety measures with the excellent support from government agencies.



- Hana Lamphun received the award for achievement of Outstanding Establishment in Labor Relations and Labor Welfare from the Department of Labor for the third consecutive years.
- Hana Ayutthaya received the “Good Labor Practices” certificate given by the Ministry of Labor presenting the importance and cooperation between an employer and employees in compliance with laws as part of social responsibility for labor resulting in improving the quality of life of employees, increase productivity and promote collaboration in the workplace.





## 4. Management Discussion and Analysis (MD&A)



### Overall Group Performance

Hana Microelectronics Group “Hana” Sales Revenue decreased -4% year on year, at THB 26,152 million in year 2023 from THB 27,167 million in year 2022. Sales Revenue in USD terms decreased by -3% to USD 751 million in 2023 from USD 775 million in 2022. Earnings from Operations decreased -26% to THB 1,787 million in 2023 from THB 2,422 million in 2022. Net Profit decreased by -16% to THB 1,761 million in 2023 from THB 2,102 million in 2022 due to a downturn in the semiconductor cycle in 2023 and inventory adjustment at IC Korea.

### Past Performance Analysis Revenue Analysis

Group sales decreased -4% in 2023 to THB 26,152 million from 2022 at THB 27,167 million driven by a downturn in the semiconductor cycle. USD sales were -3% lower in 2023 at USD 751 million down from USD 775 million in 2022. The average THB/USD exchange rate strengthened 1% to THB/USD 34.8 in 2023 from THB/USD 35.1 in 2022. The Microelectronics divisions’ sales revenue in USD increased 5% [5% in THB terms] in 2023 over 2022. The microelectronics operation in Lamphun sales increased in USD 12% [11% in THB terms] and Jiaxing decreased in USD by -13% [-15% in THB terms] in 2023.

In 2023 IC assembly sales overall in USD decreased by -20% [-21% in THB terms]. Specifically, IC AYT sales in USD decreased -18% [-19% in THB terms] and IC JXG USD sales decreased by -20% [-21% in THB terms]. Hana Technologies Inc. ‘HTI’, sales increased in USD 12% [11% THB] for the year.

The annual sales split was:

	2023	2022	2021
PCBA (Thailand)	47%	41%	41%
PCBA (China)	12%	14%	14%
PCBA (Cambodia)	2%	1%	1%
IC (Thailand)	28%	33%	34%
IC (China)	3%	5%	5%
HTI (USA)	6%	5%	5%
IC (Korea)	2%	1%	0%
Total	100%	100%	100%

### Gross Profit / Cost of Sales Analysis and Sales and Administration Analysis

Gross Profit decreased by THB -681 million with the gross margin decreasing -2% point to 11% in 2023 from 13% in 2022 due to the downturn in the semiconductor cycle [-1%] and IC Korea inventory and development expenses adjustment [-1%] USD 7.7 million [THB 262m].

### Operating Profit Analysis

Earnings from Operations margin decreased to 7% in 2023 from 9% in 2022. SGA including R&D expenses were -2.0% lower in 2023 than 2022.

### Payout Analysis

In Q4/2023 THB 442 million dividend of THB 0.50 per share was paid as an interim dividend from the profits of 2023.

In Q2/2023 THB 402 million final dividend of THB 0.50 per share was paid during the quarter from the profits of 2022.



In Q4/2022 THB 402 million dividend of THB 0.50 per share was paid as an interim dividend from the profits of 2022.

In Q2/2022 THB 805 million final dividend of THB 1.00 per share was paid during the quarter from the profits of 2021.

In Q4/2021 THB 805 million dividend of THB 1.00 per share was paid as an interim dividend from the profits of 2021.

## Financial Status

Net Cash reserves and financial investments were THB 7.8 billion at the 31st December 2023 up from THB 3.6 billion at the 31st December 2022.

## Asset Quality

### Accounts Receivable

Most of customers are well known and have good reputation in the IC, and electronics industry. Provision is made of amounts outstanding over 90 days and amounts which the management believe may be doubtful. Accounts receivable were 71 days in 2023, 64 days in 2022 and 62 days in 2021.

(Thousand Baht)

Trade Receivables	2023	2022	2021
Less than 3 months	4,846,118	4,754,011	4,252,339
3 - 6 months	45,888	31,736	52,465
6 - 12 months	20,445	97	5,720
More than 12 months	8,950	3,418	5,408
Total accounts receivable - other companies	4,921,401	4,789,262	4,315,932
Less : Allowance for doubtful accounts	(15,964)	(13,289)	(11,114)
	4,905,437	4,775,973	4,304,818

## Inventory

In general, Hana's production is based on clients' order, consequently, the majority of inventory are raw materials, expendable tools and work in process with little finished goods pending for customer delivery. The group companies normally write-off out-of-date inventory, and make provision for aged inventory and depletion in the value of fixed assets, if material, each quarter.

Inventory days were 145 days in 2023, 127 days in 2022 and 101 days in 2021.

## Accounts Payable

Credit terms with suppliers are mostly open account with credit terms varying from cash in advance to 90 days. The credit term has been determined in accordance with the principles of fair dealing between the Company and suppliers. Accounts payable were 59 days in 2023, 60 days in 2022 and 52 days in 2021.

## Liquidity

The group has THB 7.8 billion in cash and financial investments. Liquidity ratios are high at over 3 times current liabilities.

Operating Cashflow (EBITDA) was THB 3,490 million in 2023, -14% lower than THB 4,052 million in 2022 and THB 3,520 million in 2021.

Cash and financial investments in 2023 increased to THB 7.8 billion, due to EBITDA 3.5 billion less final dividend THB 0.4 billion 2022 paid in Q2/2023, interim dividend Q4/2023 THB 0.4 billion, net capital expenditure THB 2.7 billion, share capital increase THB 4.6 billion, other items THB -0.4 billion.

Cash and financial investments in 2022 decreased to THB 3.6 billion, due to EBITDA 4.1 billion less final dividend THB 0.8 billion 2021 paid in Q2/2022, interim dividend Q4/2022 THB 0.4 billion, net capital expenditure THB 2.9 billion, other items THB -2.5 billion.

Cash and financial investments in 2021 decreased to THB 6.0 billion, due to EBITDA 3.5 billion less final dividend THB 0.8 billion 2020 paid in Q2/2021, interim dividend Q4/2021 THB 0.6 billion, net capital expenditure THB 3.9 billion, other items THB -1.9 billion.

## Capital Expenditure

Capital Expenditure was THB 2,689 million in 2023, THB 2,876 million in 2022, and THB 3,895 million in 2021. Capital Expenditure in 2023 was mainly for IC Korea plant due to investment in expansion of Silicon Carbide devices and building purchase for Hana Technologies expansion, whereas in 2022 and 2021 capital expenditure was across the IC divisions. Generally, capital expenditure for production equipment will follow the increase in sales, particularly in the IC division. However, there is a 6 to 12 month time lag due to the ordering lead time. Plant expansion will depend on the current building utilisation and lead time to construct new plant or expand in an existing plant.

## Source of Financial Capital

As the group as no interest bearing debt and operating working capital is positive the groups funding is from the shareholders equity.

## Tax Payment

The corporate tax policy of Hana group has been set as a framework for tax management and practices to be in accordance with legal, rules and regulations governing the taxes of each country in which the business operates. Below is the tax reporting for local and overseas operations of Hana group.

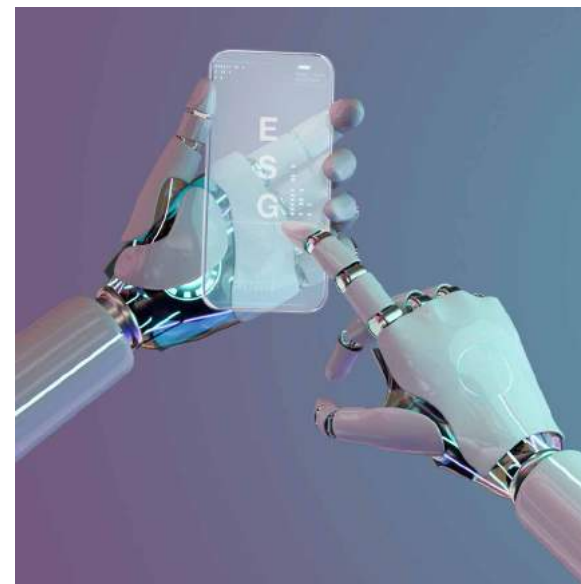
Description	Thailand operations	Overseas operations	Total
Total revenues (Million Baht)	20,195	6,437	26,632
Profit before income tax expenses (Million Baht)	2,458	(612)	1,846
Normal income tax rate (%)	20%	0 - 25%	
Income tax expenses per normal tax rate (Million Baht)	491	(148)	339
Actual income tax expenses (Million Baht)	31	54	85
Actual income tax rate (%)	1%	(9%)	

Hana operations in Thailand have paid the corporate income tax expenses lower than the normal tax rate as received the promotional privileges for tax exemption under the Investment Promotion from the Board of Investment (BOI) while the overseas operations have paid lower than the normal tax rates due to the operating loss.

## Foreign Exchange Rates

The THB/USD currency movements reflected the increase in relative interest rates in the USA in 2022 & 2023. The average rate for 2023 was THB/USD 34.80 which was 1% stronger than 2022 was THB/USD 35.07 which was 10% weaker than the 2021 at THB/USD 31.98.

## Business Operations Driven Sustainability



### Rising labor cost and energy cost

The daily minimum wages for Thai workers nationwide is set to raise by 2.4% from 1 January 2024 whereas the electricity price in Thailand also remains on the rise. In order to cope with the labor cost and energy cost increase to minimize our production costs, the Company has continued our actions towards sustainable development related to ESG as follows.

- #### Focusing automation efforts

Hana has continued to invest in automating the manufacturing processes towards industrial 4.0 standard that offers numerous benefits such as reduce human dependency, reduce costs, remain competitive, and increase customer satisfaction. Taking advantage of these advances will ensure that the Company remains at the forefront of innovation and remain competitive.



- Investing renewal energy and energy saving measures

In 2023, the investment in additional solar roof installation has been approved for 2 facilities in Lamphun, with the cost saving of THB 7.4 million per year, reducing GHG emission by 1,612 Ton CO<sub>2</sub>e which can reduce GHG emission scope 2 by 6.8%. Hana will add more renewable capacity in 2024. The Company also continues its efforts for various energy saving programs through the internal initiatives and the greenhouse gas reduction network collaboration with the Industrial Estate Authority of Thailand, Thailand Greenhouse Gas Management Organization (TGO) for the pilot project “GHG reduction for Net Zero Emissions”, etc.

- Increasing labor productivity and improve quality

We continue to optimize our operations to increase productivity, improve quality, and reduce costs through Quality Improvement Programs: QCC (Quality Control Circle), Kaizen, etc. as we believe that efficient manufacturing processes consume less energy, use fewer resources, and produce less waste. One of the best ways to improve operational efficiency is to directly tie it to an incentive program. Rewards give employees a stake in the outcome of project or task. Awards also enable our employees’ participation to be a key path of the Company’s and their career growth.

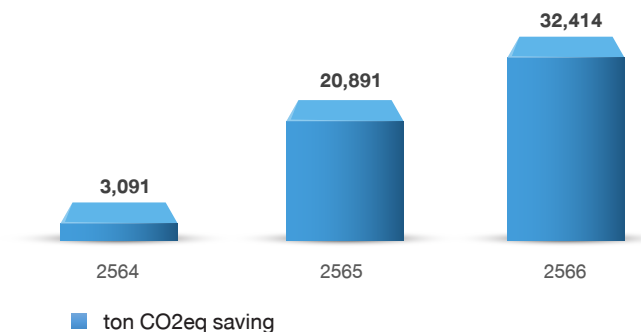
- Development and retention of human capital

Human capital is the most important for the organization’s innovation and future growth. The Company continues to focus on our human capital development to attract and retain skilled workers along with career development opportunities and employee recognition programs.

## Green Business

Power Master Semiconductor (PMS), a subsidiary of the Company, produces Silicon Carbide power solutions which enable end-product applications (EV, EV charger, PV, Cloud servers, electric motors in industrial and consumer products, etc.) to be more energy-efficient which contributes to reducing CO<sub>2</sub> emissions. Our PMS products will create more green revenue to the group enhancing the transition to the green economy.

### PMS producing innovative products saving CO<sub>2</sub> emission



### Navigating the post-COVID next normal:

Sales in 2023 in our semiconductor divisions weakened due to market downturn after the high demand in 2021/22 caused by supply chain shortages caused by the global recovery after the COVID-19 pandemic.

In 2023, Hana has pursued its initiative in increasing localization of the supply chain for certain raw materials in minimizing the risk of global supply chain issues, reducing costs, achieving faster delivery times, improving customer satisfaction, developing a long term partnership with local suppliers, promoting local hiring workforce and improving the domestic economy.



## Major Factors that could Affect Business

### Economic shifts

The company business is that of an electronics manufacturing service company. The company manufactures products on behalf of its customers for shipment to them or their customers. Therefore, the company's performance is mostly affected by its ability to win and retain business from the existing and new customers. In turn, customer demand is affected by world economic growth and the customer's sales growth.

Economic markets can transform rapidly: inflation, recession and periods of prosperity can influence business variables. Macro-economic stability of the countries in which we, our customers and suppliers operate. Global financial stability which may affect interest rates and access of funding of the company, its customers and suppliers.

### Exchange rate volatility

The groups sales revenue are in foreign currency (primarily USD) and USD currency costs are approximately 60% percent of sales revenues. The Group operating profit sensitivity to change in the Thai Baht/USD and Chinese CNY/USD exchange rates is currently about Baht 200 million per quarter for every 10% change in the average Baht/USD and CNY/USD rates (i.e.  $(1 - 0.60) \times \text{Sales Revenue} \times 10\%$ ).

Out of the groups foreign exchange exposure, as of the 30th September 2023 all foreign exchange contracts to hedge the Baht against the USD have been unwound so there is zero net outstanding THB/USD contracts. This action was taken due to weakening THB/USD and high interest rate differential between USD and THB. At the end of Q2/2023 USD 120 million was hedged (sell USD buy THB).

Whilst the book value of the offshore companies are represented in foreign currency, the effect of the change in the exchange rate is shown by the movement of the foreign currency 'Translation Adjustment' in the shareholders funds section of the balance sheet. There is no cash affect concerning its movement.

For Hana being an export group of companies the currency movements cause volatility in earnings due to effects on the operating margins and also inventory valuations (which the management report each quarter when there is a material effect on the profits) and margins.

### Public health events

Pandemic risks such as the continuing severity, magnitude and duration of the pandemic, including impacts of the pandemic, of businesses' and governments' responses to the pandemic the extent to which the pandemic and related impacts particularly global supply chain disruptions. The post pandemic may change public and social norms. Social changes might be the change factors for the business where certain products may rise or fall in popularity.

### Other factors

There are other factors which may affect operating performance of the company are (but not limited to): product price erosion, customers' products success in their respective markets and lifecycle of such products, consistently manufacturing products to agreed specifications and delivery schedules with customers including product liability risks in the event of product failures, suppliers price and consistent supply of raw materials to agreed specifications, and regulatory environment compliance risks.

### Exceptional Items

The company issued 80.5 million new shares in 2023 at THB 57 per share raising THB 4.6 billion on 19th October 2023.

There were no Exceptional Items in 2022.

In Q4/2021 we wrote down the balance invested in Credit Suisse (Lux) Supply Chain Finance Fund of THB 404 million (USD 12.7 million) to zero. The original invested amount totaled USD 35 million. Whilst there may be some further recoveries from the fund we believe it is prudent to provide for the balance of the fund.

### Subsequent Event

None





## Consolidated Statement of Earnings

(Unit: Thousand Baht)

	Year 2023		Year 2022		Year 2021		2023-2022	% 2023-2022
<b>Revenues</b>								
Sales	26,152,116		27,167,163		23,780,179		(1,015,047)	-4%
Consisting Of:								
PCBA (Lamphun, Thailand)	12,312,130	47%	11,121,072	42%	10,195,977	38%	1,191,058	11%
PCBA (Jiaxing, China)	3,250,546	12%	3,806,134	14%	3,120,701	17%	(555,587)	-15%
PCBA (Cambodia)	395,269	2%	199,088	1%	108,126	0%	196,181	99%
IC (Ayutthaya, Thailand)	7,317,612	28%	9,038,404	33%	8,182,304	34%	(1,720,792)	-19%
IC (Jiaxing, China)	914,835	3%	1,318,488	5%	1,161,537	6%	(403,653)	-31%
HTI (Ohio, USA)	1,482,207	6%	1,339,247	5%	961,680	5%	142,960	11%
IC (Korea)	479,518	2%	344,730	1%	49,854		134,787	39%
	26,152,116	100%	27,167,163	101%	23,780,179	100%	(1,015,047)	-4%
Other Income	438,666		455,839		354,755		(17,173)	-4%
<b>Total Operating Revenues</b>	26,590,782		27,623,002		24,134,935		(1,032,219)	-4%
<b>Expenses</b>								
Cost Of Sales	23,172,094	89%	23,506,161	87%	20,492,977	85%	(334,067)	-1%
Selling & Admin. Expenses	1,499,628	6%	1,533,298	6%	1,329,088	6%	(33,670)	-2%
R&D Expenses	131,561	1%	161,295	1%	94,223	0%	(29,734)	-18%
Other Expenses	-		-		-			
<b>Total Expenses</b>	24,803,283	95%	25,200,754	93%	21,916,287	91%	(397,470)	-2%
<b>Operating Earnings</b>	1,787,499	7%	2,422,248	9%	2,218,648	10%	(634,749)	-26%
Dividend Income	83		5,781		2,066		(5,698)	
Interest	96,965		93,696		113,953		3,270	3%
Finance Expenses	(51,834)		(12,509)		(7,492)		(39,325)	314%
<b>Earnings Before Income Tax</b>	1,832,714	7%	2,509,216	9%	2,327,175	11%	(676,502)	-27%
Corporate Income Tax	(85,468)	5%	(107,380)	4%	(52,708)	5%	21,912	-20%
<b>Earnings Before Exchange. &amp; Exceptional Items</b>	1,747,246	7%	2,401,836	9%	2,274,466	11%	(654,590)	-27%
Revaluation Of Financial Instruments	21,456		(10,186)		526		31,642	
Exchange Gain (Loss)	(8,135)		(289,579)		(308,655)		281,444	
Exceptional Items	-		-		(421,023)		-	
<b>Net Earnings For The Period</b>	1,760,567	7%	2,102,071	8%	1,545,314	13%	(341,504)	-16%



## Consolidated Balance Sheet

(Unit: Thousand Baht)

	Year 2023		Year 2022		Year 2021		2023-2022	% 2023-2022
<b>Assets</b>								
<b>Current Assets</b>								
Cash In Hand & At Banks	6,954,416		2,374,708		3,304,173		4,579,709	193%
Financial Investments	1,938,097		1,259,383		2,694,695		678,714	54%
Accounts Receivable - Trade	5,178,141		4,981,041		4,552,783		197,100	4%
Inventories	8,969,347		9,456,928		6,856,572		(487,581)	-5%
Other Current Assets	119,368		171,171		161,613		(51,803)	-30%
<b>Total Current Assets</b>	<b>23,159,370</b>		<b>18,243,231</b>		<b>17,569,835</b>		<b>4,916,139</b>	<b>27%</b>
Long Term Financial Investments	-		152		154		(152)	-100%
Investments In Associated Company	-		-		-		-	
<b>Fixed Assets (Net)</b>	<b>11,773,778</b>		<b>10,925,757</b>		<b>9,734,970</b>		<b>848,021</b>	<b>8%</b>
Other Assets	372,809		534,268		548,008		(161,460)	
<b>Total Assets</b>	<b>35,305,957</b>		<b>29,703,408</b>		<b>27,852,967</b>		<b>5,602,549</b>	<b>19%</b>
<b>Liabilities</b>								
<b>Current Liabilities</b>								
Bank Overdrafts & Loans	1,076,408		-		-		1,076,408	
Accounts & Notes Payable	3,390,546		4,160,841		3,505,876		(770,295)	-19%
Short Term Provisions	-		345,624		334,199		(345,624)	-100%
Corporate Income Tax Payable	50,816		68,761		20,528		(17,944)	-26%
Accrued Expenses	342,233		-		-		342,233	
Other Current Liabilities	150,015		452,111		168,375		(302,096)	-67%
<b>Total Current Liabilities</b>	<b>5,034,054</b>		<b>5,027,337</b>		<b>4,028,978</b>		<b>6,717</b>	<b>0%</b>



## Consolidated Balance Sheet (continue)

(Unit: Thousand Baht)

	Year 2023		Year 2022		Year 2021		2023-2022	% 2023-2022
<b>Long Term Liabilities</b>								
Long Term Loans							-	
Other Long Term Liabilities	1,125,182		813,929		765,895		311,253	
<b>Total Liabilities</b>	6,159,236		5,841,266		4,794,873		317,971	5%
<b>Shareholders' Equity</b>								
Share Capital	885,367		804,879		804,879		80,488	
Unrealised Gain (Loss) On Change In Investments	-		-		-			
Share Premium	6,230,536		1,723,219		1,723,219		4,507,317	262%
Retained Earnings	-		-		-			
Appropriated Statutory Reserve	541,627		536,313		514,958		5,314	1%
Unappropriated & Treasury Share Reserve	21,130,039		20,234,096		19,343,953		895,943	4%
Translation Adjust. & Investment Revaluation	359,152		563,635		671,085		(204,483)	-36%
Treasury Shares	-		-		-		-	
Excess Cost Over Net Book Value Of Subsidiary Investments	-		-		-		-	
<b>Total Shareholders' Equity</b>	29,146,720		23,862,142		23,058,093		5,284,578	22%
<b>Total Liabilities &amp; Shareholders' Equity</b>	35,305,957		29,703,408		27,852,967		5,602,549	19%



## Consolidated Summary Statement of Cashflows

(Unit: Thousand Baht)

	Year 2023	Year 2022	Year 2021	2023-2022
<b>Net Earnings before Tax</b>	1,846,035	2,209,451	1,598,022	(363,416)
<b>Adjustments to reconcile net earnings to net cash provided by operating activities</b>				
<b>Non-Cash items</b>				
Depreciation & Amortisation	1,702,296	1,629,827	1,301,418	72,469
Unrealised (gain) Loss on exchange	18,139	93,392	81,982	(75,253)
Change in other provisions	544,080	65,060	492,210	479,020
	2,264,515	1,788,279	1,875,610	476,235
<b>Working Capital (increase) decrease</b>				
Trade accounts receivable	(195,782)	(536,317)	(1,092,088)	340,536
Inventories	53,281	(2,666,004)	(2,402,126)	2,719,285
Trade accounts payable	(670,730)	598,177	1,065,268	(1,268,907)
Other	(47,028)	(51,871)	(137,189)	4,843
	(860,259)	(2,656,015)	(2,566,135)	1,795,756
<b>Net Cashflow from Operating Activities</b>	3,250,291	1,341,715	907,497	1,908,576
<b>Cashflow from Investing Activities</b>				
(Increase) decrease in short term investment	(619,635)	1,306,046	1,187,610	(1,925,681)
Increase in property, plant and equipment	(2,653,935)	(2,491,394)	(4,129,321)	(162,541)
Proceeds from sale of fixed assets	34,975	20,852	32,693	14,122
Increase (decrease) in translation adjustment	(504,998)	116,110	1,355,725	(621,108)
Decrease in short term loans to related parties	-	-	-	-
Other	-	(4,463)	(30,368)	4,463
	(3,743,593)	(1,052,848)	(1,583,661)	(2,690,745)
<b>Cashflow from Financing Activities</b>				
Proceeds from Capital Increase	4,587,805	-	-	4,587,805
Cash received from increase in share capital & overdraft	1,330,329	(11,014)	(11,385)	1,341,343
Dividend paid	(845,123)	(1,207,318)	(1,408,538)	362,196
Net cash (used in) from financing activities	5,073,011	(1,218,332)	(1,419,923)	6,291,343
Net Cash, equivalents and short term liquid investments increase (decrease)	4,579,709	(929,465)	(2,096,087)	5,509,173
Cash and Equivalents at the beginning of the period	2,374,708	3,304,173	5,400,261	(929,465)
Cash and Equivalents at the end of the period	6,954,417	2,374,708	3,304,173	4,579,708





## Financial Ratios

(Unit: Thousand Baht)

	Year 2023	Year 2022	Year 2021	2023-2022
<b>Profitability Ratios</b>				
Gross Profit Margin (%)	11%	14%	14%	(3%)
Operating Profit Margin (%)	7%	9%	9%	(2%)
Net Profit before Exceptional Margin (%)	7%	9%	10%	(2%)
Net Profit after Exceptional Margin (%)	7%	6%	6%	1%
EBITDA margin (%)	13%	15%	15%	(2%)
Return On Equity (%) pa	6%	7%	7%	(1%)
Return On Assets (%) pa	5%	6%	6%	(1%)
Return On Operating Capital Employed (%) pa	8%	12%	12%	(4%)
<b>Efficiency Ratios</b>				
Working Capital turnover	2	4	4	(2)
Account Receivable days	71	62	62	9
Inventory days	145	101	101	44
Accounts Payable days	59	52	52	7
<b>Liquidity Ratios</b>				
Current Ratio	4.6	4.4	4.4	0.2
Quick Ratio	2.8	2.6	2.6	0.2
<b>Financial Capital Ratios</b>				
Debt / Equity	0.2	0.2	0.2	
Net Debt to Equity	(0.1)	(0.1)	(0.1)	
Interest Coverage	n/a	n/a	n/a	

## 5. General Information and Other Important Information



### 5.1 General Information

<b>Name:</b>	Hana Microelectronics Public Co., Ltd.
<b>Symbol:</b>	HANA
<b>Company registration number:</b>	0107536000773
<b>Contact address:</b>	
<b>Headquarters:</b>	65/98 Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkok, Khet Lakxi, Bangkok 10210, Thailand Tel.: 66 2551 1297-8, 66 2521 4935-9 Fax: 66 2551 1299, 66 2552 4906
<b>Branch 1:</b>	101/2 Moo 4, EPZ Northern Region Industrial Estate, Chiangmai - Lampang Road, T. Baan-Klang, A. Muang Lamphun, Lamphun province 51000, Thailand Tel.: 66 5358 1567 - 73, 66 5355 2361 Fax: 66 5358 1573 - 4, 66 5358 1290

<b>Branch 2:</b>	123 Moo 5, T. Pa Sak, A. Muang Lamphun, Lamphun province 51000, Thailand Tel.: 66 5309 0254, 66 5309 0210 Fax: 66 5353 7629
<b>Website:</b>	<a href="http://www.hanagroup.com">www.hanagroup.com</a>
<b>Nature of business:</b>	Electronics Manufacturing Service “EMS” Producer
<b>Registered share capital:</b>	885,366,746 ordinary shares at par value of THB 1 per share
<b>Paid-up capital:</b>	885,366,660 ordinary shares at par value of THB 1 per share
<b>Other type of shares:</b>	None
<b>References:</b>	
<b>Auditor:</b>	EY Office Limited 33rd Floor, Lake Rajada Office Complex, 193/136-137 New Rajadapisek Road, Bangkok 10110 Thailand Tel.: 66 2264 0777 Fax: 66 2264 0790
<b>Solicitors:</b>	Civilian Co., Ltd. 63 Soi 8 (Soi Preeda), Sukhumvit Road, Wattana, Bangkok 10110 Thailand Tel.: 66 2255 2550-2, 66 2653 1133-4 Fax: 66 2653 1135, 66 2253 3427
<b>Registrar:</b>	Thailand Securities Depository Co., Ltd. 93 Rachadapisek Road, Dindaeng, Dindaeng, Bangkok 10400 Thailand Tel.: 66 2009 9000 Fax: 66 2009 9991

### 5.2 Other Important Information

None

Investors can get more information of the Company at [www.hanagroup.com](http://www.hanagroup.com)

### 5.3 Legal Disputes

None

### 5.4 Secondary Market

None





# CORPORATE GOVERNANCE



## 6. Corporate Governance Policy

The long-term success of a company is largely determined by the support we earn from our employees, customers, business partners, investors, local community and other stakeholders. Hana believes that good corporate governance will enhance the credibility and reputation of the Company as well as promoting and safeguarding the interests of shareholders and other stakeholders. Hana is committed to good corporate governance by compliance with the best practices of corporate governance wherever possible and practical for the Company. We will continue to seek improvements to our solid foundation in good corporate governance to achieve sustainable long-term growth.

### 6.1 Overview on Corporate Governance Policy and Guidelines

The Board realizes and commits to conduct the Company's business with the good corporate governance in conformance with the principles of corporate governance in making an organization more efficiency, transparency, enhancing the credibility and strengthening sustainable growth. The Board has established and approved the corporate governance policy and the corporate code of conducts as the guidelines for the directors, executives and employees in discharging their duties.

The Company has established the corporate governance policy based on the 5 Principles of Good Corporate Governance for Listed Companies 2012 of the Stock Exchange of Thailand (SET), and annually reviews the application of the Corporate Governance Code for Listed Companies 2017 (the "CG Code"), developed by the Securities and Exchange Commission (SEC), by means that are suitable for the Company's business towards 8 Principles as follows.

SET CG Principles Compliance with the SEC CG Code

SET CG Principles	Compliance with the SEC CG Code
Principle 1 : Rights of Shareholders	Principle 1 : Establish Clear Leadership Role and Responsibilities of the Board
Principle 2 : Equitable Treatment of Shareholders	Principle 2 : Define Objectives that Promote Sustainable Value Creation
Principle 3 : Role of Stakeholders	Principle 3 : Strengthen Board Effectiveness
Principle 4 : Disclosure and Transparency	Principle 4 : Ensure Effective CEO and People Management
Principle 5 : Responsibilities of the Board	Principle 5 : Nurture Innovation and Responsible Business
	Principle 6 : Strengthen Effective Risk Management and Internal Control
	Principle 7 : Ensure Disclosure and Financial Integrity
	Principle 8 : Ensure Engagement and Communication with Shareholders

The Company's Corporate Governance Policy has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Corporate Governance Policy.



### 6.1.1 Policy and Guidelines Relating to the Board of Directors

The Board is responsible for the corporate governance, management and strategic direction of the organization and for delivering accountable corporate performance in accordance with the organization's goals and objectives. The Board has a fiduciary duty with respect to the shareholders and must act in the best interest of the Company.

The Board of Directors of Hana consists of 8 directors of whom four are executive directors and 4 are independent directors which is accounted for 50% of the Board. The Chairman of the Board is not the same person who holds the Chief Executive Officer position and the Chairman is an independent director.

The Board of Directors has appointed 5 subcommittees as follows.



Those consist of directors with knowledge, ability and experience in the performance of duties in accordance with the responsibilities. All directors have freedom to express their opinions on the Company's operations. The roles and responsibilities of the Board and management are clearly defined so as to ensure independence and ensure that business is efficiently, accurately and transparently administered by the management. The Board shall annually review the structure in terms of size, composition, proportion of independent directors and the board diversity to ensure its leadership role in achieving the Company's objectives.

The Company's Charters of Board and Committees have been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > Charters of Board and Committees.

### Director Selection and Remuneration

For the director nomination, a director shall be a person whose qualifications are complete pursuant to the Public Limited Companies Act and other qualifications not contrary to any regulations of the Securities Exchange of Commission or the Company's policies. The Company also considers the Board Skill Matrix by having the Nomination Committee to review and ensure the Board selection process and qualified candidates before proposing to the Board and/or shareholders for approval.

The Company's succession plan on the key executive positions has been set up and reviewed by the Nomination Committee and proposed to the Board annually to ensure the proper transition planning of the Company.

The director remuneration (except for the executive committee who receive the remuneration as employees of the Company) is considered and approved by the shareholders' meeting annually. The basis of the remuneration is based on the Company's performance, the director's responsibility, whereby the remuneration shall be benchmarked with other listed companies in the same industry and to be sufficient to attract, retain, and motivate qualified directors to bring the organization achieve both short-term and long-term goals.

### Board Diversity

The Company is open wide to the diversity of the structure of the Board of Directors. The diversity policy has been adopted to promote a diverse and inclusive membership on the Board. The person who will serve as a director should provide complementary qualification to the existing directors for the necessary skills which are still lacking on the Board as well as professional areas of expertise, specialized experiences, gender diversity, age, regardless of nationality or race. The increase proportion of female member is the ultimate goal in terms of gender diversity, with a commitment to have at least 2 female representation on the Board.

### Service on Other Boards

In order to give proper attention and contribution to the assigned responsibilities, the Board has the policy that the directors including the CEO shall limit their services to not more than 3 boards of publicly traded companies with no exception.

### Director Development

The Board development policy is to ensure the directors gain more understanding and enable them to fulfill their roles. The Company supports the director development in forms of orientation, undertaking specific training for continual improvement, updating best practices/director manual, providing access to relevant papers and reports, annual evaluation and factory tours. The Board promotes the directors to receive training through seminars, webinars, forums, workshops, events that enhance the effectiveness of the board roles on an annual basis.

### Performance Assessment

The Board realizes that the good corporate governance requires effective boards and to evaluate their performance and appraise directors at least once a year. The self-evaluation is the board approach to evaluate each director's contribution on an individual basis, as a team member and as a member of committees. Reporting on the board and committees' evaluations shall allow the Board to view individual director performance and potential additional contribution.

### Supervision of Subsidiaries and Associated Companies

The Board has its mechanisms to manage and oversight the subsidiaries and associated companies. The Board has delegated to the Executive Committee to oversee and responsible for the operations of its subsidiaries and associated companies include appointing the representative to be a director or a controlling person and shall report to the Board accordingly. From the Board's resolution No. 6/2013, the Board has resolved that the appointed person must be approved by the Board prior to vote on important matters in the same approval levels of the Company that has to be approved by the Board. This includes the connected transaction and the acquisition or disposition of assets by the rules relating to the disclosure of information and the transaction is in line with the rules of the Company. In addition, the maintenance of information and accounting records of the subsidiaries can be verified and financial statements can be consolidated within timelines.



## 6.1.2 Policy and Guidelines Related to Shareholders and Stakeholders

### 1. Rights of Shareholders

Hana recognizes the importance of shareholders' rights and treats all shareholders either individual investors or institutional investors equitably, fairly and in line with relevant laws where no actions shall be taken to materially diminish shareholders' rights. The Company shall not obstruct or cause obstacles for communication opportunities among shareholders. If any shareholder agreement is to be executed by any shareholder, the Company shall endeavor to ensure that such shareholder agreement will not materially affect the Company or other shareholders.

- **Rights to Attend the Shareholders' Meeting and Vote**

One of the basic rights of shareholders is the right to attend and vote at shareholders' meetings. To encourage shareholders to exercise their rights in shareholders' meetings, the Company takes following actions:

#### **Before the meeting day:**

The Company sets the date, time and place of the meeting by taking into consideration the convenience of shareholders in attending and encouraging shareholders, including institutional investors, to attend the meeting. The Company holds the Annual General Meeting of Shareholders (AGM) within 4 months after financial year ends. In 2023, the Company held the AGM on 28 April 2023 at 14:00 hrs. at its head office located at 65/98 Soi Vibhavadi-Rangsit 64, Junction 2, Kwang Talad Bangkhen, Khet Lakxi, Bangkok making it convenient for shareholders including institutional investors to travel and attend the meeting. The Company arranged with the Thailand Securities Depository Co., Ltd. (TSD) which is the Company's securities deposit registrar send the notice of shareholders' meeting by posted mail on 5 April 2023 which was 21 days prior to the meeting date in order to provide sufficient time for shareholders and institutional investors to review the details of information disclosed in the notice of meeting. The notice of meeting expressly indicated the matters to be tabled at the meeting, whether for acknowledgement, approval or consideration, including the Board's opinion on each agenda. Other supporting information and documents were also attached to the notice. In addition to the direct delivery, the notice of meeting was made available to the shareholders through the Company website ([www.hanagroup.com](http://www.hanagroup.com)) on 31 March 2023 which was 30 days in advance and the notice of meeting was published through SET's information system or "SET Link" in both Thai and English versions, which were the same as the original notice mailed to shareholders.

