

Management's Discussion and Analysis

Year 2015

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue decreased 3% year on year, to THB 20.5 billion in year 2015 from THB 21.2 billion in year 2014. Sales Revenue in USD terms decreased by 8% to USD 599m in 2015 from USD 653m in 2014. Operating profits increased 3% to THB 2,131m in 2015 from THB 2,064m in 2014. Operating profits decreased 2% in USD terms to USD 62m in 2015 from USD 63m in 2014.

Net Profit decreased by 39% to THB 2,066m in 2015 from THB 3,405m in 2014. The subsidiary Hana Semiconductor (Ayutthaya), continued to recover from the impact of the flood in 2011 and has been operationally profitable from mid 2013. Net Exceptional items in 2014 of THB 1,350m is from the final payments of insurance proceeds for business interruption.

Past Performance Analysis

Revenue Analysis

Group Sales were lower by 3% in 2015 at THB 20,521m from THB 21,227m in 2014 with markets being weaker in the first half of 2015 in particular and generally weaker for the PCBA division (which had strong growth in 2014). USD sales were 8% lower in 2015 at USD 599m from USD 653m in 2014 as the average THB/USD exchange rate weakened 5% to THB/USD 34.25 in 2015 from THB/USD 32.48 in 2014.

The Microelectronics divisions' sales revenue decreased 16% [-11% THB] in 2015 over 2014. The microelectronics operation in Lamphun sales decreased 17% [-13% in THB terms] and JXG decreased by 13% [-8% in THB terms] in 2015. In 2015 IC assembly sales overall increased by 5% in USD terms [+11% in THB terms]. Specifically, IC AYT sales increased 7% [+13% in THB terms], and IC JXG USD sales were similar [+4% in THB terms].

Hana Microdisplay Technologies "HMT", sales increased 51% [+59% THB] for the year.

The annual sales split was:

	<u>2015</u>	<u>2014</u>	<u>2013</u>
PCBA (Thailand)	42%	47%	44%
PCBA (China)	19%	20%	22%
CPG - (Bangkok)	0%	0%	0%
IC (AYT)	31%	26%	27%
IC (China)	6%	6%	6%
HMT (USA)	2%	1%	1%
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	100%	100%	100%

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

Gross Profit increased by THB 184m with the gross margin being 15% in 2015 up 2% from 13% in 2014. This was due to the increase in sales at the IC Division in Ayutthaya and weaker THB/USD. The higher operating leverage enabled Ayutthaya to be profitable from June 2013 and a more favourable product mix in Lamphun also contributed to higher margins.

Operating Profit Analysis

The Operating profit margin was similar at 10% in 2015 and 2014. SGA expenses increased by 10% [THB 106m] due to the opening of new plants in Lamphun (Sahaphat Industrial Park) and Cambodia (Koh Kong). Net Exceptional items in 2014 of THB 1,350m was from the final payment of insurance proceeds for business interruption damage.

Payout Analysis

For the year 2015 the company has paid interim dividends of THB 805m (THB 1.00/share) in Q4/15.

For the year 2014 the company has paid full dividends of THB 1,610m (THB 2.00/share). An interim dividend of THB 805m in Q4/14 and the final dividend of THB 805m in Q2/15.

For the year 2013 the company has paid full dividends of THB 1,207.50m (THB 1.50/share). An interim dividend of THB 402.50m in Q4/13 and the final THB 805m in Q2/14.

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 paid out in May.

Financial Status

The group currently has no interest bearing debt. Cash (and financial investments) reserves at the 31st December, 2015 were THB 9.1 billion up from 31st December, 2014 were THB 8.3 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.

Trade Receivables	'000	<u>2015</u>	<u>2014</u>	<u>2013</u>
Less than 3 months		3,110,049	3,196,839	3,132,604
3 - 6 months		61,075	24,772	13,813
6 - 12 months		2,511	7,732	1,222
More than 12 months		1,306	2,024	3,150
Total accounts receivable - other companies		3,174,941	3,231,367	3,150,789
Less : Allowance for doubtful accounts		(24,245)	(24,410)	(4,269)
		<u>3,150,696</u>	<u>3,206,957</u>	<u>3,146,520</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 69 days in 2015, 61 days in 2014 and 69 days in 2013.

