

Management's Discussion and Analysis

Year 2020

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue decreased 5% year on year, at THB 19.3 billion in year 2020 from THB 20.4 billion in year 2019. Sales Revenue in USD terms decreased by 6% to USD 616m in 2020 from USD 656m in 2019. Earnings from Operations increased 23% to THB 1,725m in 2020 from THB 1,408m in 2019.

Net Profit increased by 6% to THB 1,908m in 2020 from THB 1,805m in 2019 due to higher operating profits more than offsetting an decrease in exchange gain of THB 199m in 2020.

Past Performance Analysis

Revenue Analysis

Group Sales decreased 5% in 2020 to THB 19,282m from 2019 at THB 20,384m due to market weakness from the lower sales revenues in (Q2 & Q320) and reduction of inventories held by customers in Q1-Q3 due to the COVID-19 pandemic. USD sales were 6% lower in 2020 at USD 616m down from USD 656m in 2019 as the average THB/USD exchange rate weakened 1% to THB/USD 31.29 in 2020 from THB/USD 31.05 in 2019.

The Microelectronics divisions' sales revenue decreased 6% [-6% in THB terms] in 2020 over 2019. The microelectronics operation in Lamphun sales decreased 6% [-5% in THB terms] and JXG decreased by 8% [-7% in THB terms] in 2019.

In 2020 IC assembly sales overall decreased by 4% in USD terms [-4% in THB terms]. Specifically, IC AYT sales decreased 3% [-2% in THB terms], and IC JXG USD sales decreased by 17% [-17% in THB terms].

Hana Technologies Inc "HTI" (formerly Hana Microdisplay Technologies), sales decreased 19% [-18% THB] for the year.

The annual sales split was:

	<u>2020</u>	<u>2019</u>	<u>2018</u>
PCBA (Thailand)	44%	45%	40%
PCBA (China)	13%	14%	17%
PCBA (Cambodia)	1%	0%	0%
IC (Thailand)	34%	33%	33%
IC (China)	4%	4%	5%
HTI (USA)	4%	4%	5%
	<hr/>	<hr/>	<hr/>
	100%	100%	100%

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

Gross Profit increased by THB 357m with the gross margin being 13% in 2020 up 2 percentage points from 11% in 2019. +2% points higher gross margin due to lower materials cost related exchange rate movements from Q419 to Q120 [+1%], reduced overtime and labour and salary cost reductions [+1%].

Operating Profit Analysis

The Earnings from Operations margin increased by 2 percentage points to 9% in 2020 from 7% in 2019 due to the increase in gross margin. SGA including R&D expenses were 7% higher in 2020 than 2019.

Payout Analysis

For the year 2020 the company paid full dividends of THB 1,126m (THB 1.40/share). An interim dividend paid of THB 523m in Q4/20 and the final dividend of THB 603m in Q2/21.

For the year 2019 the company paid full dividends of THB 1,046m (THB 1.30/share). An interim dividend paid of THB 523m in Q4/19 and the final dividend of THB 523m in Q2/20.

For the year 2018 the company paid full dividends of THB 1,610m (THB 2.00/share). An interim dividend paid of THB 805m in Q4/18 and the final dividend of THB 805m in Q2/19.

The final dividend is normally announced in the board meeting in February of the following year for approval in the annual general meeting in April and paid out in May.

Financial Status

Net Cash reserves and financial investments were THB 9.7 billion at the 31st December 2020 up from THB 8.7 billion at the 31st December 2019

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 64 days in 2020, 64 days in 2019 and 63 days in 2018 .

Trade Receivables	'000	<u>2020</u>	<u>2019</u>	<u>2018</u>
Less than 3 months		3,318,590	3,212,509	3,668,482
3 - 6 months		18,861	9,054	34,940
6 - 12 months		3,203	3,579	7,737
More than 12 months		2,418	3,626	1,480
Total accounts receivable - other companies		3,343,072	3,228,768	3,712,639
Less : Allowance for doubtful accounts		(6,117)	(4,485)	(21,556)
		<u>3,336,955</u>	<u>3,224,283</u>	<u>3,691,083</u>

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 98 days in 2020, 98 days in 2019, and 89 days in 2018.