The Company also provides opportunities for shareholders to submit questions or enquiries prior to the meeting with the procedures enclosed in the notice of meeting and available on the Company website. Further, the Company encourages the exercising of voting rights by shareholders who cannot attend the shareholders' meeting by appointing their proxies to participate in the meeting or appoint the Company's independent directors on their behalf to attend the meeting and vote by providing the proxy form B on which shareholders are able to specify their votes, with the notice of meeting.

#### **On the meeting day:**

The Board of Directors is to ensure that the meeting is conducted transparently and efficiently as well as to facilitating the exercise of shareholders' rights. The quorum including the total number of shareholders in attendance in person or by proxies, voting procedures and voting count method are clearly advised to the meeting prior to the discussion of the agenda items. Each shareholder has one vote for each share and a resolution passed by a majority of votes, except where it requires otherwise in accordance with the Company's Article of Association. In case of directors and/or shareholders who have vested interests or involvement in any particular agenda, the directors with vested interests or involvement



in aforesaid agenda shall leave the meeting room and abstain from voting and the votes are not allowed for shareholders who have vested interests or involvement related to any particular agenda item.

The chairman shall convene the meeting according to the terms and conditions in line with the Company's Articles of Association and manage appropriate time for each agenda set forth in the meeting invitation. During the meeting, shareholders are given the opportunities to raise questions, recommendations as well as providing their opinions on the Company's performance or other concerns on an equitable basis.

In regards to the AGM conducted in 2023, 8 out of 8 directors (100%) attended the meeting which included the chairman of the Board, the chairman of all subcommittees, Chief Executive Officer, Chief Financial Officer and Chief Operating Officers. The external auditor also attended the meeting with the directors so that they could listen to shareholders' opinions or suggestions and also answer any questions.

The Board has adopted the technology in using the barcode system for registration and vote counting in order to bring more accuracy and the results of voting can be announced in a timely manner. Each matter of the agenda is required the use of barcode voting card so that shareholders are able to vote as they deem appropriate. Ballots are collected in the event of an objection or abstention or invalid and kept for further evidence and verification.

In addition, the Company arranges the lawyer as the inspector who is an independent person to count and check the votes in the meeting and clearly inform the voting results as agree, disagree, abstain and invalid ballot. Duty stamps are made available to shareholders with no charge.

#### **After the meeting day:**

The meeting minutes recording the course of the meeting, the list of directors and executives attending the meeting, voting procedures, vote counting methods, the agenda discussed, the results of shareholder voting counts on each agenda and the decisions made by the meeting with the number of votes of shareholders casting affirming, opposing, abstaining and invalid votes including shareholders' questions and answers are made available within the appropriate time to shareholders.

The minutes of the 2023 AGM has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) within the following business day after the meeting and at the same time sent to the Stock Exchange of Thailand under section Investor Relations > SET News, on the subject - Minutes of Annual General Meeting of Shareholders year 2023 and also the video clip of 2023 AGM of Shareholders. If shareholders have any inquiries or comments on the minutes, they can contact to the Corporate Secretary. The minutes are maintained at the Company's head office for further reference.

- **Rights in Addition to Voting Rights**

The Company has provided shareholders rights in addition to voting rights as follows:

- The rights to be counted as a shareholder, for example, a right to buy, sell, transfer shares or a right to inspect shareholder records, etc.;
- The right to receive full and fair returns without inequitable treatment from any group of shareholders.;
- The right to access the Company's information such as the quarterly financial results, the minutes of shareholders' meeting, the right to request the Company's visit, etc.;





- The right to participate in decision-making for material matters such as the appointment or dismissal of the Company's directors and approval of their remuneration, appointment of auditors and approval of their remuneration, etc.;
- The right to inspect the management of the Board of Directors, who are representatives of shareholders, such as to inspect the Company's books and records through the Company's public filings including 56-1 One Report, etc.;
- The right to obtain a redress or a rectification for any violations of their rights.

In 2023, the Company had no actions that violated the right of shareholders, such as not changing or adding agenda items without notifying shareholders in advance or which limit the access to the Company's information that was released to public. In addition, the Company did not prevent or obstruct any opportunities for shareholders to communicate with each other.

## 2. Equitable Treatment of Shareholders

Hana pays special attention to the interest of the Company's owners - the shareholders. Equitable treatment is given with fairness to all categories of shareholders as follows:

### **Treat all classes equally:**

The Company ensures fair treatment of shareholders irrespective of the size of each of their shareholdings. Foreign shareholders and owners of small stakes (minority shareholders) as well as individual investors or institutional investors are treated equally. All of shareholders, in respect of each class of shares, are entitled to the same dividend payments, and have equal rights in the event of share capital increases. The Company's shareholder meetings are open to all shareholders, and all shares of the same class have the same voting rights. Voting at the shareholders' meeting is done by the principle of one share, one vote.

### **Protect minority shareholders' rights:**

The Company has the policies to promote the right of minority shareholders by allowing minority shareholders to propose agenda items and nominate candidates to be elected as the directors in advance at the AGM. During October - December, shareholders have the right to submit proposals for the upcoming AGM to the Board of Directors for consideration.

The procedures and criteria to propose agenda items and nominate the directors to the Board of Directors have been posted on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Procedures to Propose AGM Agenda Items and Nomination of Board Members.

However, in 2023 there were no shareholder proposals sent to the Board of Directors for consideration.

qThe matters discussed in the AGM and voting were in sequence as given in the invitation letter without changing important information or adding agenda items without notifying shareholders in advance so shareholders had the opportunity to adequately study the information before making the decision. Further, the Board of Directors allowed shareholders to elect each director eligible for election on individual basis.

### 3. Responsibility to Stakeholders

Hana recognizes and respects the rights of all stakeholders inclusive but not limited to our employees, customers, partners, shareholders, competitors, creditors, communities, society, the environment as well as government agencies and related organizations. The Board believes that taking into account the concerns and interests of stakeholders according to the legal and regulatory requirements and the respect of the legitimate expectations of all stakeholders should benefit all parties in the long run.

We have outlined the guidelines to encourage active participation between the Company and stakeholders as follows.

#### Employees

Employees as the internal stakeholders who are those within an organization play an important role in contributing to the long-term success and performance of the corporation. Our employment policy is established with the consideration of non-discrimination and human rights principles. The Company is dedicated to the achievement of equality of opportunity for all of its employees in relation to all personnel matters including recruitment, training, promotion, transfer, benefits, dismissal, and etc. without regard to race, color, religion, gender, national origin or handicap status as well. All employees will be treated as individuals solely according to their abilities to meet job requirements. Employees shall be provided with reasonable accommodation for religious practices.

Compensation paid to employees is complied with all applicable wage laws, including those relating to minimum wages, overtime payment, and legally mandated benefits. The Company has provided the long-term welfare benefits that retain and motivate employees, particularly for the retirement benefits and the provident fund to help employees to save a portion of their salary in the event of retirement, disability, sickness or unemployment. The Company's provident fund is an alternative saving scheme for retirement where employees contribute a portion of their salaries and the Company makes the contribution equal to the rate of the employee's savings. Employees will benefit from the savings provided by the provident fund management in the form of investment.

In addition, the Company established human resource management policy on salary management aiming the explicit criteria of employee compensation by considering their assignment, duties and responsibilities, competency, performance evaluation result, standard of living, compensation benchmarking with the same local industry including the Company's financial ability to pay, which shall consider on the basis of equality compensation to ensure transparent, fair and impartial assessment and in line with approval procedures.

Compensation guidelines for employees are assessed to be consistent with their short-term performance such as bonuses as well as their short-term performance through Career Development Program designated for employees to develop their skills, knowledge, competencies and capabilities for fitting each individual. The Company also provides individual career advancement to move forward with the corporate growth. These personnel development schemes are considerably beneficial to both employees and the entire organization. The Company has also set up the policies and the committees to assess and verify individual employee, the core competencies and assessment methods have been determined including their advantages and disadvantages to appropriately match with positions and for further advancement as well. Besides training plan and other development tools has been provided for the development of the employees.

Furthermore, Hana prioritizes the appropriate management of the quality of life, good environment, occupational health and safety to employees. The policies, operational guidelines and occupational health and safety management system standards are systematically implemented to prevent potential hazards in all activities and work areas as a preventive action that reduces negative impacts to protect the labor rights as they have to access a decent and safe working environment according to international standards. The Company closely monitors trends of the pandemic situation to define appropriate measures and guidelines to prevent and reduce risks of infection in the Company's workplace and regularly promotes and supports the employees' good health and encourages them through various health promotion activities as well.

## Customers

Hana's places the highest value on our customers. The long-term relationship that Hana has with all its customers is a testament to this fact. The Company aims to meet or exceed our customers' expectation for product quality, delivery, and reliability at competitive prices.

Hana places the paramount importance on quality of product and services and believes that quality is truly a business enabler. Hana's accredited Quality Management System (QMS) aims to deliver high quality products on time. Our policy is to strive for the customer satisfaction, zero defects, and meeting international standards and requirements. Over 20 years of ISO 9001 certification demonstrates our commitment towards quality, continuous improvement, and sustainment.

The Company and its subsidiaries continue to support supply chain management solutions particularly for customers, coordinating business activities and processes to minimize their total costs and maximize their effectiveness in the marketplace. We work with our customers to provide problem solving solutions regarding customer complaints, listen to their recommendations, meeting their needs, and honoring our commitments. Customer partnership is a foundation of success that also requires commitment to nurture new relationships and build and foster long-term relationships by creating synergies of knowledge, security, sustainability, and adaptability for both parties.

## Intellectual Property

Hana has the policy on the intellectual property and copyrights in order to safeguard the tangible and intellectual property of those with whom we do business, which may be used in fulfilling work assignments, and we will comply with all regulations or contractual requirements governing the use of such property. Any reward and copyrights received from the assignment/work given by the Company or any byproduct assignment/work that originated or resulted from training/tutoring by the Company shall belong to the Company.

Directors, management and employees shall use computer and information technology related work according to Computer-Related Crime Act and other local intellectual property and copyright laws. All employees are required to sign for acknowledgement of the agreement of compliance with intellectual property and copyrights and related laws.

## Business Partners

Ethical business practice is ingrained in Hana corporate culture. The Company promotes and communicates the importance of ethics and commitments as the Company continues to grow. The emphasis on these ethics and commitments have become our core value for the whole organization. Hana has a long history of establishing trust and strong partnerships with our key suppliers and business partners, hence, a Supplier Code of Conduct has been established to ensure that our suppliers conduct their business in accordance with legal standards and high ethical requirements also. We expect them to be responsible for society and the environment. Suppliers are provided the Supplier Code of Conduct, required to sign for acceptance for acknowledgment and strictly abide and follow the code of conduct.

**Supplier Selection** - Hana continues to promote and practice fair and open competition where the procurement of goods and services is conducted in a manner of the highest ethical standards. The hiring of services and the purchase of goods will be based solely upon price, quality, service, and delivery. All procurement activities are performed based upon following principles:

- Free of prejudice or selective treatment, impartial and fair selection of capable and responsible suppliers and contractors and maintain an equitable business relationship with business partners as well
- Maximum use of competition as well as antitrust/anticompetitive practices

- Procure from business partners complying with laws, human rights and in consideration of quality, safety, occupational health and environment policies
- Business partners shall conduct their businesses in accordance with the code of conduct and shall not offer bribes to public or private sectors in any form and the Company also encourages them to participate in the anti-corruption network such as the Thai Private Sector Collective Action against Corruption (CAC) for the mutual sustainable anti-corruption goal.
- Compliance with laws, relevant regulations and contractual obligations
- Adopting of an effective monitoring system and management controls to detect and prevent bribery, fraud or other malpractices in the processes of procurement and tendering

We ensure communication to build relationships with suppliers and collaboration is the key to our success. In selecting business partners, the Company has various criteria to evaluate factors in addition to consideration of price, quality, service, delivery, credit terms by also covering environmental and social factors such as ISO 14001 certification which is the environmental management system standards, ISO 45001 - occupational health and safety management system standards, and other environmental management systems. Besides, the Company has established criteria to identify different tiers of suppliers, including the critical tier 1 and the critical non-tier 1 suppliers, to cover the risk assessment and create proper action plans of each tier reasonably.

**Supply Chain Management** – As suppliers are part of our sustainable business, Hana continues to promote fair and open communications where the procurement of goods and services are conducted in a manner of the highest ethical standards. We believe effective communication helping both parties align our goals, expectations, and values with our business partner. In 2023, Hana Ayutthaya, after Covid-19, resumed the Supplier Recognition Program to motivate, reward, and retain our best support suppliers, which enabled the Company to improve our supply chain performance, reduce costs, and enhance business relationship.





**Localized Sourcing** – Our local supply chain management has been implemented by acquiring second source suppliers or new suppliers for certain production materials. Our supply chain localization is part of our strategies in managing global supply chain to reduce dependence on overseas suppliers, reduce material and supply chain costs, increase flexibility, fast delivery, improve customer satisfaction, and build a self-sufficient local ecosystem. In 2023, Hana Lamphun has strengthen business partnership with those local suppliers for additional project accomplishment and the development support program through training curriculum as to benefit both parties in term of knowledge sharing, process capability study, production technology, risk management, etc. In summary, a localized supply chain benefits the Company in 2023 as follows.

Number of projects accomplishment	Cost saving (Baht)	Target achievement
50 projects	THB 12 million per year	100%



**Supplier Audit** - Hana regularly conducts supplier audits with both self-assessment and site visit and use these activities as a tool to develop and strengthen relationship with our strategic suppliers, especially suppliers classified as tier 1. In addition, the supplier audit is also a critical method for any potential risk identification, assessment and mitigation plans of emerging risk from supply chain system such as raw material shortage crisis. Our critical suppliers are required to implement business continuity plans while Hana also review and address the risk of geographic concentration of critical suppliers and re-evaluate the possibility of qualifying suppliers in different geographical zones to secure supply flexibility.

For supplier assessment, the suppliers also need to pass our sustainability criteria covering social and environmental aspects/GI2 (Green Industry Level 2) or equivalent such as occupational health, safety and environment, RBA Code of Conduct which covers labor, human rights, health and safety, environment, ethics and management system, as well as in compliance with Supplier Code of Conduct. In 2023, Hana Lamphun has selected suppliers that must undergo an On-site Audit based on being the new suppliers, recommended to be audited by our customers, suppliers that need to be re-evaluated/followed-up from previous assessment, etc. Hana Lamphun completed the On-site Audit totally 7 suppliers which met our target.

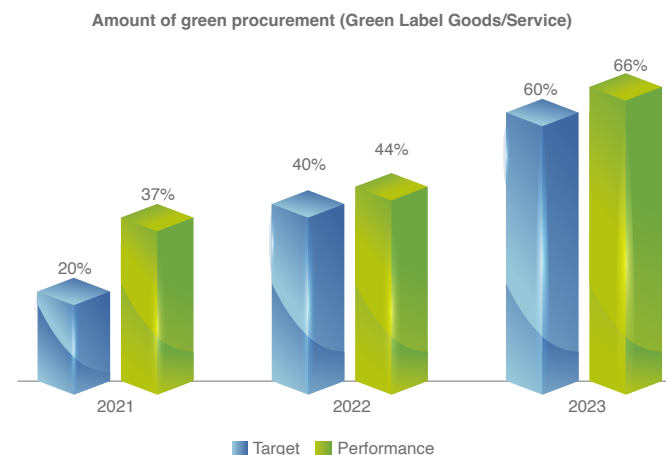
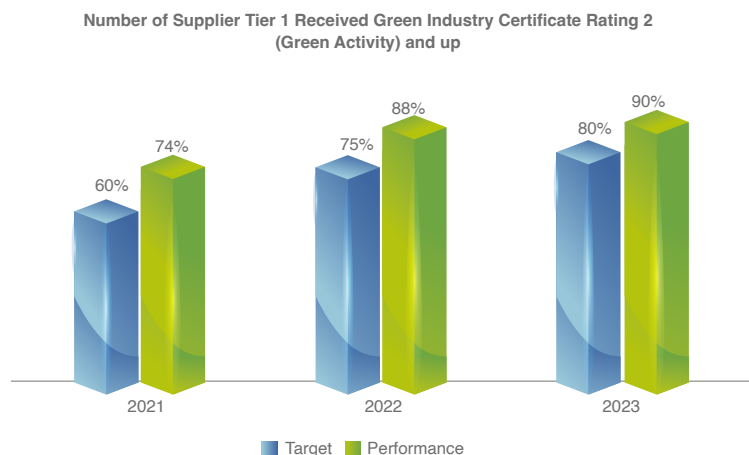
**Partner Development** - In 2023, Hana Lamphun and Hana Ayutthaya have developed partnership capabilities with 8 suppliers by organizing training courses to Hana for sharing their technical knowledge of process design, material selection, update on latest technology, new software applicable to Hana needs, the features and attributes of defects so enable Hana to enhance ability to better handle, minimize waste/defect, technology advantage, and increase productivity.





**Green Procurement** - To raise awareness of sustainability, we support and promote programs that are environmentally friendly as well as focusing on community impact by working with key partners to minimize environmental and social impact. As such, Green Procurement is considered as a forward-looking approach to minimize climate change and enhance environmental sustainability. The Company has adopted the integrating environmental performance considerations into the procurement decision-making process with the quantitative target. As part of Hana's efforts to conserve the global environment through the green procurement implementation, our target and the outcome are as follows.

1. The Company has encouraged the local first-tier suppliers for certain products: raw material, energy, chemical, and packaging to acquire Green Industry Level 2 or higher from the Ministry of Industry. In 2023 90% of our first-tier suppliers consequently acquired the aforesaid certification in Level 2 and higher which exceeded the target set at 80%.
2. The Company has procured the environmentally friendly products and services such as green label products and energy saving electric appliances, where in 2023 was accounted for 66% of the total procurement which was greater than the target set at 60%.



**Note:**

1. First-tier supplier is categorized by the top 50 suppliers having the highest purchasing volume.
2. To certify as a green industry, the supplier must be an industry that adheres to environmentally friendly operations by passing 3 assessment criteria; improving the efficiency of the production process, environmental management for continuous improvement, and corporate social responsibility both internally and externally throughout the supply chain. The green industry certificate rating level 2 so called Green Activity must have an environmental policy, communicating environmental policy in the organization, and environmental planning covering objectives, targets, action steps, responsible persons and completed time frame as well as environmental execution to achieve such results.

## Shareholders

The Company attempts to achieve growth in earnings for shareholders over the long term. The board members and executive management shall be qualified for their positions and have a clear understanding of their roles in corporate governance and exercise sound business judgment in the best interest of the Company and shareholders including the preparation and disclosure of financial and non-financial information accurately, completely and timely and devote the time and ability to perform their duties.

Our treatment toward shareholders shall comply with the good corporate governance principles for the right and equitable treatment of all shareholders. The disclosures shall be made on a consistent basis, completely and truthfully in regards to the status of the Company, its operating results, financial standing, accounts and other reports. There shall be no disclosure of inside information to individuals associated with the management or directors, which cause damage to the shareholders as a whole.

## Business Competitors

The Board focuses on operating its business with open and fair competition and have a practical guidance for the competitors by not involving in the competition by the dumping, persecution or deprivation influence in order to avoid competition, not taking any action that violates the intellectual property or copyright of competitors, not using dishonest methods to discredit a competitor or no trade secret violations, strictly complying with competition laws, antitrust laws, and related laws while doing business both domestic and abroad in compliance with laws, regulations, policies and guidelines regarding trade competition of the countries in which the Company do business with including any case of mergers and acquisitions. In 2023, there was no dispute or lawsuit between the Company and any competitors.

## Creditors

The Company treats creditors responsibly with honesty, equality and fairness to obtain a fair return to both parties and comply with the agreement including the terms of guarantee and managing cash flow to be able to pay to the creditors according to the terms and conditions. The Company will notify the creditors status in the event of payment default and to comply with the Consumer Protection Law and other related laws. In case that the Company cannot comply with the agreed terms, the Company shall notify the creditors in advance to jointly find solutions for remedy and loss prevention. In 2023, there was no dispute or lawsuit between the Company and any creditors.

## Communities, Society and Environment

Hana vigorously and sustainably conducts the business on the basis of responsibility to communities, society and environment in consideration of the efficient use of resources, energy conservation, renewable energy use, effective waste management, reduction of waste, pollution, carbon and greenhouse gas emission, and climate change mitigation, strictly abiding by all applicable health, safety, and environmental laws and regulations in countries and communities in which the Company operates. The Company policy aims at manufacturing, handling and disposing of waste in compliance with laws and in a responsible manner without creating risks and impact on human health, communities, society or the environment. The Company has set sustainability business direction as one of our long-term strategies in response to future disruptions such as energy transition and climate change.

Hana has been certified by the International Standard for Environmental Management Systems (ISO 14001) which provides practical tools for the Company to manage not only its environmental responsibilities but also the business development by focusing on the pollution prevention and environmental protection so overall it helps to reduce the environmental impact as well as reducing operating costs of the business.



Hana is also an ISO 45001 certified company for Occupational Health and Safety Management System with the policy expressing the commitment to operate business not only to resolve health and safety in workplace but also to cover ways preventing accidents to the workers and the surrounding community.

The Company encourages the use of resources efficiently and the use of renewable energy by arranging various energy saving projects including solar rooftop installation. The Board supports the training of all employees to achieve a better understanding and create awareness of the environment. In 2023, various environmental training courses had been provided to 5,160 employees by both internal and external instructors such as:

**Environmental Aspects' Assessment:** To identify environmental issues arising from activities, products and services within the scope of the environmental management system for the environmental aspects so the Company can plan to make improvement.

**ISO 14001 Environmental Management:** To develop the knowledge and skills required to implement and maintain the ISO 14001 environmental management system.

**Energy Conservation Awareness:** To raise awareness of the issues of natural resources and awareness of the environment and energy conservation so that employees can apply the skills, knowledge and experience into practice and everyday life properly and in accordance with the relevant policies.

**Intensive Use of Chemical Safety:** To train employees who perform work related to chemicals, emergency team and related functions to understand the chemical hazards in the workplace and their effect on health and the environment including the control or management of such hazardous chemicals.

**Safety, Occupational Health and Working Environment:** To provide management and staff, as well as contract workers working on site for training and awareness of safe work practices and preventive measures to contribute to the goal of reducing occupational risks of hazards, accidents, injury and disease and improving workplace health and safety.

**Basic Fire Safety Training Course:** To raise awareness of fire hazards in the workplace and how to act safely in the event of an emergency fire situation, including preparation of fire prevention and suppression plans.

By providing those courses to our employees, the Company could determine priorities and set objectives better for eliminating hazards, reducing risks and developing continuous improvement. The Company also gains from the efficient use of resources including better effective environmental management.

### Government Authorities and Associated Organizations

Hana requires its directors, executive and employees to understand and abide by those laws, regulations, policies, and procedures that applicable to them in the performance of their job duties including the duties to pay tax to the government properly. The Board of Directors has established a corporate tax policy as a framework for tax management and practices to be in accordance with legal compliance and the rules and regulations governing the tax of each country in which the business operates including adhere to the business operations with the principles of good corporate governance, business code of conducts and social responsibility.

The Company's Corporate Tax Policy has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Corporate Tax Policy.

## 4. Disclosure and Transparency

The Company ensures timely disclosure of all material matters and all relevant information is reported to the Stock Exchange of Thailand in accordance with the disclosure requirements. It is critical to have as much information as can be available so that continuous evaluation of investment performance may be conducted. The Company will make the effort to disclose information broadly and proactively through channels of communication that allow equal access to market participants. New information that is likely to materially influence the valuation of the Company's shares shall be disclosed to the market immediately and the information disclosed to investors will be accurate, not misleading and sufficient for investors to make decisions. In addition to the information disclosure in accordance with relevant regulations, through the channels of the Stock Exchange of Thailand and 56-1 One Report, the Company also discloses information in both Thai and English versions through other channels such as the Company website with regularly post and update. The Company has the Communication and Disclosure Policy to ensure all information relevant and material disclosure in an appropriate, equal and timely manner. There was no violation that Hana breached the disclosure rules and regulations. The financial reports have been disclosed in a timely manner during the past years.

The Company has not set up the Investor Relations Department, but the Company's executive directors are actively involved in the role of investor relations on a continuous basis as the Company believes that their ability to deliver confidence and clear presentation is as important a skill as technical and managerial capabilities. The Corporate Affairs Department is also available to provide basic information upon request. The Company has the IR Code of Conduct to set clear directions and support the investor relations function and ensure the effective communication among the Company, investors, shareholders, the financial community and other stakeholders.

The Company usually arranges an analyst meeting each quarter to inform the investor community of the financial result and also clarify all inquiries from institutional investors, fund managers and analysts who attend the meeting. Additionally, the Company's visits by interested analysts are also welcome and can be arranged by appointment.

In 2023, the Company participated in the investor relation's activities as follows.

Participation events	Physical	Online	Total (Time)
Analyst Meeting	-	4	4
SET's Opportunity Day	-	3	3
Meeting with Foreign Investors	12	23	35
Meeting with Local Investors	6	7	13
Company Visit	2	-	2

All investors can access the Company's financial and non-financial information through the SET's Public disclosure system and on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) or contact to following persons.

Name	Department	E-mail Address	Phone Number	Fax Number
Ms. Jirapa Kongmanee	Corporate Affairs	<a href="mailto:jirapak@hanabk.th.com">jirapak@hanabk.th.com</a>	0 2551 1297 # 117	0 2551 1299
Ms. Penpimol Kotchabhakdi	Corporate Affairs	<a href="mailto:penpimol_k@hanabk.th.com">penpimol_k@hanabk.th.com</a>	0 2551 1297 # 226	0 2551 1299

The Company's Communication and Disclosure Policy and Corporate Code of Conduct for Investor Relations have been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subjects - Communication and Disclosure Policy and Corporate Code of Conduct for Investor Relation.

## 6.2 Business Code of Conduct

The Board of Directors attempts to operate its worldwide business in accordance with the highest ethical standards and relevant laws. The Company expects and requires that its directors, executives and employees perform their duties with the highest standards of integrity in the conduct of business. The Board ensures the implementation and enforces compliance with the code of conducts by setting adequate mechanisms to be in place through the processes as follows.

01

### Policy Establishment

The corporate code of conduct has been written as the Company's policy and procedure in order to provide the general guidance for those in recognizing and resolving ethical and legal issues while conducting the Company's business.

02

### Leadership Accountability

The Board, executives and management lead by example and demonstrate a commitment to ethical behavior and ensure they are actively promoting ethical practices throughout the organization. The compliance to the code of conduct is regularly monitored by senior management. All the directors and executives (accounted for 100%) are required to sign a certification of acknowledgement and compliance with the code of conducts of the Board of Directors

03

### Training and Education

Conduct regular training sessions to educate employees for the code of conduct and its importance. In 2023 to ensure that employees have the knowledge and understanding of the policies and practices of business ethics, the Company conducted trainings for employees and provided the post tests to evaluate the training results. For the new hired employees, 100% has been trained for the code of conduct as part of orientation whereas 32% for monthly employees were trained in 2023.

04

### Ethical Hotline and Whistleblower Protection

Implement a confidential reporting mechanism to encourage employees and stakeholders to report any ethical concerns or violations.

05

### Regular Audits and Assessments

Conduct periodic audits and assessments to evaluate the effectiveness of the code of conducts. The internal audit department also monitored the implementation and compliance for the code of conducts.

06

### Continuous Improvement

Regularly review and identify any gaps or areas for improvement and take appropriate actions to prevent re-occurrence.

07

### Reporting

The summary of the code of conduct monitoring and compliance is reported to the Audit Committee at least once a year.



**Violation:** The Company shall not tolerate any illegal or unethical acts. Anyone violating the code of conduct will be disciplined including termination of employment. For the available whistleblowing channels, there was no case of complaint or dispute regarding a breach of the code of conduct. The Audit Committee was reported no violation of the code of conduct from the internal audit department in 2023.

The Company's Code of Conduct has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subjects - Corporate Code of Conduct and Business Code of Conduct of the Board of Directors.

### 6.3 Major Changes and Development on the Corporate Governance Policy and System during the Year

The Board of Directors places importance on conducting business under the principles of good corporate governance. The corporate governance policy has been reviewed at least once a year.

In 2023, the Board of Directors has approved the change of the Chairman of the Corporate Governance and Sustainability Committee to be an independent director which shall effective in 2024 onwards, in order to enhance the independent oversight roles in accordance with the principles of good governance and strengthen efficiency the sustainable operations of the Company.

In 2023, the Board of Directors has reviewed our corporate governance practices and there are certain areas that the Company adapted alternative approaches, having regard to the Company's particular circumstances. As a result, the Company has not complied with CG Code and corporate governance best practices as major items as follows.





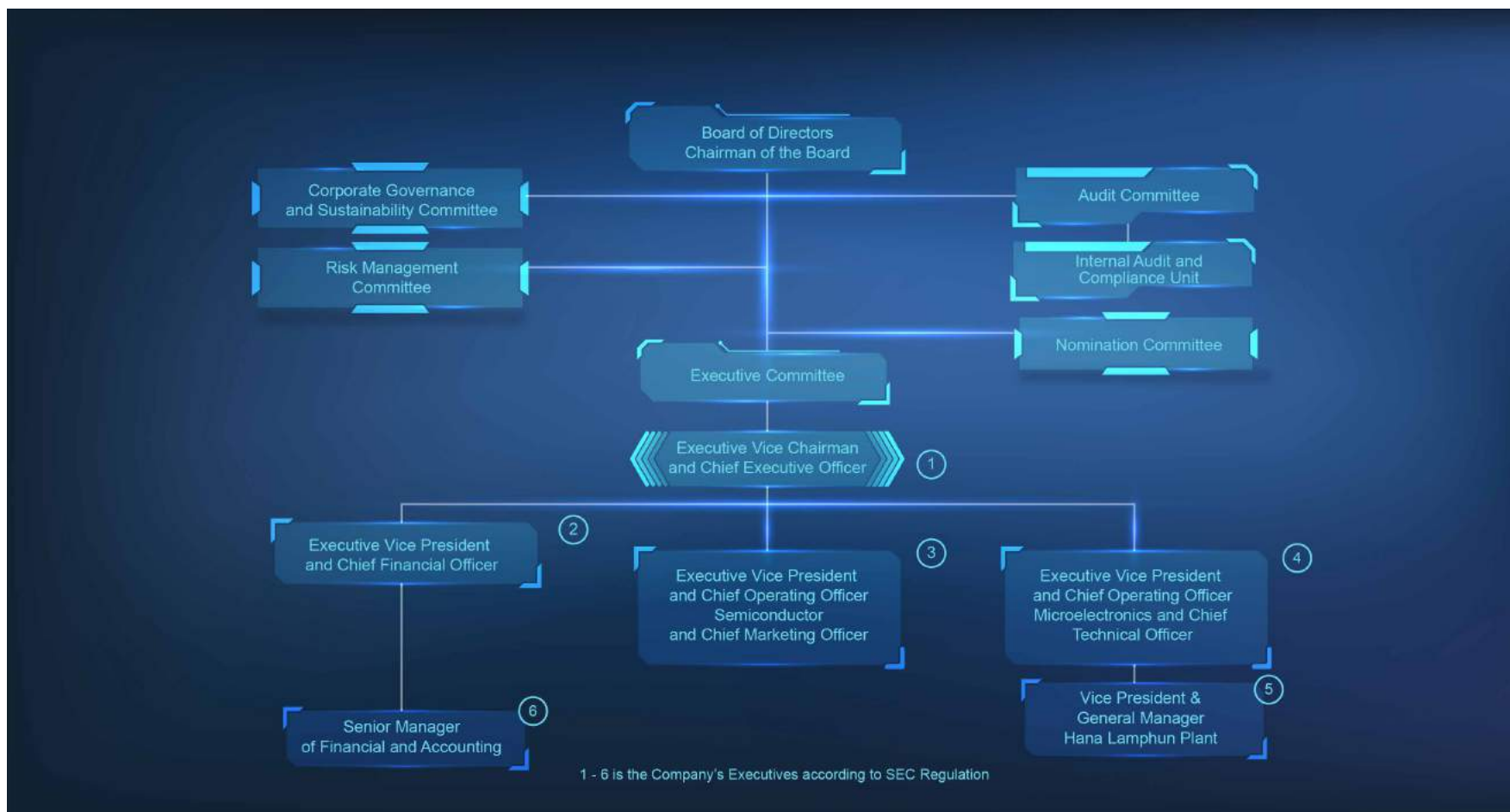
Disclosure of Non-compliance	Reasons
<b>1. Independent directors more than 50%</b>  The Board should consist of more than 50% of independent directors.	The board structure of the Company consists of four independent directors and four executive directors, which is accounted for 50% of the Board, whereby: <ol style="list-style-type: none"><li>1. The Chairman of the Board and the Chief Executive Officer (CEO) is not the same person;</li><li>2. The Chairman of the Board is an independent director;</li><li>3. The Chairman of the Board and the CEO are not immediate family members;</li><li>4. The Chairman of the Board is not part of the management team.</li></ol>
<b>2. Appointment of Remuneration Committee</b>  The Remuneration Committee should be appointed and composed of majority of independent directors with specified sets of duties and responsibilities and held at least 2 meetings per year.	As the remuneration structure of the Board has been set for the independent directors only, whereas the remuneration of executive directors is paid as senior company employees. The Company has not established the Remuneration Committee as the Board of Directors is capable of reviewing the remuneration of the independent directors by the Board as a whole. The Board is responsible for determining remuneration policy and structure of compensation for independent directors with transparency, benchmarking with prevailing industry and considering each director according to individual duties and responsibilities. For the Board's remuneration in all kinds, the Board has proposed to shareholders for final approval annually.
<b>3. Disclosure of CEO Remuneration</b>	The Board is of opinion that the compensation disclosure is highly sensitive as the CEO receives remuneration as a managerial employee of the Company, not as a director. The Company has disclosed the remuneration in the form of group executives, the policy on CEO remuneration and performance evaluation of the CEO. Therefore, the disclosure of CEO's remuneration to the public may be considered as deemed appropriate in future.



## 7. Corporate governance structure and material facts related to the board, subcommittees, executives, employees and others

### 7.1 Corporate Governance Structure

The Company's organization structure includes the Board of Directors and 5 sub-committees: Executive Committee, Audit Committee, Nomination Committee, Corporate Governance and Sustainability Committee, Risk Management Committee and the management of key business units. The organization structure as of 31 December 2023 is as follows.



## 7.2 Board of Directors

As of 31 December 2023, the Board of Directors consists of eight directors of whom four are executive directors and four are independent directors.

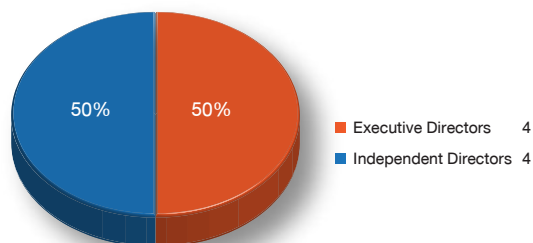
Name	Position	Appointment Date
1. Mr. John Thompson	Independent Director Chairman of Board of Directors Chairman of Audit Committee	1 January 2017
2. Ms. Pornphan Abhamongkol	Independent Director Audit Committee Chairman of Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	1 January 2022
3. Mrs. Sunun Thongbai	Independent Director Audit Committee Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	1 December 2022
4. Mr. Stephanus Josephus Hendrikus Brader	Independent Director Audit Committee Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	1 December 2022
5. Mr. Richard David Han	Executive Director Nomination Committee	26 July 1993
6. Mr. Terrence Philip Weir	Executive Director Chairman of Corporate Governance and Sustainability Committee Chairman of Risk Management Committee	26 July 1993
7. Mr. Sanjay Nirendra Mitra	Executive Director	29 April 2022
8. Mr. Insuk Kim	Executive Director	29 April 2022

## Term of Service of Independent Directors

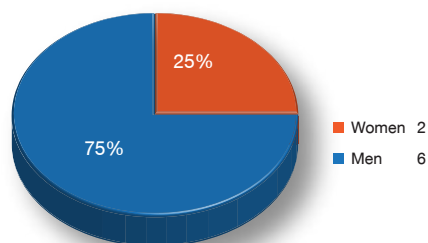
The Board of Directors set the term of service of independent directors shall not over than nine years from the date of their first appointment, with no exception.