Liquidity

The group has THB 9.1 billion in cash and short term investments with no interest bearing debt. Liquidity ratios are high at over 3 times current liabilities. Operating Cashflow (EBITDA) was 3% higher in 2015 due to the higher operating profit at Ayutthaya plant in 2015 and a 5% weaker Thai Baht. EBITDA at THB 3.3 billion in 2015 and 3.2 billion in 2014 and THB 2.6 billion in 2013.

Cash and short term investments in 2015 increased by THB 0.8 billion to THB 9.1 billion, due to EBITDA 3.3 billion less final dividend THB 0.8b 2014 paid in Q215, interim dividend Q414 THB 0.8b , capital expenditure THB 1.6b, decrease in working capital of THB +0.4b, decrease in fixed deposit +0.3b.

Cash and short term investments in 2014 increased by THB 2.0 billion to THB 8.3 billion, due to EBITDA 3.2 billion less final dividend THB 0.8b, interim dividend Q414 THB 0.8b , capital expenditure THB 0.9b, insurance proceeds of THB 1.3b and increase in fixed deposit -0.3b.

Cash and short term investments in 2013 increased by THB 1.2 billion to THB 6.7 billion, due to EBITDA 2.6 billion less final dividend THB 0.8b, interim dividend Q413 THB 0.4b , capital expenditure THB 1.2b, increase in working capital of THB 0.2b and insurance proceeds of THB 1.2b.

Capital Expenditure

Net Capital Expenditure was THB 1,583m in 2015, THB 854m in 2014 and THB 1,221m in 2013. 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 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 140m 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 2015 of THB/USD 34.25 was 5% weaker than the THB/USD 32.48 in 2014 which was 5% weaker than the THB/USD 30.8 in 2013.

Exceptional Items

The plant of Hana Semiconductor (Ayutthaya) Co., LTD, a 100% owned subsidiary of the company, which is located in Hitech Industrial Estate in Ayutthaya province, was inundated in early October 2011 as a result of the extensive flooding in Thailand during the fourth quarter of 2011. The plant, equipment and business of the subsidiary suffered major damage with approximately USD 40m of property damage and significant business interruption losses. In the 2011 Financial Statements the subsidiary made full provision for the book value of the damaged property which is to be replaced. The subsidiary has also expensed repairs incurred during the fourth quarter in the 2011 accounts.

Further repairs of THB 146m accounted for in 2012 for repairs and materials damage. In 2012, THB 300m was received as an interim payment for the Property Insurance claim and THB 400m was received as an interim payment for the business interruption insurance claim.

THB 742m recorded in 2013 as exceptional income to complete the THB 1,042m settlement of the building and machinery property insurance claim in regards to the 2011 flood.

THB 110m for income tax and fine related to the 1997 income tax case as detailed in Note 18.5 of the financial statements for Q313.

In Q413 THB 199m was received as first and final payment for stock damage property claim settlement.

In 2014 THB 1,350m was received as final payment for business interruption claim to complete the THB 1,750m settlement of the Business Interruption insurance Claim.

There were no Exceptional Items in 2015.

