## **Management's Discussion and Analysis**

### **Overall Group Performance**

Hana Microelectronics Group 'Hana' Sales Revenue increased 9% year on year at THB 5.7 billion for the third quarter of 2017 from THB 5.3 billion for the third quarter 2016. Sales Revenue in USD terms increased by 13% to USD 172m from USD 152m in Q3 2016. Operating Profits increased 17% to THB 632m in Q3 2017 from THB 540m in Q3 2016.

Net Profit increased 35% to THB 769m in Q317 from THB 569m in Q316, due to higher operating profits and exchange gain in Q317.

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	Q317		<u>Q316</u>		Q317-Q316	Q317-Q316
PCBA (Lamphun, Thailand)	2,029,010	36%	1,883,468	36%	145,542	8%
PCBA (Jiaxing, China)	920,196	16%	972,632	18%	(52,436)	-5%
PCBA (Cambodia)	24,733	0%	21,776	0%	2,957	14%
IC (Ayutthaya, Thailand)	2,153,521	37%	1,873,856	36%	279,665	15%
IC (Jiaxing, China)	376,840	7%	263,680	5%	113,160	43%
HMT (Ohio, USA)	244,614	4%	274,985	5%	(30,371)	-11%
Total Revenue	5,748,914	100%	5,290,397	100%	458,517	9%

## **Sales Revenue Analysis**

#### **Year on Year Sales Revenue Analysis**

Quarter 3 2017 sales revenue for the group increased 13% year-on-year in USD terms, from USD 152m in Q316 to USD 172m in Q317. The average exchange rate for Q317 was 4% stronger at THB/USD 33.4 from THB/USD 34.8 in Q316. As a result the sales revenue in THB terms increased 10% year on year for the quarter.

Year-on-year, in USD terms, the microelectronics divisions sales increased by 8%. Sales in Lamphun increased 12% whilst Jiaxing decreased by 1%. The IC divisions sales revenues increased 23% in Q317, with revenues of the IC division in Ayutthaya increasing by 20% and Jiaxing increasing by 49%. "HMT" the Microdisplay/RFID operation in Ohio sales revenue decreased 6%.

#### **Quarter on Quarter Sales Revenue Analysis**

Quarter-on-Quarter, in USD terms, sales for the group increased 12% from USD 153m in Q217 to USD 172m in Q317. In THB equivalent the group sales were up 10% in Q317 compared to Q217 due to the average THB/USD exchange rate being 3% stronger at 33.4 in Q317 from 34.3 in Q217. Sales in the microelectronics division increased 5% with Lamphun increasing 3% and Jiaxing increasing 9%. Sales revenues from the IC divisions were 27% higher in Q317 with Ayutthaya sales increasing 29% and Jiaxing IC sales increasing by 20%. The Microdisplay division sales decreased 11% in Q317 compared to Q217.

#### **Sales Revenue Split**

	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016
PCBA (Lamphun, Thailand)	36%	39%	38%	38%	36%
PCBA (Jiaxing, China)	16%	17%	18%	18%	18%
PCBA (Cambodia)	0%	0%	0%	0%	0%
IC (Ayutthaya, Thailand)	37%	33%	34%	34%	36%
IC (Jiaxing, China)	7%	6%	5%	5%	5%
HMT (Ohio, USA)	4%	5%	5%	5%	5%
	100%	100%	100%	100%	100%

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

The Gross Profit margin was 15% in Q317 up from Q316 at 14% due to increased sales volume.

## **Operating Profit Analysis**

Year-on-year operating profits were 17% higher at THB 632m in Q317 compared to THB 540m in Q316. The Operating margin was 11% in Q317 up 1% from 10% in Q316 due to the higher gross margin. SG&A expenses were similar in Q317 to Q316. SG&A expenses in Q317 were 1% lower than Q217.

## **Foreign Exchange Rates**

Each week's sales and purchases are booked based on the exchange rate at the close of the previous week. The average exchange rate for Q317 was Baht/USD 33.39, Q316 was Baht/USD 34.84 (and Q217 was Baht/USD 34.30).

The offshore subsidiaries income statements are translated at the average rate for the quarter, (for their respective currencies). The Balance sheets of the offshore companies were translated at the closing rate of Baht/USD 33.37 at 30/09/17, and Baht/USD 34.70 at 30/09/16 (33.98 at 30/06/17) or the respective rate applicable to each offshore subsidiary's base currency.

#### **Payout Analysis**

No dividends were paid out during the quarter.

#### **Financial Status**

The group currently has no interest bearing debt. Cash reserves and financial investments at the 30th September 2017 were THB 10.5 billion up from 30th September, 2016 were THB 10.0 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 days were 59 days in Q317 and 62 days in Q316.

Trade Receivables	30-Sep-17	30-Sep-16	THB '000
Less than 3 months	3,670,625	3,444,247	
3 - 6 months	9,149	29,329	
6 - 12 months	3,322	8,076	
More than 12 months	13,327	3,880	
Total accounts receivable - other companies	3,696,423	3,485,532	-
Less: Allowance for doubtful accounts	(14,378)	(17,143)	
	3,682,045	3,468,389	=

## **Inventory**

In general, Hana's production is based on clients' orders, 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 70 days as at 30th September, 2017 and 71 days as at 30th September, 2016.

#### Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q3 2017 was THB 901m which was 8% higher than Q3 2016 was THB 834m.

# **Capital Expenditure**

Capital Expenditure was THB 302m in Q3 2017, and THB 242m in Q3 2016. 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 as no net interest bearing debt and operating working capital is positive the groups

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% 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) x Sales Revenue x 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.

#### **Exceptional Items**

None

#### **Subsequent Event**

None

# **CONSOLIDATED STATEMENT OF EARNINGS**

	Quarter		Quarter			%
'000 Baht	Q317	_	Q316		Q317-Q316	Q317-Q316
REVENUES						
Sales	5,748,914		5,290,396		458,518	9%
consisting of:						
PCBA (Lamphun, Thailand)	2,029,010	36%	1,883,468	36%	145,542	8%
PCBA (Jiaxing, China)	920,196	16%	972,632	18%	(52,436)	-5%
PCBA (Cambodia)	24,733	0%	21,776	0%	2,957	14%
IC (Ayutthaya, Thailand)	2,153,521	37%	1,873,856	36%	279,665	15%
IC (Jiaxing, China)	376,840	7%	263,680	5%	113,160	43%
HMT (Ohio, USA)	244,614	4%	274,985	5%	(30,371)	-11%
	5,748,914	100%	5,290,397	100%	458,517	9%
Other Income	87,138		80,696		6,442	8%
TOTAL OPERATING REVENUES	5,836,052	-	5,371,093	•	464,959	9%
EXPENSES						
Cost of Sales	4,914,400	85%	4,541,741	86%	372,659	8%
Selling & Admin. Expenses	289,727	5%	288,981	5%	746	0%
TOTAL EXPENSES	5,204,127	91%	4,830,722	91%	373,405	8%
OPERATING EARNINGS	631,925	11%	540,371	10%	91,554	17%
Interest	48,679		48,287		392	1%
Interest Expenses	(1,942)	_	(1,780)		(162)	
EARNINGS before Income Tax	678,662	12%	586,878	11%	91,783	16%
Corporate Income Tax	(30,845)	-1%	(87,615)	-2%	56,770	-65%
Earnings before Exch. & Exceptional Items	647,817	_	499,263	'	148,554	30%
Exchange Gain (Loss)	121,705		69,752		51,953	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	769,522	13%	569,015	11%	200,507	35%

# **CONSOLIDATED STATEMENT OF EARNINGS**

	YTD		YTD		YTD	YTD %
'000 Baht	30-Sep-17	_	30-Sep-16		Q317-Q316	Q317-Q316
REVENUES		·		•	_	
Sales	16,218,979		14,796,471		1,422,508	10%
consisting of:						
PCBA (Lamphun, Thailand)	5,992,271	37%	5,523,181	38%	469,090	8%
PCBA (Jiaxing, China)	2,670,388	17%	2,672,371	18%	(1,983)	0%
PCBA (Cambodia)	68,457	0%	45,513	0%	22,944	
IC (Ayutthaya, Thailand)	5,617,930	35%	5,162,907	35%	455,023	9%
IC (Jiaxing, China)	983,772	6%	780,124	5%	203,648	26%
HMT (Ohio, USA)	886,161	5%	612,375	4%	273,786	45%
	16,218,979	100%	14,796,471	100%	1,422,508	10%
Other Income	199,885		197,590		2,295	1%
TOTAL OPERATING REVENUES	16,418,864	· <del>-</del>	14,994,061	-	1,424,803	10%
EXPENSES						
Cost of Sales	13,775,577	85%	12,878,968	87%	896,609	7%
Selling & Admin. Expenses	884,320	5%	880,318	6%	4,002	0%
•						
TOTAL EXPENSES	14,659,897	90%	13,759,286	93%	900,611	7%
OPERATING EARNINGS	1,758,967	11%	1,234,775	8%	524,192	42%
Interest	155,883		149,581		6,302	4%
Interest Expenses	(5,564)		(5,212)		(352)	
EARNINGS before Income Tax	1,909,286	12%	1,379,144	9%	530,141	38%
Corporate Income Tax	(63,727)	3%	(116,584)	8%	52,857	-45%
Earnings before Exch. & Exceptional Items	1,845,559	-	1,262,560	-	582,998	46%
Exchange Gain (Loss)	417,110		207,396		209,714	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	2,262,669	14%	1,469,956	10%	792,712	54%
EARNINGS % of SALES	14%		10%		4%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	2.29		1.57		0.72	
EARNINGS per SHARE (baht) after exceptionals	2.81		1.83		0.98	
Operating Profit (EBIT)	1,758,967		1,234,775		524,192	
Operating Profit Margin	11%		8%			
Depreciation	816,654		880,241		(63,587)	
EBITDA (excl exchange gain/loss)	2,575,621		2,115,016		460,605	
EBITDA % of Sales Revenue	16%		14%			
Cashflow Earnings per Share	3.20		2.63		0.57	

