

Management's Discussion and Analysis

Year 2017

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 5% year on year, at THB 21.6 billion in year 2017 from THB 20.5 billion in year 2016. Sales Revenue in USD terms increased by 9% to USD 635 million in 2017 from USD 581 million in 2016. Operating profits increased 16% to THB 2,290 million Baht in 2017 from THB 1,969m Baht in 2016. Operating profits increased 21% in USD terms to USD 67 million in 2017 from USD 56 million in 2016.

Net Profit increased by 37% to THB 2,888 million in 2017 from THB 2,105 million in 2016 due to THB 531 million positive change in foreign exchange gain (loss) and higher operating profits.

Past Performance Analysis

Revenue Analysis

Group Sales increased 5% in 2017 at THB 21,551 million from 2016 at THB 20,523 million with markets strong throughout the year but particularly after the first quarter on 2017. USD sales were 9% higher in 2017 at USD 635 million up from USD 581m in 2016 as the average THB/USD exchange rate strengthened 4% to THB/USD 33.93 in 2017 from THB/USD 35.30 in 2016.

The Microelectronics divisions' sales revenue increased 6% [+2% THB] in 2017 over 2016. The microelectronics operation in Lamphun sales increased 7% [+3% in THB terms] and JXG increased by 3% [-1% in THB terms] in 2017. In 2017 IC assembly sales overall increased by 12% in USD terms [+8% in THB terms]. Specifically, IC AYT sales increased 10% [+5% in THB terms], and IC JXG USD sales increased by 26% [+21% in THB terms]. Hana Microdisplay Technologies "HMT", sales increased 27% [+22% THB] for the year.

The annual sales split was:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
PCBA (Thailand)	38%	38%	43%
PCBA (China)	17%	18%	19%
PCBA (Cambodia)	0%	0%	0%
IC (Thailand)	34%	34%	31%
IC (China)	6%	5%	6%
HMT (USA)	5%	5%	1%
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	100%	100%	100%

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

Gross Profit increased by THB 339 million with the gross margin being 15% in 2017 up 1 percentage point from 14% in 2016, due to higher sales revenue and lower depreciation expense.

Operating Profit Analysis

The Operating profit margin increased by 1 percentage point to 11% in 2017 from 10% in 2016. SG&A expenses increased by 4% [THB 52 million].

Payout Analysis

For the year 2017 the company paid an interim dividend of THB 805 million in Q4/17.

For the year 2016 the company paid full dividends of THB 1,610 million (THB 2.00/share). An interim dividend paid of THB 805 million in Q4/16 and the final dividend of THB 805 million in Q2/17.

For the year 2015 the company paid full dividends of THB 1,610 million (THB 2.00/share). An interim dividend paid of THB 805 million in Q4/15 and the final dividend of THB 805 million in Q2/16.

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

The group currently has no interest bearing debt. Cash reserves and financial investments at the 31st December, 2017 were THB 9.7 billion down from 31st December, 2016 at THB 9.9 billion.

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 63 days in 2017, 61 days in 2016 and 59 days in 2015.

Trade Receivables	'000	<u>2017</u>	<u>2016</u>	<u>2015</u>
Less than 3 months		3,713,024	3,404,803	3,110,049
3 - 6 months		14,756	18,549	61,075
6 - 12 months		681	26,032	2,511
More than 12 months		9,130	4,443	1,306
Total accounts receivable - other companies		3,737,591	3,453,827	3,174,941
Less : Allowance for doubtful accounts		(11,159)	(19,855)	(24,245)
		<u>3,726,432</u>	<u>3,433,972</u>	<u>3,150,696</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 77 days in 2017, 73 days in 2016 and 70 days in 2015.

Liquidity

The group has THB 9.7 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 7% higher in 2017.

EBITDA at THB 3.4 billion in 2017 and 3.1 billion in 2016 and THB 3.3 billion in 2015.

Cash and financial investments in 2017 decreased by THB 0.2 billion to THB 9.7 billion, due to EBITDA 3.4 billion less final dividend THB 0.8 billion 2016 paid in Q217, interim dividend Q417 THB 0.8 billion, capital expenditure THB 1.1 billion, other items THB -0.9 billion.

Cash and financial investments in 2016 increased by THB 0.8 billion to THB 9.9 billion, due to EBITDA 3.1 billion less final dividend THB 0.8 billion 2015 paid in Q216, interim dividend Q416 THB 0.8 billion, capital expenditure THB 0.8 billion, other items THB +0.1 billion.

Cash and financial investments in 2015 increased by THB 0.5 billion to THB 9.1 billion, due to EBITDA 3.3 billion less final dividend THB 0.8 billion 2014 paid in Q215, interim dividend Q415 THB 0.8 billion, capital expenditure THB 1.6 billion, other items THB +0.4 billion.

Capital Expenditure

Net Capital Expenditure was THB 1,111 million in 2017, THB 801 million in 2016 and THB 1,583 million in 2015. Capital Expenditure was higher in 2015 due to the higher capital expenditure from Ayutthaya plant compared to recent years after the impact of the flood in 2011 and completion of the building construction in Cambodia.