## Board Composition

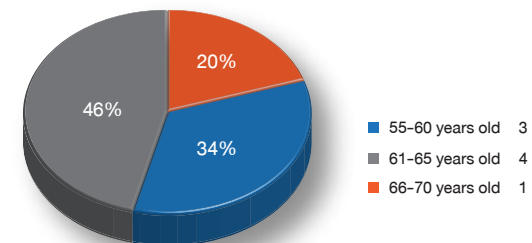
Independent proportion



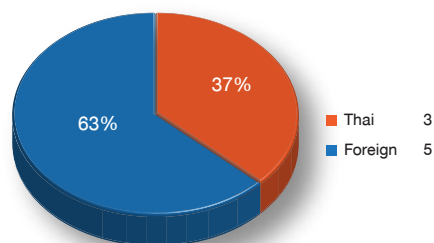
Gender Representation



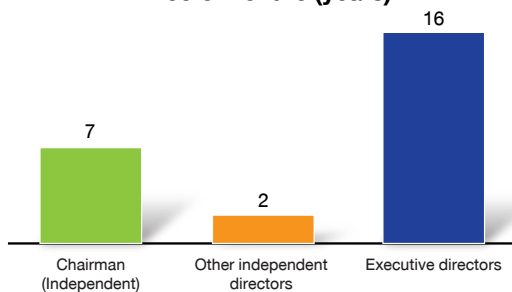
Age Diversity



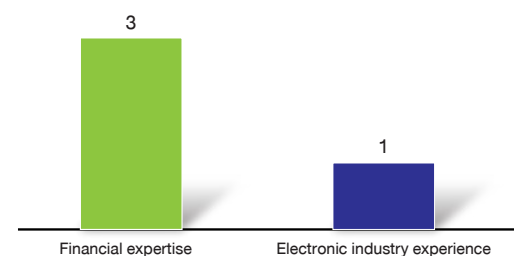
Board Nationality



Director Tenure (years)



Audit Committee Expertise



## Authorized Directors

The directors authorized to bind the Company shall be the joint signatures of any two directors and affixed with the Company's seal.

## The Information of Directors of the Company's Subsidiaries

The information is disclosed in Attachment 2.





## Board Duties and Responsibilities

In conducting the business of the Company, the Board of Directors shall perform their duties with responsibilities, due care and loyalty in the best interest of the Company and its shareholders.

### Duties and responsibilities of the Board of Directors:

1. To ensure that directors and executives perform their responsibilities with duty of care and loyalty and that the Company operates in accordance with the relevant laws and objectives enumerated in the Company's Memorandum of Association and have the authority to perform duties provided or related thereto under the resolution of the shareholders' meetings
2. To ensure that the Company's annual and medium-term objectives, goals and strategies align with the Company's long-term objectives, which shall be reviewed and updated annually as well as monitoring and overseeing the implementation of corporate strategies
3. To determine the vision and mission of the Company and to review annually
4. To consider decisions on the material transactions or significant matters such as large investment, the Company's key policies, management authority, and any transactions as prescribed by laws
5. To review the system of sound internal control and risk management system to be effectively implemented and maintained
6. To ensure that the major related party transactions or conflict of interests are in compliance with the relevant notifications, regulations and guidelines of the Stock Exchange of Thailand
7. To ensure the appropriate accounting systems, the preparation of financial reports and accounting policies in accordance with generally accepted accounting and reviewed by independent auditors
8. To put in place a mechanism for an annual performance evaluation of the board and sub-committees
9. To ensure business continuity in the long term including the development and succession plans for the executives to be in place and annually request reporting the implementation of the development and succession plans
10. To review the corporate governance policy and its compliance at least annually
11. To govern the subsidiaries in order to protect benefits of investors including assigning directors of its subsidiaries to control management under the policies of the Company, including transactions related to securities and exchange laws or SET regulations.
12. To attend every Board of Directors' meeting except special reasonable circumstances
13. To support the Company's policies and practices related to anti-corruption in all forms

**Authorities of the Board of Directors:**

1. Related to the Company business - To approve the Company's vision, mission and business objectives/goals, the matters impacted to financial status, debt, future business strategies and performance of the Company, projects with capital investment over than THB 100,000,000 and the change of capital structure and accounting policy
2. Related to shareholders - To approve the dividend payment, financial statement and its notes, the auditor's opinion, annual report, calling shareholders' meeting, the change of the Company's Memorandum of Association, appointment of auditors and their remuneration and the ordinary share issuance and to recommend to shareholders' meetings
3. Related to the Board and executive management - To approve the appointment and removal of director and secretary of the Company and its subsidiaries, delegation or empowerment of the roles and responsibilities to CEO, sub-committees, the charters of Board of Directors and sub-committees, the other Board seats held by directors, CEO and executive management as well as related party transactions and conflict of interest
4. Related to organization principle - To approve the corporate governance policy, the code of conduct, sustainability development policy, risk management and internal control including management of enterprise information technology

**Duties and Responsibilities of the Chairman of the Board of Directors:**

1. The Chairman of the Board has additional responsibilities more than other directors as follows.
2. To steer, oversee and ensure that the Board efficiently carries out its duties to achieve the Company's objectives
3. Together with CEO, to call the Board and shareholders' meetings and set the agendas of the meetings which important matters should be included
4. To allocate sufficient time to discuss important matters and encourage directors to exercise independent judgment
5. To act as a chairperson at the meetings of the Board and shareholders including review and sign minutes of meetings
6. To cast a vote to break a tie for the Board and shareholders' meetings
7. To ensure that all directors promote the Company's ethical culture and good corporate governance
8. To promote constructive relationship between independent directors and executive directors, and between the Board and management

**Segregation of Duties between the Board of Directors and Management**

The roles and responsibilities between the Board and management are clearly segregated as follows.

Board of Directors	Management
<ul style="list-style-type: none"> <li>• To have the ultimate responsibility for the Company's long-term prosperity</li> <li>• To approve the large projects/investment, major transactions, policies, etc.</li> <li>• To oversee the overall performance of the Company and to monitor the efficiency and effectiveness of the implementation of the policies and plans</li> </ul>	<ul style="list-style-type: none"> <li>• To run the business of the Company and set its business strategies in accordance with the delegated authority of the Board</li> <li>• To have the authority to approve day-to-day operational expenditures, investment, commercial agreement, etc. according to the limited amount approved by the Board</li> <li>• To report results to the Board</li> </ul>



The Board has approved the separation of duties and authorization of management such as approval limits of day-to-day operational expenses. However, such authorization shall not include that where the grantee can approve the transaction of which he or she is a person who might have any conflict of interest with the Company or its subsidiaries regarding such transaction.

#### **Duties and Responsibilities of Chief Executive Officer:**

1. The Board delegates authority and responsibility for the conduct of the Company's business to CEO who has following responsibilities:
2. To manage and monitor the Company's daily operations and performance consistent with the Company's objectives, strategies and relevant policies
3. To recommend to the Board any significant operational changes and major capital expenditures beyond delegated authority
4. To propose appropriation of earnings to the Board for interim and/or annual dividend payments
5. To assign responsibilities to the senior management and supervise the work of executive directors
6. To empower the engagement and commitment for the Company in accordance with all applicable laws and the Company's standards and policies
7. To conduct other duties in accordance with the resolutions of the Board meetings and/or shareholders' meetings

### **7.3 Sub-Committees**

The Board currently has five sub-committees - Executive Committee, Audit Committee, Nomination Committee, Corporate Governance and Sustainability Committee and Risk Management Committee in fulfilling its responsibilities whereby the Charters of Board of Directors and other sub-committees have been posted on the Company website as shown in Attachment 5.

#### **1. Executive Committee**

**Structure:** As of 31 December 2023, the Executive Committee comprises of four members.

**Term:** There is no term limit.

Name	Position
1. Mr. Richard David Han	President and Chief Executive Officer
2. Mr. Terrence Philip Weir	Executive Vice President and Chief Financial Officer
3. Mr. Sanjay Nirendra Mitra	Executive Vice President and Chief Operating Officer Semiconductors and Chief Marketing Officer
4. Mr. Insuk Kim	Vice President and Chief Operating Officer Microelectronics and Chief Technical Officer

**Duties and Responsibilities of the Executive Committee:**

1. To perform and manage the Company's business to comply with the policies, mission and business plans as determined by the Board of Directors
2. To determine budget and the management's authorities of the Company
3. To monitor and follow up the operation of the Company's policies to ensure its efficiency
4. To monitor and follow up the performance of the Company to ensure its compliance with the business plan
5. To have the authorization for approval limits of day-to-day operational expenses in accordance with the approval authorization policy of the Company and to consider the large investment projects such as a joint venture, a construction of new plant etc. and any significant transactions over than THB 100,000,000 shall be proposed to the Board for approval
6. To perform other duties as assigned by the Board of Directors

**2. Audit Committee**

**Structure:** The Audit Committee was formally established since 10 September 1999. The Committee consists entirely of independent directors, who are independent from Hana operations and free from any relationship that might in the opinion of the Board of Directors to be construed as a conflict of interest. As of 31 December 2023, the Audit Committee comprises of four members.

**Term:** The Chairman and members are appointed for an initial term of three years.

Name	Position
1. Mr. John Thompson	Chairman
2. Ms. Pornphan Abhamongkol	Member
3. Mrs. Sunun Thongbai	Member
4. Mr. Stephanus Josephus Hendrikus Brader	Member

Mr. John, Ms. Pornphan and Mrs. Sunun have the expertise and experience to review the financial statements while Mr. Stephanus has the full experience with the electronic industry.

**Duties and Responsibilities of the Audit Committee:**

1. To review the Company's financial reporting process in order to ensure that it is accurate and adequate
2. To review the Company's internal control system and internal audit system to ensure that they are suitable and efficient, to determine an internal audit unit's independence, as well as approving the appointment, transfer and dismissal of the head of an internal audit department
3. To review the Company's compliance with the laws on securities and exchange, the regulations of the SET and other laws relating to the Company's business





4. To consider, select and nominate external auditors including propose their remuneration including consider the performance of auditors and dismissal as well as attending the meeting at least once a year with the external auditors without executive management being present
5. To review the connected transactions or transactions that may lead to conflicts of interests in order to ensure that they are in compliance with the SET regulations and applicable laws, and are reasonable and for the highest benefit of the Company
6. To prepare and disclose in the Company's annual report, an Audit Committee's report which shall be signed by the Chairman of Audit Committee and consisted of at least the following information:
  - 6.1. an opinion on the accuracy, completeness and creditability of the Company's financial report;
  - 6.2. an opinion on the adequacy of the Company's internal control system;
  - 6.3. an opinion on the compliance with related laws i.e. the Securities and Exchange Act, the SET regulations, or the laws relating to the Company's business;
  - 6.4. an opinion on the suitability of an auditor;
  - 6.5. an opinion on the transactions that may lead to conflicts of interests;
  - 6.6. the number of the Audit Committee meetings, and the attendance of such meetings by each committee member;
  - 6.7. an opinion or overview comment received by the Audit Committee from its performance of duties in accordance with the charter; and
  - 6.8. other transactions which, according to the Audit Committee's opinion, should be known to the shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Board of Directors
7. To support and monitor the risk management systems and ensure the measures of the Company are appropriate
8. To review the Company's compliance with private sector's anti-corruption and certification program, including the Collective Action Coalition Against Corruption's Self-Evaluation Tool
9. In its performance of duties, if it is found or suspected that there is a transaction or any of the following acts which may materially affect the Company's financial condition and operating results, the Audit Committee shall report it to the Board of Directors for rectification within the period of time that the Audit Committee thinks fit:
  - 9.1. a transaction which causes a conflict of interest;
  - 9.2. any fraud, irregularity, or material defect in an internal control system; or
  - 9.3. an infringement of the SET regulations or any law relating to the Company's business

If the Board of Directors or management fails to make a rectification within the period of time under the first paragraph, any Audit Committee may report on the transaction or act under the first paragraph to the SEC and the SET.
10. To perform any other duties as assigned by the Board of Directors
11. To review and revise the Audit Committee Charter and propose any revision to the Board of Directors for approval



### 3. Nomination Committee

**Structure:** The Nomination Committee was established in November 2004. As of 31 December 2023, the committee consists of three independent directors and one executive director. The Committee will at all-time consist of a majority of independent directors.

**Term:** The Chairman and members are appointed for the term of three years.

Name	Position
1. Ms. Pornphan Abhamongkol	Chairman
2. Mr. Richard David Han	Member
3. Mrs. Sunun Thongbai	Member
4. Mr. Stephanus Josephus Hendrikus Brader	Member

#### Duties and Responsibilities of the Nomination Committee:

1. To ensure a formal and transparent procedure for the appointments of new directors and key executive management to the Board
2. To select the potential candidates whose qualifications best meet the criteria and propose to the Board
3. To propose and review the executive management succession plan
4. To review annually the size and composition of the Board and recommend any proposed changes to the Board

### 4. Corporate Governance and Sustainability Committee

**Structure:** In 2013, the Board established the Corporate Governance Committee that composed of the majority of independent directors. As of 31 December 2023, the committee consists of three independent directors and one executive director.

**Term:** The Chairman and members are appointed for an initial term of three years.

Name	Position
1. Mr. Terrence Philip Weir	Chairman
2. Ms. Pornphan Abhamongkol	Member
3. Mrs. Sunun Thongbai	Member
4. Mr. Stephanus Josephus Hendrikus Brader	Member



## Duties and Responsibilities of the Corporate Governance and Sustainability Committee:

### Corporate Governance Oversight:

1. To consider, review and revise the corporate governance policy continually at least once a year to keep the company's corporate governance policy updated and in line with the international standards, laws, criteria, rules and regulations
2. To monitor and evaluate at the end of each year, the performance of the directors and executives in compliance with best practices as specified in the corporate governance policy
3. To prepare the annual report on corporate governance including any necessary opinions and suggestions and propose to the Board
4. To perform any other duties assigned by the Board

### Sustainability Development Oversight:

1. To set the Company's sustainability policy framework, goals, strategies, and plans for implementation covering ESG dimensions
2. To approve the budget plan related to sustainability development
3. To appoint the working team to assist the Committee as well as appointing the consultant/expert in performing their duties
4. To monitor the performance of the sustainability strategy to be in line with the policy framework and specified goals
5. To regularly report performance progress to the Board for acknowledgement

## 5. Risk Management Committee

**Structure:** The Risk Management Committee was established in 2008. In 2020, the Board restructured the Committee to be composed of directors at the board level. The Committee can appoint their management team of each Hana location responsible for ensuring an appropriate risk management process is in place.

**Term:** The Chairman and members are appointed for an initial term of three years.

Name	Position
1. Mr. Terrence Philip Weir	Chairman
2. Ms. Pomphan Abhamongkol	Member
3. Mrs. Sunun Thongbai	Member
4. Mr. Stephanus Josephus Hendrikus Brader	Member

**Duties and Responsibilities of Risk Management Committee:**

The Risk Management Committee has the duties and responsibility that have been approved by the Board in implementing the risk management policy, reviewing the effectiveness of risk management profile, presenting the Company's overall risks and solutions to effectively prevent and limit Hana's overall risks at an acceptable level, and reporting the results to the Board periodically.

**7.4 Executive Management**

As of 31 December 2023, the executive management of the Company consists of below 6 members where the detail of the executive management is shown in Attachment 1.

Name	Position
1. Mr. Richard David Han	President and Chief Executive Officer
2. Mr. Terrence Philip Weir	Executive Vice President and Chief Financial Officer
3. Mr. Sanjay Nirendra Mitra	Executive Vice President and Chief Operating Officer Semiconductors and Chief Marketing Officer
4. Mr. Insuk Kim	Executive Vice President and Chief Operating Officer Microelectronics and Chief Technical Officer
5. Mr. Wichai Sukprasertkul	Vice President and General Manager Hana Microelectronics (Lamphun and Cambodia))
6. Ms. Achara Chaicharncheep	Senior Financial and Accounting Manage

**Remuneration Policy of the Board of Directors and Executives****Remuneration for Directors:**

The Company provides the remuneration to the independent directors while the executive directors receive the remuneration as the role of employees of the Company. Therefore, the Company has not established the Remuneration Committee as the Board considers and reviews the remuneration of the independent directors by the whole Board. The Company provides the remuneration to the independent directors in forms of meeting allowances and bonus of which the rates are up to the responsibilities of the members. There is no other benefit. The remuneration for directors has been compared with the rate of the same industry and the structure of the remuneration of the Company. All types of the remuneration of directors have always been approved by shareholders every year.



## Remuneration for Executives:

**Basis of Key Executive Remuneration** - The Company is to ensure that key executive remuneration enhance its ability to attract, retain and motivate competent and experienced staff. Remuneration of executives of short and long terms is in accordance with performance of each executive. The remuneration of executives including CEO comprises of base salary, cash bonuses (annual and performance-based bonuses) and employee welfare such as provident funds, medical benefits, life insurance, etc. The provident fund is a part of the incentive programs to offer executives, management and employees a secure income in the case of death, disability, resignation or retirement. The Company contributes at the rate of 3 - 7.5 percent of their salaries depending on the length of service year with the Company. Other long-term incentive program is the retirement benefit which is eligible to receive when retires from the Company.

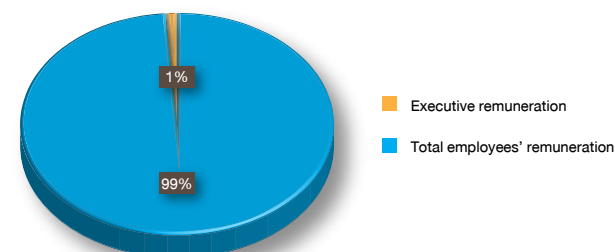
The Board of Directors has established the written CEO remuneration policy that covers the short-term and long-term incentives. The Board delegates the CEO compensation process to the executive committee. The short-term incentive depends on the group's financial performance and on CEO's own success evaluated by the independent directors. For the long-term incentive, the CEO shall be eligible for long-term incentive programs with the same terms and conditions as employees. For other long-term incentives of CEO if any, the executive committee shall seek recommendation from the Board.

**Measurement Criteria** - The performance-based has been recognized for the legitimate difference in roles, individual contribution, complexity and responsibility of the position they hold, including the performance of the Company. The determination of remuneration also takes into account the current market rate and annual salary increase of the staff with consideration of the market survey performed by Human Resources Department.

In 2023, the total remuneration of 6 executives is as follows.

Type of Remuneration	Amount (Baht)
Salary	28,397,655
Bonus	4,446,935
Provident Fund	1,532,665
Board Remuneration	-
Non-Monetary Remuneration	-
<b>Total</b>	<b>34,377,265</b>

Comparison of executive directors and executive management remuneration with total group remuneration



## 7.5 Employees

As of 31 December 2023, the Company and its subsidiaries have 8,164 total number of employees. For 2023, the total remuneration including salary, overtime, bonus, provident fund, etc. is THB 4,121 million. In Thailand, there are 6,450 employees (accounted for 79% of total group employees) with THB 2,647 million paid for remuneration (accounted for 64% of total group remuneration).

Number of Employees and Remuneration in Thailand:

Number of Employees as of 31 December 2023			
Department	Hana Microelectronics Public Co., Ltd.	Hana Semiconductor (Ayutthaya) Co., Ltd.	Total Employees
CEO Office	3	2	5
Customer Service and Business Development	34	22	56
Finance and Accounting	25	17	42
Human Resources/Administration/ Training	86	98	184
Management Information System (MIS)	40	23	63
Operation Support	884	1,062	1,946
Production	1,544	1,726	3,270
Quality Assurance	340	204	544
Supply Chain Management	183	157	340
Total Employees	3,139	3,311	6,450

Employee Remuneration	Hana Microelectronics Public Co., Ltd.	Hana Semiconductor (Ayutthaya) Co., Ltd.	Total Remuneration
2023	THB 1,254 million	THB 1,393 million	THB 2,647 million

## Provident Fund

The provident fund is an investment fund that is jointly established by the company and employees to serve as a long-term savings to support employees upon retirement. The Company has setup a provident fund (PVD) according to Provident Fund Act B.E 2530 since 8 April 1999. Currently, the provident fund is under the management of SCB Asset Management Company Limited.

Name of the Company and Subsidiary	Total Number of Employees (person)	Number of Employees Participated with PVD (person)	% Participation
Hana Microelectronics Public Co., Ltd.	3,139	2,909	92.67%
Hana Semiconductor (Ayutthaya) Co., Ltd.	3,311	2,779	83.93%
Total	6,450	5,688	88.18%

As the provident fund is considered a retirement savings fund for employees, the Company has a policy to support the Company's Provident Fund Committee to perceive the principle of the Investment Governance Code (I Code) and select fund comply with the I Code and/or manage investments responsibly, with policies regarding to environmental, social and good governance (Environmental, Social, and Governance: ESG) as it is an investment approach which can lead to the best interests of the fund members who are the Company's employees in long term.

### Number of Employees' Movement in Thailand:

	2023	2022	2021
Total Female (person)	4,371	5,007	5,548
Total Male (person)	2,079	2,452	2,535
Total Number of Employees	6,450	7,459	8,083
Increase/(Decrease)	(1,009)	(624)	51
% Change	(13.53%)	(7.72%)	0.63%

### Employees' Turnover Rates in Thailand:

	2023		2022		2021	
	Monthly	Daily	Monthly	Daily	Monthly	Daily
Hana Microelectronics Public Co., Ltd.	0.53%	1.34%	0.49%	1.50%	0.30%	1.42%
Hana Semiconductor (Ayutthaya) Co., Ltd.	0.83%	2.84%	1.00%	4.10%	0.90%	5.30%

## 7.6 Other Information

### The Corporate Secretary

The Board has formally appointed Ms. Jirapa Kongmanee as the corporate secretary since 11 August 2008 to carry out the duties and responsibilities according to Section 89/15 and 89/16 of Securities and Exchange Act (No. 4) B.E. 2551 effective from 31 August 2008. The corporate secretary shall perform duties with care and responsibility and in good faith as well as in compliance with all applicable laws, the objectives, the Articles of Association of the Company, and the resolutions of the Board of Directors and the shareholders' meetings.

#### Duties and responsibilities of the corporate secretary are as follows:

1. To prepare and maintain the following documents:
  - 1.1 Director registration
  - 1.2 Notification and minutes of the Board of Directors meetings including annual reports
  - 1.3 Notification and minutes of shareholders' meetings
2. To maintain Report on Interest of Directors, Executives and Related Persons and send a copy of the report under Section 89/14 of SEC regulation to the Chairman of the Board and Audit Committee within 7 days from the date that the report is received.
3. Other duties regulated by the Securities and Exchange Commission
4. Other duties assigned by the Board of Directors such as:
  - Advise on the laws and regulations involved and oversee the activities of the Board to be in accordance with the applicable laws
  - Conduct the Board of Directors and shareholders' meetings
  - Liaise with regulatory agencies such as the SET and ensure disclosure and press release according to the applicable laws

The detail of the Corporate Secretary is shown in Attachment 1.

### Auditor's Remuneration

The Board provides external independent auditors who are qualified to be the auditors of companies approved by the Securities and Exchange Commission (SEC) by appointing a rotating auditor at least every 7 years and the same auditor shall not be appointed to perform the audit for 5 consecutive years.

The Board of Directors is responsible for appointing external auditors and determining the amount of audit fees with shareholders' approval. There will be no directors, representatives, or employees can be appointed to act as an auditor during the period of service in the position.



The auditor has authority to audit the Company's and subsidiaries accounts, other related documents and evidence related to income and expenses including the assets and liabilities of the Company and subsidiaries during business hours. In this case, the auditor has authority to interrogate directors, management, employees of the Company in any position and also representatives of the Company and also advise them to provide financial facts or provide related documents or evidence related to the Company's business operations. The auditor has a duty to attend every shareholders' meeting when considering the balance sheet, profit and loss of financial statements and any issues related to the Company's accounting.

In 2023, the Annual General Meeting of Shareholders approved the appointment of Ms. Kamontip Lertwitworatep, Certified Public Accountant No. 4377 of EY Office Limited to be the Company's auditor with the remuneration of not exceeding THB 2,450,000.

The Company and 3 subsidiaries paid the audit fees to EY Office Limited, Thailand as follows.

#### 1. Audit Fee:

(Unit: Baht)

Company	Auditor Name	2023	2022
Hana Microelectronics Public Co., Ltd.	Ms. Kamontip Lertwitworatep	2,450,000	2,450,000
Hana Semiconductor (Ayutthaya) Co., Ltd.	Ms. Kamontip Lertwitworatep	1,260,000	1,360,000
Hana Semiconductor (BKK) Co., Ltd.	Ms. Kamontip Lertwitworatep	150,000	150,000
Hana Semiconductor International Co., Ltd.	Ms. Kamontip Lertwitworatep	340,000	340,000
Total		4,200,000	4,300,000

#### 2. Non-Audit Fee:

(Unit: Baht)

Company	Non-Audit Fees	2023		2022
		Paid During the Year	Future Payment	Paid
Hana Microelectronics Public Co., Ltd.	BOI audit fee	-	540,000	450,000
	Inventory destruction fee	60,000	-	60,000
Hana Semiconductor (Ayutthaya) Co., Ltd.	BOI audit fee	-	270,000	270,000
Inventory destruction fee		-	-	-
Total		60,000	810,000	780,000

For the financial year ended 31 December 2023, the external auditors confirmed to the Audit Committee on the actions they take to maintain their professional independence with respect to the Company and its affiliates in accordance with the Code of Ethics for Professional Accountants issued by Thailand's Federation of Accounting Professions by not holding any shares in the Company and its affiliates and not purchasing goods and services from the Company and its affiliates.

## 8. Report on key operating results related to corporate governance

### 8.1 Performance of the Board of Directors in 2023

#### 8.1.1 Selection, Development and Evaluation of Duty Performance of the Board of Directors

The Board of Directors gives emphasis on the transparency of director selection by assigning to the Nomination Committee to consider nomination of new directors to be in line with the Board diversity policy by considering personal attributes regarding knowledge, skills, professional experiences, gender, age, regardless of nationality/race aligned with the Board Skill Matrix and the Company's business strategy. When recruiting new directors, the sources could be from a professional search firm, IOD director pool for new director candidates or from personal recommendation as considered by the Nomination Committee. In addition, the Company has the policy to give the right to shareholders to propose appropriate candidates for election to the Board. The Nomination Committee is responsible for review of the qualifications and performance of the candidates or those directors who retired by rotation and make recommendations to the Board of Directors for proposing to shareholders for approval.

In 2023, there was no proposal for candidates sent by shareholders to the Nomination Committee to review. Therefore, the Board considered those directors who retired by rotation and proposed to AGM for approval, whereby the Board considered their qualifications in line with the Company's business strategies including working experiences, expertise, previous year performances, willingness and time devoted to the Board that are suitable to be considered for re-election. The Board concluded that our 8 directors in alignment with the composition of the Board Skill Matrix and in line with the Company's business strategies, which is disclosed in Attachment 2.

#### Qualifications of Directors

A person who serves as a director of the Company shall possess the knowledge, abilities, personal contribution and shall have at least the following qualifications:

1. To have qualifications and have no prohibited characteristics as specified by the Public Limited Companies Act including have no manner indicating a lack of trustworthiness to manage the Company from the view of shareholders according to the regulations of Securities and Exchange Commission (SEC).
2. To have knowledge, skills, expertise, experiences, education and gender as the Board deems appropriate for its composition, diversity and such qualifications can contribute to the Company's strategies. In addition, at least 1 director has an experience in the electronic industry or related to the Company's business.
3. To devote time especially for making key decisions and handling duties for the best interest of the Company and being able to participate in all the Board and shareholders' meetings unless necessary or emergency.
4. To have a moral, ethical, and any other features that may be required by laws or deemed appropriate by the Board.



## Qualifications of Independent Directors

A person who serves as an independent director of the Company shall possess the knowledge, abilities and personal contribution. At least one member of the Audit Committee must have financial knowledge and other qualifications not contrary to any regulations of the Securities Exchange of Commission (SEC) or the Company policies.

To ensure that the Board includes such directors who can exercise their best judgment, all independent directors shall be affirmatively determined that such director meets the requirement set by the Securities Exchange of Commission (SEC). In particular, an independent director is a director who:

1. Must hold shares less than 0.5% of the total shares eligible to vote of the Company, subsidiaries, associates, or controlling parties, including the shares held by the related parties of such an independent director (This shareholding threshold of the Company shares held by the independent directors is stricter than the minimum requirements of the SEC and SET.).
2. Must not be an executive director, an employee, or a consultant who receives regular remuneration from the Company or any of its subsidiaries, and is also neither a controlling person of the Company or subsidiaries nor a related person at least for the past two years.
3. Must not be the person who has relationship by means of descent or legal registration as parents, spouses, siblings, and children, including spouses of children of any other directors, management, major shareholders, controlling party/person or any person to be nominated as a director, management or controlling person of the Company or its subsidiaries.
4. Must never have engaged or not engage in a business relationship with the Company, its subsidiaries, associates, major shareholders, controlling person that deprives his/her exercise of independent discretion including must never have been or be a significant shareholder or controlling person of related person/party who has business with the Company, its subsidiaries and associates, major shareholders or controlling person unless the foregoing status ended at least two years. This also includes normal business transactions for operation, rent or lease of fixed assets, asset or service transactions, financial assistance involving loan granting or receiving, guarantee, provision of assets as collateral or other related transactions obliged the Company or its contractual party for the liability to pay the other party that is accounting from 3% or more of net tangible assets of the Company or twenty million baht whichever is lower.
5. Must never have been or not be an auditor for the Company, its subsidiaries, associates, major shareholders, or controlling person, and must not be a significant shareholder, controlling person, or partner of an auditing firm in which an auditor of the Company, its subsidiaries, associates, major shareholders or controlling person serves unless the foregoing status ended at least two years before.
6. Must never have been or not be a professional service provider, including legal or financial advisor with a service fee of more than two million baht per year paid by the Company, its subsidiaries, associates, major shareholders, or controlling person, and must not be a significant shareholder, controlling person, or partner of the above mentioned service firms unless the foregoing status ended at least two years before.
7. Must not be the director who is nominated to be the representative of directors of the Company, a major shareholder, or any other shareholder related to the Company's major shareholders.
8. Must not conduct the same business and compete significantly with the Company or its subsidiaries, and must not be a significant partner in partnerships or executive director, staff, employee, paid advisor or hold more than 1% of voting shares of other companies which have the same business and compete significantly with the Company or its subsidiaries.
9. Must not have any other conditions that be unable to exercise independent opinions regarding the business operation of the Company.

## Appointment of Directors

The appointment of directors shall comply with the Company's Article of Association that is from the majority vote of shareholders' meeting. Each shareholder shall have one vote on each share. Election of directors may be carried out on either an individual basis or en bloc basis as the meeting deems appropriate. In voting, either on an individual or en bloc basis, a shareholder shall so vote in accordance with the number of votes each shareholder has under and the said shareholder may not allot any number of his votes to any such person. The person obtaining the highest votes and the persons obtaining lesser votes, respectively, (in the case of en bloc election) whose total number does not exceed the positions under the election shall be elected as directors. In the case of tied votes, the last person shall be decided by the casting vote of the chairman of the meeting.

In case a directorship becomes vacant other than on retirement by rotation, the Board shall elect a person who has qualifications and who is not disqualified under the Public Companies Limited Act as replacement at subsequent meeting of the Board of Directors. Unless the remaining duration of the director's term of office is less than two months, the replacing director shall hold office for the remaining term of office of the director whom he/she replaces. The resolution of the Board of Directors shall be supported by a vote of not less than three-fourth (3/4) of the number of remaining directors.

## Orientation for New Directors

The newly appointed director shall receive an orientation regarding the Company's business, duties and responsibilities of directors. The brief review shall be led by the Chief Executive Officer, Chief Financial Officer or his/her appointee. All other necessary information shall be given by the Corporate Secretary. The new director will be arranged to attend training courses with the Thai Institute of Directors (IOD) such as DAP, DCP courses as well as encouraging directors to develop their skills and knowledge in performing their duties in charge on an annual basis.

## Director Development

The Board's policy is to encourage the development of directors for continuous participation in training and seminars organized by various institutions such as SET, SEC, IOD or the audit firm, etc.

In 2023, the directors attended the training courses/seminars as follows.

Name and Position of Directors	2023 Training Courses/Seminars
Mr. John Thompson, an independent director	<ul style="list-style-type: none"> <li>CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023</li> </ul>
Mr. Richard David Han, an executive director	<ul style="list-style-type: none"> <li>SET Sustainability Sharing: MSCI Sustainability Assessment &amp; Key ESG Trends by the Stock Exchange of Thailand - January 2023</li> <li>Global Minimum Tax: Preparing, Provisioning and Requirements for Compliance by EYGM Limited - July 2023</li> </ul>
Mr. Terrence Philip Weir, an executive director	<ul style="list-style-type: none"> <li>Global Minimum Tax: Preparing, Provisioning and Requirements for Compliance by EYGM Limited - July 2023</li> <li>Managing Climate-Related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023</li> <li>CPA Australia Learning Insights by CPA Australia Ltd. - October 2023 (3 hours)</li> <li>Professional Ethics in Focus by CPA Australia Ltd. - November 2023 (2 hours)</li> <li>Cyber Security and Board/Audit and Risk Committee Responsibility by CPA Australia Ltd. - November 2023 (1 hour)</li> </ul>



Name and Position of Directors	2023 Training Courses/Seminars
Mr. Sanjay Nirendra Mitra, an executive director	<ul style="list-style-type: none"> <li>Managing Climate-Related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023</li> </ul>
Mr. Insuk Kim, an executive director	<ul style="list-style-type: none"> <li>SET Sustainability Sharing: MSCI Sustainability Assessment &amp; Key ESG Trends by the Stock Exchange of Thailand - January 2023</li> </ul>
Ms. Pornphan Abhamongkol, an independent director	<ul style="list-style-type: none"> <li>CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023</li> <li>Importance of the Audit Committee and Confidence in the Thai Capital Market by the Securities and Exchange Commission - November 2023</li> </ul>
Mrs. Sunun Thongbai, an independent director	<ul style="list-style-type: none"> <li>CYBER VISION 2023: Identify and Protect: Keys to a Secure Future by the Stock Exchange of Thailand - June 2023</li> <li>CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023</li> <li>Importance of the Audit Committee and Confidence in the Thai Capital Market by the Securities and Exchange Commission - November 2023</li> </ul>
Mr. Stephanus Josephus Hendrikus Brader, an independent director	<ul style="list-style-type: none"> <li>Managing Climate-Related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023</li> </ul>

Remark: Mr. Terrence Philip Weir, an executive director and Chief Financial Officer, has completed 3 courses of 2023 refreshment programs in financial and accounting totally 6 hours from CPA Australia Ltd. Those courses were reviewed by the Audit Committee to be beneficial to the Company and related to accounting principles/standards that are consistent with the nature of the Company's business.

There are 7 directors of the Company attended the IOD's Director Accreditation Program (DAP) and 1 director has attended the IOD's Director Certification Program (DCP). All 8 directors have attended the training courses in 2023 which are equivalent to 100%. More details of the training courses attended by the directors are disclosed in Attachment 1 - Details of the Board of Directors, Executives, and Corporate Secretary.

