

## 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	<b><u>2017</u></b>	<b><u>2016</u></b>	<b><u>2015</u></b>
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)
		<b>3,726,432</b>	<b>3,433,972</b>	<b>3,150,696</b>

### **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