Liquidity

The group has THB 9.6 billion in cash and financial investments with no interest bearing debt. Liquidity ratios are high at over 3 times current liabilities.

Operating Cashflow (EBITDA) was THB 2,900m in 2020 14% higher than THB 2,546m in 2019.

EBITDA was THB 2.9 billion in 2020 and THB 2.5 billion in 2019 and 3.4 billion in 2018.

Cash and financial investments in 2020 increased to THB 9.7 billion, due to

EBITDA 2.9 billion less final dividend THB 0.5b 2019 paid in Q220, interim dividend Q420 THB 0.5b , net capital expenditure THB 1.1b, other items THB -0.8b.

Cash and financial investments in 2019 remained stable at THB 8.5 billion, due to

EBITDA 2.5 billion less final dividend THB 0.8b 2018 paid in Q219, interim dividend Q419 THB 0.5b , net capital expenditure THB 1.1b, other items THB -0.1b.

Cash and financial investments in 2018 decreased by THB 1.0 billion to THB 8.5 billion, due to

EBITDA 3.4 billion less final dividend THB 0.8b 2017 paid in Q218, interim dividend Q418 THB 0.8b , capital expenditure THB 1.9b, other items THB -1.1b.

Capital Expenditure

Net Capital Expenditure was THB 1,055m in 2020, THB 1,076m in 2019, and THB 2,333m in 2018. Capital Expenditure was lower in 2020 due to the lower capital expenditure from Ayutthaya plant compared to recent years due to the COVID-19 pandemic in 2020 and weakening in the semiconductor industry in 2019 and high capital expenditure in 2018.

Generally, capital expenditure for production equipment will follow the increase in sales, particularly in the IC division. However, there is a 3 to 6 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 has no interest bearing debt and operating working capital is positive the group's funding is from the shareholders equity.

Major Factors which could have an Impact on the Company's Performance

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.

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 200m 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, USD 120m is hedged, Foreign exchange contracts are used to buy THB and Sell USD on a rolling 3 or 6 months basis.

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.

Foreign Exchange Rates

The THB/USD currency movements reflected the economic trends in emerging markets and commodities during period. The average rate for 2020 of THB/USD 31.29 was 1% weaker than the THB/USD 31.05 in 2019 which was 4% stronger than the THB/USD 32.31 in 2018.

Exceptional Items

There were no Exceptional Items in 2020, 2019 or 2018.

Subsequent Event

None

HANA MICROELECTRONICS GROUP

CONSOLIDATED STATEMENT OF EARNINGS

'000 Baht	Year 2020		Year 2019		Year 2018		2020-2019	% 2020-2019
REVENUES								
Sales	19,282,520		20,384,422		22,264,260		(1,101,902)	-5%
consisting of:								
<i>PCBA (Lamphun, Thailand)</i>	8,617,065	44%	9,093,562	45%	8,824,932	38%	(476,497)	-5%
<i>PCBA (Jiaxing, China)</i>	2,581,014	13%	2,787,832	14%	3,706,284	17%	(206,818)	-7%
<i>PCBA (Cambodia)</i>	107,461	1%	85,348	0%	44,182	0%	22,113	26%
<i>IC (Ayuthaya, Thailand)</i>	6,526,515	34%	6,665,343	33%	7,445,097	34%	(138,828)	-2%
<i>IC (Jiaxing, China)</i>	763,655	4%	914,667	4%	1,203,452	6%	(151,011)	-17%
<i>HTI (Ohio, USA)</i>	682,908	4%	837,670	4%	1,040,312	5%	(154,762)	-18%
<i>IC (Korea)</i>	3,902							
	<u>19,282,520</u>	100%	<u>20,384,422</u>	100%	<u>22,264,260</u>	100%	<u>(1,105,805)</u>	-5%
Other Income	388,166		347,883		375,335		40,283	12%
TOTAL OPERATING REVENUES	<u>19,670,686</u>		<u>20,732,305</u>		<u>22,639,595</u>		<u>(1,065,522)</u>	-5%
EXPENSES								
Cost of Sales	16,734,326	87%	18,193,460	89%	19,060,852	85%	(1,459,133)	-8%
Selling & Admin. Expenses	1,126,805	6%	1,103,980	5%	1,245,852	6%	22,825	2%
R&D Expenses	84,417	0%	26,744	0%	23,634	0%	57,674	216%
Other Expenses	-		-		-		-	
TOTAL EXPENSES	<u>17,945,549</u>	93%	<u>19,324,183</u>	95%	<u>20,330,338</u>	91%	<u>(1,378,634)</u>	-7%
OPERATING EARNINGS	<u>1,725,137</u>	9%	<u>1,408,122</u>	7%	<u>2,309,257</u>	10%	<u>313,113</u>	22%
Dividend Income	1,992		66		2,014		1,925	
Interest	139,610		183,557		196,115		(43,947)	-24%
Finance Expenses	(9,066)		(13,234)		(6,752)		4,168	-31%
EARNINGS before Income Tax	<u>1,857,673</u>	9%	<u>1,578,511</u>	8%	<u>2,500,634</u>	11%	<u>275,260</u>	17%
Corporate Income Tax	(60,127)	3%	(108,265)	7%	(140,537)	5%	48,137	-44%
Earnings before Exch. & Exceptional Items	<u>1,797,545</u>	9%	<u>1,470,246</u>	7%	<u>2,360,098</u>	11%	<u>323,397</u>	22%
Exchange Gain (Loss)	135,706		334,338		15,125		(198,633)	
Exceptional Items	(25,511)		-		-		(25,511)	
NET EARNINGS for the Period	<u>1,907,741</u>	10%	<u>1,804,585</u>	9%	<u>2,375,223</u>	13%	<u>99,254</u>	6%