Subsequent Event

None

HANA MICROELECTRONICS GROUP

CONSOLIDATED STATEMENT OF EARNINGS

'000 Baht	Year 2015		Year 2014		Year 2013		2015-2014	% 2015-2014
REVENUES								
Sales	20,521,353		21,227,209		17,667,000		(705,856)	-3%
consisting of:								
PCBA (Lamphun, Thailand)	8,689,991	42%	9,952,829	47%	7,813,693	44%	(1,262,838)	-13%
PCBA (Jiaxing, China)	3,959,265	19%	4,290,307	20%	3,791,426	22%	(331,042)	-8%
PCBA (Cambodia)	22,125	0%	-	0%	-	0%	22,125	
IC (Ayuthaya, Thailand)	6,299,513	31%	5,591,601	26%	4,805,783	27%	707,912	13%
IC (Jiaxing, China)	1,243,137	6%	1,199,624	6%	1,115,469	6%	43,513	4%
HMT (Ohio, USA)	307,322	2%	192,848	1%	140,629	1%	114,474	59%
	<u>20,521,353</u>	100%	<u>21,227,209</u>	100%	<u>17,667,000</u>	100%	<u>(705,856)</u>	-3%
Other Income - Operating	215,637		227,086		282,866		(11,449)	-5%
TOTAL OPERATING REVENUES	<u>20,736,990</u>		<u>21,454,295</u>		<u>17,949,866</u>		<u>(717,305)</u>	-3%
EXPENSES								
Cost of Sales	17,490,908	85%	18,358,461	86%	15,665,335	89%	(867,553)	-5%
Selling & Admin. Expenses	1,114,612	5%	1,032,239	5%	908,149	5%	82,373	8%
	<u>18,605,520</u>	91%	<u>19,390,700</u>	91%	<u>16,573,484</u>	94%	<u>(785,180)</u>	-4%
OPERATING EARNINGS	<u>2,131,471</u>	10%	<u>2,063,595</u>	10%	<u>1,376,382</u>	8%	<u>67,876</u>	3%
Other Income - Non Operating	29,484		44,556		95,013		(15,072)	
Interest	222,431		214,998		165,169		7,433	3%
Interest Expenses	(7,997)		(8,270)		(8,643)		273	-3%
EARNINGS before Income Tax	<u>2,375,388</u>	11%	<u>2,314,879</u>	11%	<u>1,627,922</u>	9%	<u>60,509</u>	3%
Corporate Income Tax	(47,248)	2%	(366,768)	16%	(61,999)	4%	319,520	-87%
Earnings before Exch. & Exceptional Items	<u>2,328,140</u>	11%	<u>1,948,111</u>	9%	<u>1,565,923</u>	9%	<u>380,029</u>	20%
Exchange Gain (Loss)	(261,770)		107,382		(60,329)		(369,152)	
Exceptional Items	-		1,350,000		831,604		(1,350,000)	
NET EARNINGS for the Period	<u>2,066,370</u>	10%	<u>3,405,493</u>	16%	<u>2,337,198</u>	13%	<u>(1,339,123)</u>	-39%

HANA MICROELECTRONICS GROUP

CONSOLIDATED Balance Sheet

'000 Baht	Year 2015	Year 2014	Year 2013	2015-2014	% 2015-2014
ASSETS					
CURRENT ASSETS					
Cash in Hand & at Banks	6,104,135	5,467,223	4,185,699	636,913	12%
Financial Investments	3,016,908	2,863,280	2,524,310	153,629	5%
Accounts Receivable - trade	3,317,966	3,354,080	3,241,169	(36,114)	-1%
Inventories	3,366,602	3,328,914	3,171,981	37,688	1%
Other Current Assets	202,023	118,864	154,586	83,159	70%
TOTAL CURRENT ASSETS	16,007,635	15,132,361	13,277,747	875,274	6%
Fixed Deposit	-	330,690	-	(330,690)	-100%
INVESTMENTS IN ASSOCIATED COMPANY	-	-	-		
FIXED ASSETS (net)	6,901,339	6,405,504	6,844,878	495,836	8%
OTHER ASSETS	213,866	182,778	34,513	31,088	
TOTAL ASSETS	23,122,840	22,051,332	20,157,137	1,071,508	5%
LIABILITIES					
CURRENT LIABILITIES					
Bank Overdrafts & Loans	-	-	15,946		
Accounts & Notes Payable	2,412,958	2,477,893	2,484,859	(64,935)	-3%
Corporate Income Tax Payable	19,269	171,712	17,606	(152,442)	-89%
Accrued Expenses	347,248	360,134	419,335	(12,886)	-4%
Other Current Liabilities	385,350	162,120	239,514	223,230	138%
TOTAL CURRENT LIABILITIES	3,164,825	3,171,859	3,177,261	(7,033)	0%
LONG TERM LIABILITIES					
Long Term Loans					
Other Long Term Liabilities	534,440	515,862	385,799	18,578	
TOTAL LIABILITIES	3,699,265	3,687,720	3,563,060	11,545	0%
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		
Retained Earnings	-	-	-		
Appropriated Statutory Reserve	416,331	386,272	375,919	30,059	8%
Unappropriated & Treasury Share Reserve	15,491,802	15,028,833	13,301,102	462,969	3%
Translation adj. & Investment revaluation	987,344	420,409	388,959	566,935	135%
Treasury shares	-	-	-		
Excess Cost over Net Book Value of Subsidiary Investments	-	-	-		
TOTAL SHAREHOLDERS EQUITY	19,423,575	18,363,612	16,594,078	1,059,963	6%
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	23,122,840	22,051,332	20,157,137	1,071,508	5%