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 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, USD 140 million 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 2017 of THB/USD 33.93 was 4% stronger than the THB/USD 35.30 in 2016 which was 3% weaker than the THB/USD 34.25 in 2015.

Exceptional Items

There were no Exceptional Items in 2017, 2016 or 2015.

Subsequent Event

None

HANA MICROELECTRONICS GROUP

CONSOLIDATED STATEMENT OF EARNINGS

'000 Baht	Year		Year		Year		% 2017-2016	
	2017		2016		2015		2017-2016	
REVENUES								
Sales	21,550,861		20,522,624		20,521,353		1,028,237	5%
consisting of:								
PCBA (Lamphun, Thailand)	8,014,779	38%	7,773,094	38%	8,689,991	43%	241,685	3%
PCBA (Jiaxing, China)	3,641,321	17%	3,669,590	18%	3,959,265	19%	(28,269)	-1%
PCBA (Koh Kong, Cambodia)	84,896	0%	84,967	0%	22,125	0%	(71)	0%
IC (Ayuthaya, Thailand)	7,350,290	34%	6,971,287	34%	6,299,513	31%	379,003	5%
IC (Jiaxing, China)	1,302,562	6%	1,074,834	5%	1,243,137	6%	227,728	21%
HMT (Ohio, USA)	1,157,012	5%	948,852	5%	307,322	1%	208,160	22%
	<u>21,550,861</u>	100%	<u>20,522,624</u>	100%	<u>20,521,353</u>	100%	<u>1,028,237</u>	5%
Other Income	295,530		260,348		197,590		35,183	14%
TOTAL OPERATING REVENUES	<u>21,846,391</u>		<u>20,782,972</u>		<u>20,718,943</u>		<u>1,063,419</u>	5%
EXPENSES								
Cost of Sales	18,336,460	85%	17,646,813	86%	17,490,908	85%	689,648	4%
Selling & Admin. Expenses	1,219,773	6%	1,167,449	6%	1,114,612	5%	52,324	4%
TOTAL EXPENSES	<u>19,556,233</u>	91%	<u>18,814,262</u>	92%	<u>18,605,520</u>	91%	<u>741,972</u>	4%
OPERATING EARNINGS	<u>2,290,158</u>	10%	<u>1,968,710</u>	9%	<u>2,113,423</u>	10%	<u>321,448</u>	16%
Interest	206,197		202,539		222,431		3,658	2%
Interest Expenses	(7,284)		(7,384)		(7,997)		100	-1%
EARNINGS before Income Tax	<u>2,489,070</u>	11%	<u>2,163,865</u>	10%	<u>2,327,857</u>	11%	<u>325,205</u>	15%
Corporate Income Tax	(131,974)	5%	(137,216)	6%	(47,248)	2%	5,242	-4%
Earnings before Exch. & Exceptional Items	<u>2,357,096</u>	11%	<u>2,026,649</u>	10%	<u>2,280,609</u>	11%	<u>330,447</u>	16%
Exchange Gain (Loss)	530,634		78,770		(261,770)		451,864	
Exceptional Items	-		-		-		-	
NET EARNINGS for the Period	<u>2,887,730</u>	13%	<u>2,105,419</u>	10%	<u>2,018,839</u>	10%	<u>782,311</u>	37%

HANA MICROELECTRONICS GROUP

CONSOLIDATED Balance Sheet

'000 Baht	Year 2017	Year 2016	Year 2015	2017-2016	%
				2017-2016	2017-2016
ASSETS					
CURRENT ASSETS					
Cash in Hand & at Banks	4,756,538	6,347,595	5,426,494	(1,591,057)	-25%
Financial Investments	4,982,973	3,292,934	3,357,198	1,690,039	51%
Accounts Receivable - trade	3,904,178	3,561,206	3,317,966	342,971	10%
Inventories	4,082,874	3,676,207	3,366,602	406,667	11%
Other Current Assets	166,896	159,638	202,023	7,258	5%
TOTAL CURRENT ASSETS	17,893,458	17,037,580	15,670,284	855,878	5%
Fixed Deposit	-	313,262	337,351	(313,262)	-100%
INVESTMENTS IN ASSOCIATED COMPANY	-	-	-		
FIXED ASSETS (net)	6,065,872	6,217,792	6,901,339	(151,920)	-2%
OTHER ASSETS	443,768	212,150	213,866	231,618	
TOTAL ASSETS	24,403,098	23,780,784	23,122,840	622,314	3%
LIABILITIES					
CURRENT LIABILITIES					
Bank Overdrafts & Loans	-	-	-		
Accounts & Notes Payable	2,920,965	2,813,467	2,412,958	107,498	4%
Corporate Income Tax Payable	40,486	42,023	19,269	(1,537)	-4%
Accrued Expenses	326,809	358,307	347,248	(31,498)	-9%
Other Current Liabilities	97,658	150,343	385,350	(52,684)	-35%
TOTAL CURRENT LIABILITIES	3,385,918	3,364,139	3,164,825	21,779	1%
LONG TERM LIABILITIES					
Long Term Loans					
Other Long Term Liabilities	327,302	454,879	534,440	(127,578)	
TOTAL LIABILITIES	3,713,220	3,819,019	3,699,265	(105,799)	-3%
SHAREHOLDERS EQUITY					
Share Capital	804,879	804,879	804,879	(0)	
Unrealised gain(loss) on change in investments	-	-	-		
Share Premium	1,723,219	1,723,219	1,723,219	(0)	
Retained Earnings	-	-	-		
Appropriated Statutory Reserve	443,691	428,284	416,331	15,407	4%
Unappropriated & Treasury Share Reserve	17,504,229	16,088,535	15,491,802	1,415,694	9%
Translation adj. & Investment revaluation	213,860	916,848	987,344	(702,988)	-77%
Treasury shares	-	-	-		
Excess Cost over Net Book Value of Subsidiary Investments	-	-	-		
TOTAL SHAREHOLDERS EQUITY	20,689,878	19,961,765	19,423,575	728,113	4%
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	24,403,098	23,780,784	23,122,840	622,314	3%