### Performance Assessment of the Board of Directors

The Board has conducted its annual performance for individual and as a group evaluation by adopting the self-assessment method from the Stock Exchange of Thailand to assess performance in the latest year.

The Board self-assessment questionnaire allowed the Board to assess their effectiveness into 6 aspects:

1. Board structure and qualifications
2. Roles, duties and responsibilities of the Board
3. The Board meeting
4. Duties of directors
5. Relationship with management
6. Director's self-improvement and management training

Further, the Board also can provide feedback in the assessment form to improve the Board's performance. The Corporate Secretary concludes the Board's group performance and reports to the Board meeting. In 2023, the overall performance of the Board's group was assessed at "very good" ranking, equivalent to 90.75%.

The Board also has conducted the performance evaluation of an individual director using the self-assessment method with evaluation criteria. In 2023, the corporate secretary concluded the Board's individual performance and reported to the Board meeting with the average performance was "very good" ranking, equivalent to 89%.

### Performance Assessment of the Sub-committees

The Board has also annually conducted the performance evaluation of all sub-committees that are the Audit Committee, the Nomination Committee, the Corporate Governance and Sustainability Committee and the Risk Management Committee. Those Committees evaluate their own assessment and the Corporate Secretary reports the result to the Board. In 2023, each sub-committee got the average score as "very good", equivalent to 90.56%.

### Performance Assessment of CEO

On an annual basis, the performance of CEO is evaluated by the independent directors, where the evaluation criteria have been applied from the guidance of the Stock Exchange of Thailand. The areas to assess CEO cover his leadership, strategy formulation, strategy execution, financial planning and performance, relationships with the Board, external relations, human resources management and relations, succession plan, products/service knowledge and personal qualities. In 2023, the independent directors assessed the CEO with an average score of 89%.

### Criteria for Nomination and Appointment of the CEO

The criteria for nomination and appointment of the CEO are set forth by the Nomination Committee to ensure the process is conducted transparently and in accordance with established criteria as listed below.

1. Specific qualifications as specified in the job description of CEO succession plan i.e., knowledgeable in business operations, professional skills and experiences and any other necessary qualifications beneficial in the Company's best interest;
2. General qualifications, ethical, organizational leadership skills, well-recognized by related organizations in the industry;
3. Prohibited characteristics under laws and any other relevant regulations, e.g., conflicts of interest;
4. Conditions of employment and remuneration structure;
5. Nominated and selected by the Nomination Committee; and
6. Approved by the Board of Directors

### CEO Succession Plan

The Board of Directors has improved its succession planning approach by developing the formal CEO succession planning policy in adopting a more comprehensive program that anticipates internal CEO succession while preparing for the possible need to recruit an external candidate depending on the circumstances whether on a planned or emergency basis.

An emergency succession is required when CEO is unable to perform the duties due to accident or other unexpected circumstances. A special meeting of the Board would be convened to decide which of the executives might be appointed as Acting CEO for the remainder of the time required.

In the event of permanent changes due to retirement or planned vacancy, the entire Board shall be involved in choosing a successor. However, the Board could delegate much of the responsibility to implement the search to the Nomination Committee or a special ad hoc committee to work with the Board and current CEO to identify and develop potential internal candidates, monitor the development of candidates and assess the readiness of candidates, or conduct an external search if cannot come to an agreement on an internal candidate, etc.

Overseeing and developing the top management succession plan is the responsibility of the Board, with the Nomination Committee assigned to monitor the progress and review the succession plan annually to ensure that key components are up-to-date, particularly the CEO's job description, minimum qualification requirements, minimum experiences and personal characteristics and the succession readiness improvement. In 2023, the Nominating Committee has reported the progress to the Board of Directors' Meeting on 7 December 2023.

### 8.1.2 Meeting Attendance and Individual Directors' Remuneration

#### Board of Directors' Meetings

The Board of Directors sets the meeting schedules in advance by informing in the meeting agenda before each year-ending so that the directors can arrange their time to attend the meetings. In 2023, the Company held 6 meetings of the Board of Directors, which are the normal agenda items. The total number of directors attending the meetings must be no less than one half of the total number of directors to constitute a quorum. The chairman of the Board and CEO set the agenda of the Board meetings. Any director may suggest agenda items and may raise at meetings other matters that they consider importance of discussion. Information and data for the Board's understanding of the business to be discussed at meetings are distributed in advance of meetings according to the policy that is to provide 5 days in advance. To prepare for meetings, directors are responsible for reviewing the materials that are sent to them in advance. If there are additional inquiries, the directors can contact the CEO, the corporate secretary or designated executives. At the Board meetings, ample time is scheduled to allow full discussion of important matters. Management presentations are scheduled to permit an appropriate portion of the Board meeting time to be available for discussion and comments. The Board's policy is to vote on the agenda item by having at least 2 out of 3 of total directors present in the meeting for each agenda item. The minutes of Board of Directors' meeting are properly made and contain key facts such as the timing of start and finish, name of directors present and absent, summary of items of major discussion and resolutions, the minute taker and certifier. The minutes are maintained at the Company's head office and cannot be edited without prior consent of the Board's approval.

#### The Meeting without Attendance of Management

The Board encourages the non-executive directors to have a separate meeting in absence of management to encourage more open discussion without management present. In 2023, the independent directors conducted a meeting without attendance of management one time on 13 November 2023. The meeting was conducted with the participation of internal and external auditors with the agenda discussion on the significant matters and other concerns related to financial statements and internal control audits by the auditors during the year 2023 including review if there is any connected transaction in 2023 that may lead to conflicts of interest, any fraud findings, as well as the cooperation from management and staff to support the auditors and any limitation related to the audit works, and report to the Board meeting subsequently.

## Meeting Attendance

Meeting	Board of Directors		Audit Committee		Nomination Committee		Corporate Governance and Sustainability Committee		Risk Management Committee		Non-Executive Meeting		Annual General Meeting	
Total Number of Meetings in 2023	6		4		2		2		1		1		1	
Number of Meetings Attended/ Participated in 2023	Physical	Online	Physical	Online	Physical	Online	Physical	Online	Physical	Online	Physical	Online	Physical	Online
Independent Directors:														
Mr. John Thompson	6/6	-	4/4	-	-	-	-	-	-	-	-	-	1/1	-
Ms. Pornphan Abhamongkol	6/6	-	4/4	-	2/2	-	2/2	-	1/1	-	1/1	-	1/1	-
Mrs. Sunun Thongbai	6/6	-	4/4	-	2/2	-	2/2	-	1/1	-	1/1	-	1/1	-
Mr. Stephanus Josephus Hendrikus Brader	4/6	2/6	2/4	2/4	1/2	1/2	1/2	1/2	-	1/1	-	1/1	1/1	-
Executive Directors:														
Mr. Richard David Han	6/6	-	4/4	-	2/2	-	-	-	-	-	-	-	1/1	-
Mr. Terrence Philip Weir	5/6	1/6	3/4	1/4	-	-	-	-	-	-	-	-	1/1	-
Mr. Sanjay Nirendra Mitra	4/6	2/6	-	-	-	-	-	-	-	-	-	-	1/1	-
Mr. Insuk Kim	5/6	1/6	-	-	-	-	-	-	-	-	-	-	1/1	-



## Remuneration of Directors

### (1) Monetary Remuneration

The Company provides the remuneration to the independent directors while the executive directors receive the remuneration as the role of employees of the Company. Therefore, the Company has not established the Remuneration Committee as the Board considers and reviews the remuneration of the independent directors by the whole Board. The Company provides the remuneration to the independent directors in forms of meeting allowances and bonus of which the rates are up to the responsibilities of the members. There is no other benefit. The remuneration of directors has been compared with the rate of the same industry and the structure of the remuneration of the Company. All types of the remuneration of directors have always been approved by shareholders every year.

Individual disclosure of remuneration of the Board of Directors in 2023 is as follows.

Name	Position	Meeting Allowance (Baht)	Bonus (Baht)	Total (Baht)
Mr. John Thompson	Independent Director Chairman of Board of Directors Chairman of Audit Committee	663,250	-	663,250
Ms. Pornphan Abhamongkol	Independent Director Audit Committee Chairman of Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	368,225	-	368,225
Mrs. Sunun Thongbai	Independent Director Audit Committee Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	368,225	-	368,225



Name	Position	Meeting Allowance (Baht)	Bonus (Baht)	Total (Baht)
Mr. Stephanus Josephus Hendrikus Brader	Independent Director Audit Committee Nomination Committee Corporate Governance and Sustainability Committee Risk Management Committee	368,225	-	368,225
Mr. Richard David Han	Executive Director Nomination Committee	-	-	-
Mr. Terrence Philip Weir	Executive Director Chairman of Corporate Governance and Sustainability Committee Chairman of Risk Management Committee	-	-	-
Mr. Sanjay Nirendra Mitra	Executive Director	-	-	-
Mr. Insuk Kim	Executive Director	-	-	-
Total				1,767,925

**(2) Other Type of Compensation for Directors**

None

### 8.1.3 Supervision of Subsidiaries and Associated Companies

The detail is shown in 6.1.1.

### 8.1.4 Corporate Governance Policy and Guideline Compliance Control

#### Reviewing Vision, Mission and Corporate Objectives

The Board of Directors annually reviews and approves the Company's vision, mission and corporate objectives or the long-term goals as well as overseeing the implementation and monitoring the performance of the management. The Board of Directors' Meeting No. 6/2023 held on 7 December 2023 reviewed and approved the Company's vision, mission and corporate objectives or the long-term goals. The CEO has reported to the Board for the execution summary with the Company's strategies once a year in addition to report the operating performance for each meeting.

#### Conflicts of Interest

The Company has the policy in place to deal with conflicts of interest. The Board of Directors has established the policy and procedure for directors and executives to report on conflicts of interest to ensure that they are abided by their fiduciary duties in the way that they must not have personal interest, whether directly or indirectly, in the matter under their decision. Directors and executives are required to disclose any material interest in transactions or matters affecting the Company and its subsidiaries through the established form approved by the Board of Directors. The Corporate Secretary is responsible for receiving reports from directors and executives who disclose their interests and those of their related parties to the Chairman of Audit Committee and the Chairman of the Board respectively.

Related party transactions between the Company and a director or executive and/or connected persons, which may lead to the potential conflicts of interest, must be considered by the Audit Committee. For material related party transactions, such transaction must be approved by the Board of Directors and/or the shareholders' meeting depending on the nature and the size of transaction as required by Notification of the Capital Market Supervisory Board where those directors and executives shall be excluded from decision making involving transactions in which they have vested interests or are connected.

In 2023, there was no conflict of interest from directors and executives or connected persons reported to the Board.

The Company's Conflict of Interest Guidelines have been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject – Business Code of Conduct of the Board of Directors.

## Prevent Insider Trading

The Company has the policy to prevent directors and executives complying with the notification of the Securities and Exchange Commission from taking advantage of inside information, from dishonest dealing for themselves and their related parties. Insider trading is prohibited. Hana has established a system to prevent the use of inside information for personal benefits as follows.

- Communicate the compliance of the policy of Business Code of Conduct of the Board of Directors and executives. The directors and executives are required to sign on acknowledgement of the policy on an annual basis.
- Inform the Board and executives by a circular letter that those who may gain inside information shall avoid trading the Company's securities for the period of one month before the Company announces its financial statements to the public and at least 24 hours after the information is widely spread out to the public.
- Require the Board and executives to inform to the Board or the Corporate Secretary at least 1 day in advance before actual trading of the Company's securities.
- Inform the Board and executives for the duties to report the Company securities holdings and movements to the Securities Exchange Commission (SEC) under the Securities and Exchange Act B.E. 2535 and the Stock Exchange of Thailand's regulations.
- Confirm the shareholding status with individual director and executive through the Corporate Secretary on a monthly basis.
- Report to the Board for the shareholding status of individual director and executive at every Board meeting.

In 2023, no director or executive traded the Company's shares by using inside information, and during the silent periods.

## Cyber Security and Personal Data Protection

The Board is committed to protect the data privacy and information security, maintain the confidentiality of information, data integrity of the Company's physical assets and all electronic information in order to ensure that the safe and responsible use of information technology to meet operational and contractual confidentiality obligations and continuous improvement.

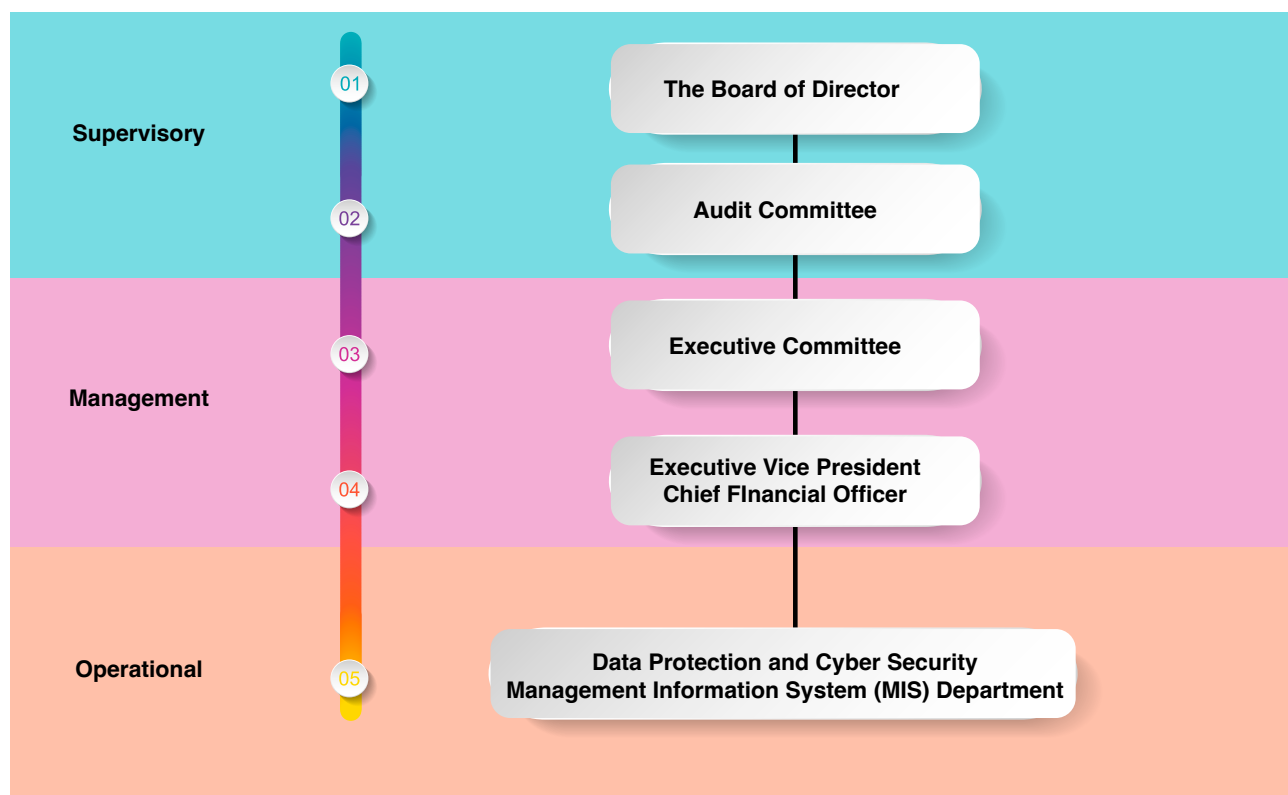
**Data Privacy Protection** - The Company has realized the importance of the safety of personal information from using the service and protection of the personal information of all stakeholders responsibly. The data privacy policy has been established and disclosed to the public for transparency in supervision of the responsible personal data protection and supervision of the operational framework administration unit in accordance with the Personal Data Protection Act (PDPA) in order to gain confidence in the security of information to our stakeholders. There are 5 guidelines for personal data protection as follows:





**Protect Confidential Information** - The Board is committed to protect customers' personal information and privacy including business partners' confidentiality by operating in adherence to applicable laws and regulations of personal information when personal data is collected, stored, processed, transmitted and shared. The practice is to sign an agreement on confidentiality information with every customer and/or business partner. The Company shall not disclose any information to anyone or other agencies without official authorization from the customers or business partners.

**IT and Cyber Security Governance Structure** - To ensure proper policy management as well as at the operational level, the Company has a 3-level governance structure consisting of (1) supervisory level, (2) management level, and (3) operational level.



**Security Awareness Training** - To enhance employees' information security awareness and employees' security policy compliance, MIS together with Training Department have provided training to all employees and management, which is accounted 100% of employees who received trainings and passed the post-tests in 2023.

**Channels for Contacting and Complaining about Personal Data** - In the event that the owner of the personal data wants to inspect the collection of personal data/purpose of data use/controller and the office of the personal data controller, can address to our Human Resources Management Department as follows:



## Implementation Outcome

Hana Semiconductor (Ayutthaya) Co., Ltd. and Hana Microelectronics (Jiaxing) Co., Ltd., the subsidiaries, are ISO/IEC 27001 certified for 80% of the total technology infrastructures.

No incidents of breaches and data leaks.

Information Security/Cybersecurity	Target	2023
Number of data breach incident such as information leakage, theft and loss of data of customers	0	0
Number of employees and customers who are impacted from information leakage	0	0
Amount of fines or penalties arising of breach of security information or other cybersecurity incidents	0	0
Personal Data Protection		
Customer complaints with supporting evidence of customers' personal data breach	0	0
Complaints from third party	0	0
Complaints from government agencies	0	0

The Company has disclosed the Personal Data Protection Policy in both Thai and English versions on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section About Us > Privacy Policy (PDPA).

## Anti-Corruption

**Anti-Corruption Policy** - The Company established the anti-corruption policy and has been approved and reviewed by the Board yearly. The anti-corruption policy is as follows.

“Hana has a zero tolerance of bribery and corruption. The Company prohibits the Board of Directors, management, employees or third parties in their relationship with the Company, being involved in any act of corruption in any form in all business transactions to benefit directly or indirectly and shall comply with the applicable laws and regulations in all the countries in which the Company operates.”

**Risk Assessment** - In 2023, the Risk Management Committee assessed the potential corruption risks by conducting the corruption risks separate from other risks. The risk profile was reported to the Board by having the Compliance Unit perform compliance audit in mitigated risks with the established policy.

**Training and Communication** - In 2023, the Company communicated and provided training to employees regarding its anti-corruption policy and related policies, i.e., corporate code of conducts, gifts and hospitality policy, conflict of interest policy, etc. Employees can get access to the policies via the Company’s bulletin boards and intranet website. The supplier code of conduct covering the anti-corruption policy has been communicated with both overseas and local suppliers for their acknowledgment and compliance. In 2023, the Company received the signed acknowledgement from 1,669 suppliers, which was accounted for 100% from the goal of 100%.

**Monitoring and Review** - The Audit Committee reviews the anti-corruption policy on an annual basis and proposes any amendment to the Board for approval. The Audit Committee also monitors the implementation of the policy and makes recommendations accordingly. Internal control systems and procedures shall be reviewed periodically by an internal audit department to ensure that they are effective in countering bribery and the audit results are to be discussed with relevant operational personnel and reported to senior management and the Audit Committee. In 2023, the risk assessment included the anti-corruption was reported to the Board for consideration.

**Certification** - The Company has been re-certified as a member of Thailand’s Private Sector Collective Action Coalition Against Corruption (CAC), which shall be valid to 2024, for the Company’s actions and effort to support the mobilization of the private sector in the fight against corruption since 2013. In addition, the Company also became the partnership of PACT Network established by the Thaipat Institute to promote concrete anti-corruption in the private sector.

**Collective Impact** - Hana encourages our business partners and subcontractors to become a part of CAC by inviting our business partners through an open letter posted on the Company website. With the collaboration for impact, this can help reduce corruption risks and help promote a transparent and sustainable business environment.

In addition, the Company and its subsidiaries yearly announces “No Gift Policy” and communicates with its business partners and discloses to the public as the guideline for directors and employees not to accept or give gifts by cooperating with other business sectors for the fight against corruption.





The Company's Anti-Corruption Policy has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investor Relations > Sustainable Development > Anti-Corruption.

### Whistleblowing and Channels of Complaints

The Board provides channels for stakeholders to communicate any concerns about illegal, any suspected fraud or corruption, human right violation, unethical conduct or violation of the good corporate governance, any suggestion or any complaints regarding to activities or conduct of the Company or any of its staff or business partners relating to the Company. Stakeholders can report such complaint or concern in good faith directly to following channels.



Position	Name	Email
Chairman of the Board of Directors and the Audit Committee	Mr. John Thompson	<a href="mailto:john@ntasset.com">john@ntasset.com</a>
Chairman of Corporate Governance and Sustainability Committee and Risk Management Committee	Mr. Terrence Philip Weir	<a href="mailto:terry@hanabk.th.com">terry@hanabk.th.com</a>
Chief Executive Officer	Mr. Richard David Han	<a href="mailto:richardh@hanabk.th.com">richardh@hanabk.th.com</a>
Corporate Human Resources Business Partner / Training & Administration Senior Director	Mrs. Tappawong Na Tarlang	<a href="mailto:tappawong@hanabk.th.com">tappawong@hanabk.th.com</a>
Corporate Secretary and the Head of Internal Audit Department	Ms. Jirapa Kongmanee	<a href="mailto:jirapak@hanabk.th.com">jirapak@hanabk.th.com</a>

**Mailing Address** - Hana Microelectronics Public Co., Ltd., 65/98, Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210, Thailand.

Any whistleblower in Hana group should initially make a compliant or report any act of misconduct or suspicions through the respective channels such as through an employee's direct supervisor (manager level and above), the head of Human Resource Department of each Hana location or a suggestion/red box available at each Hana location. If employees cannot go to their respective channels, they could report to the above channels.

**Handling of Complaints** - The Company will decide how to respond in a responsible and appropriate manner. An investigation will be conducted as speedily and sensitively as possible in accordance with all relevant laws and regulations. The Internal Audit Department will report the details of complaints and investigation results to the Executive Committee or the Audit Committee and the Board depending on the complaint, dispute or issue raised.

**Protection of Reporting Individual including witness and concerned personnel** - It is a policy that the Company will not discharge, demote, suspend, threaten, harass or in any other actions against any person reporting any such complaint that made in good faith.

**Violation** - In 2023, the Board did not receive any complaints about corruption/fraud, breach of business ethics and corporate governance, a civil action or fines from SEC, human right violation or no complaint that damage to the Company's reputation due to the administration of the Board of Directors, as well as no legal dispute concerning labour, human rights, and the environment.

The Company's Whistleblowing Policy has been disclosed both in Thai and English on the Company website ([www.hanagroup.com](http://www.hanagroup.com)) under section Investors Relation > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Whistleblowing Policy.

## 8.2 Report of the Audit Committee

The detail is shown in Attachment 6.

## 8.3 Report of Other Sub-committees

The detail is shown in Attachment 6.

## 9. Internal Control and Related Party Transactions

### 9.1 Internal Control

The Board of Directors is responsible for establishing and maintaining the internal control system. The Board has appointed the Audit Committee to review the appropriateness and effectiveness of the internal control system provided by management. The Audit Committee shall ensure that such existing internal control systems achieve their objectives and that they should provide reasonable assurance concerning the accuracy of financial statements, the safeguard of assets against loss, unauthorized use or fraud, and the assurance of transactions that are executed consistent with the Company's policies and procedures.

In 2023, the Board has performed self-assessment to evaluate the internal control system by applying the control assessment criteria from the Stock Exchange of Thailand. There are an Internal Audit Department and a Compliance Unit to monitor and oversee the overall company activities in line with established system and applicable laws and regulations. The Risk Management Committee has been appointed to ensure implementation of the risk management policy to be monitored and limited overall risks at an acceptable level.

From the Board of Directors' Meeting No. 6 held on 7 December 2023 with the Audit Committee attended the meeting, the Board assessed the Company's internal control system based on 5 components of COSO's Internal Control Integrated Framework which are Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring Activities.

The Board agreed with the Audit Committee that the existing internal control system is considered appropriate and adequate as summarized below.

#### 1. Control Environment

The Company has established organization structure, line of control, approval authorities for different managerial levels, and the charters of various committees to assist in discharging duties and responsibilities of the Board of Directors. The policies on corporate governance, code of conduct, anti-corruption policy and the operation policies and procedures are written as guidelines for directors, executive and employees to perform their duties with integrity.

#### 2. Risk Assessment

The Risk Management Committee has been appointed to ensure implementation of the risk management policy to be monitored and limited overall risks at an acceptable level. Substantial risks are identified in consideration of both internal and external factors and prioritization based on the impact and likelihood of identified risks for further suitable risk mitigations. The Company also considers the potential for fraud in assessing risks to the achievement of objectives. The Company's risk profile has been reviewed by the Risk Management Committee and proposed to the Board regularly whereas the risk management policy has been reviewed annually.

#### 3. Control Activities

The Company develops general control activities to mitigate risks such as the segregation of duties among approval, accounting booking and asset's custody, the security control of information technology system, the policy to approve transactions done by people who have no interest in the transactions.

#### 4. Information and Communication

The Company's management provides the Board with adequate information for decisions and sends the notice or document to the Board in advance for their preparation. Board meeting minutes could be able to track back concerning the duties of the directors. The Company has the whistleblower channels for internal and external parties.

#### 5. Monitoring Activities

The appropriateness and adequacy of internal control is monitored regularly through a combination of management review, self-assessment, Compliance Unit and internal & external auditors. The results of internal & external audit and compliance reviews are reported to the Audit Committee on a regular basis. The Audit Committee also approves the Internal Audit Department and Compliance Unit plans.

#### 6. Different Opinion between the Audit Committee and the Board of Directors regarding the Internal Control

None

#### 7. Internal Audit Department

The Audit Committee has appointed Ms. Jirapa Kongmanee to the position of Head of Internal Audit Department from 10 September 1999 due to having adequate experiences in internal audit field and having been trained in the training courses related to the scope of internal audit such as Internal Audit Role in Governance, Risk and Control, Business Management Skills, Business Analysis and Information Technology, COSO Internal Control Framework, including training courses related to the new laws and new accounting standards, and she understands the activities and operations of the Company therefore she was regarded as appropriate to perform such duties properly and adequately. The Internal Audit Department has a reporting line to the Audit Committee who considers and approves the appointment, transfer and dismissal of the department head. More profile details of the Head of Internal Audit Department appear in Attachment 3.

#### 8. Compliance Unit

The Board of Directors' Meeting No. 5 held on 13 November 2013 has appointed Ms. Jirapa Kongmanee to the position of Head of Compliance Unit to be responsible for overseeing the business operations of Hana group in accordance with the laws, rules and regulations of the relevant authorities. Profile details of the Head of Compliance Unit also appear in Attachment 3.

#### 9.2 Related Party Transactions

According to Note 7 on related party transactions of the consolidated financial statements for the year ended 31 December 2023, relevant details of related party transactions entered into by the Company and its subsidiaries were disclosed. Those related party transactions were entered into the ordinary course of business between the Company and its subsidiaries and such transactions have been conducted with fair and at arms' length on commercial terms.





As 31 December 2023, Hana Microelectronics Public Co., Ltd. has business transactions with related parties as follows:

Transactions	Total amount (Million Baht)	Counterparty	Transaction amount (Million Baht)	Relationships	Pricing policy
Sales of goods	163	Hana Technologies, Inc.	161	Subsidiary	Prices agreed between the parties due to the uniqueness of products sold to each customer
		Hana Microelectronics (Cambodia) Co., Ltd.	2	Subsidiary	
Sales of assets	4	Hana Microelectronics (Cambodia) Co., Ltd.	3	Subsidiary	Cost plus mark up
		Hana Semiconductor (Ayutthaya) Co., Ltd.	1	Subsidiary	
Dividend income	240	Hana Semiconductor (Ayutthaya) Co., Ltd.	140	Subsidiary	Declared rates according to the resolutions of the Board of Directors Meetings
		Hana Semiconductor (BKK) Co., Ltd.	100	Subsidiary	
Guarantee fee income	2	Power Master Semiconductor Co., Ltd.	2	Subsidiary	0.5 percent per annum
Purchase of materials	321	Hana Semiconductor (Ayutthaya) Co., Ltd.	11	Subsidiary	Cost plus mark up
		Hana Semiconductor International Ltd.	239	Subsidiary	
		Omac Sales Ltd.	69	Subsidiary	
		Hana Microelectronics (Cambodia) Co., Ltd.	2	Subsidiary	
Purchase of assets	2	Hana Semiconductor (Ayutthaya) Co., Ltd.	2	Subsidiary	Cost plus mark up
Marketing service fee expense	9	Hana Microelectronics, Inc.	9	Subsidiary	Rates stipulated in the agreement
Service fee expense	2	Omac Sales Ltd.	2	Subsidiary	Cost plus mark up

In 2023, there was no related party transaction between the Company or its subsidiaries and connect persons who may have conflicts of interest or any other situations which could be against the best interest of the Company and its shareholders (as regulated by the Securities and Exchange Commission or the Stock Exchange of Thailand).

### Procedures for Related Party Transactions

In case of normal business transactions made with related parties under Section 89/12 (1) as required by the Securities and Exchange Act such as general trading conditions or transactions that support the normal course of business, such transactions shall be approved by the Board of Directors or in compliance with the principle approved by the Board of Directors.

For related party transaction that may have a potential conflict of interest, the Audit Committee shall review and approve by the Board. In case that there is any transaction which has or may have the conflicts of interests of directors or related persons, such directors or related persons having aforementioned interests shall inform foresaid transaction to the Board and abstain from voting in that agenda.

In addition, the Company and its subsidiaries shall comply with the notifications and regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand. The related party transactions which the Company discloses on the note in financial statements shall be presented and considered by the Audit Committee quarterly in order to prevent potential conflicts of interest.

Any material related party transactions required shareholders' approval under the notification of the Stock Exchange of Thailand, the Company shall disclose the details and rationale of the transactions to shareholders in advance before execution with the below minimum disclosures:

1. The name and relationship of the person who has conflicts of interest
2. The nature and volume of transactions during the year, as well as the continuous transactions or time by time transactions
3. The reasons to engage the transaction with a person who may have conflicts of interest, the benefit to shareholders, and how fair and reasonable pricing policy and commercial terms are fair and reasonable.
4. The opinions of the Audit Committee

The transaction shall be approved by the shareholders' meeting and shareholders who have interest in foresaid transaction have no right to vote on such resolution so the decision shall be made by disinterested shareholders.

### Investor Protection

When there is any related transaction between the Company or its subsidiaries, and the related parties in the future, the transaction shall be approved by the Board of Directors, which has the Audit Committee providing its opinion for the necessity and the appropriateness of the transactions and how utmost benefits to the Company. Directors who have vested interests in such transactions shall have no right to vote. If the Audit Committee doesn't have an expertise in the matter of such transactions, the Company shall provide an independent expert or the Company's auditor to provide an opinion for decision by the Board or shareholders in making the transactions, as any case may be. The Company shall also disclose the transactions in the notes of the financial statements audited by the Company's auditor.



### Policy of Related Transactions in Future

The policies of the Company and its subsidiaries regarding related transactions in future shall be in compliance with the Securities and Exchange Act, the regulations of the Stock Exchange of Thailand and compliance to the requirements regarding the disclosure of the connected transactions and acquisition or disposal of the Company's assets.

The Company's policy is to operate business in the best interest of the Company and its subsidiaries. The Company and its subsidiaries have engaged into the normal business transactions. As such, the related transactions shall be done under the normal course of business conditions with fair and at market prices.

### Opinion of the Audit Committee

The Audit Committee has considered the previous and current related transactions between the Company and its subsidiaries or the related parties or transactions that may have conflicts of interest, and has the opinion that the Company has disclosed the information correctly and completely. Such transactions were under the normal business conditions with fair and at arms' length.

## Report of the Board of Directors' Responsibilities for Financial Statements



The Board of Directors is responsible for the preparation of financial statements in accordance with generally accepted accounting principles and the adoption of appropriate accounting policies on a consistent basis including using judgment carefully and reasonably in preparation of financial statement. The important information is adequately disclosed in the notes to financial statement. The necessary clarification and analysis regarding the financial positions and performances of the Company and its subsidiaries have been provided for the interests of shareholders and investors.

The maintenance of the internal control system and risk management system are the responsibilities of the Board to reasonably assure that assets are safeguarded from unauthorized use or disposition and that the accounting records are sufficiently reliable to permit the preparation of financial statements that conform in all material respects with generally accepted accounting principles.

The Board of Directors has appointed an Audit Committee. The Audit Committee meets during the year to review with management and the auditors any significant accounting, internal control, and auditing matters.

The Board is of the opinion that the financial statements of Hana Microelectronics Public Company Limited and its subsidiaries for the year ended December 2023 are materially accurate, complete, and reliable.

A handwritten signature in black ink, appearing to read 'John Thompson'.

Mr. John Thompson  
Chairman of the Board of Directors

A handwritten signature in black ink, appearing to read 'Richard David Han'.

Mr. Richard David Han  
Executive Vice Chairman and  
Chief Executive Officer

# Independent Auditor's Report

## To the Shareholders of Hana Microelectronics Public Company Limited

### Opinion

I have audited the accompanying consolidated financial statements of Hana Microelectronics Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2023, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of Hana Microelectronics Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Hana Microelectronics Public Company Limited and its subsidiaries and of Hana Microelectronics Public Company Limited as at 31 December 2023, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

### Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

The key audit matters and how audit procedures respond for each matter are described below.

#### *Revenue recognition*

Revenue from sales are the accounting transactions that have significant volume of transactions and amounts, and directly affect profit or loss of the Group. The majority of the Group's sales transactions are conducted with a number of major overseas customers under a variety of arrangements and conditions which may impact the recognition of revenue of the Group causing risks with respect to the amount and timing of such revenue recognition.

I examined the revenue recognition of the Group by

- Assessing and testing the Group's internal controls with respect to the revenue cycle by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operation of the designed controls.
- Applying a sampling method to select sales to assess whether revenue recognition was consistent with the conditions or arrangement made with the customers, and whether it was in compliance with the Group's policy.
- On a sampling basis, examining supporting documents for actual sales transactions occurring during the year and near the end of the accounting period.
- Requesting for confirmations of consignment inventory balances located at customers' hubs at the end of the accounting period and on a sampling basis, examining supporting documents whether the consignment inventories were correctly excluded from sales for the year.
- Reviewing of credit notes that the Group issued after the end of the accounting period.



## Independent Auditor's Report

- Performing analytical procedures of disaggregated data to detect possible irregularities in sales transactions throughout the period, particularly for accounting entries made through journal vouchers.

### *Inventories*

Estimating the net realisable value of inventory, as disclosed in the related accounting policies in Note 4.3 and Note 5.1 to the financial statements, is an area requiring significant management judgement, particularly with regard to the estimation of allowance for diminution in the value of slow-moving and obsolete inventory. This requires detailed analysis of the product life cycle, the competitive environment, economic circumstances and the situation within the high-technology industry. There is a risk with respect to the amount of provision set aside for diminution in the value of inventory.

I assessed and tested the Group's internal controls relevant to the determination of provision for diminution in the value of inventory by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operations of the designed controls. In addition, I also assessed the method and the assumptions applied by management in determining such provision. The procedures that I performed included:

- Gaining an understanding of the basis applied in determining the provision for diminution in value of inventory and reviewing the consistency of the application of that basis, and the rationale for the recording of specific provisions.
- Comparing the inventory holding periods and inventory movements to identify product lines with indicators of lower than normal inventory turnover.
- Comparing details of sales transactions occurring after the date of the financial statements with the cost of inventory for each product line.
- Comparing historical data of actual losses on sales and write-offs of inventory during each of the previous years with the provision for diminution in value of inventory recorded at the preceding year-end.