# HANA MICROELECTRONICS GROUP CONSOLIDATED Balance Sheet

CONSOLIDATED Datafice Sheet		_	
	Quarter	Quarter	
'000 Baht	30-Sep-17	30-Sep-16	Q317-Q316
ASSETS			
CURRENT ASSETS			
Cash in Hand & at Banks	6,513,162	7,092,704	(579,542)
Financial Investments	3,967,555	2,879,861	1,087,694
Accounts Receivable - trade	3,797,034	3,617,651	179,383
Amounts due from Related Companies	-	-	
Inventories	3,835,543	3,567,526	268,017
Other Current Assets	174,585	161,408	13,177
TOTAL CURRENT ASSETS	18,287,879	17,319,150	968,729
Fixed Deposit	-	-	
FIXED ASSETS (net)	6,241,704	6,273,543	(31,839)
OTHER ASSETS	302,319	214,427	87,892
TOTAL ASSETS	24,831,902	23,807,120	1,024,782
LIABILITIES			
CURRENT LIABILITIES			
Bank Overdrafts & Loans	-	-	
Accounts & Notes Payable	3,065,725	2,870,806	194,919
Corporate Income Tax Payable	-	-	
Accrued Expenses	333,684	346,999	(13,315)
Other Current Liabilities	59,658	141,392	(81,734)
TOTAL CURRENT LIABILITIES	3,459,067	3,359,197	99,870
LONG TERM LIABILITIES	485,641	577,613	(91,972)
TOTAL LIABILITIES	3,944,708	3,936,810	7,898
SHAREHOLDERS EQUITY			
Share Capital	804,879	804,879	
Treasury Shares	-	-	
Share Premium	1,723,219	1,723,219	0
Retained Earnings			
Appropriated Statutory Reserve	428,706	427,551	1,155
Unappropriated	17,545,903	16,145,659	1,400,244
Translation adj. & Investment revaluation	384,487	769,002	(384,515)
Unrealised gain(loss) on change in investments	-	-	
Excess Cost over Net Book Value of Subsidiary Investments	-	-	
TOTAL SHAREHOLDERS EQUITY	20,887,194	19,870,310	1,016,884
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	24,831,902	23,807,120	1,024,782

# **CONSOLIDATED Summary Statement of Cashflows**

'000 Baht	Quarter <b>30-Sep-17</b>	Quarter 30-Sep-16
Cashflow from Operating Activities		
Net Earnings before tax	800,367	656,630
Adjustments to reconcile net earnings to net cash provided		
by operating activities		
Non Cash items		
Depreciation	269,378	296,478
Unrealised (gain) Loss on exchange	62,824	(17,359)
Increase (Decrease) in allowance for doubtful debts	(8,189)	3,521
Increase (Decrease) in allowance for obsolete inventories	(8,654)	14,645
Change in other provisions	(64,242)	(87,224)
	251,117	210,061
Working Capital (increase) decrease	4	
Trade accounts receivable	(154,551)	(634,087)
Inventories	108,861	79,962
Trade accounts payable	28,500	77,543
Other	(61,400)	41,734
	(78,590)	(434,848)
Net Cashflow from Operating Activities	972,894	431,843
Cashflow from Investing Activities		
(Increase) decrease in short term investment	(846,044)	(715,420)
Increase in property, plant and equipment	(398,007)	(127,747)
Proceeds from sale of fixed assets	5,443	213,992
Increase (decrease) in translation adjustment	(145,677)	(150,872)
Revaluation deficit on investments	(25,090)	4,846
Other		
	(1,409,375)	(775,202)
Cashflow from Financing Activities		
Cash received from increase in share capital		
Dividend paid	-	-
Other	-	-
Net cash (used in ) from financing activties	<del></del>	
Met cash (used iii ) ironi iniancing activites	-	-
Net Cash, equivalents and short term liquid investments	(436,481)	(343,358)
increase (decrease)	6 645 010	C 750 422
Cash and Equivalents at the beginning of the period	6,645,019	6,758,422
Cash and Equivalents at the end of the period	6,208,538	6,415,064

# **Financial Ratios**

	Quarter	Quarter	
'000 Baht	30-Sep-17	30-Sep-16	Q <u>317-Q3</u> 16
Profitability Ratios			
Gross Profit Margin (%)	15%	14%	1%
Operating Profit Margin (%)	11%	10%	1%
Net Profit before Exceptional Margin (%)	11%	9%	2%
Net Profit after Exceptional Margin (%)	13%	11%	2%
EBITDA margin (%)	16%	16%	
Return On Equity (%) pa	15%	11%	4%
Return On Assets (%) pa	12%	10%	2%
Return On Operating Capital Employed (%) pa	23%	21%	2%
Efficiency Ratios			
Working Capital turnover	5	5	
Account Receivable days	59	62	- 3
Inventory days	70	71	- 1
Accounts Payable days	56	57	- 1
Liquidity Ratios			
Current Ratio	5	5	
Quick Ratio	4	4	
Financial Capital Ratios			
Debt / Equity	0	0	
Net Debt to Equity	0	0	
Interest Coverage	n/a	n/a	
	, α	, α	