HANA MICROELECTRONICS GROUP

CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Year 2015	Year 2014	Year 2013	2015-2014
Cashflow from Operating Activities				
Net Earnings	2,113,618	3,772,263	2,399,198	(1,658,645)
Adjustments to reconcile net earnings to net cash provided by operating activities				
Non Cash items				
Depreciation	1,168,154	1,125,081	1,188,390	43,073
Unrealised (gain) Loss on exchange	6,958	17,691	117,452	(10,734)
Change in other provisions	144,252	(31,750)	(127,771)	176,002
	<u>1,319,364</u>	<u>1,111,023</u>	<u>1,178,070</u>	<u>208,342</u>
Working Capital (increase) decrease				
Trade accounts receivable	81,796	(174,094)	(381,655)	255,890
Inventories	(49,350)	(111,281)	(226,801)	61,931
Trade accounts payable	(188,026)	(36,592)	431,383	(151,434)
Other	(321,799)	(377,161)	(163,958)	55,361
	<u>(477,379)</u>	<u>(699,127)</u>	<u>(341,030)</u>	<u>221,748</u>
Net Cashflow from Operating Activities	<u>2,955,603</u>	<u>4,184,159</u>	<u>3,236,238</u>	<u>(1,228,555)</u>
Cashflow from Investing Activities				
(Increase) decrease in short term investment	116,979	(476,689)	(102,806)	593,668
Increase in property, plant and equipment	(1,629,428)	(813,343)	(1,580,557)	(816,085)
Proceeds from sale of fixed assets	27,982	25,281	60,087	2,701
Increase (decrease) in translation adjustment	795,725	(8,940)	660,662	804,665
Decrease in short term loans to related parties				-
Other	(20,191)	(2,834)	17,367	(17,357)
	<u>(708,933)</u>	<u>(1,276,525)</u>	<u>(945,247)</u>	<u>567,592</u>
Cashflow from Financing Activities				
Cash paid for treasury stock	-	-	-	-
Cash received from increase in share capital & overdraft	-	(16,354)	(9,154)	16,354
Dividend paid	(1,609,758)	(1,609,758)	(1,207,318)	-
Net cash (used in) from financing activities	<u>(1,609,758)</u>	<u>(1,626,112)</u>	<u>(1,216,472)</u>	<u>16,354</u>
Net Cash, equivalents and short term liquid investments increase (decrease)	636,913	1,281,522	1,074,519	(644,608)
Cash and Equivalents at the beginning of the period	<u>5,467,222</u>	<u>4,185,700</u>	<u>3,111,181</u>	<u>1,281,522</u>
Cash and Equivalents at the end of the period	<u>6,104,135</u>	<u>5,467,222</u>	<u>4,185,700</u>	<u>636,913</u>

HANA MICROELECTRONICS GROUP

Financial Ratios

'000 Baht	Year 2015	Year 2014	Year 2013	2015-2014
Profitability Ratios				
Gross Profit Margin (%)	15%	14%	11%	1%
Operating Profit Margin (%)	10%	10%	8%	0%
Net Profit before Exceptional Margin (%)	11%	9%	9%	2%
Net Profit after Exceptional Margin (%)	10%	16%	13%	-6%
EBITDA margin (%)	16%	15%	14%	1%
Return On Equity (%) pa	11%	19%	14%	-8%
Return On Assets (%) pa	9%	15%	11%	-6%
Return On Operating Capital Employed (%) pa	20%	20%	14%	0%
Efficiency Ratios				
Working Capital turnover	5	5	5	(0)
Account Receivable days	59	56	61	3
Inventory days	69	61	69	8
Accounts Payable days	50	49	53	1
Liquidity Ratios				
Current Ratio	5.1	4.8	4.2	0.3
Quick Ratio	3.9	3.7	3.1	0.2
Financial Capital Ratios				
Debt / Equity	0.2	0.2	0.2	0.0
Net Debt to Equity	-0.3	-0.3	-0.2	0.0
Interest Coverage	n/a	n/a	n/a	