### *Provision for long-term employee benefits*

The valuation of long-term employee benefit obligations is one of significant accounting estimates

to the financial statements because the Group has a large number of employees and has defined benefit plans as discussed in the related accounting policies in Note 4.13 and Note 5.3 to the financial statements. In addition, the calculation of long-term employee benefit obligations requires the management to select the calculation method and exercise a high degree of judgement in determining appropriate assumptions such as discount rates, future salary increases, mortality rates and staff turnover rates. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty. There is therefore a risk with respect to the amounts of the provision for long-term employee benefits.

I assessed and tested the Group's internal controls with respect to the assessment of provision for long-term employee benefits by making enquiry of responsible executives, gaining an understanding of internal controls and testing the method and significant assumptions both demographic and financial aspects used by the management to calculate the long-term employee benefit obligations and considering the impact of changes in key assumptions on the valuation of long-term employee benefit obligations. In addition, I reviewed the disclosure in the notes to the financial statements with respect to the provision for long-term employee benefits.

### **Other Information**

Management is responsible for the other information. The other information comprises the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon. The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

## Independent Auditor's Report

### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

### Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.


I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

## Independent Auditor's Report

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.

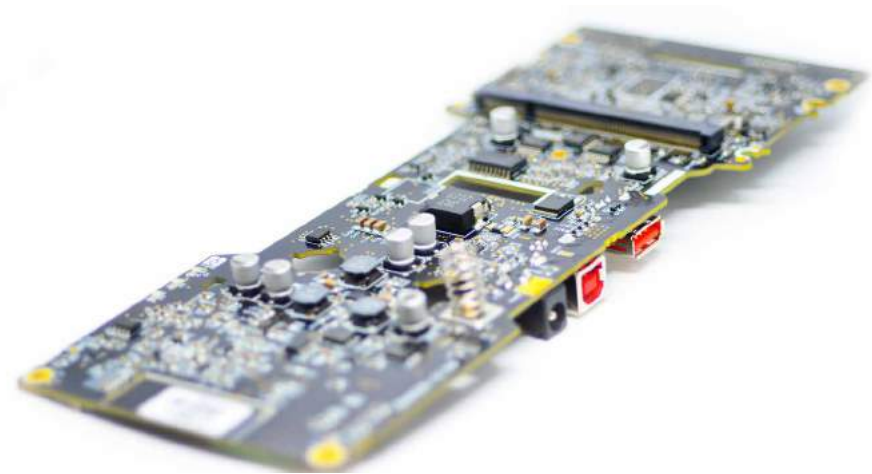


Kamontip Lertwitworatep

Certified Public Accountant (Thailand) No. 4377

EY Office Limited

Bangkok: 27 February 2024



## Statements of financial position

Hana Microelectronics Public Company Limited and its subsidiaries as at 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	6	6,954,416,159	2,374,707,590	4,986,595,129	239,247,683
Trade and other receivables	7, 8	5,178,140,817	4,981,040,956	2,540,679,369	2,101,776,357
Inventories	9	8,969,347,441	9,456,927,941	3,896,501,970	4,199,807,992
Other current financial assets	10	1,938,097,168	1,259,382,804	-	-
Other current assets		119,368,279	171,171,278	18,038,937	25,279,694
<b>Total current assets</b>		<b>23,159,369,864</b>	<b>18,243,230,569</b>	<b>11,441,815,405</b>	<b>6,566,111,726</b>
<b>Non-current assets</b>					
Investments in subsidiaries	11	-	-	4,129,629,264	3,583,449,264
Investment property	12	72,303,750	72,303,750	72,303,750	72,303,750
Property, plant and equipment	13	11,701,474,654	10,853,453,227	2,134,006,492	2,185,609,253
Intangible assets	14	328,983,403	403,129,123	41,264,281	46,615,510
Other non-current financial assets	15	150,000	151,800	97,000	97,000
Deferred tax assets	27	18,653,072	10,643,216	12,391,098	4,673,322
Other non-current assets		25,022,161	120,496,046	516,905	10,000
<b>Total non-current assets</b>		<b>12,146,587,040</b>	<b>11,460,177,162</b>	<b>6,390,208,790</b>	<b>5,892,758,099</b>
<b>Total assets</b>		<b>35,305,956,904</b>	<b>29,703,407,731</b>	<b>17,832,024,195</b>	<b>12,458,869,825</b>

The accompanying notes are an integral part of the financial statements.

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
<b>Liabilities and shareholders' equity</b>					
<b>Current liabilities</b>					
Short-term loans from financial institutions	16	1,076,407,950	-	-	-
Short-term loan from related party	7	-	-	-	200,000,000
Trade and other payables	7, 17	3,390,545,998	4,160,840,943	1,168,669,146	1,492,683,675
Current portion of long-term loans from financial institution	20	24,035,500	-	-	-
Current portion of lease liabilities	18	4,990,258	273,842,643	-	-
Short-term provisions	19	342,233,000	345,624,000	-	-
Income tax payable		50,816,390	68,760,559	16,590,626	9,607,761
Derivative liabilities		-	17,213,734	-	-
Other current liabilities		145,024,991	161,054,933	32,489,322	32,731,312
<b>Total current liabilities</b>		<b>5,034,054,087</b>	<b>5,027,336,812</b>	<b>1,217,749,094</b>	<b>1,735,022,748</b>
<b>Non-current liabilities</b>					
Long-term loans from financial institution					
- net of current portion	20	203,340,330	-	-	-
Lease liabilities - net of current portion	18	732,858	480,545	-	-
Deferred income		124,586,707	59,874,606	-	-
Deferred tax liabilities	27	30,570,404	44,180,452	-	-
Provision for long-term employee benefits	21	765,952,019	709,393,316	368,265,776	348,390,532
<b>Total non-current liabilities</b>		<b>1,125,182,318</b>	<b>813,928,919</b>	<b>368,265,776</b>	<b>348,390,532</b>
<b>Total liabilities</b>		<b>6,159,236,405</b>	<b>5,841,265,731</b>	<b>1,586,014,870</b>	<b>2,083,413,280</b>

## Statements of financial position (Cont.)

Hana Microelectronics Public Company Limited and its subsidiaries as at 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Shareholders' equity					
Share capital					
Registered	22				
885,366,746 ordinary shares of Baht 1 each (2022: 974,403,900 ordinary shares of Baht 1 each)		885,366,746	974,403,900	885,366,746	974,403,900
Issued and fully paid-up					
885,366,660 ordinary shares of Baht 1 each (2022: 804,878,860 ordinary shares of Baht 1 each)		885,366,660	804,878,860	885,366,660	804,878,860
Share premium		6,230,535,782	1,723,218,982	6,230,535,782	1,723,218,982
Capital reserve for share-based payment transactions	23	40,449,982	-	-	-
Retained earnings					
Appropriated - statutory reserve	24	541,627,153	536,312,739	100,000,000	100,000,000
Unappropriated		21,130,039,200	20,234,096,439	9,030,106,883	7,747,358,703
Other components of shareholders' equity		318,701,722	563,634,980	-	-
<b>Total shareholders' equity</b>		<b>29,146,720,499</b>	<b>23,862,142,000</b>	<b>16,246,009,325</b>	<b>10,375,456,545</b>
<b>Total liabilities and shareholders' equity</b>		<b>35,305,956,904</b>	<b>29,703,407,731</b>	<b>17,832,024,195</b>	<b>12,458,869,825</b>

The accompanying notes are an integral part of the financial statements.



## Income statements

### Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
<b>Revenues</b>					
Sales	29, 30	26,152,116,286	27,167,162,849	12,474,673,507	11,272,767,989
Dividend income	11	83,250	2,252,452	240,083,230	440,071,968
Gain on exchange		41,283,448	-	67,838,102	64,087,755
Gain on derivatives		-	30,253,082	-	-
Other income		438,666,051	455,838,992	53,120,268	66,829,956
<b>Total revenues</b>		<b>26,632,149,035</b>	<b>27,655,507,375</b>	<b>12,835,715,107</b>	<b>11,843,757,668</b>
<b>Expenses</b>	26				
Cost of sales		23,172,094,053	23,506,161,074	10,343,192,926	9,313,890,455
Selling and distribution expenses		210,411,575	211,836,640	65,320,335	63,031,825
Administrative expenses		1,420,777,686	1,482,755,910	299,898,294	290,742,411
Loss on exchange		-	319,832,105	-	-
Loss on derivatives		49,418,425	-	-	-
Reversal of impairment loss on financial assets	10	(21,456,192)	(3,528,531)	-	-
Loss on FVTPL equity instruments		-	10,185,735	-	-
<b>Total expenses</b>		<b>24,831,245,547</b>	<b>25,527,242,933</b>	<b>10,708,411,555</b>	<b>9,667,664,691</b>

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
<b>Operating profit</b>		<b>1,800,903,488</b>	<b>2,128,264,442</b>	<b>2,127,303,552</b>	<b>2,176,092,977</b>
Finance income	25	96,965,468	93,695,610	19,150,386	422,228
Finance cost		(51,833,631)	(12,508,918)	(3,429,793)	(4,824,985)
<b>Profit before income tax expenses</b>		<b>1,846,035,325</b>	<b>2,209,451,134</b>	<b>2,143,024,145</b>	<b>2,171,690,220</b>
Income tax expenses	27	(85,468,004)	(107,379,729)	(19,594,973)	(15,529,069)
<b>Profit for the year</b>		<b>1,760,567,321</b>	<b>2,102,071,405</b>	<b>2,123,429,172</b>	<b>2,156,161,151</b>
<b>Profit attributable to:</b>					
Equity holders of the Company		<b>1,760,567,321</b>	<b>2,102,071,405</b>	<b>2,123,429,172</b>	<b>2,156,161,151</b>
<b>Earnings per share</b>	28				
Basic earnings per share					
Profit attributable to equity holders of the Company		2.14	2.61	2.59	2.68
<b>Number of weighted average ordinary shares (shares)</b>		<b>821,196,935</b>	<b>804,878,860</b>	<b>821,196,935</b>	<b>804,878,860</b>

The accompanying notes are an integral part of the financial statements.

## Statements of comprehensive income

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Profit for the year		1,760,567,321	2,102,071,405	2,123,429,172	2,156,161,151
Other comprehensive income:					
Other comprehensive income to be reclassified to profit or loss in subsequent periods:					
Exchange differences on translation of financial statements in foreign currency - net of income tax	27	(259,191,109)	116,378,766	-	-
Gain (loss) on changes in value of debt instruments designated at fair value through other comprehensive income - net of income tax		14,257,851	(223,829,171)	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods - net of income tax		(244,933,258)	(107,450,405)	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods					

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Actuarial gain (loss) - net of income tax	21, 27	(14,187,386)	16,745,868	4,441,768	(14,958,188)
Other comprehensive income not to be reclassified to profit or loss in subsequent periods - net of income tax		(14,187,386)	16,745,868	4,441,768	(14,958,188)
Other comprehensive income for the year		(259,120,644)	(90,704,537)	4,441,768	(14,958,188)
Total comprehensive income for the year		1,501,446,677	2,011,366,868	2,127,870,940	2,141,202,963
Total comprehensive income attributable to:					
Equity holders of the Company		1,501,446,677	2,011,366,868	2,127,870,940	2,141,202,963

The accompanying notes are an integral part of the financial statements.

## Statements of cash flows

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Cash flows from operating activities</b>				
Profit before tax	1,846,035,325	2,209,451,134	2,143,024,145	2,171,690,220
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation	1,636,406,249	1,528,085,900	360,345,314	356,938,694
Amortisation expenses	65,889,637	101,741,414	8,676,009	8,678,965
Allowance for expected credit losses	2,674,872	2,174,515	-	-
Reduction of inventories to net realisable value	404,020,094	26,361,971	116,753,636	38,901,032
Write-off obsolete and damaged inventories	30,279,573	39,286,370	30,279,573	39,286,369
Dividend income from subsidiaries	-	-	(239,999,980)	(439,999,968)
Dividend income from other companies	(83,250)	(2,252,452)	(83,250)	(72,000)
Loss (gain) on disposals/write-off of equipment and intangible assets	25,935,249	1,315,022	3,180,159	(1,263,308)
Allowance for impairment loss on assets (reversal)	-	(1,292,586)	-	-
Expenses for share-based payment transactions	40,449,982	-	-	-

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Provision for vacation (reversal)	477,141	(3,891,331)	(333,641)	(1,740,974)
Provision for long-term employee benefits	64,402,195	59,854,193	32,810,659	29,029,717
Loss on sales of debt instruments at fair value through other comprehensive income	709,351	56,987,291	-	-
Loss on fair value adjustments of financial instruments	-	10,185,735	-	-
Reversal of allowance for impairment loss on other current financial assets	(21,456,192)	(3,528,531)	-	-
Unrealised loss on exchange	18,138,576	93,391,621	7,722,394	77,640,998
Unrealised loss (gain) on derivatives	49,418,425	(30,253,082)	-	-
Finance income	(96,965,468)	(93,695,610)	(19,150,386)	(422,228)
Finance cost	44,218,230	3,808,787	661,370	1,666,986
Profit from operating activities before changes in operating assets and liabilities	4,110,549,989	3,997,730,361	2,443,886,002	2,280,334,503

The accompanying notes are an integral part of the financial statements.

## Statements of cash flows (Cont.)

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Operating assets (increase) decrease				
Trade and other receivables	(195,781,567)	(536,317,247)	(433,791,913)	(555,225,639)
Inventories	53,280,833	(2,666,003,833)	156,272,813	(759,766,852)
Other current assets	51,013,400	(4,611,502)	7,238,256	13,171,696
Operating liabilities increase (decrease)				
Trade and other payables	(670,729,953)	598,177,354	(317,377,629)	(69,573,671)
Other current liabilities	(16,507,083)	4,536,240	91,651	8,937,947
Deferred income	64,712,101	59,874,606	-	-
Cash from operating activities	3,396,537,720	1,453,385,979	1,856,319,180	917,877,984
Cash paid for long-term employee benefits	(21,946,054)	(52,700,308)	(8,408,822)	(28,219,990)
Cash paid for income tax	(124,300,595)	(58,970,280)	(20,414,709)	(16,051,681)
<b>Net cash from operating activities</b>	<b>3,250,291,071</b>	<b>1,341,715,391</b>	<b>1,827,495,649</b>	<b>873,606,313</b>
Cash flows from investing activities				

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Decrease (increase) in other current financial assets	(2,037,345,416)	562,685,815	-	-
Cash paid for investment in subsidiary	-	-	(546,180,000)	-
Decrease in long-term fixed deposit	1,800	1,800	-	-
Interest received	90,621,328	108,486,911	10,077,993	427,284
Proceeds from sales of financial instruments	1,327,003,584	632,619,062	-	-
Dividend income from subsidiaries	-	-	239,999,980	439,999,968
Dividend income from other companies	83,250	2,252,452	83,250	72,000
Acquisitions of property, plant and equipment and intangible assets	(2,653,934,812)	(2,491,394,839)	(328,930,923)	(325,944,832)
Acquisition of asset under lease agreement	(269,496,094)	-	-	-
Proceeds from disposals of equipment	34,974,544	20,852,401	3,515,877	14,232,997
Decrease (increase) in other non-current assets	95,473,885	(4,462,794)	(506,905)	-
<b>Net cash from (used in) investing activities</b>	<b>(3,412,617,931)</b>	<b>(1,168,959,192)</b>	<b>(621,940,728)</b>	<b>128,787,417</b>

The accompanying notes are an integral part of the financial statements.

## Statements of cash flows (Cont.)

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Cash flows from financing activities</b>				
Increase in short-term loans from financial institutions	1,945,416,600	-	-	-
Repayment of short-term loans from financial institutions	(803,881,750)	-	-	-
Increase (decrease) in short-term loan from related party	-	-	(200,000,000)	200,000,000
Cash receipt from long-term loans	238,734,740	-	-	-
Repayment of long-term loans	(2,403,550)	-	-	-
Payment of principal portion of lease liabilities	(9,548,960)	(10,078,568)	-	-
Proceeds from share capital increase	4,587,804,600	-	4,587,804,600	-
Interest paid	(37,988,036)	(934,932)	(889,315)	(1,414,383)
Dividend paid	(845,122,760)	(1,207,318,290)	(845,122,760)	(1,207,318,290)
<b>Net cash from (used in) financing activities</b>	<b>5,073,010,884</b>	<b>(1,218,331,790)</b>	<b>3,541,792,525</b>	<b>(1,008,732,673)</b>
Increase (decrease) in cash and cash equivalents	4,910,684,024	(1,045,575,591)	4,747,347,446	(6,338,943)
Translation adjustment	(330,975,455)	116,110,479	-	-

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>4,579,708,569</b>	<b>(929,465,112)</b>	<b>4,747,347,446</b>	<b>(6,338,943)</b>
Cash and cash equivalents at beginning of year	2,374,707,590	3,304,172,702	239,247,683	245,586,626
<b>Cash and cash equivalents at end of year (Note 6)</b>	<b>6,954,416,159</b>	<b>2,374,707,590</b>	<b>4,986,595,129</b>	<b>239,247,683</b>
<b>Supplemental cash flow information</b>				
Non-cash related transactions from investing activities				
Net increase (decrease) in accounts payable for purchases of plant and equipment	(124,184,189)	58,092,789	(10,167,554)	25,996,976
Revaluation gain (loss) on changes in fair value of debt instruments at FVOCI	14,257,851	(223,829,170)	-	-
Increase in right-of-use assets from lease agreements	7,330,763	273,225,277	-	-

The accompanying notes are an integral part of the financial statements.



# Statements of changes in shareholders' equity

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements								
		Issued and paid up share capital	Share premium	Capital reserve for share-based payment	Retained earnings		Other components of shareholders' equity			Total shareholders' equity
							Other comprehensive income		Total other components of shareholders' equity	
					Appropriated - Statutory reserve	Unappropriated	Fair value reserve of financial assets at FVOCI	Exchange differences on translation of financial statements in foreign currency		
Balance as at 1 January 2022	32	804,878,860	1,723,218,982	-	514,957,656	19,343,952,539	214,535,272	456,550,113	671,085,385	23,058,093,422
Profit for the year		-	-	-	-	2,102,071,405	-	-	-	2,102,071,405
Other comprehensive income for the year		-	-	-	-	16,745,868	(223,829,171)	116,378,766	(107,450,405)	(90,704,537)
Total comprehensive income for the year		-	-	-	-	2,118,817,273	(223,829,171)	116,378,766	(107,450,405)	2,011,366,868
Dividend paid		-	-	-	-	(1,207,318,290)	-	-	-	(1,207,318,290)
Unappropriated retained earnings transferred to statutory reserve		-	-	-	21,355,083	(21,355,083)	-	-	-	-
Balance as at 31 December 2022		804,878,860	1,723,218,982	-	536,312,739	20,234,096,439	(9,293,899)	572,928,879	563,634,980	23,862,142,000
Balance as at 1 January 2023	22	804,878,860	1,723,218,982	-	536,312,739	20,234,096,439	(9,293,899)	572,928,879	563,634,980	23,862,142,000
Profit for the year		-	-	-	-	1,760,567,321	-	-	-	1,760,567,321
Other comprehensive income for the year		-	-	-	-	(14,187,386)	14,257,851	(259,191,109)	(244,933,258)	(259,120,644)
Total comprehensive income for the year		-	-	-	-	1,746,379,935	14,257,851	(259,191,109)	(244,933,258)	1,501,446,677
Share capital increase		80,487,800	4,507,316,800	-	-	-	-	-	-	4,587,804,600
Recognition of expenses against capital reserve for share-based payment transactions		23	-	-	40,449,982	-	-	-	-	40,449,982
Dividend paid		32	-	-	-	-	(845,122,760)	-	-	(845,122,760)
Unappropriated retained earnings transferred to statutory reserve		-	-	-	5,314,414	(5,314,414)	-	-	-	-
Balance as at 31 December 2023		885,366,660	6,230,535,782	40,449,982	541,627,153	21,130,039,200	4,963,952	313,737,770	318,701,722	29,146,720,499

The accompanying notes are an integral part of the financial statements.

## Statements of changes in shareholders' equity (Cont.)

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Baht)

	Note	Separate financial statements				
		Issued and paid up share capital	Share premium	Retained earnings		Total shareholders' equity
				Appropriated Statutory reserve	Unappropriated	
Balance as at 1 January 2022		804,878,860	1,723,218,982	100,000,000	6,813,474,030	9,441,571,872
Profit for the year		-	-	-	2,156,161,151	2,156,161,151
Other comprehensive income for the year		-	-	-	(14,958,188)	(14,958,188)
Total comprehensive income for the year		-	-	-	2,141,202,963	2,141,202,963
Dividend paid	32	-	-	-	(1,207,318,290)	(1,207,318,290)
Balance as at 31 December 2022		804,878,860	1,723,218,982	100,000,000	7,747,358,703	10,375,456,545
Balance as at 1 January 2023		804,878,860	1,723,218,982	100,000,000	7,747,358,703	10,375,456,545
Profit for the year		-	-	-	2,123,429,172	2,123,429,172
Other comprehensive income for the year		-	-	-	4,441,768	4,441,768
Total comprehensive income for the year		-	-	-	2,127,870,940	2,127,870,940
Share capital increase	22	80,487,800	4,507,316,800	-	-	4,587,804,600
Dividend paid	32	-	-	-	(845,122,760)	(845,122,760)
Balance as at 31 December 2023		885,366,660	6,230,535,782	100,000,000	9,030,106,883	16,246,009,325

The accompanying notes are an integral part of the financial statements.

# Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

## 1. General information

Hana Microelectronics Public Company Limited (“the Company”) was incorporated as a limited company under Thai law and transformed to be a public limited company under the Public Limited Companies Act on 27 January 1993. The Company operates its business in Thailand and is principally engaged in the manufacture and trading of electronic components. The registered office of the Company is at 65/98, Soi Vibhavadi-Rangsit 64, Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok.

## 2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

### 2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of Hana Microelectronics Public Company Limited (“the Company”) and the following subsidiary companies (“the subsidiaries”) (collectively as “the Group”):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2023	2022
			Percent	Percent
<u>Held by the Company</u>				
Hana Semiconductor (Ayutthaya) Company Limited	Manufacture and trading of electronic components	Thailand	58	58
Hana Semiconductor (BKK) Company Limited	Holding company	Thailand	100	100
Omac Sales Limited	Purchasing of electronic components and equipment	Hong Kong	100	100
Hana Microelectronics International Company Limited	Holding company	British Virgin Islands	100	100
Hana Microelectronics Investments Company Limited	Holding company	British Virgin Islands	100	100
Hana Microelectronics (Cambodia) Company Limited	Manufacture and trading of electronic components	Cambodia	100	100
<u>Held through the subsidiaries</u>				
Hana Semiconductor (Ayutthaya) Company Limited	Manufacture and trading of electronic components	Thailand	42	42
Hana Semiconductor International Limited	Trading of electronic components	British Virgin Islands	100	100
Hana Microelectronics Enterprises Company Limited	Holding company	British Virgin Islands	100	100
Hana Technologies, Inc.	Manufacture and trading of electronic components	USA	100	100
Hana Microelectronics, Inc.	Agent and customer services	USA	100	100
Hana Macao Commercial Offshore Limited	Customer services	Macao	100	100
Hana Microelectronics (Jiaxing) Company Limited	Manufacture and trading of electronic components	China	100	100
Power Master Semiconductor Company Limited	Manufacture and trading of electronic components	South Korea	100	100

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
- c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
- e) The assets and liabilities in the financial statements of overseas subsidiary companies are translated to Thai Baht using the exchange rate prevailing on the end of reporting period, and revenues and expenses translated using monthly average exchange rates. The resulting differences are shown under the caption of "Exchange differences on translation of financial statements in foreign currency" in the statements of changes in shareholders' equity.
- f) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.

- 2.3 The separate financial statements present investments in subsidiaries under the cost method.

### 3. New financial reporting standards

#### 3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

#### 3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2024

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

### 4. Significant accounting policies

#### 4.1 Revenue and expense recognition

##### *Sales of goods*

Revenue from sales of goods is recognised at the point in time when control of the asset is transferred to the customer, generally upon delivery of the goods. Revenue is measured at the amount of the consideration received or receivable, excluding value added tax, of goods supplied after deducting returns, discounts, allowances.

##### *Interest income*

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

# Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

## Dividends

Dividends are recognised when the right to receive the dividends is established.

## Finance cost

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognised on an accrual basis.

## 4.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

## 4.3 Inventories

Raw materials, work in process, and finished goods are valued at the lower of cost (under weighted average method) and net realisable value. The cost of inventories is measured using the standard cost method, which approximates actual cost. Cost of finished goods and work in process include direct materials, direct labour, and factory overheads.

Allowance for diminution in inventory value is set up for obsolete, slow-moving or deteriorated inventories.

## 4.4 Investments in subsidiaries

Investments in subsidiaries are accounted for in the separate financial statements using the cost method.

## 4.5 Investment property

Investment property in land is measured initially at cost, including transaction costs. Subsequent to initial recognition, investment property is stated at cost less allowance for loss on impairment (if any).

## 4.6 Property, plant and equipment and depreciation

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

Leasehold improvements	period of lease
Buildings	10 - 39 years
Fixtures	10 - 22 years
Other assets	3 - 33 years

Depreciation is included in determining income. No depreciation is provided on land, construction in progress and machinery under installation.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in the income statement when the asset is derecognised.

## 4.7 Intangible assets

Intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Research costs are expensed as incurred. An intangible asset arising from development expenditure on an individual project is recognised only when the Group can demonstrate the commercial and technical feasibility of completing the intangible asset and the availability to measure reliably the expenditure during the development. The cost will be amortised when the related products are commercially produced.

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to the income statement.



# Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

A summary of the intangible assets with finite useful lives is as follows:

Useful lives	
Computer software	3 - 10 years
Development costs	10 years

## 4.8 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

### The Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

### Right-of-use assets

Right-of-use assets is measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets is calculated by reference to their costs on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	50	years
Buildings	2 - 28	years
Machinery and equipment	3	years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets are presented as property, plant and equipment in the statement of financial position.

### Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounts the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

### Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 4.9 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Company, whether directly or indirectly, or which are under common control with the Company.

They also include individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors, and officers with authority in the planning and direction of the Company's operations.

### 4.10 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency. Items of each entity included in the consolidated financial statements are measured using the functional currency of that entity.

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

### 4.11 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment right-of-use assets, investment property and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in the income statement.

In the assessment of asset impairment if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the income statement.

### 4.12 Equity-settled share-based payments

The Group recognises equity-settled share-based payment transactions when services are rendered by employees, based on the fair value of the stock grants at the grant date. The expenses, together with a corresponding increase in "Capital reserve for share-based payment transactions" in shareholders' equity, are recognised over the service period as specified in the plan.

The fair value of the share-based payment transactions is determined by taking into consideration performance conditions. At the end of each reporting period, the Group reassesses its estimates of the number of stock grants that will ultimately vest.

### 4.13 Employee benefits

#### *Short-term employee benefits*

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

#### *Post-employment benefits*

##### *Defined contribution plans*

The Group and its employees have jointly established a provident fund. The fund is monthly contributed to by the employees and the Group. The fund's assets are held

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

in a separate trust fund and the Group's contributions are recognised as expenses when incurred.

### *Defined benefit plans*

The Group has obligations in respect of the severance payments they must make to employees upon retirement under labor law. The Group treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefits plans are recognised immediately in other comprehensive income.

Past service costs are recognised in the income statement on the earlier of the date of the plan amendment or curtailment and the date that the restructuring-related costs are recognised.

### *Provision for vacation*

The Group has set up provision for vacation which is calculated in accordance with the Group's policy and formula, taking into consideration the employee's salary, the number of service years and the unused vacation days.

## 4.14 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

### **Provision for product warranty**

The Group records provision for product warranty, which is estimated by reference to obligation for product warranty under manufacturing contract.

## 4.15 Government grants

Government grants are recognised when there is reasonable assurance that the grants will be received, and all attached conditions will be complied.

Grants related to assets are presented as deferred income and are recognised as income in the income statement on a straight-line basis over the useful lives of the assets.

Grants related to income are recognised as other income in the income statement.

## 4.16 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

### **Current tax**

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

### **Deferred tax**

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

# Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

## 4.17 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

### Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

#### *Financial assets at amortised cost*

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in the income statement when the asset is derecognised, modified or impaired.

#### *Financial assets at FVOCI (debt instruments)*

The Group measures financial assets at FVOCI if the financial asset is held to collect contractual cash flows and to sell the financial asset and the contractual terms of the

financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the income statement and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to the income statement.

#### *Financial assets designated at FVOCI (equity instruments)*

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive income on these financial assets are never recycled to the income statement.

Dividends are recognised as other income in the income statement, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

#### *Financial assets at FVTPL*

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognised in the income statement.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income in the income statement.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the income statement when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any discounts or premiums on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in the income statement.

### Regular way purchases and sales of financial assets

Regular way purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognised on the trade date, i.e., the date on which the Group commits to purchase or sell the asset.

### Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the income statement.

### Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.



# Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

## Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

### 4.18 Derivatives

The Group has no policy to speculate in or engage in the trading of any financial derivative instruments, other than for managing the foreign currency risk by entering into forward exchange contracts to mitigate such exposure.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and subsequently remeasured at fair value, which is determined by reliable financial institutions. Gains on losses arising from changes in the fair value of the contracts are recognised in the income statement.

### 4.19 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

## 5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

### 5.1 Allowance for diminution in inventory value

The determination of allowance for diminution in inventory value requires management to make judgements and estimates of potential inventory losses. The allowance for declining in net realisable value is estimated based on the selling price expected in the ordinary course of business less the estimated costs to complete the sale; and allowance for obsolete, slow-moving and deteriorated inventories is estimated based on the approximate aging of each type of inventories and the prevailing market condition.

### 5.2 Property plant and equipment and depreciation

In determining depreciation of plant and equipment, the management is required to make estimates of the useful lives and residual values of the plant and equipment and to review estimate useful lives and residual values when there are any changes.

In addition, the management is required to review property, plant and equipment

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

for impairment on a periodical basis and record impairment losses when it is determined that their recoverable amount is lower than the carrying amount. This requires judgements regarding forecast of future revenues and expenses relating to the assets subject to the review.

### 5.3 Post-employment benefits under defined benefit plans

The obligation under the defined benefit plan is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

### 5.4 Fair value of financial instruments

In determining the fair value of financial instruments recognised in the statement of financial position that are not actively traded and for which quoted market prices are not readily available, the management exercises judgement, using a variety of valuation techniques and models. The input to these models is taken from observable markets, and includes consideration of credit risk, liquidity, correlation and longer-term volatility of financial instruments. Change in assumptions about these factors could affect the fair value recognised in the statement of financial position and disclosures of fair value hierarchy.

## 6. Cash and cash equivalents

Cash and cash equivalents as at 31 December 2023 and 2022 as reflected in the statements of financial position and cash flows consist of the following:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Cash	1,533	1,463	257	363
Bank deposits	2,499,454	2,335,226	936,338	238,885
Fixed deposits with maturity not over 3 months	4,453,429	38,019	4,050,000	-
<b>Total cash and cash equivalents</b>	<b>6,954,416</b>	<b>2,374,708</b>	<b>4,986,595</b>	<b>239,248</b>

As at 31 December 2023, bank deposits in savings accounts and fixed deposits carried interests between 0.010 and 5.240 percent per annum (2022: 0.001 and 3.300 percent per annum).

## 7. Related party transactions

During the years, the Company had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Company and those related parties.

(Unit: Million Baht)

	Separate financial statements		Transfer pricing policy
	2023	2022	
<b>Transactions with subsidiary companies</b> (eliminated from the consolidated financial statements)			
Sales of goods	163	152	Prices agreed between the parties due to the uniqueness of products sold to each customer
Sales of assets	4	5	Cost plus mark up
Dividend income	240	440	Declared rate
Guarantee fee income	2	-	0.5 percent per annum
Purchase of materials	321	406	Cost plus mark up
Purchase of assets	2	1	Cost plus mark up
Marketing service fee expenses	9	10	Rates stipulated in the agreement
Service fee expenses	2	2	Cost plus mark up

## Notes to consolidated financial statements

### Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

As at 31 December 2023 and 2022, the balances of the accounts between the Company and those related parties are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Trade and other receivables (Note 8)</b>				
<u>Trade receivables - related parties</u>				
Subsidiaries	-	-	72,721	26,793
Total trade receivables - related parties	-	-	72,721	26,793
<u>Other receivables - related parties</u>				
Subsidiaries	-	-	5,908	4,443
Total other receivables - related parties	-	-	5,908	4,443
<b>Total trade and other receivables</b>	-	-	78,629	31,236
<b>Trade and other payables (Note 17)</b>				
<u>Trade payables - related parties</u>				
Subsidiaries	-	-	47,003	236,579
Total trade payables - related parties	-	-	47,003	236,579
<u>Other payables - related party</u>				
Subsidiary	-	-	375	583
Total other payables - related party	-	-	375	583
<b>Total trade and other payables</b>	-	-	47,378	237,162

#### Short-term loan from related party

Movements in short-term loan from related party during the year ended 31 December 2023 are summarised below.

(Unit: Thousand Baht)

	Balance as at 31 December	During the year		Balance as at 31 December
	2022	Increase	Decrease	2023
<b>Short-term loan from related party</b>				
Hana Semiconductor (BKK) Company Limited	200,000	-	(200,000)	-
<b>Total short-term loan from related party</b>	200,000	-	(200,000)	-

As at 31 December 2022, short-term loan from related party carried interest at the rate of 0.80 percent per annum and was due for repayment in May 2023.

#### Directors and management's benefits

During the years ended 31 December 2023 and 2022, the Group had employee benefit expenses payable to its directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Short-term employee benefits	146.3	149.6	19.3	16.6
Post-employment benefits	3.6	3.8	1.4	1.1
<b>Total</b>	<b>149.9</b>	<b>153.4</b>	<b>20.7</b>	<b>17.7</b>

#### Guarantee obligations with related parties

The Company has outstanding guarantee obligations with its related party, as described in Note 33.5 to the financial statements.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 8. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Age of receivable</b>				
<b>Trade receivables - subsidiaries</b>				
Not yet due	-	-	34,627	19,650
Past due				
Up to 3 months	-	-	37,758	1,136
3 - 6 months	-	-	58	1,628
6 - 12 months	-	-	278	163
Over 12 months	-	-	-	4,216
Total trade receivables - subsidiaries (Note 7)	-	-	72,721	26,793
<b>Trade receivables - unrelated parties</b>				
Not yet due	3,523,315	3,828,540	1,651,895	1,482,372
Past due				
Up to 3 months	1,322,803	925,471	718,582	514,816
3 - 6 months	45,888	31,736	35,107	19,174
6 - 12 months	20,445	97	13,560	352
Over 12 months	8,950	3,418	2,605	2,880
Total trade receivables - unrelated parties	4,921,401	4,789,262	2,421,749	2,019,594
Less: Allowance for expected credit losses	(15,964)	(13,289)	(2,492)	(2,492)
Total trade receivables - unrelated parties - net	4,905,437	4,775,973	2,419,257	2,017,102
Total trade receivables - net	4,905,437	4,775,973	2,491,978	2,043,895
<b>Other receivables</b>				
Receivables from the Revenue Department	62,012	65,335	7,237	10,367
Other receivables - subsidiaries (Note 7)	-	-	5,908	4,443
Other receivables - unrelated parties	210,692	139,733	35,556	43,071
Total other receivables	272,704	205,068	48,701	57,881
Trade and other receivables - net	5,178,141	4,981,041	2,540,679	2,101,776

The normal credit term is 30 to 60 days.