HANA MICROELECTRONICS GROUP

CONSOLIDATED Balance Sheet

'000 Baht	Year 2020	Year 2019	Year 2018	2020-2019	% 2020-2019
ASSETS					
CURRENT ASSETS					
Cash in Hand & at Banks	5,400,261	5,434,979	4,081,336	(34,719)	-1%
Financial Investments	4,266,901	3,582,766	4,465,406	684,135	19%
Accounts Receivable - trade	3,460,920	3,340,723	3,831,672	120,196	4%
Inventories	4,496,142	4,518,387	5,222,840	(22,245)	0%
Other Current Assets	95,709	137,874	155,141	(42,165)	-31%
TOTAL CURRENT ASSETS	17,719,932	17,014,729	17,756,395	705,203	4%
Long Term Financial Investments	97	135,790	146,121	(135,693)	-100%
INVESTMENTS IN ASSOCIATED COMPANY					
	-	-	-	-	
FIXED ASSETS (net)	7,010,560	6,974,166	7,251,542	36,394	1%
	-	-	-	-	
OTHER ASSETS	449,543	301,497	214,254	148,046	
TOTAL ASSETS	25,180,132	24,426,182	25,368,313	753,950	3%
LIABILITIES					
CURRENT LIABILITIES					
Bank Overdrafts & Loans	-	500,000	-	(500,000)	-100%
Accounts & Notes Payable	2,354,747	2,252,054	3,421,409	102,693	5%
Short Term Provisions	311,099	301,540	324,498	9,559	3%
Corporate Income Tax Payable	12,338	22,447	37,278	(10,110)	-45%
Accrued Expenses	-	-	-	-	
Other Current Liabilities	127,928	105,661	130,408	22,268	21%
TOTAL CURRENT LIABILITIES	2,806,113	3,181,702	3,913,593	(375,590)	-12%
LONG TERM LIABILITIES					
Long Term Loans	-	-	-	-	
Other Long Term Liabilities	760,407	698,864	371,590	61,543	
TOTAL LIABILITIES	3,566,520	3,880,567	4,285,183	(314,047)	-8%
SHAREHOLDERS EQUITY					
Share Capital	804,879	804,879	804,879	-	
Unrealised gain(loss) on change in investments	-	-	-	-	
Share Premium	1,723,219	1,723,219	1,723,219	-	0%
Retained Earnings	-	-	-	-	
Appropriated Statutory Reserve	456,463	456,463	456,463	-	0%
Unappropriated & Treasury Share Reserve	19,239,560	18,441,803	18,237,930	797,757	4%
Translation adj. & Investment revaluation	(610,508)	(880,748)	(139,361)	270,240	-31%
Treasury shares	-	-	-	-	
Excess Cost over Net Book Value of Subsidiary Investments	-	-	-	-	
TOTAL SHAREHOLDERS EQUITY	21,613,612	20,545,616	21,083,130	1,067,997	5%
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	25,180,132	24,426,182	25,368,313	753,950	3%