HANA MICROELECTRONICS GROUP
CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Year 2017	Year 2016	Year 2015	2017-2016
Cashflow from Operating Activities				
Net Earnings before Tax	3,019,704	2,242,635	2,113,618	777,069
Adjustments to reconcile net earnings to net cash provided by operating activities				
Non Cash items				
Depreciation	1,083,474	1,179,998	1,168,154	(96,524)
Unrealised (gain) Loss on exchange	8,964	123	6,958	8,841
Change in other provisions	(352,204)	(381,021)	144,252	28,817
	<u>740,234</u>	<u>799,100</u>	<u>1,319,364</u>	<u>(58,866)</u>
Working Capital (increase) decrease				
Trade accounts receivable	(317,305)	(232,345)	81,796	(84,960)
Inventories	(387,837)	(230,189)	(49,350)	(157,648)
Trade accounts payable	99,205	551,275	(188,026)	(452,070)
Other	(140,119)	(122,040)	(321,799)	(18,079)
	<u>(746,056)</u>	<u>(33,299)</u>	<u>(477,379)</u>	<u>(712,758)</u>
Net Cashflow from Operating Activities	3,013,882	3,008,436	2,955,603	5,446
Cashflow from Investing Activities				
(Increase) decrease in short term investment	(1,091,869)	349,889	(560,662)	(1,441,758)
Increase in property, plant and equipment	(942,803)	(841,722)	(1,629,428)	(101,081)
Proceeds from sale of fixed assets	16,477	269,282	27,982	(252,805)
Increase (decrease) in translation adjustment	(812,434)	(245,125)	795,725	(567,309)
Decrease in short term loans to related parties				-
Other	(164,552)	(9,901)	(20,191)	(154,651)
	<u>(2,995,181)</u>	<u>(477,577)</u>	<u>(1,386,574)</u>	<u>(2,517,604)</u>
Cashflow from Financing Activities				
Cash paid for treasury stock	-	-	-	-
Cash received from increase in share capital & overdraft	-	-	-	-
Dividend paid	(1,609,758)	(1,609,758)	(1,609,758)	-
Net cash (used in) from financing activities	<u>(1,609,758)</u>	<u>(1,609,758)</u>	<u>(1,609,758)</u>	<u>-</u>
Net Cash, equivalents and short term liquid investments increase (decrease)	(1,591,056)	921,101	(40,728)	(2,512,158)
Cash and Equivalents at the beginning of the period	<u>6,347,595</u>	<u>5,426,494</u>	<u>5,467,222</u>	<u>921,101</u>
Cash and Equivalents at the end of the period	<u>4,756,539</u>	<u>6,347,595</u>	<u>5,426,494</u>	<u>(1,591,057)</u>

HANA MICROELECTRONICS GROUP

Financial Ratios

'000 Baht	Year 2017	Year 2016	Year 2015	2017-2016
Profitability Ratios				
Gross Profit Margin (%)	15%	14%	15%	1%
Operating Profit Margin (%)	11%	10%	10%	1%
Net Profit before Exceptional Margin (%)	11%	10%	11%	1%
Net Profit after Exceptional Margin (%)	13%	10%	10%	3%
EBITDA margin (%)	16%	15%	16%	1%
Return On Equity (%) pa	14%	11%	11%	3%
Return On Assets (%) pa	12%	9%	9%	3%
Return On Operating Capital Employed (%) pa	20%	18%	20%	2%
Efficiency Ratios				
Working Capital turnover	5	5	5	
Account Receivable days	63	61	59	2
Inventory days	77	73	70	4
Accounts Payable days	57	54	50	3
Liquidity Ratios				
Current Ratio	5.3	5.1	5.1	0.2
Quick Ratio	4.0	3.9	3.9	0.1
Financial Capital Ratios				
Debt / Equity	0.2	0.2	0.2	
Net Debt to Equity	-0.3	-0.3	-0.3	
Interest Coverage	n/a	n/a	n/a	