### 9. Inventories

(Unit: Thousand Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2023	2022	2023	2022	2023	2022
Finished goods	1,154,250	1,083,072	(67,434)	(38,307)	1,086,816	1,044,765
Work in process	1,233,426	1,051,116	(226,585)	-	1,006,841	1,051,116
Raw materials	7,116,070	7,386,172	(336,097)	(187,789)	6,779,973	7,198,383
Goods in transit	95,717	162,664	-	-	95,717	162,664
Total	9,599,463	9,683,024	(630,116)	(226,096)	8,969,347	9,456,928

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2023	2022	2023	2022	2023	2022
Finished goods	647,011	750,041	(35,761)	(29,197)	611,250	720,844
Work in process	248,295	272,066	-	-	248,295	272,066
Raw materials	3,224,887	3,250,624	(202,359)	(92,169)	3,022,528	3,158,455
Goods in transit	14,429	48,443	-	-	14,429	48,443
Total	4,134,622	4,321,174	(238,120)	(121,366)	3,896,502	4,199,808

Detailed movements of the reduction of cost to net realisable value are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Balance at the beginning of the year	(226,096)	(199,734)	(121,366)	(82,465)
Add: Increase during the year	(664,533)	(269,320)	(323,064)	(154,991)
Less: Reversal during the year	259,390	242,917	206,310	116,090
Add: Translation adjustment	1,123	41	-	-
Balance at the end of the year	(630,116)	(226,096)	(238,120)	(121,366)

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 10. Other current financial assets

(Unit: Thousand Baht)

	Consolidated financial statements	
	2023	2022
<u>Debt instruments at amortised cost</u>		
Fixed deposits	703,078	14,658
Total debt instruments at amortised cost	703,078	14,658
<u>Debt instruments at FVOCI</u>		
Overseas marketable corporate bonds	1,235,019	859,086
Overseas quoted bonds	-	340,462
Total	1,235,019	1,199,548
Less: Allowance for expected credit losses	-	(21,455)
Total debt instruments at FVOCI - net	1,235,019	1,178,093
<u>Financial assets at FVTPL</u>		
Derivative assets (Note 35)	-	66,632
Total financial assets at FVTPL	-	66,632
Total other current financial assets - net	1,938,097	1,259,383

As at 31 December 2023, fixed deposits with financial institutions carried interests between 0.95 and 5.80 percent per annum (2022: 0.10 and 1.45 percent per annum).

In 2023, the Group reversed provision of Baht 21.5 million for expected credit losses on its debt instruments at FVOCI (2022: Baht 3.5 million).

### 11. Investments in subsidiaries

Details of investments in subsidiaries as presented in the separate financial statements are as follows:

Company's name	Paid up capital		Shareholding percentage		Cost		Dividend received during the year	
	2023	2022	2023 Percent	2022 Percent	2023	2022	2023	2022
Hana Semiconductor (Ayutthaya) Company Limited	1,200,000	1,200,000	58	58	2,142,910	2,142,910	140,000	140,000
Hana Semiconductor (BKK) Company Limited	1,000,000	1,000,000	100	100	1,011,100	1,011,100	100,000	300,000
Omac Sales Limited	325	325	100	100	273,492	273,492	-	-
Hana Microelectronics (Cambodia) Company Limited	702,127	155,947	100	100	702,127	155,947	-	-
Hana Microelectronics International Company Limited	-	-	100	100	-	-	-	-
Hana Microelectronics Investment Company Limited	-	-	100	100	-	-	-	-
Total investments in subsidiaries					4,129,629	3,583,449	240,000	440,000

In September 2023, the Company additionally invested in 15,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, in amount of USD 15 million or equivalent to Baht 546.18 million.

As at 31 December 2023, the Company invested in 20,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, amounting to USD 20 million or equivalent to Baht 702.13 million (2022: 5,000 ordinary shares, amounting to USD 5 million or equivalent to Baht 155.95 million), representing 100% of the issued and paid-up share capital of the subsidiary.



## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 12. Investment property

The net book value of investment property, representing land, as at 31 December 2023 and 2022 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Cost	72,304	72,304	72,304	72,304
Net book value	72,304	72,304	72,304	72,304

As at 31 December 2023, the fair value of the investment property based on market price amounted to approximately Baht 96 million (2022: Baht 96 million).

### 13. Property, plant and equipment

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Net book value				
Property, plant and equipment	11,533,940	10,410,887	2,134,006	2,185,609
Right-of-use assets (Note 18)	167,535	442,566	-	-
Total	11,701,475	10,853,453	2,134,006	2,185,609



# Notes to consolidated financial statements

## Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

Movements of property, plant and equipment for the years ended 31 December 2023 and 2022 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements								
	Land	Buildings	Leasehold improvement	Fixtures	Machinery and equipment	Office furniture and equipment	Vehicles	Construction in progress and machinery under installation	Total
<b>Cost</b>									
As at 1 January 2022	501,928	4,251,594	158,190	1,034,498	17,300,632	792,803	55,782	1,908,866	26,004,293
Additions	-	273,120	11,779	33,803	1,424,942	47,949	9,962	1,074,496	2,876,051
Disposals	-	-	-	-	(288,539)	(9,565)	(7,206)	-	(305,310)
Transfer in (out)	-	217,612	(5,522)	146,740	1,752,459	74,025	-	(2,185,314)	-
Translation adjustment	4,981	(32,527)	(4,733)	(178)	(183,305)	(3,864)	(341)	(55,421)	(275,388)
As at 31 December 2022	506,909	4,709,799	159,714	1,214,863	20,006,189	901,348	58,197	742,627	28,299,646
Additions	53,142	51,608	8,911	31,808	642,819	36,302	1,782	1,862,299	2,688,671
Disposals	-	(4,459)	-	(232,814)	(462,473)	(29,698)	-	-	(729,444)
Transfer in (out)	-	73,280	9,545	14,099	627,880	26,298	-	(751,102)	-
Translation adjustment	(1,478)	(43,527)	(4,258)	(179)	(202,323)	(4,703)	(298)	(18,061)	(274,827)
As at 31 December 2023	558,573	4,786,701	173,912	1,027,777	20,612,092	929,547	59,681	1,835,763	29,984,046
<b>Accumulated depreciation</b>									
As at 1 January 2022	23,509	2,296,205	126,376	815,714	12,297,528	677,271	45,514	-	16,282,117
Depreciation for the year	3,061	201,822	10,472	60,515	1,180,115	67,137	4,964	-	1,528,086
Accumulated depreciation for disposed assets	-	-	-	-	(266,885)	(9,051)	(7,206)	-	(283,142)
Translation adjustment	748	(25,281)	(5,901)	(6)	(105,543)	(2,836)	(335)	-	(139,154)
As at 31 December 2022	27,318	2,472,746	130,947	876,223	13,105,215	732,521	42,937	-	17,387,907
Depreciation for the year	3,033	206,880	12,564	61,386	1,277,040	70,488	5,015	-	1,636,406
Accumulated depreciation for disposed assets	-	(4,144)	-	(232,750)	(428,930)	(23,254)	-	-	(689,078)
Translation adjustment	(317)	(21,309)	(3,551)	(14)	(82,661)	(2,801)	(277)	-	(110,930)
As at 31 December 2023	30,034	2,654,173	139,960	704,845	13,870,664	776,954	47,675	-	18,224,305
<b>Allowance for impairment loss</b>									
As at 1 January 2022	-	-	-	150	59,344	16	-	-	59,510
Decrease during the year	-	-	-	-	(1,293)	-	-	-	(1,293)
Translation adjustment	-	-	-	-	69	-	-	-	69
As at 31 December 2022	-	-	-	150	58,120	16	-	-	58,286
Translation adjustment	-	-	-	-	(20)	-	-	-	(20)
As at 31 December 2023	-	-	-	150	58,100	16	-	-	58,266
<b>Net book value</b>									
As at 31 December 2022	479,591	2,237,053	28,767	338,490	6,842,854	168,811	15,260	742,627	10,853,453
As at 31 December 2023	528,539	2,132,528	33,952	322,782	6,683,328	152,577	12,006	1,835,763	11,701,475
<b>Depreciation for the year</b>									
2022 (Baht 1,420 million included in manufacturing cost, and the balance in administrative expenses)									1,528,086
2023 (Baht 1,486 million included in manufacturing cost, and the balance in administrative expenses)									1,636,406

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

Unit: Thousand Baht)

	Separate financial statements							Total
	Land	Buildings	Fixtures	Machinery and equipment	Office furniture and equipment	Vehicles	Construction in progress and machinery under installation	
<b>Cost</b>								
As at 1 January 2022	249,865	2,009,653	418,622	3,517,274	281,505	12,599	69,210	6,558,728
Additions	-	3,492	3,540	22,246	14,460	5,007	303,134	351,879
Disposals	-	-	-	(67,997)	(4,907)	-	-	(72,904)
Transfer in (out)	-	46,008	6,667	182,354	30,178	-	(265,207)	-
As at 31 December 2022	249,865	2,059,153	428,829	3,653,877	321,236	17,606	107,137	6,837,703
Additions	-	-	9,790	5,750	24,276	-	275,601	315,417
Disposals	-	(2,248)	(23,989)	(218,703)	(19,387)	-	-	(264,327)
Transfer in (out)	-	-	14,098	231,026	12,865	-	(257,989)	-
As at 31 December 2023	249,865	2,056,905	428,728	3,671,950	338,990	17,606	124,749	6,888,793
<b>Accumulated depreciation</b>								
As at 1 January 2022	-	1,066,399	277,770	2,741,794	224,536	10,291	-	4,320,790
Depreciation for the year	-	84,033	27,407	220,939	23,718	842	-	356,939
Accumulated depreciation for disposed assets	-	-	-	(55,142)	(4,793)	-	-	(59,935)
As at 31 December 2022	-	1,150,432	305,177	2,907,591	243,461	11,133	-	4,617,794
Depreciation for the year	-	85,515	28,089	215,654	29,191	1,896	-	360,345
Accumulated depreciation for disposed assets	-	(2,248)	(23,926)	(212,218)	(19,260)	-	-	(257,652)
As at 31 December 2023	-	1,233,699	309,340	2,911,027	253,392	13,029	-	4,720,487
<b>Allowance for impairment loss</b>								
As at 31 December 2022	-	-	-	34,300	-	-	-	34,300
As at 31 December 2023	-	-	-	34,300	-	-	-	34,300
<b>Net book value</b>								
As at 31 December 2022	249,865	908,721	123,652	711,986	77,775	6,473	107,137	2,185,609
As at 31 December 2023	249,865	823,206	119,388	726,623	85,598	4,577	124,749	2,134,006
<b>Depreciation for the year</b>								
2022 (Baht 334 million included in manufacturing cost, and the balance in administrative expenses)								356,939
2023 (Baht 334 million included in manufacturing cost, and the balance in administrative expenses)								360,345

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

As at 31 December 2023, certain plant and equipment were fully depreciated but are still in use. The gross carrying amount, before deducting accumulated depreciation and allowance for impairment loss, of those assets amounted to approximately Baht 12,347 million (2022: Baht 15,004 million) and for the Company amounted to approximately Baht 2,786 million (2022: Baht 2,760 million).

### 14. Intangible assets

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements	
	Computer software	Development costs	Total	Computer software	Total
<b>Cost</b>					
As at 1 January 2022	191,221	346,244	537,465	104,869	104,869
Additions	68,927	18,767	87,694	63	63
Translation adjustment	4,733	(11,011)	(6,278)	-	-
As at 31 December 2022	264,881	354,000	618,881	104,932	104,932
Additions	23,166	-	23,166	3,345	3,345
Write-off	(33)	(20,523)	(20,556)	(33)	(33)
Translation adjustment	(3,276)	(11,628)	(14,904)	-	-
As at 31 December 2023	284,738	321,849	606,587	108,244	108,244
<b>Accumulated amortisation</b>					
As at 1 January 2022	115,559	-	115,559	49,637	49,637
Amortisation for the year	30,508	71,233	101,741	8,679	8,679
Translation adjustment	(2,006)	458	(1,548)	-	-
As at 31 December 2022	144,061	71,691	215,752	58,316	58,316
Amortisation for the year	35,457	30,433	65,890	8,676	8,676
<b>Accumulated amortisation for write-off assets</b>					
As at 1 January 2022	(12)	-	(12)	(12)	(12)
Translation adjustment	(1,590)	(2,436)	(4,026)	-	-
As at 31 December 2023	177,916	99,688	277,604	66,980	66,980
<b>Net book value</b>					
As at 31 December 2022	120,820	282,309	403,129	46,616	46,616
As at 31 December 2023	106,822	222,161	328,983	41,264	41,264

### 15. Other non-current financial assets

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<u>Debt instruments at amortised cost</u>				
Fixed deposits	53	55	-	-
Total debt instruments at amortised cost	53	55	-	-
<u>Equity instruments designated at FVOCI</u>				
Local marketable equity securities	97	97	97	97
Total equity instruments designated at FVOCI	97	97	97	97
Total other non-current financial assets	150	152	97	97

### 16. Short-term loans from financial institutions

Movements in short-term loans from financial institutions during the year ended 31 December 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements	Separate financial statements
Balance as at 1 January 2023	-	-
Add: Increase during the year	1,945,417	-
Less: Repayment during the year	(803,882)	-
Translation adjustment	(65,127)	-
Balance as at 31 December 2023	1,076,408	-

As at 31 December 2023, the overseas subsidiaries had short-term loans from commercial banks of USD 31.5 million or equivalent to Baht 1,076.4 million, which carry interest between 6.37 and 7.48 percent per annum and are due for repayment during February to March 2024.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 17. Trade and other payables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Trade payables - subsidiaries (Note 7)	-	-	47,003	236,579
Trade payables - unrelated party	2,154,622	3,000,144	878,633	1,029,496
Other payables - subsidiaries (Note 7)	-	-	375	583
Advance received from customers	722,366	487,885	134,085	109,138
Other payables for purchase of machinery	156,188	280,372	73,866	84,033
Accrued expenses	357,370	392,440	34,707	32,855
Total trade and other payables	3,390,546	4,160,841	1,168,669	1,492,684

### 18. Leases

The Group has lease contracts for various items of property, plant, and equipment used in its operations. Leases generally have lease terms between 2 and 50 years.

#### a) Right-of-use assets (Note 13)

Movements of right-of-use assets for the years ended 31 December 2023 and 2022 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements			
	Land	Buildings	Machinery and equipment	Total
1 January 2022	122,171	48,123	7,953	178,247
Additions	-	269,629	3,596	273,225
Depreciation for the year	(3,061)	(5,259)	(6,724)	(15,044)
Translation adjustment	4,233	1,510	395	6,138
31 December 2022	123,343	314,003	5,220	442,566
Additions	-	4,567	2,763	7,330
Write-off during the year - net book value at write-off date	-	(315)	-	(315)
Transfer out	-	(265,153)	-	(265,153)
Depreciation for the year	(3,033)	(4,705)	(4,949)	(12,687)
Translation adjustment	(1,160)	(3,075)	29	(4,206)
31 December 2023	119,150	45,322	3,063	167,535

The overseas subsidiary has mortgaged the land use right and buildings with the net book value as at 31 December 2023 of approximately CNY 32.5 million or equivalent to approximately Baht 156.4 million as collateral for long-term loans from financial institution as described in Note 20.

#### b) Lease liabilities

(Unit: Thousand Baht)

	Consolidated financial statements	
	2023	2022
Lease payments	5,796	274,460
Less: Deferred interest expenses	(73)	(136)
Total	5,723	274,324
Less: Portion due within one year	(4,990)	(273,843)
Lease liabilities - net of current portion	733	481

Movements of the lease liabilities during the years ended 31 December 2023 and 2022 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements	
	2023	2022
Balance at beginning of year	274,324	10,849
Additions	8,710	273,225
Accretion of interest	172	2,926
Payments during the year	(9,721)	(13,004)
Transfer	(269,496)	-
Translation	1,734	328
Balance at end of year	5,723	274,324

A maturity analysis of lease payments is disclosed in Note 35.1 under the liquidity risk.



## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### c) Expenses relating to leases that are recognised in income statements

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Depreciation expense of right-of-use assets	12,687	15,044	-	-
Interest expense on lease liabilities	172	2,926	-	-
Expense relating to short-term leases	10,738	10,658	188	176
Expense relating to leases of low-value assets	541	492	433	349

### d) Others

The Group had total cash outflows for leases for the year ended 31 December 2023 of Baht 21 million (2022: Baht 21 million) and for the Company amounting to Baht 0.6 million (2022: Baht 0.5 million) including the cash outflows related to short-term leases and leases of low-value assets.

## 19. Short-term provisions

(Unit: Thousand Baht)

	Consolidated financial statements
	Provision for product warranty
As at 1 January 2022	334,199
Translation adjustment	11,425
As at 31 December 2022	345,624
Translation adjustment	(3,391)
As at 31 December 2023	342,233

## 20. Long-term loans from financial institution

Movements in long-term loans from financial institution during the year ended 31 December 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements	Separate financial statements
Balance as at 1 January 2023	-	-
Add: Increase during the year	238,735	-
Less: Repayment during the year	(2,404)	-
Translation adjustment	(8,955)	-
Balance as at 31 December 2023	227,376	-
Less: Portion due within one year	(24,036)	-
Long-term loans from financial institution - net of current portion	203,340	-

As at 31 December 2023, the overseas subsidiary had long-term loans from financial institution of CNY 47.3 million or equivalent to Baht 227.4 million, which carry a floating interest rate benchmarked to one-year lending rate of People's Bank of China (PBOC) throughout the period of the agreement and are repayable within 2026.

The long-term credit facilities of the overseas subsidiary which have not yet been drawn amounted to CNY 82.3 million or equivalent to Baht 395.6 million.

The above loans are secured by the land use right and buildings of the subsidiary.

## 21. Provision for long-term employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, was as follows:

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Provision for long-term employee benefits at beginning of year	709,393	718,851	348,391	332,488
Included in the income statement:				
Current service cost	45,902	45,409	22,830	22,358
Interest cost	18,500	14,445	9,981	6,672
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
Demographic assumptions changes	(35,673)	(31,847)	(46,943)	3,021
Financial assumptions changes	37,239	9,170	8,455	(2,463)
Experience adjustments	12,537	6,065	33,961	14,535
Benefits paid during the year	(21,946)	(52,700)	(8,409)	(28,220)
Provision for long-term employee benefits at end of year	765,952	709,393	368,266	348,391

The Group expects to pay Baht 23 million of long-term employee benefits during the next year (the Company only: Baht 21 million) (2022: Baht 21 million, the Company only: Baht 19 million).

As at 31 December 2023, the weighted average duration of the liabilities for long-term employee benefit is 12 years (the Company only: 14 years) (2022: 13 years, the Company only: 15 years).

Significant actuarial assumptions are summarised below.

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	(% per annum)	(% per annum)	(% per annum)	(% per annum)
Discount rate	2.7 - 2.9	2.7 - 3.1	2.9	3.1
Future salary increase rate	4.0 - 5.0	4.0 - 5.0	4.0 - 5.0	4.0 - 5.0
Staff turnover rate (depending on age)	6.4 - 29.5	6.0 - 28.1	6.4 - 16.1	6.0 - 17.6

The results of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligations as at 31 December 2023 and 2022 are summarised below.

(Unit: Million Baht)

	31 December 2023			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(81)	97	(45)	54
Salary increase rate	96	(82)	53	(45)
	Increase 5%	Decrease 5%	Increase 5%	Decrease 5%
Staff turnover rate	(134)	183	(87)	123

(Unit: Million Baht)

	31 December 2022			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(79)	95	(45)	54
Salary increase rate	94	(80)	53	(45)
	Increase 5%	Decrease 5%	Increase 5%	Decrease 5%
Staff turnover rate	(127)	168	(76)	104

## 22. Share capital

22.1 On 28 April 2023, the Annual General Meeting of the Company's shareholders passed the following resolutions relating to the Company's share capital.

- Approving to decrease the Company's registered share capital from Baht 974,403,900 (974,403,900 ordinary shares of Baht 1.00 each) to Baht 804,878,860 (804,878,860 ordinary shares of Baht 1.00 each) by cancelling 169,525,040 unissued shares, at the par value of Baht 1.00 per share. The Company registered the capital decrease with the Ministry of Commerce on 2 June 2023.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

- b) Approving to increase the Company's registered share capital from Baht 804,878,860 (804,878,860 ordinary shares of Baht 1.00 each) to Baht 885,366,746 (885,366,746 ordinary shares of Baht 1.00 each) by issuing 80,487,886 new ordinary shares, at the par value of Baht 1.00 per share. The Company registered the capital increase with the Ministry of Commerce on 6 June 2023.

22.2 On 16 October 2023, the Meeting of the Company's Board of Directors passed a resolution approving the Company to issue and allocate the newly-issued ordinary shares by means of a general mandate in the amount of 80,478,800 shares, at the par value of Baht 1.00 per share for the purposes of offering for sale in the private placement at the offering price of Baht 57.00 each or a total of Baht 4,587.80 million. The Company received payment for such shares and registered the increase of its paid-up capital with the Ministry of Commerce on 19 October 2023.

### 23. Equity-settled share-based payments

On 15 December 2022, an overseas subsidiary issued stock grants of its shares to directors, executives and employees of the Group, with significant details as follows:

Number of stock grants issued: 41,113,486 units (16% of ordinary shares of the subsidiary)  
Vesting conditions: Employees must remain in service for a granting period. The 20% of stock grants shall become vested and exercisable on the date of the subsidiary's Initial Public Offering (IPO date) and 20% of stock grants on the first, second, third and fourth anniversary of the IPO date.

There were no modifications to the share-based payment arrangement during the year.

During the year 2023, the Group recognised equity-settled share-based payment transactions amounting to Baht 40.4 million as expenses in profit or loss, together with a corresponding increase in "Capital reserve for share-based payment transactions" in shareholders' equity.

### 24. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5 percent of its net income after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution.

At present, the statutory reserve has fully been set aside.

### 25. Finance income

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Interest income on bank deposits	39,420	14,193	19,150	422
Interest income on debt instruments measured at FVOCI	57,545	79,503	-	-
Total	96,965	93,696	19,150	422

### 26. Expenses by nature

Significant expenses classified by nature are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Raw materials and consumables used	17,287,871	17,447,885	8,519,236	7,496,120
Changes in inventories of finished goods and work in process	2,224	(503,233)	133,365	(110,141)
Salaries and wages and other employee benefits	4,034,743	4,291,546	1,233,614	1,248,285
Management benefit expenses	149,904	153,426	20,728	17,716
Depreciation and amortisation expenses	1,702,296	1,629,827	369,021	365,618

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 27. Income tax

Income tax expenses for the years ended 31 December 2023 and 2022 are made up as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Current income tax:</b>				
Current income tax charge	107,733	113,563	27,457	17,486
Adjustment in respect of income tax of previous year	(1,376)	(6,359)	(59)	1,026
<b>Deferred tax:</b>				
Relating to origination and reversal of temporary differences	(20,889)	176	(7,803)	(2,983)
<b>Income tax expenses reported in the income statements</b>	<b>85,468</b>	<b>107,380</b>	<b>19,595</b>	<b>15,529</b>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2023 and 2022 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Deferred tax relating to actuarial gain (loss)	85	(134)	85	(134)
Deferred tax relating to exchange differences from translating foreign currency financial statements	(816)	(596)	-	-
	(731)	(730)	85	(134)

The reconciliation between accounting profit and income tax expenses is shown below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Accounting profit before tax	1,846,035	2,209,451	2,143,024	2,171,690
Applicable tax rate	0 - 25%	0 - 30%	20%	20%
Accounting profit before tax multiplied by income tax rate	329,214	430,550	428,605	434,338
Adjustment in respect of income tax of previous year	(1,376)	(6,359)	(59)	1,026
Effects of:				
Promotional privileges (Note 30)	(447,004)	(502,007)	(350,541)	(327,581)
Dividend income not subject to tax	(17)	(14)	(48,017)	(88,014)
Income not subject to tax	(1,242)	(438)	-	-
Unrecognised temporary differences and unused tax losses as deferred tax assets	227,279	199,800	-	-
Non-deductible expenses	3,923	5,282	131	94
Additional expense deductions allowed	(12,064)	(12,747)	(3,532)	(1,308)
Others	(13,245)	(6,687)	(6,992)	(3,026)
<b>Total</b>	<b>(242,370)</b>	<b>(316,811)</b>	<b>(408,951)</b>	<b>(419,835)</b>
<b>Income tax expenses reported in the income statements</b>	<b>85,468</b>	<b>107,380</b>	<b>19,595</b>	<b>15,529</b>

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

The components of deferred tax assets and deferred tax liabilities are as follows:

(Unit: Thousand Baht)

	Statements of financial position as at 31 December			
	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
<b>Deferred tax assets</b>				
Allowance for expected credit losses	1,328	1,179	47	22
Allowance for diminution in value of inventories	5,787	2,449	4,462	1,080
Allowance for asset impairment	643	305	643	305
Provision for long-term employee benefits	6,901	3,102	6,901	3,102
Provision for vacation	1,461	644	338	164
Accrued expenses	22,298	20,596	-	-
Others	52,860	25,682	-	-
<b>Total</b>	<b>91,278</b>	<b>53,957</b>	<b>12,391</b>	<b>4,673</b>
<b>Deferred tax liabilities</b>				
Accumulated depreciation - plant and equipment	(103,195)	(87,494)	-	-
<b>Total</b>	<b>(103,195)</b>	<b>(87,494)</b>	<b>-</b>	<b>-</b>
<b>Deferred tax assets (liabilities) - net</b>	<b>(11,917)</b>	<b>(33,537)</b>	<b>12,391</b>	<b>4,673</b>
<b>Statements of financial position</b>				
Deferred tax assets	18,653	10,643	12,391	4,673
Deferred tax liabilities	(30,570)	(44,180)	-	-
<b>Deferred tax assets (liabilities) - net</b>	<b>(11,917)</b>	<b>(33,537)</b>	<b>12,391</b>	<b>4,673</b>

As at 31 December 2023, the subsidiaries had deductible temporary differences and unused tax losses totaling Baht 2,747 million (2022: Baht 1,851 million), on which deferred tax assets have not been recognised as the subsidiaries believe future taxable profits may not be sufficient to allow utilisation of the temporary differences and unused tax losses. The unused tax losses will expire by the year 2038.

## 28. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the year.

### 28.1 Weighted average number of ordinary shares

(Unit: Thousand shares)

	2023	2022
Balance brought forward	804,879	804,879
Add: The weighted average number of ordinary shares issued during the year	16,318	-
<b>Weighted average number of ordinary shares</b>	<b>821,197</b>	<b>804,879</b>

### 28.2 Basic earnings per share

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Profit for the year (Thousand Baht)	1,760,567	2,102,071	2,123,429	2,156,161
Weighted average number of ordinary shares (Thousand shares)	821,197	804,879	821,197	804,879
<b>Basic earnings per share (Baht)</b>	<b>2.14</b>	<b>2.61</b>	<b>2.59</b>	<b>2.68</b>



## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 29. Promotional privileges

The Group has received promotional privileges under the Investment Promotion Act B.E. 2520 as approved by the Board of Investment. Subject to certain imposed conditions, significant promotional privileges received with respect to tax are as follows:

Particulars		The Company												
1.	Certificate No.	2138(2)/2550	1887(1)/2552	1234(1)/2555	2620(1)/2555	2199(2)/2557	59-0178-0-00-1-0	60-1432-1-00-1-0	63-1072-1-00-1-0	64-0816-1-00-1-0	64-0104-1-00-1-0	65-0289-1-00-1-0	66-0309-1-04-1-0	66-0115-1-00-1-0
2.	Promotional privileges for	Production of PCBA	Production of Semiconductor i.e. Wireless Sensor	Production of Integrated Circuit (IC) and Die Testing	Production of Electronic Control Unit	Production of PCBA	Production of PCBA	Production of Telecommunication and Wafer Die Test	Production of Semiconductor i.e. Integrated Circuit	Production of Electro-Magnetic	Production of Semiconductor i.e. Wafer Testing and Wafer Sawing	Production of parts for electronic control and measurement instruments for automotive industry	Production of PCBA	Integrated circuit (IC) and Continuous products
3.	The significant privileges are													
3.1	Exemption from corporate income tax on net income derived from the promoted operation and exemption from income tax on dividends paid from the promoted operations which are tax exempted throughout the period in which the corporate income tax is exempted.	8 years (expired) (tax exempted according to investment)	8 years (expired) (tax exempted according to investment)	8 years	8 years	8 years (tax exempted according to investment)	8 years (tax exempted according to investment)	6 years (tax exempted according to investment)	6 years (tax exempted according to investment)	4 years (tax exempted according to investment)	6 years (tax exempted according to investment)	8 years (tax exempted according to investment)	-	6 years (tax exempted according to investment)
3.2	50 % reduction of the normal corporate income tax rate for net income derived after the expiry date in 3.1	5 years	5 years	5 years	5 years	5 years	5 years	-	-	-	-	-	3 years (50 percent of investment in improvement of machines exclude land or working capital)	-
3.3	Exemption from import duty on machinery as approved by the Board.	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted
3.4	2 times deduction of transportation, electricity and water expenses from the first earning operating income	10 years	10 years	10 years	10 years	10 years	10 years	-	-	-	-	-	-	-
4.	Date of first earning operating income	3 December 2007	2 December 2009	26 February 2016	3 January 2014	3 April 2015	4 February 2020	1 January 2018	Has not yet started utilising the privileges	8 October 2021	Has not yet started utilising the privileges	6 July 2023	29 April 2023	Has not yet started utilising the privileges

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

Particulars	Subsidiary					
	Hana Semiconductor (Ayutthaya) Company Limited					
1. Certificate No.	1034(2)/2552	2371(1)/2553	2687(1)/2556	60-0686-1-00-1-0	61-1275-1-00-1-0	64-0682-1-00-1-0
2. Promotional privileges for	Production of Wafer Saw, Integrated Circuit (IC) and Integrated Circuit Tested (IC Tested)	Production of Integrated Circuit (IC)	Production of Semiconductor	Production of Integrated Circuit (IC), Wafer sawing, Wafer Grinding and Wafer Testing	Production of Integrated Circuit (IC)	Production of Integrated Circuit (IC) and Integrated Circuit Tested (IC Tested)
3. The significant tax privileges are						
3.1 Exemption from corporate income tax on net profit from promoted operations and exemption from income tax on dividends paid from the promoted operations which are tax exempted throughout the period in which the corporate income tax is exempted	8 years (Until 1 January 2022)	8 years (Until 27 November 2022)	8 years (Until 2 January 2026)	6 years (Until 31 December 2026)	6 years (Until 2 January 2029)	6 years
3.2 50 % reduction of the normal corporate income tax rate for net income derived after the expiry date in 3.1	5 years	5 years	5 years	-	-	-
3.3 Exemption from import duty on machinery as approved by the Board.	Granted	Granted	Granted	Granted	Granted	Granted
3.4 2 times deduction of transportation, electricity and water expenses from the first earning operating income	10 years	10 years	10 years	-	-	-
4. Date of first earning operating income	2 January 2013	28 November 2014	3 January 2018	1 January 2021	3 January 2023	Has not yet started utilising the privileges

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

The Group's operating revenues for the years ended 31 December 2023 and 2022, divided between promoted and non-promoted operations, are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements					
	Promoted operations		Non-promoted operations		Total	
	2023	2022	2023	2022	2023	2022
<b>Sales</b>						
Domestic sales	202,127	281,764	68	345	202,195	282,109
Export sales	19,334,385	19,829,066	6,615,536	7,055,988	25,949,921	26,885,054
<b>Total sales</b>	<b>19,536,512</b>	<b>20,110,830</b>	<b>6,615,604</b>	<b>7,056,333</b>	<b>26,152,116</b>	<b>27,167,163</b>

(Unit: Thousand Baht)

	Separate financial statements					
	Promoted operations		Non-promoted operations		Total	
	2023	2022	2023	2022	2023	2022
<b>Sales</b>						
Domestic sales	155,676	225,521	68	345	155,744	225,866
Export sales	12,225,071	10,998,601	93,859	48,301	12,318,930	11,046,902
<b>Total sales</b>	<b>12,380,747</b>	<b>11,224,122</b>	<b>93,927</b>	<b>48,646</b>	<b>12,474,674</b>	<b>11,272,768</b>

### 30. Segments information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Group is organised into business units based on their products and have two reportable segments as follows:

1. The Printed Circuit Board Assembly (PCBA) Segment, which produces and sells Printed Circuit Board Assembly (PCBA).
2. The Integrated Circuit (IC) Segment, which produces and sells Integrated Circuit (IC).

No operating segments have been aggregated to form the above reportable operating segments.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

The following tables present revenue, profit and total assets information regarding the Group's operating segments for the years ended 31 December 2023 and 2022.

(Unit: Million Baht)

	Printed Circuit Board Assembly (PCBA)	Integrated Circuit (IC)	Others	Total reportable segments	Eliminations	Total
<b>For the year ended 31 December 2023</b>						
Revenue from external customers	15,956	8,235	1,961	26,152	-	26,152
Inter-segment revenue	3,513	752	1,093	5,358	(5,358)	-
<b>Total revenue</b>	<b>19,469</b>	<b>8,987</b>	<b>3,054</b>	<b>31,510</b>	<b>(5,358)</b>	<b>26,152</b>
<b>Segment profit</b>	<b>2,859</b>	<b>473</b>	<b>(368)</b>	<b>2,964</b>	<b>16</b>	<b>2,980</b>
Gain on exchange rate						41
Other income						439
Selling and distribution expenses						(210)
Administrative expenses						(1,421)
Loss on derivatives						(49)
Reversal of impairment loss on financial assets						21
Finance income						97
Finance cost						(52)
Income tax expenses						(85)
<b>Profit for the year</b>						<b>1,761</b>
<b>Segment total assets</b>						
Additions to property, plant and equipment	552	332	1,805	2,689	-	2,689

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Million Baht)

	Printed Circuit Board Assembly (PCBA)	Integrated Circuit (IC)	Others	Total reportable segments	Eliminations	Total
<b>For the year ended 31 December 2022</b>						
Revenue from external customers	15,129	10,354	1,684	27,167	-	27,167
Inter-segment revenue	3,699	1,027	1,439	6,165	(6,165)	-
<b>Total revenue</b>	<b>18,828</b>	<b>11,381</b>	<b>3,123</b>	<b>33,332</b>	<b>(6,165)</b>	<b>27,167</b>
<b>Segment profit</b>	<b>2,719</b>	<b>999</b>	<b>(63)</b>	<b>3,655</b>	<b>6</b>	<b>3,661</b>
Dividend income						2
Gain on derivatives						30
Other income						456
Selling and distribution expenses						(212)
Administrative expenses						(1,483)
Loss on exchange rate						(320)
Reversal of impairment loss on financial assets						4
Loss on FVTPL equity instruments						(10)
Finance income						94
Finance cost						(13)
Income tax expenses						(107)
<b>Profit for the year</b>						<b>2,102</b>
<b>Segment total assets</b>						
Additions to property, plant and equipment	464	1,296	1,116	2,876	-	2,876

### Geographic information

Revenue from external customers is based on locations of the customers as below.

(Unit: Million Baht)

	2023	2022
<b>Revenue from external customers</b>		
Singapore	6,432	6,889
United States of America	6,260	5,823
China	3,175	3,395
Malaysia	3,063	2,930
Germany	1,128	634
Others	6,094	7,496
<b>Total</b>	<b>26,152</b>	<b>27,167</b>

(Unit: Million Baht)

	2023	2022
<b>Non-current assets (other than deferred tax assets)</b>		
Korea	4,567	3,469
Thailand	4,471	5,083
China	2,012	1,935
United States of America	638	501
Cambodia	376	391
Hong Kong	53	57
Others	8	14
<b>Total</b>	<b>12,125</b>	<b>11,450</b>

### Major customers

For the year 2023, the Group has revenue from 5 major customers in amount of Baht 12,059 million, arising from sales by the Printed Circuit Board Assembly (PCBA) segment and the Integrated Circuit (IC) segment (2022: 12,583 million).

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 31. Provident fund

The Group and its employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. Both employees and the Group contribute to the fund monthly at the rates of 3.0 - 7.5 percent of basic salary. The fund, which is managed by SCB Asset Management Company Limited, will be paid to employees upon terminating in accordance with the fund rules. The contributions for the year 2023 amounting to approximately Baht 91 million (2022: Baht 91 million) and for the Company amounting to approximately Baht 46 million (2022: Baht 45 million) were recognised as expenses.