HANA MICROELECTRONICS GROUP
CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Year 2020	Year 2019	Year 2018	2020-2019
Cashflow from Operating Activities				
Net Earnings before Tax	1,967,868	1,912,849	2,515,760	55,019
Adjustments to reconcile net earnings to net cash provided by operating activities				
Non Cash items				
Depreciation	1,175,279	1,138,134	1,110,629	37,144
Unrealised (gain) Loss on exchange	4,428	(45,839)	18,516	50,267
Change in other provisions	(26,802)	(193,122)	(106,226)	166,320
	<u>1,152,904</u>	<u>899,174</u>	<u>1,022,919</u>	<u>253,731</u>
Working Capital (increase) decrease				
Trade accounts receivable	(117,081)	481,963	2,933	(599,044)
Inventories	(45,845)	720,903	(1,166,828)	(766,748)
Trade accounts payable	(15,246)	(689,159)	152,498	673,914
Other	(37,375)	(114,364)	(47,320)	76,990
	<u>(215,546)</u>	<u>399,342</u>	<u>(1,058,716)</u>	<u>(614,888)</u>
Net Cashflow from Operating Activities	2,905,226	3,211,365	2,479,962	(306,139)
Cashflow from Investing Activities				
(Increase) decrease in short term investment	(333,929)	1,180,808	560,546	(1,514,737)
Increase in property, plant and equipment	(1,200,505)	(1,407,023)	(1,908,216)	206,518
Proceeds from sale of fixed assets	33,546	73,694	11,697	(40,147)
Increase (decrease) in translation adjustment	191,934	(880,325)	(206,708)	1,072,259
Decrease in short term loans to related parties				-
Other	(59,789)	9,060	(2,724)	(68,849)
	<u>(1,368,742)</u>	<u>(1,023,787)</u>	<u>(1,545,406)</u>	<u>(344,956)</u>
Cashflow from Financing Activities				
Payment of principal portion of lease liabilities	(22,822)	-	-	(22,822)
Cash received from increase in share capital & overdraft	(502,038)	494,115	-	(996,153)
Dividend paid	(1,046,343)	(1,328,050)	(1,609,758)	281,708
Net cash (used in) from financing activities	(1,571,203)	(833,935)	(1,609,758)	(737,268)
Net Cash, equivalents and short term liquid investments increase (decrease)	(34,719)	1,353,643	(675,201)	(1,388,362)
Cash and Equivalents at the beginning of the period	5,434,980	4,081,337	4,756,538	1,353,643
Cash and Equivalents at the end of the period	<u>5,400,261</u>	<u>5,434,980</u>	<u>4,081,337</u>	<u>(34,719)</u>

HANA MICROELECTRONICS GROUP

Financial Ratios

'000 Baht	Year 2020	Year 2019	Year 2018	2020-2019
Profitability Ratios				
Gross Profit Margin (%)	13%	11%	14%	2%
Operating Profit Margin (%)	9%	7%	10%	2%
Net Profit before Exceptional Margin (%)	9%	7%	11%	2%
Net Profit after Exceptional Margin (%)	10%	9%	11%	1%
EBITDA margin (%)	15%	12%	15%	3%
Return On Equity (%) pa	9%	9%	11%	
Return On Assets (%) pa	8%	7%	9%	1%
Return On Operating Capital Employed (%) pa	14%	11%	18%	3%
Efficiency Ratios				
Working Capital turnover	3	4	4	(1)
Account Receivable days	64	64	63	
Inventory days	98	98	89	
Accounts Payable days	50	57	61	(7)
Liquidity Ratios				
Current Ratio	6.3	5.3	4.5	1.0
Quick Ratio	4.7	3.9	3.2	0.8
Financial Capital Ratios				
Debt / Equity	0.2	0.2	0.2	
Net Debt to Equity	-0.3	-0.2	-0.2	-0.1
Interest Coverage	n/a	n/a	n/a	