### 32. Dividend paid

During the years 2023 and 2022, the Group had dividend payments as follows:

	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)
<b>The Company</b>			
<u>For the year 2023</u>			
Dividends on 2022 income and unappropriated retained earnings	Annual General Meeting of the shareholders on 28 April 2023	402	0.50
Interim dividends in respect of the income for the period from 1 January 2023 to 30 September 2023	Board of Directors' Meeting on 13 November 2023	443	0.50
Total for the year 2023		845	1.00
<u>For the year 2022</u>			
Dividends on 2021 income and unappropriated retained earnings	Annual General Meeting of the shareholders on 29 April 2022	805	1.00
Interim dividends in respect of the income for the period from 1 January 2022 to 30 June 2022	Board of Directors' Meeting on 14 November 2022	402	0.50
Total for the year 2022		1,207	1.50
<b>Subsidiaries</b>			
<b>Hana Semiconductor (Ayutthaya) Company Limited</b>			
<u>For the year 2023</u>			
Interim dividends in respect of 2022 income and unappropriated retained earnings	Board of Directors' Meeting on 5 April 2023	240	2.00
Total for the year 2023		240	2.00
<u>For the year 2022</u>			
Interim dividends in respect of the income for the period from 1 January 2022 to 30 September 2022 and unappropriated retained earnings	Board of Directors' Meeting on 24 November 2022	240	2.00
Total for the year 2022		240	2.00

	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)
<b>Subsidiaries</b>			
<b>Hana Semiconductor (BKK) Company Limited</b>			
<u>For the year 2023</u>			
Interim dividends in respect of income for the period from 1 January 2023 to 30 April 2023	Board of Directors' Meeting on 18 May 2023	100	1.00
Total for the year 2023		100	1.00
<u>For the year 2022</u>			
Dividends on 2021 income and unappropriated retained earnings	Annual General Meeting of the shareholders on 28 April 2022	200	2.00
Interim dividends in respect of the income for the period from 1 January 2022 to 30 September 2022 and unappropriated retained earnings	Board of Director's Meeting on 7 December 2022	100	1.00
Total for the year 2022		300	3.00

### 33. Commitments and contingent liabilities

#### 33.1 Capital commitments

As at 31 December 2023, the Group had capital commitments relating to the acquisitions of machinery totaling Baht 37 million (2022: Baht 165 million) and the Company only of approximately Baht 17 million (2022: Baht 52 million).

#### 33.2 Commitments under service agreements

The Group has future payments required under the service contracts as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Payable:				
In up to 1 year	103.5	97.7	23.2	33.7
In over 1 year and up to 5 years	22.1	69.2	1.1	0.1



## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 33.3 Marketing supportive service agreement

Since the year 2001, the Company and three subsidiaries entered into marketing supportive service agreement with an overseas subsidiary. Under that agreement, the Company and the three subsidiaries have to pay service fees to that subsidiary at the rates stipulated in the agreement.

### 33.4 Sale representative agreements

Since the year 2015, an overseas subsidiary entered into sale representative agreement with an unrelated company with the annual service fees of approximately USD 0.6 million.

### 33.5 Guarantees

- a) As at 31 December 2023, the Company and a subsidiary have jointly guaranteed bank credit facilities of a subsidiary amounting to USD 65 million or equivalent to Baht 2,235.19 million (2022: Nil), the Company amounting to USD 35 million or equivalent to Baht 1,197.82 million (2022: Nil).
- b) As at 31 December 2023, there were outstanding bank guarantees of approximately Baht 29 million (2022: Baht 27 million) issued by the banks on behalf of the Group in respect of certain performance bonds as required in the normal course of business of the Group to guarantee electricity uses, among others, and the Company of approximately Baht 28 million (2022: Baht 26 million).

## 34. Fair value hierarchy

As at 31 December 2023 and 2022, the Group had the assets that were measured at fair value or for which fair value was disclosed using different levels of inputs as follows:

(Unit: Thousand Baht)

	31 December 2023		
	Consolidated financial statements		
	Level 1	Level 2	Total
<b>Assets measured at fair value</b>			
Financial assets measured at FVOCI			
Marketable corporate bonds	1,180,575	54,444	1,235,019
Local marketable equity securities	97	-	97
<b>Assets for which fair value was disclosed</b>			
Investment property	-	96,405	96,405

(Unit: Thousand Baht)

	31 December 2022		
	Consolidated financial statements		
	Level 1	Level 2	Total
<b>Assets measured at fair value</b>			
Financial assets measured at FVTPL			
Derivatives assets	-	66,632	66,632
Financial assets measured at FVOCI			
Marketable corporate bonds	859,086	-	859,086
Quoted bonds	319,007	-	319,007
Local marketable equity securities	97	-	97
<b>Assets for which fair value was disclosed</b>			
Investment property	-	96,405	96,405
<b>Liabilities measured at fair value</b>			
Derivatives liabilities	-	17,214	17,214

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Thousand Baht)

	31 December 2023		
	Separate financial statements		
	Level 1	Level 2	Total
<b>Assets measured at fair value</b>			
Financial assets measured at FVOCI			
Local marketable equity securities	97	-	97
<b>Assets for which fair value was disclosed</b>			
Investment property	-	96,405	96,405

(Unit: Thousand Baht)

	31 December 2022		
	Separate financial statements		
	Level 1	Level 2	Total
<b>Assets measured at fair value</b>			
Financial assets measured at FVOCI			
Local marketable equity securities	97	-	97
<b>Assets for which fair value was disclosed</b>			
Investment property	-	96,405	96,405

### 35. Financial instruments

#### 35.1 Financial risk management objectives and policies

The Group's financial instruments principally comprise cash and cash equivalents, trade and other receivables, investments and trade and other payables. The financial risks associated with these financial instruments and how they are managed are described below.

##### Credit risk

The Group is exposed to credit risk primarily with respect to trade and other receivables deposits with banks and financial institutions and other financial instruments. The maximum exposure to credit risk is limited to the carrying amounts of receivables as stated in the statement of financial position.

##### Trade receivables

The Group manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Outstanding trade receivables are regularly monitored.

An impairment analysis is performed at each reporting date to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar credit risks. The Group classifies customer segments by customer type and rating. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables are written-off if past due for more than one year and not subject to enforcement activity.

##### Financial instruments and cash deposits

The Group manages the credit risk from balances with banks and financial institutions by making investments only with approved counterparties and within credit limits assigned to each counterparty. The limits are set to minimise the concentration of risks and therefore mitigate financial loss through a counterparty's potential failure to make payments.

The credit risk on debt instruments and derivatives is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

##### Interest rate risk

The Group's exposure to interest rate risk relates primarily to its cash at financial institutions and investments. Most of its financial assets and liabilities bear floating interest rates, or fixed interest rates which are close to the market rate.

As at 31 December 2023 and 2022, significant financial assets and liabilities classified by type of interest rates are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity dates, or the re-pricing date if this occurs before the maturity date.

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

	Consolidated financial statements as at 31 December 2023				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
<b>Financial assets</b>					
Cash and cash equivalents	4,453	2,478	23	6,954	0.010 - 5.240
Trade and other receivables	-	-	5,178	5,178	-
Other current financial assets	1,688	250	-	1,938	0.950 - 7.400
	6,141	2,728	5,201	14,070	
<b>Financial liabilities</b>					
Short-term loans from financial institutions	1,025	51	-	1,076	6.370 - 7.480
Trade and other payables	-	-	3,391	3,391	-
Long-term loans from financial institution	-	227	-	227	3.750 - 3.850
	1,025	278	3,391	4,694	

	Consolidated financial statements as at 31 December 2022				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
<b>Financial assets</b>					
Cash and cash equivalents	153	1,671	551	2,375	0.001 - 3.300
Trade and other receivables	-	-	4,981	4,981	-
Other current financial assets	1,193	-	66	1,259	0.100 - 9.750
	1,346	1,671	5,598	8,615	
<b>Financial liabilities</b>					
Trade and other payables	-	-	4,161	4,161	-
	-	-	4,161	4,161	

	Separate financial statements as at 31 December 2023				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
<b>Financial assets</b>					
Cash and cash equivalents	4,050	929	8	4,987	0.10 - 2.00
Trade and other receivables	-	-	2,541	2,541	-
	4,050	929	2,549	7,528	
<b>Financial liabilities</b>					
Trade and other payables	-	-	1,169	1,169	-
	-	-	1,169	1,169	

	Separate financial statements as at 31 December 2022				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
<b>Financial assets</b>					
Cash and cash equivalents	-	239	-	239	0.05 - 0.10
Trade and other receivables	-	-	2,102	2,102	-
	-	239	2,102	2,341	
<b>Financial liabilities</b>					
Short-term loan from related party	200	-	-	200	0.80
Trade and other payables	-	-	1,493	1,493	-
	200	-	1,493	1,693	

### Foreign currency risk

The Group's exposure to foreign currency risk related primarily to its trading transactions that are denominated in foreign currencies. The Group seeks to reduce this risk by entering into forward exchange contracts when it considers appropriate. Generally, the forward contracts will mature within one year.

## Notes to consolidated financial statements

### Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

The balances of financial assets and liabilities denominated in foreign currencies as at 31 December 2023 and 2022 are summarised below.

Foreign currency	Financial assets as at 31 December		Financial liabilities as at 31 December		Average exchange rate as at 31 December	
	2023	2022	2023	2022	2023	2022
	(Million)	(Million)	(Million)	(Million)	(Baht per foreign currency unit)	
Cambodia Riel	294	921	1	-	0.0083	0.0084
US Dollar	258	115	54	77	34.2233	34.5624
Japan Yen	63	-	11	19	0.2423	0.2609

As at 31 December 2022, the two overseas subsidiaries had outstanding forward exchange contracts, of which details are presented below.

As at 31 December 2022		
Sold amount	Contractual maturity date	Contractual exchange rate for amount sold
(Million USD)		(Baht per USD)
120	23 January 2023 - 21 March 2023	34.3500 - 35.8700

#### Foreign currency sensitivity

The following tables demonstrate the sensitivity of the Group's profit before tax to a reasonably possible change in US dollar exchange rates, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities including non-designated foreign currency derivatives as at 31 December 2023 and 2022. The Group's exposure to foreign currency changes for all other currencies is not material.

Currency	2023		2022	
	Change in FX rate	Effect on profit before tax Increase (decrease)	Change in FX rate	Effect on profit before tax Increase (decrease)
	(%)	(Million Baht)	(%)	(Million Baht)
US dollar	+1	69	+1	13
	- 1	(69)	- 1	(13)

#### Liquidity risk

The Group manages liquidity risk to meet its obligations and maintain cash balances to cover the liquidity needs. The Group has assessed that it has sufficient working capital to settle financial liabilities and concluded the risk to be low.

The table below summarises the maturity profile of the Group's non-derivative financial liabilities and derivative financial instruments as at 31 December 2023 and 2022 based on contractual undiscounted cash flows:

(Unit: Thousand Baht)

	As at 31 December 2023		
	Consolidated financial statements		
	Less than 1 year	1 to 5 years	Total
<b>Non-derivatives</b>			
Short-term loans from financial institutions	1,076,408	-	1,076,408
Trade and other payables	3,390,546	-	3,390,546
Lease liabilities	5,063	733	5,796
Long-term loans from financial institution	24,036	203,340	227,376
<b>Total non-derivatives</b>	<b>4,496,053</b>	<b>204,073</b>	<b>4,700,126</b>

(Unit: Thousand Baht)

	As at 31 December 2022		
	Consolidated financial statements		
	Less than 1 year	1 to 5 years	Total
<b>Non-derivatives</b>			
Trade and other payables	4,160,841	-	4,160,841
Lease liabilities	273,954	506	274,460
<b>Total non-derivatives</b>	<b>4,434,795</b>	<b>506</b>	<b>4,435,301</b>
<b>Derivatives</b>			
Derivative liabilities: net settled	17,214	-	17,214
<b>Total derivatives</b>	<b>17,214</b>	<b>-</b>	<b>17,214</b>

## Notes to consolidated financial statements

Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

(Unit: Thousand Baht)

	As at 31 December 2023		
	Separate financial statements		
	Less than 1 year	1 to 5 years	Total
<b>Non-derivatives</b>			
Trade and other payables	1,168,669	-	1,168,669
<b>Total non-derivatives</b>	1,168,669	-	1,168,669

(Unit: Thousand Baht)

	As at 31 December 2022		
	Separate financial statements		
	Less than 1 year	1 to 5 years	Total
<b>Non-derivatives</b>			
Short-term loan from related party	200,000	-	200,000
Trade and other payables	1,492,684	-	1,492,684
<b>Total non-derivatives</b>	1,692,684	-	1,692,684

### 35.2 Fair value of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

The estimated fair value of the derivatives is as follows:

(Unit: Million Baht)

	Consolidated financial statements
	As at 31 December 2022
	Fair value
<b>Derivatives</b>	
Forward exchange contracts - gain	66.6
Forward exchange contracts - loss	17.2

The methods and assumptions used by the Group in estimating the fair value of financial instruments are as follows:

- For financial assets and liabilities which have short-term maturity, including cash and cash equivalents, accounts receivable, accounts payable and loan, their carrying amounts in the statement of financial position approximate their fair value.
- For debts and equity securities, their fair value is generally derived from quoted market prices, or based on generally accepted pricing models when no market price is available.
- For fixed deposits with financial institution carrying interest approximate to the market rate, their carrying amounts in the statement of financial position approximate their fair value.
- For derivatives, their fair value has been determined by using a discounted future cash flow model and a valuation model technique. Most of the inputs used for the valuation are observable in the relevant market, such as spot rates of foreign currencies, yield curves of the respective currencies and interest rate yield curves. The subsidiaries have considered the counterparty credit risk when determining the fair value of derivatives.

During the current year, there were no transfers within the fair value hierarchy.

## 36. Capital management

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 31 December 2023, the Group's debt-to-equity ratio was 0.21:1 (2022: 0.24:1) and the Company's was 0.10:1 (2022: 0.20:1).



## Notes to consolidated financial statements

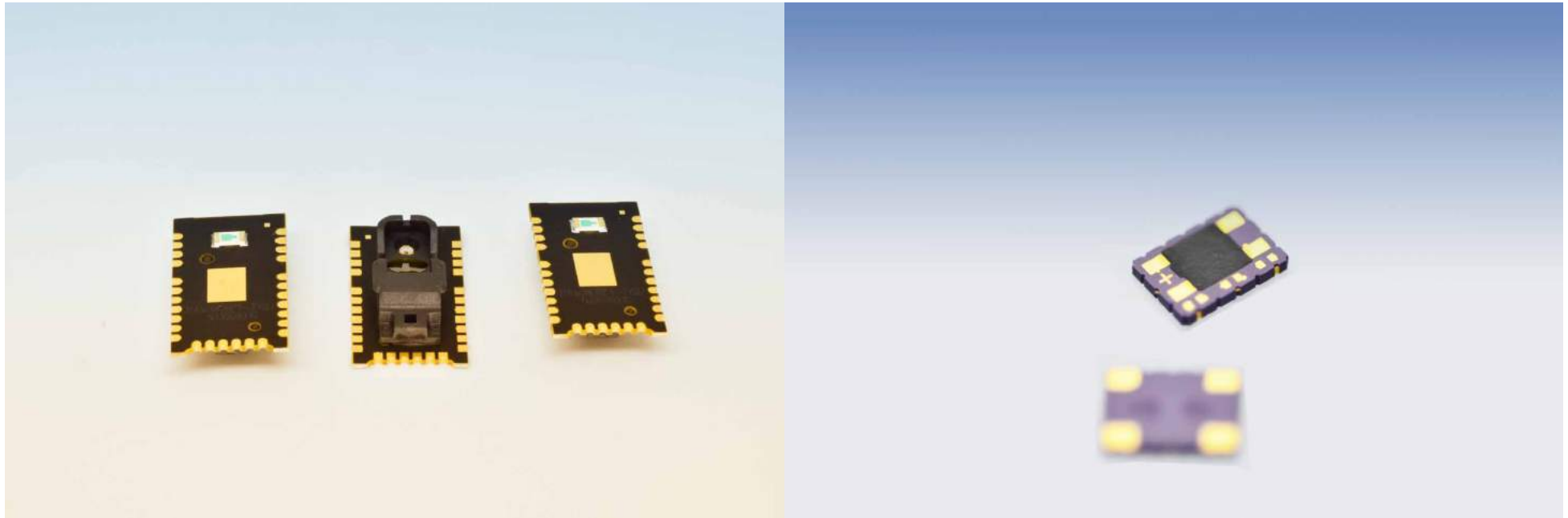
Hana Microelectronics Public Company Limited and its subsidiaries for the year ended 31 December 2023

### 37. Event after the reporting period

On 27 February 2024, the meeting of the Board of Directors of the Company No. 1/2024 passed the resolution approving the final dividend payment for the year 2023 to the Company's shareholders at Baht 0.5 per share. Thus, including the interim dividend of Baht 0.5 per share, the total dividend payment for the year 2023 will be Baht 1.0 per share. The dividend payment will later be proposed for approval in the Annual General Meeting of the Company's shareholders.

### 38. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 27 February 2024.



## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 1. MR. JOHN THOMPSON

- Independent Director
- Chairman of the Board of Directors
- Chairman of Audit Committee

Age:	59 years old
Date of appointment:	1 January 2017
Number of years as the director:	7 years
Working Experience:	
2017 - present	Chairman of the Board of Directors, Independent Director and Chairman of Audit Committee Hana Microelectronics Public Co., Ltd.
2007 - present	Executive Director NT Asset (Thailand) Co., Ltd.
2007 - 2022	Independent Director and Audit Committee Bangkok Post Public Co., Ltd.

#### Education Background:

- Bachelor (Honours), London University, United Kingdom
- Associate Chartered Accountant (ACA), The Institute of Chartered Accountants in England & Wales (ICAEW), United Kingdom

#### IOD Training Courses:

Directors Accreditation Program (DAP) 57/2006

#### Other Trainings:

CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023

Family relationship between Directors and Executives: None

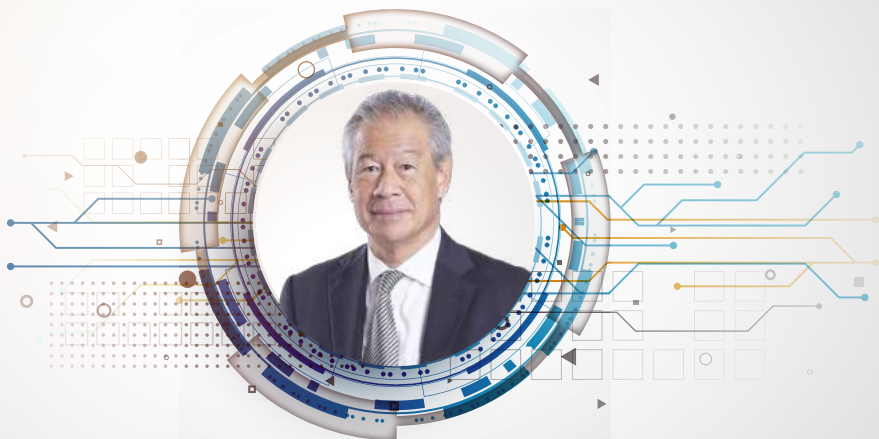
Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
None	NT Asset (Thailand) Co., Ltd. Position: Executive Director	None

Shareholding of Mr. John Thompson				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
0 share	-	-	0 share (0%)	None	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 2. MR. RICHARD DAVID HAN

- Executive Director
- Executive Vice Chairman and Chief Executive Officer
- Nomination Committee

Age:	66 years old
Date of appointment:	26 July 1993
Number of years as the director:	30 years
Working Experience:	
2004 - present	Nomination Committee
	Hana Microelectronics Public Co., Ltd.
1993 - 2022	Executive Director
	Hana Microelectronics Public Co., Ltd.
Education background:	<ul style="list-style-type: none"> <li>• B.A. Business Studies, Westminster, London, United Kingdom</li> <li>• M.B.A. (Marketing) City University, London, United Kingdom</li> <li>• Directors Accreditation Program (DAP) 57/2006</li> <li>• Understanding the Fundamental of Financial Statements (UFS) 4/2006</li> </ul>
IOD Training Courses:	

#### Other Trainings:

- SET Sustainability Sharing: MSCI Sustainability Assessment & Key ESG Trends by the Stock Exchange of Thailand - January 2023
- Global Minimum Tax: Preparing, provisioning and requirements for compliance by EYGM Limited - July 2023

Family relationship between Directors and Executives: None

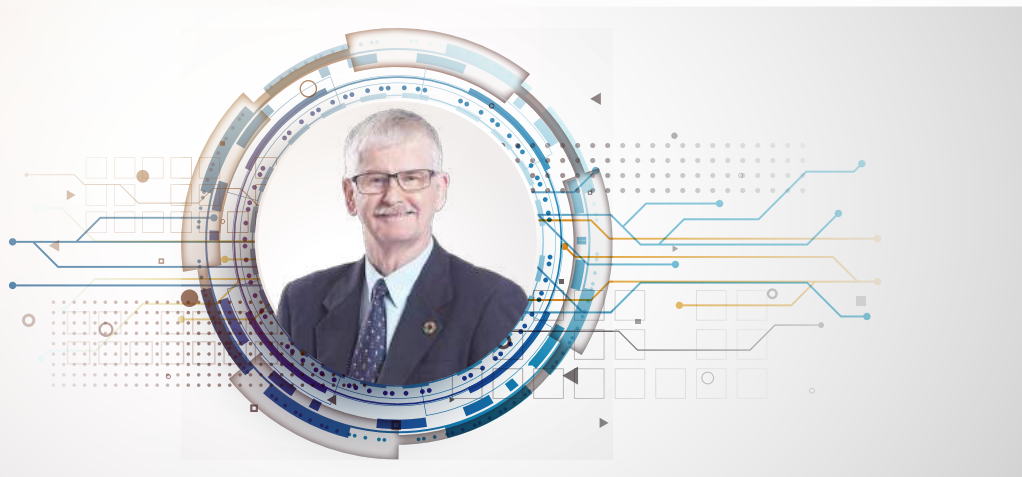
Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
1. Hana Semiconductor (BKK) Co., Ltd. 2. Hana Semiconductor (Ayutthaya) Co., Ltd. 3. Hana Technologies, Inc. 4. Hana Microelectronics, Inc. 5. Hana Microelectronics (Jiaxing) Co., Ltd. 6. Hana Microelectronics Investment Co., Ltd. 7. Hana Microelectronics International Co., Ltd. 8. Hana Microelectronics Enterprise Co., Ltd. 9. Hana Semiconductor International Ltd. 10. Hana Macao Co., Ltd. 11. Omac Sales Ltd. 12. Hana Microelectronics (Cambodia) Co., Ltd. 13. Power Master Semiconductor Co., Ltd.	1. Omac (HK) Limited 2. Omac Limited 3. Rainbow Joy Limited	None
Position: Executive Director	Position: Executive Director	

Shareholding of Mr. Richard David Han			Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Spouse	Minor Child
	Acquisition	Disposition		
1,040,000 shares	-	-	None	None
			1,040,000 shares (0.117%)	

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 3. MR. TERRENCE PHILIP WEIR

- **Executive Director**
- **Executive Vice President and Chief Financial Officer**
- **Chairman of Corporate Governance and Sustainability Committee**
- **Chairman of Risk Management Committee**

Age:	64 years old
Date of appointment:	26 July 1993
Number of years as the director:	30 years
Working Experience:	
2013 - 2003	Chairman of Corporate Governance and Sustainability Committee Hana Microelectronics Public Co., Ltd.
2008 - present	Chairman of Risk Management Committee Hana Microelectronics Public Co., Ltd.
1993 - present	Executive Director Hana Microelectronics Public Co., Ltd.
Educational Background:	Bachelor of Economics, Macquarie University, CPA, Australia
IOD Training Background:	Director Certification Program (DCP) 6/2001, Diploma
Other Trainings:	<ul style="list-style-type: none"> <li>• Global Minimum Tax: Preparing, provisioning and requirements for compliance by EYGM Limited - July 2023</li> <li>• Managing Climate - related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023</li> </ul>

#### Continuing development course in accounting knowledge (Refreshment):

- CPA Australia Learning Insights by CPA Australia Ltd. - October 2023 (3 hours)
- Professional Ethics in Focus by CPA Australia Ltd. - November 2023 (2 hours)
- Cyber Security and board/audit and risk committee responsibility by CPA Australia Ltd. - November 2023 (1 hour)

**Remark:** Mr. Terrence Philip Weir, an executive director and Chief Financial Officer, has completed 3 courses of refreshment programs in financial and accounting totally 6 hours from CPA Australia Ltd. Those courses were reviewed by the Audit Committee to be beneficial to the Company and related to accounting principles/standards that are consistent with the nature of the Company's business.

**Family relationship between Directors and Executives:** None

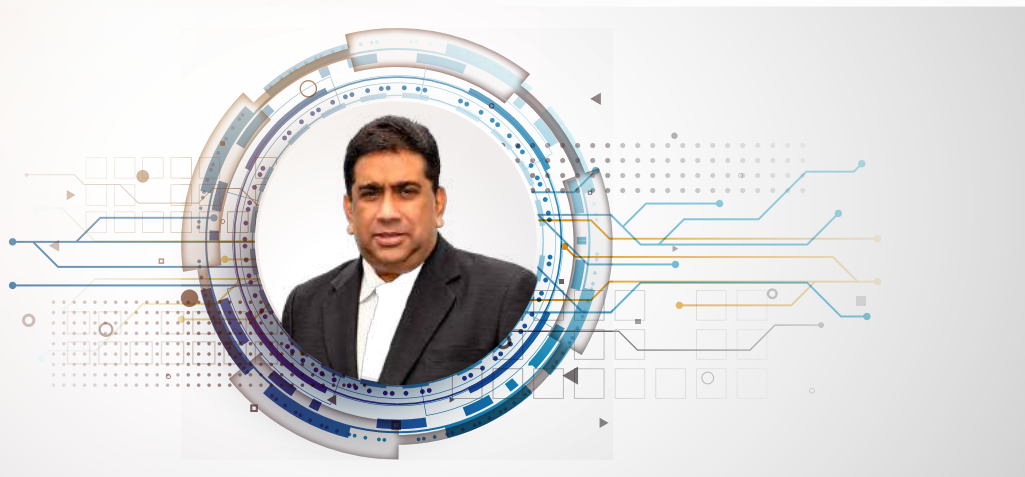
**Disciplinary record under the Securities and Exchange Act and the Derivatives Act:** None

**Take the position as the director or management in other companies:**

Subsidiaries of Hana	Non-listed Company	Listed Company
1. Hana Semiconductor (BKK) Co., Ltd. 2. Hana Semiconductor (Ayutthaya) Co., Ltd. 3. Hana Technologies, Inc. 4. Hana Microelectronics, Inc. 5. Hana Microelectronics (Jiaxing) Co., Ltd. 6. Hana Microelectronics Investment Co., Ltd. 7. Hana Microelectronics International Co., Ltd. 8. Hana Microelectronics Enterprise Co., Ltd. 9. Hana Semiconductor International Ltd. 10. Hana Macao Co., Ltd. 11. Omac Sales Ltd. 12. Hana Microelectronics (Cambodia) Co., Ltd. 13. Power Master Semiconductor Co., Ltd.	None	None
<b>Position:</b> Executive Director		

Shareholding of Mr. Terence Philip Weir				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
575,000 shares		-	575,000 shares (0.065%)	None	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 4. MR. SANJAY NIRENDRA MITRA

- **Executive Director**
- **Executive Vice President, Chief Operating Officer for Semiconductor, and Chief Marketing Officer**

Age:	59 years old
Date of appointment:	29 April 2022
Number of years as the director:	2 years
Working Experience:	
2022 - present	Executive Director, Executive Vice President, Chief Operating Officer for Semiconductor and Chief Marketing Officer, Hana Microelectronics Public Co., Ltd.
2012 - present	Vice President and General Manager, Hana Semiconductor (Ayutthaya) Co., Ltd.
2009 - present	President, Hana Microelectronics, Inc.
2005 - 2009	Vice President and General Manager, Hana Semiconductor (Ayutthaya) Co., Ltd.
2002 - 2004	Customer Specific Operations Director, Hana Semiconductor (Ayutthaya) Co., Ltd.
2001 - 2002	Senior Engineering Manager, Brooks Automation, Inc., Colorado, USA

1991 - 2001

Manufacturing Operations Director, Ramtron International Corporation, Colorado, USA

#### Educational Background:

- Bachelor of Science (Physics), University of Bombay (Mumbai), India
- Bachelor of Engineering (Computer Engineering), University of Bombay (Mumbai), India
- Master of Science (Electrical Engineering), Montana State University, USA

#### IOD Training Background:

Director Accreditation Program (DAP) 193/2022 (English Program)

#### Other Trainings:

Managing Climate - related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023

Family relationship between Directors and Executives: None

Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

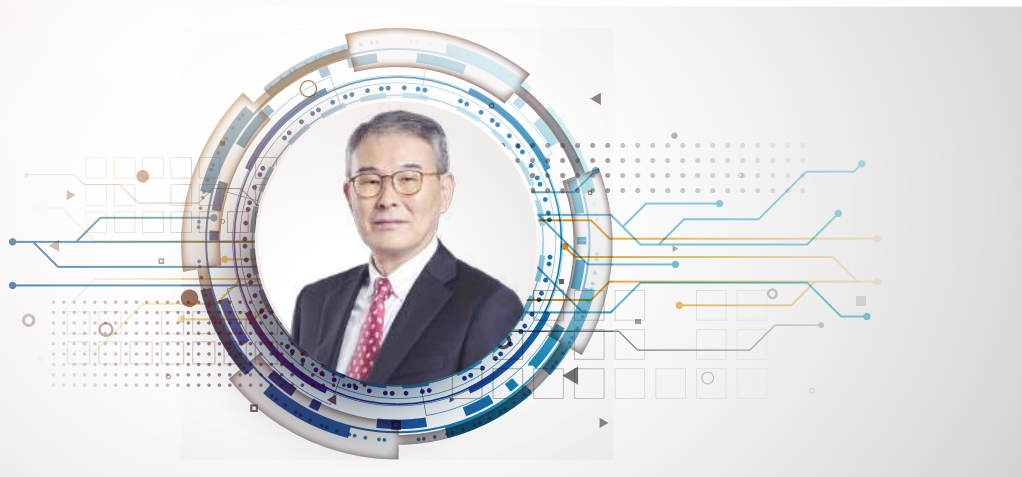
Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
1. Hana Semiconductor (Ayutthaya) Co., Ltd. 2. Hana Microelectronics, Inc.	None	None
Position: Executive Director		

Shareholding of Mr. Sanjay Nirendra Mitra				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
0 shares	-	-	0 shares (0%)	None	None



## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 5. MR. INSUK KIM

- **Executive Director**
- **Executive Vice President, Chief Operating Officer for Microelectronic, and Chief Technical Officer**

Age: 60 years old

Date of appointment: 29 April 2022

Number of years as the director: 2 years

Working Experience:

2022 - present	Executive Vice President, Chief Operating Officer for Microelectronics and Chief Technical Officer, Hana Microelectronics Public Co., Ltd.
2016 - 2021	Corporate Senior Vice President and International Manufacturing Operations, Hana Microelectronics Public Co., Ltd.
2006 - 2016	Managing Director, ON Semiconductors Corporation, Singapore and Philippines
2003 - 2006	Engineering Director STATS ChipPAC Pte. Ltd., Singapore
1989 - 2003	Engineering Director NXP Semiconductors Co., Ltd., Korea, Thailand, Philippines and Singapore

**Educational Background:** Bachelor of Mechanical Engineering, Kyung Hee University Seoul, Korea

**IOD Training Background:** Director Accreditation Program (DAP) 193/2022 (English Program)

**Other Trainings:** SET Sustainability Sharing: MSCI Sustainability Assessment & Key ESG Trends by the Stock Exchange of Thailand - January 2023

**Family relationship between Directors and Executives:** None

**Disciplinary record under the Securities and Exchange Act and the Derivatives Act:** None

**Take the position as the director or management in other companies:**

Subsidiaries of Hana	Non-listed Company	Listed Company
1. Hana Semiconductor (Ayutthaya) Co., Ltd. 2. Hana Microelectronics (Jiaxing) Co., Ltd. 3. Hana Microelectronics (Cambodia) Co., Ltd. 4. Power Master Semiconductor Co., Ltd.	None	None
<b>Position:</b> Executive Director		

Shareholding of Mr. Insuk Kim			Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Spouse	Minor Child
	Acquisition	Disposition		
0 shares	-	-	None	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 6. MS. PORNPAN ABHAMONGKOL

- Independent Director
- Audit Committee
- Chairman of Nomination Committee
- Corporate Governance and Sustainability Committee
- Risk Management Committee

Age: 59 years old

Date of appointment: 1 January 2022

Number of years as the director: 2 years

Working Experience:

December 2022 - present: Chairman of Nomination Committee  
Hana Microelectronics Public Co., Ltd.

January 2022 - present: Independent Director, Audit Committee, Nomination Committee,  
Corporate Governance and Sustainability Committee and Risk  
Management Committee  
Hana Microelectronics Public Co., Ltd.

2015 - present: Freelance Consultant (Finance)

2013 - 2015: Director, Head of Client Management Department, BNP Paribas  
Bangkok Branch

#### Educational Background:

- Bachelor of Business Administration (Finance & Banking), Assumption University
- Master of Business Administration, Assumption University

#### IOD Training Background:

Director Accreditation Program (DAP) 190/2022

#### Other Trainings:

- CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023
- Importance of the Audit Committee and Confidence in the Thai Capital Market by the Securities and Exchange Commission - November 2023

Family relationship between Directors and Executives: None

Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
None	None	None

Shareholding of Ms. Pornphan Abhamongkol			Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Spouse	Minor Child
	Acquisition	Disposition		
0 share	-	-	0 share (0%)	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 7. MRS. SUNUN THONGBAI

- Independent Director
- Audit Committee
- Nomination Committee
- Corporate Governance and Sustainability Committee
- Risk Management Committee

Age:	62 years old
Date of appointment:	1 December 2022
Number of years as the director:	1 year
Working Experience:	
2022 - present	Independent Director, Audit Committee, Nomination Committee, Corporate Governance and Sustainability Committee and Risk Management Committee Hana Microelectronics Public Co., Ltd.
2012 - 2019	Vice President and Director Media Logistics Co., Ltd.
2002 - 2007	Finance & Administration Director Pacific Marketing & Entertainment Group Ltd.
2001 - 2002	Group Finance Director The Minor Food Group Public Company Limited
1997 - 1999	General Manager Jotun Powder Coatings (Thailand) Ltd.

1992 - 1997

Finance & Administration Manager  
Jotun Powder Coatings (Thailand) Ltd.

1986 - present

Freelance Auditor (CPA)

#### Educational Background:

- Bachelor of Accounting, Thammasat University
- Master of Business Administration, Thammasat University

#### IOD Training Background:

Director Accreditation Program (DAP) 198/2022

#### Other Trainings:

- CYBER VISION 2023: Identify and Protect: Keys to a secure future by the Stock Exchange of Thailand - June 2023
- CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023
- Importance of the Audit Committee and Confidence in the Thai Capital Market by the Securities and Exchange Commission - November 2023

Family relationship between Directors and Executives: None

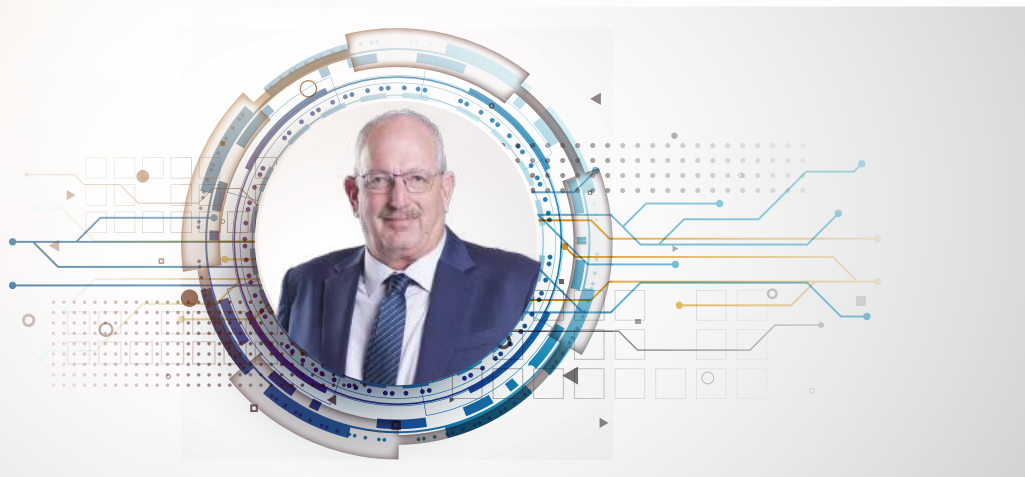
Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
None	None	None

Shareholding of Mrs. Sunun Thongbai				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
0 share	-	-	0 share (0%)	None	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 8. MR. STEPHANUS JOSEPHUS HENDRIKUS BRADER

- Independent Director
- Audit Committee
- Nomination Committee
- Corporate Governance and Sustainability Committee
- Risk Management Committee

Age:	62 years old
Date of appointment:	1 December 2022
Number of years as the director:	1 Year
Working Experience:	
2022 - present	Independent Director, Audit Committee, Nomination Committee, Corporate Governance and Sustainability Committee and Risk Management Committee Hana Microelectronics Public Co., Ltd.
2012 - 2021	Managing Director Allegro MicroSystems (Thailand) Co., Ltd.
2010 - 2012	General Manager Fokker Elmo (Langfang) Electrical System Co., Ltd., China
2007 - 2009	General Manager NXP Semiconductors (Beijing) Ltd., China

2002 - 2007

Vice President & General Manager  
NXP Semiconductors Philippines Inc., Philippines

**Educational Background:** Bachelor of Technology in Physical Electronics (honors),  
University of Bradford, United Kingdom

**IOD Training Background:** Director Accreditation Program (DAP) 198/2022

**Other Trainings:** Managing Climate - related Risks and Opportunities in Equity Analysis  
and Investment by the Securities and Exchange Commission -  
November 2023

**Family relationship between Directors and Executives:** None

**Disciplinary record under the Securities and Exchange Act and the Derivatives Act:** None

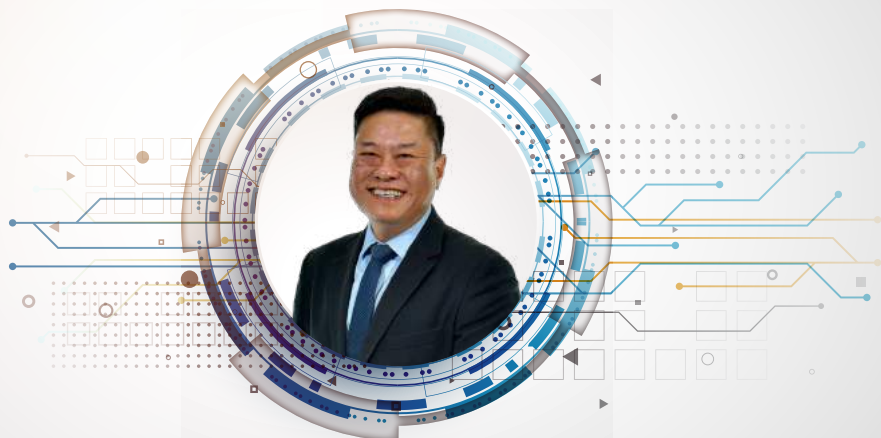
**Take the position as the director or management in other companies:**

Subsidiaries of Hana	Non-listed Company	Listed Company
None	None	None

Shareholding of Mr. Stephanus Josephus Hendrikus Brader			Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Spouse	Minor Child
	Acquisition	Disposition		
0 share	-	-	0 share (0%)	None



## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 9. MR. WICHAJ SUKPRASERTKUL

- Vice President and General Manager Hana-Lamphun and Hana-Cambodia

Age:	56 years old
Date of appointment:	1 January 2022
Working Experience:	
2023 - present	Vice President and General Manager Hana-Cambodia
2022 - present	Vice President and General Manager Hana-Lamphun
2008 - 2021	Vice President of Operations Hana-Lamphun
Educational Background:	Bachelor of Engineering (Electronics Engineering) King Mongkut's Institute of Technology Ladkrabang
IOD Training Background:	None
Other Trainings:	Microelectronics Supply Chain Cluster Connection by The Board of Investment of Thailand (BOI) – February 2023
Awards:	Top Performance Award from Technology Promotion Association (Thailand-Japan) - January 2023

Family relationship between Directors and Executives: None

Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
Hana Microelectronics Public (Cambodia) Co., Ltd.	None	None

Shareholding of Mr. Wichai Sukprasertkul				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
0 share	-	-	0 share (0%)	None	None



## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 10. MS. ACHARA CHAICHARNCHEEP

#### • Senior Manager of Financial and Accounting

Age:	54 years old
Date of appointment:	14 October 2013
Working Experience:	
1996 – present	Finance and Accounting Senior Manager Hana Microelectronics Public Co., Ltd. (Headquarters)
Educational Background:	Bachelor of Accounting, Kasetsart University
IOD Training Background:	None
Other Trainings:	Global Minimum Tax: Preparing, provisioning and requirements for compliance by EYGM Limited - July 2023

#### Continuing development course in accounting knowledge (Refreshment):

- Thai Financial Reporting Standard for Non-Publicly Accountable Entities (TFRS for NPAEs) by Federation of Accounting Professions - November 2023 (7.30 hours)
- Expenses and prohibited expenses under the Revenue Code by Dhamniti Seminar And Training Co., Ltd. - November 2023 (6 hours)

**Remark:** Ms. Achara Chaicharncheep is the registered accountant and has qualifications and conditions in accordance with the rules specified in the notification of the Department of Business Development. She has completed the continual knowledge development program on professional accounting which shall be not lesser than 12 hours each calendar year which the number of hours of continuous knowledge development in the accounting profession shall be not lesser than 6 hours.

Family relationship between Directors and Executives: None

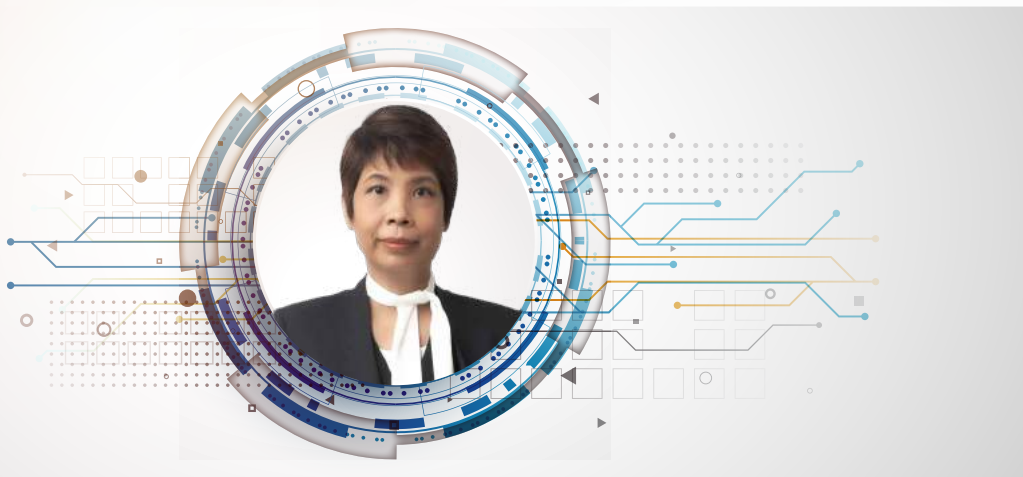
Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
Hana Semiconductor (BKK) Co., Ltd.	None	None
Position: Senior Manager of Financial and Accounting		

Shareholding of Ms. Achara Chaicharncheep				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
20,000 shares (0.002%)	-	-	20,000 shares (0.002%)	None	None

## Attachment 1: Details of the Board of Directors, Executives, and the Corporate Secretary



### 11. MS. JIRAPA KONGMANEE

- The Corporate Secretary
- Senior Manager of Internal Audit
- The Head of Compliance Unit

Age:	56 years old
Date of appointment:	11 August 2008
Working Experience:	
2013 - present	The Head of Compliance Unit Hana Microelectronics Public Co., Ltd.
2008 - present	Corporate Secretary Hana Microelectronics Public Co., Ltd.
1999 - present	Senior Manager of Internal Audit Hana Microelectronics Public Co., Ltd.
Educational Background:	<ul style="list-style-type: none"> <li>• Bachelor of Accounting, Bangkok University</li> <li>• Master of Business Administration, Butler University, USA</li> </ul>
IOD Training Background:	<ul style="list-style-type: none"> <li>• Corporate Secretary Program (IOD) 19/2006</li> <li>• Effective Minute Taking (IOD) 4/2006</li> </ul>

#### Other Trainings:

- How to kick start Net-Zero journey and Greenhouse Gas reporting by KPMG Thailand – April 2023
- Facilitating the Growth of Thailand's Carbon Market Seminar by the Stock Exchange of Thailand - June 2023
- CGR Workshop 2023 by Thai Institute of Directors – June 2023
- Disclosure of sustainability report according to ISSB standards and relate to the 56-1 One Report by the Securities and Exchange Commission – August 2023
- CYBER VISION 2023: Protect and Detect: Don't Let Your Guard Down by the Stock Exchange of Thailand - September 2023
- AGM Checklist 2024 by Thai Investor Association – October 2023
- ASEAN CG Scorecard Coaching 2023 by Thai Institute of Directors – October 2023
- SDG Guidebook for Thai Listed Companies and SDG Impact Standards by the Securities and Exchange Commission – October 2023
- Managing Climate - related Risks and Opportunities in Equity Analysis and Investment by the Securities and Exchange Commission - November 2023
- How to apply double materiality in sustainability reporting by Thaipat Institute – November 2023
- Integrating UNSDGs with GRI for Sustainability Reporting by SGS Thailand – December 2023

Family relationship between Directors and Executives: None

Disciplinary record under the Securities and Exchange Act and the Derivatives Act: None

Take the position as the director or management in other companies:

Subsidiaries of Hana	Non-listed Company	Listed Company
None	None	None

Shareholding of Ms. Jirapa Kongmanee				Indirect Shareholding	
Number of shares as of 1 January 2023	Movement during the year		Number of shares as of 31 December 2023	Spouse	Minor Child
	Acquisition	Disposition			
0 share	-	-	0 share (0%)	None	None

## Attachment 2: Details of the Directors of Subsidiaries

The Company and its subsidiaries															The Related Companies		
The Company and its subsidiaries	Hana Microelectronics Public Co., Ltd.	Hana Semiconductor (BKK) Co., Ltd.	Hana Semiconductor (Ayutthaya) Co., Ltd.	Hana Technology, Inc.	Hana Microelectronics, Inc.	Hana Microelectronics (Jiaxing) Co., Ltd.	Omac Sales Ltd.	Hana Microelectronics Investment Ltd.	Hana Microelectronics International Ltd.	Hana Microelectronics Enterprises Co., Ltd.	Hana Semiconductor International Ltd.	Hana Macao Co., Ltd.	Hana Microelectronics (Cambodia) Co., Ltd.	Power Master Semiconductor Co., Ltd.	Omac Ltd.	Omac (HK) Ltd.	Rainbow Joy Ltd.
Name list of Directors and Executives																	
1. Mr. John Thompson*	X																
2. Mr. Richard David Han	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//
3. Mr. Terrence Philip Weir	//	//	//	//	//	//	//	//	//	//	//	//	//	//			
4. Mr. Sanjay Nirendra Mitra	//		//		//												
5. Mr. Insuk Kim	//		//			//							//	//			
6. Ms. Pornphan Abhamongkol*	/																
7. Mrs. Sunun Thongbai*	/																
8. Mr. Stephanus Josephus Hendrikus Brader*	/																
9. Mr. Wichai Sukprasertkul	///																
10. Ms. Achara Chaicharncheep	///	///															

X = Chairman of the Board    / = Director    // = Executive Director    /// = Executive Management    \* = Independent Director

## Board Skill Matrix

Name	Mr. John Thompson	Mr. Richard David Han	Mr. Terrence Philip Weir	Mr. Sanjay Nirendra Mitra	Mr. Insuk Kim	Ms. Pornphan Abhamongkol	Mrs. Sunun Thongbai	Mr. Stephanus Josephus Hendrikus Brader
Position	Independent Director	Executive Director	Executive Director	Executive Director	Executive Director	Independent Director	Independent Director	Independent Director
Age	59	66	64	59	60	59	62	62
Gender	M	M	M	M	M	F	F	M
Leadership and Strategy	X	X	X	X	X	X	X	X
C-Suite Executive		X	X	X	X			X
Electronic Industry Knowledge		X	X	X	X			X
Accounting/Finance Knowledge	X	X	X			X	X	
Operations		X		X	X			X
Risk Management	X		X			X		X
International Business	X	X	X	X	X	X	X	X
Marketing		X		X				
Legal and Governance	X		X					
Information Technology			X					

## Attachment 3: Details of the Head of the Internal Audit and Compliance Unit

### Head of the Internal Audit and Compliance Units

Name:	Ms. Jirapa Kongmanee
Educational Background:	<ul style="list-style-type: none"> <li>Bachelor of Accounting, Bangkok University</li> <li>Master of Business Administration, Butler University, USA</li> </ul>

### Working Experience:

2013 - present:	<ul style="list-style-type: none"> <li>The Head of Compliance Unit, Hana Microelectronics Public Co., Ltd.</li> </ul>
2008 - present:	<ul style="list-style-type: none"> <li>Corporate Secretary, Hana Microelectronics Public Co., Ltd.</li> </ul>
1999 - present:	<ul style="list-style-type: none"> <li>Senior Manager of Internal Audit, Hana Microelectronics Public Co., Ltd.</li> </ul>

### Training:

Internal Audit Role in Governance, Risk and Control, Business Management Skills, Business Analysis and Information Technology, COSO Internal Control Framework, including training course related to the new laws and new accounting standards.

### Duties and responsibilities of the Head of Internal Audit:

- To prepare risk-based audit planning and propose the audit plan to the Audit Committee for approval
- To supervise the audit works according to the audit plan or adjust the audit scopes as deemed necessary

- To prepare the audit report and follow-up on internal audit with recommend improvement for effectiveness of internal control including coordinating with external auditors on matters related to the internal control system of the organization
- To evaluate existing fraud and corruption risk management framework with recommendation of potential gaps of anti-corruption controls in the processes
- To report the key audit results including major risks and management actions to senior management and the Audit Committee
- To perform other related assignments

### Duties and Responsibilities of the Head of Compliance Unit:

- To prepare compliance audit planning and propose the audit plan to the Audit Committee for approval
- To supervise the compliance audit works according to the audit plan or adjust the audit scopes as deemed necessary
- To prepare the audit report with recommend improvement to be in line with established relevant regulations, applicable laws, internal policies and procedures and specification including ethical standards
- To report the compliance audit results and management actions to senior management and the Audit Committee
- To perform other related assignments



## Attachment 4 Business Asset and Details of Asset Appraisal

As of 31 December 2023, the Company and its subsidiaries have major operating fixed assets of property, plant, machinery and equipment in the consolidated financial statements as below details.

### 1) Land and land improvement

Location	Company	Purpose of Use	Net Book Value (Million Baht)		Obligations
			Owned asset	Right of use under lease	
Bangkok, Thailand	Hana Microelectronics Public Co., Ltd.	Headquarters	123.6	-	None
Northern Region Industrial Estate, Lamphun, Thailand		PCBA Factory – Plant 1	51.0	-	None
Sahapat Group Industrial Park, Lamphun, Thailand		PCBA Factory – Plant 2	75.2	-	None
Hi-Tech Industrial Estate, Ayutthaya, Thailand	Hana Semiconductor (Ayutthaya) Co., Ltd.	IC Factory	106.4	-	None
Xingcheng Industrial Zone, Jiaxing, China	Hana Microelectronics (Jiaxing) Co., Ltd.	PCBA and IC Factories	26.8	-	None
Koh Kong Special Economic Zone, Koh Kong, Cambodia	Hana Microelectronics (Cambodia) Co., Ltd.	PCBA Factory	-	119.1	None
Solon, Ohio, USA	Hana Technologies, Inc.	RFID & Microdisplay Factory	53.1	-	None
Total Net Book Value			436.1	119.1	

### 2) Building and leasehold improvement

Location	Company	Purpose of Use	Net Book Value (Million Baht)		Obligations
			Owned asset	Right of use under lease	
Bangkok, Thailand	Hana Microelectronics Public Co., Ltd.	Office/ Headquarters	86.1	-	None
Northern Region Industrial Estate, Lamphun, Thailand		PCBA Factory – Plant 1	134.5	-	None
Sahapat Group Industrial Park, Lamphun, Thailand		PCBA Factory – Plant 2	602.6	-	None
Hi-Tech Industrial Estate, Ayutthaya, Thailand	Hana Semiconductor (Ayutthaya) Co., Ltd.	IC Factory	192.6	-	None
Xingcheng Industrial Zone, Jiaxing, China	Hana Microelectronics (Jiaxing) Co., Ltd.	PCBA and IC Factories	144.3	-	None
Koh Kong Special Economic Zone, Koh Kong, Cambodia	Hana Microelectronics (Cambodia) Co., Ltd.	PCBA Factory	240.1	-	None
Solon, Ohio, USA	Hana Technologies, Inc.	RFID & Microdisplay Factory	304.9	-	None
Cheongju-si Chungcheongbuk-do, Korea	Power Master Semiconductor Co., Ltd.	IC Factory	372.9	-	None
Gyeyang-gu, Incheon, Korea		Sales and R&D	-	2.7	None
Hong Kong	Omac Sales Ltd.	Office	52.9	42.7	None

## 2) Building and leasehold improvement (Cont.)

Location	Company	Purpose of Use	Net Book Value (Million Baht)		Obligations
			Owned asset	Right of use under lease	
Macao	Hana Macao Ltd.	Office	1.6	-	None
Total Net Book Value			2,132.5	45.4	

## 3) Machinery and Equipment

Location	Company	Purpose of Use	Net Book Value (Million Baht)		Obligations
			Owned asset	Right of use under lease	
Northern Region Industrial Estate, Lamphun, Thailand	Hana Microelectronics Public Co., Ltd.	PCBA Factory – Plant 1	329.2	-	None
Sahapat Group Industrial Park, Lamphun, Thailand		PCBA Factory – Plant 2	397.4	-	None
Hi-Tech Industrial Estate, Ayutthaya, Thailand	Hana Semiconductor (Ayutthaya) Co., Ltd.	IC Factory	1,662.6	-	None
Xingcheng Industrial Zone, Jiaxing, China	Hana Microelectronics (Jiaxing) Co., Ltd.	PCBA and IC Factories	1,766.1	-	None
Koh Kong Special Economic Zone, Koh Kong, Cambodia	Hana Microelectronics (Cambodia) Co., Ltd.	PCBA Factory	13.8	-	None
Solon, Ohio, USA	Hana Technologies, Inc.	RFID and Microdisplay Factory	203	3.1	None
Cheongju-si Chungcheongbuk-do, Korea	Power Master Semiconductor Co., Ltd.	IC Factory	2,310	-	None
Total Net Book Value			6,682.1	3.1	

## Details of leasing agreement:

### 1. Land leasing agreement for Hana in China

**Purpose of use:** Factory

**Counterparty:** Xiuzhou District, China Government (Lessor) and Hana Microelectronic (Jiaxing) Co., Ltd. (Tenant)

**Contract period:** 1 December 2004 - 11 March 2054 (50 years)

### 2. Land leasing agreement of Hana in Cambodia

**Purpose of use:** Factory and Dormitory

**Counterparty:** Koh Kong SEZ Co., Ltd. (Lessor) and Hana Microelectronic (Cambodia) Co., Ltd. (Tenant)

**Contract period:** 1 December 2013 - 30 November 2063 (50 years)

### 3. Land leasing agreement of Hana Macao

**Purpose of use:** Office

**Counterparty:** Macao Special Administrative Region of the People's Republic of China (Lessor) and Hana Macao Co., Ltd. (Tenant)

**Contract period:** The contract ends on 19 December 2049 (50 years)

### 4. Land leasing agreement of Omac in Hong Kong

**Purpose of use:** Office

**Counterparty:** Hong Kong Special Administrative Region of the People's Republic of China (Lessor) and Omac Sales Ltd. (Tenant)

**Contract period:** The contract ends on 30 June 2047 (50 years)

### 5. Land leasing agreement of Power Master in Korea

**5.1 Purpose of use:** Factory

**Counterparty:** Korean Government (Lessor) and Power Master Semiconductor Co., Ltd. (Tenant)

**Contract period:** 3 January 2019 – 2 January 2029 (renewal every 10 years)

**5.2 Purpose of use:** Sales and Research and Development

**Counterparty:** Wellslife Ltd. (Lessor) and Power Master Semiconductor Co., Ltd. (Tenant)

**Contract period:** 20 December 2022 – 31 December 2024

## Attachment 5: Corporate Governance Policy and Business Code of Conduct

The Company has disclosed the policy of Corporate Governance, Business Code of Conduct, related policies and Charters of the Board and the Sub-Committees on the Company's website as follows.

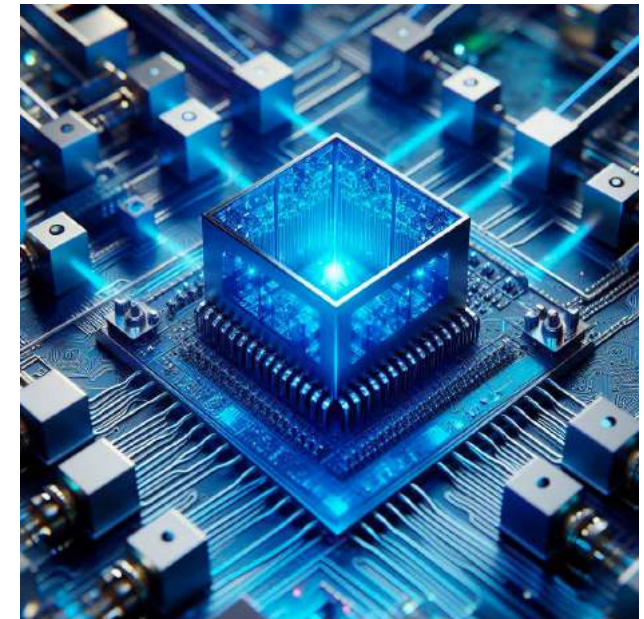
**Corporate Governance Policy and related policies:** <https://www.hanagroup.com/Investor/CGrelated>

- Corporate Governance Policy  
<https://www.hanagroup.com/File/ViewDoc/97>
- Corporate Code of Conduct  
<https://www.hanagroup.com/File/ViewDoc/82>
- Business Code of Conduct of the Board of Directors  
<https://www.hanagroup.com/File/ViewDoc/86>
- Anti-Corruption Policy  
<https://www.hanagroup.com/File/ViewDoc/84>
- Whistle Blowing Policy  
<https://www.hanagroup.com/File/ViewDoc/100>

**Sustainability:** <https://www.hanagroup.com/Investor/Sustainability>

- Sustainability Policy  
<https://www.hanagroup.com/File/ViewDoc/4405>

**Charters of the Board and Sub-Committees:** <https://www.hanagroup.com/Investor/Charters>



## Attachment 6: The Audit Committee Report



The Audit Committee of Hana Microelectronics Public Company Limited is composed of four independent directors. Members of the Committee meet the qualification and the scope of work is in accordance with the rules and regulations of the Stock Exchange of Thailand.

In performing its oversight responsibilities, the Audit Committee held 4 meetings during 2023 with the following meeting attendance of each member..

Committee	Meeting Attendance
1. Mr. John Thompson, Chairman	4 of 4 times
2. Ms. Pornphan Abhamongkol, Member	4 of 4 times
3. Mrs. Sunun Thongbai, Member	4 of 4 times
4. Mr. Stephanus Josephus Hendrikus Brader, Member	4 of 4 times

In 2023, the Audit Committee performed its duties and responsibilities assigned by the Board of Directors and the Charter of the Audit Committee as follows.

- Reviewed the financial statements of the Company and its subsidiaries to ensure the compliance with generally accepted accounting principles, and the disclosure of the notes to the financial statements including the judgments used in preparing financial statements in accordance with the financial reporting standards. The Audit Committee agreed with the auditors that the financial performance and cash flows of the Company and its subsidiaries for financial year ending 31 December 2023 presented substantial fairly and disclosed with generally accepted accounting principles and financial reporting standards. Such disclosure was also made in an adequate and timely manner.
- Reviewed the adequacy and efficiency of the internal control systems by evaluating the internal controls, approving the annual audit plan, reviewing the audit reports, considering the risk assessment and risk control measures, as well as considering the qualification of the head of the internal audit department. From the review, the Audit Committee concluded that the Company had adequate internal control and risk management systems which were appropriate to the business and the head of the internal audit had the necessary education, experiences and relevant trainings appropriate to the performance of her duties.



## Attachment 6: The Audit Committee Report

- Reviewed the connected transactions to ensure no possible conflict of interests and in compliance with the Securities and Exchange Acts. The Company also has the policy that a director and an executive shall report his interest or a related person's interest which may cause conflicts of interest and the policy requiring the Board to approve the major transactions. In 2023, the Company's business transactions with related parties arose in the ordinary course of business under the commercial terms and bases agreed upon between the Company and those related parties. There was no connected transaction giving rise to potential conflict of interests.
- Reviewed to ensure compliance with rules and regulations of the Securities and Exchange Commission and applicable regulatory requirements and the board policies. The Audit Committee concluded that the Company complied with the applicable laws, regulations and established policies.
- Recommended the appointment of the external auditors and their remuneration by giving due consideration to their experience, knowledge, ability, reliability, staff and workload, as well as the independence of auditors in performing such duties. Such auditors must be approved by the Securities and Exchange Commission (SEC). The Audit Committee proposed to the Board to seek further approval from the shareholders' meeting. For financial year ending 31 December 2023, the Audit Committee recommended to appoint Ms. Kamontip Lertwitworatep and/or Mrs. Sarinda Hirunprasurtwutti and/or Mr. Wichart Lokatekrawee of EY Office Limited as the auditors of Hana Microelectronics Public Co., Ltd. for a total remuneration of Baht 2,450,000, and the non-audit fee of Baht 580,000 for verifying the compliance with the conditions of Board of Investment tax privileges to obtain an income tax exemption for the accounting period ending 31 December 2023 including the inspection of the destruction of obsolete inventories whereby the non-audit fee was equivalent to 23.67% of the audit fee. The Audit Committee was of the opinion that the non-audit services did not affect the auditors' independence in the performance of the Company's financial statements as the auditors could plan the audits and used standard audit procedures to obtain sufficient evidence and expressed opinions on the audit report independently.

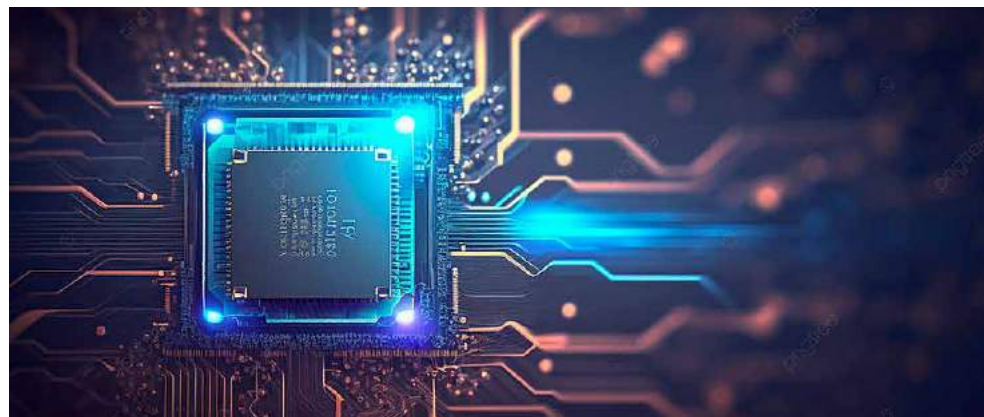
- Communicated with the external auditors on important matters by convening a special meeting for consideration of problems or restrictions arising during the audits. For the financial year ending 31 December 2023, the auditors were able to perform their duties and exercised their independent judgments under relevant auditing standards with the Company's provided assistance and cooperation.

The Audit Committee concluded its satisfaction with the accuracy, completeness and creditability of 2023 financial statements' preparation and reporting, the adequacy of internal control systems and risk management, the compliance with applicable laws and regulations including reasonable related party transactions. As a result, the Audit Committee concluded no significant deficiency or irregularity.



Mr. John Thompson

Chairman of Audit Committee



## Attachment 6: The Nomination Committee Report



The Nomination Committee consists of four directors of which three members are the independent directors. The scope and responsibility of the Committee is to assist the Board of Directors to annually review the size and composition of the Board and to maintain the appropriate balance of skills, knowledge, experience, and diversity to support and comply with the Company's strategies including the clear and transparent appointment process of directors. The Committee is responsible for selection and screening of candidate's qualifications and proposing the suitable candidates to the Board's consideration. The Board subsequently proposes agreed candidates to the shareholders' meeting for approval according to the nomination processes.

In 2023, the Committee held 2 meetings and the meeting attendance of each member was as follows.

Committee	Meeting Attendance
1. Ms. Pornphan Abhamongkol, Chairman	2 of 2 times
2. Mr. Richard David Han, Member	2 of 2 times
3. Mrs. Sunun Thongbai, Member	2 of 2 times
4. Mr. Stephanus Josephus Hendrikus Brader, Member	2 of 2 times

In December 2022, there were 2 independent directors, Mrs. Sunun Thongbai and Mr. Stephanus Josephus Hendrikus Brader, appointed to replace 2 independent directors who had completed the tenure of an independent director's term limit, along with appointing me to the position of Chairman of the Nomination Committee to be filled the vacancy.

To nominate the candidates to replace the directors completing their term limit, the Nomination Committee considered and screened qualified persons, having proper qualifications in line with the Company's business strategies, including the Board's diversity policy, to be appointed as the directors. The independent directors shall have full qualifications met the definition of independent directors according to the Company's good corporate governance policy, which stricter than the rules of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand. The Committee reviewed eligible candidates from the Director Pool database of the Thai Institute of Directors Association in addition to other sources and proposed to the Board of Directors for consideration. Nonetheless there was no any member of independent directors whose tenure exceeding 9 years in 2023.

## Attachment 6: The Nomination Committee Report

In respect of the candidate nominations for new director appointments in the shareholders' meeting in 2023, the Company invited shareholders to propose candidates for election as directors of which its policies and procedures to allow shareholders to propose candidates for the election of the Board are posted on the Company's website. However, there was no proposed candidate to the Committee from the shareholders in the previous year. Therefore, the Nomination Committee reviewed those directors whose term expired by rotation in accordance with the Company's Articles of Association. The Committee has considered that those directors can continue to make further contribution to the Board and the Company.

The Nomination Committee believes that the candidate nomination for director appointment process is proper and transparent and in compliance of the Nomination Committee Charter. The Committee also considered and reviewed the CEO succession planning policy and the qualification criteria (job description) for potential successors as well as oversaw the progress of development plan and proposed to the Board of Directors for consideration.

In 2023, the Nomination Committee reviewed the current board structure and the composition of the directors and was of opinion that they were particularly strong in the right size and mix of members of the Board with a good balance of the core skills, knowledge and experience (director skills matrix) align with business strategies for the business to remain effective in achieving the goals.



A handwritten signature in black ink, appearing to read 'Pornphan Abhamongkol'.

Ms. Pornphan Abhamongkol

Chairman of Nomination Committee

## Attachment 6: The Risk Management Committee Report



To support the Board of Directors in overseeing the organizational risk management, the Board of Directors has appointed the Risk Management Committee forming at a board-level structure which consists of an executive director as the chairman and 3 independent directors as the members. The Risk Management Committee defined their roles in risk oversight and governance and has performed their responsibilities in compliance with the Risk Committee Charter approved by the Board.

In 2023, the Committee held 1 meeting and the meeting attendance of each member was as follows.

Committee	Meeting Attendance
Mr. Terrence Philip Weir, Chairman	1 of 1 time
Ms. Pornphan Abhamongkol, Member	1 of 1 time
Mrs. Sunun Thongbai, Member	1 of 1 time
Mr. Stephanus Josephus Hendrikus Brader, Member	1 of 1 time

The Committee reviewed the risk management policies and guidelines, considered risk identification, measurement and mitigation for both enterprise and environment, social, and governance (ESG) risks, as well as reviewed new risks and emerging risks to make them correspond to the change of businesses in order to reduce material risks of the Company and reported the key risk profile to the Board in order that the Board could obtain a high level understanding of the current status of significant risks and opportunities of the Company.

The Committee believes that the Company has adequate risk management oversight and stay within its risk appetite.

Mr. Terrence Philip Weir

Chairman of Risk Management Committee



## Attachment 6: The Corporate Governance and Sustainability Committee Report



The Corporate Governance and Sustainability Committee consists of four directors of which the majority of the members are independent directors having the roles and responsibilities according to the Charter of the Corporate Governance and Sustainability Committee approved by the Board of Directors.

In 2023, the Committee held 2 meetings and the meeting attendance of each member was as follows.

Committee	Meeting Attendance
1. Mr. Terrence Philip Weir, Chairman	2 of 2 times
2. Ms. Pornphan Abhamongkol, Member	2 of 2 times
3. Mrs. Sunun Thongbai, Member	2 of 2 times
4. Mr. Stephanus Josephus Hendrikus Brader, Member	2 of 2 times

In 2023, the Committee conducted an annual review of the corporate governance policy while ensured the application of good corporate governance principles applicable for the Company's business, including corporate governance self-assessment with related checklists of the Thai Institute of Directors Association (IOD), the Stock Exchange of Thailand, the Office of the Securities and Exchange Commission and the Thai Investors Association. The Committee reviewed the sustainability policy including approved the Company's materiality prioritization, reviewed ESG risk assessment, the sustainability targets as well as monitored operational results on environment, social responsibility, and governance of the Company.



## Attachment 6: The Corporate Governance and Sustainability Committee Report

From our continuous ESG implementation and development, Hana has been assessed as “excellent” recognition level (5 stars) on corporate governance of Thai listed companies as evaluated by the Thai Institute of Directors Association (IOD) for tenth consecutive years since 2013. The Company also qualified for the third year as SET ESG Ratings in 2023 which was based on the annual sustainability assessment by the Stock Exchange of Thailand’s (SET). In addition, Hana is ranked among the top 100 listed companies, achieving the outstanding performance of ESG and we also received the Sustainability Disclosure Acknowledgement Award from Thaipat Institute, which recognized our outstanding effort towards sustainability disclosure and reporting of SDG target 12.6. As such, this reflects the recognition of the Company’s contribution to society, commitment to the environment with an emphasis on the principles of good governance.

I’m pleased to welcome Mr. Stephanus JH Brader on ascending into his new role of the Chairman of CGS Committee starting in 2024. We look forward to working with him which aims to further strengthen the Company’s efforts in embedding sustainability and opportunities that align with our sustainability agenda.

Despite potential uncertainties ahead, we look forward to upholding our commitment to the practice of good corporate governance with social and environmental responsibility in accordance to the national and international development goals.



Mr. Terrence Philip Weir

Chairman of Corporate Governance and Sustainability Committee





**Microelectronics Public Company Limited**

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