Management's Discussion and Analysis

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 12% year on year at THB 5.7 billion for the fourth quarter of 2016 from THB 5.1 billion for the fourth quarter 2015. Sales Revenue in USD terms increased by 13% to USD 162m from USD 143m in Q4 2015. Operating Profits increased 3% to THB 725m in Q4 2016 from THB 701m in Q4 2015 and sequentially were up 36% over THB 534m in Q316.

Net Profit decreased 23% to THB 636m in Q416 from THB 822m in Q415, due to similar offset by Bht 200m negative change in foreign exchange gain (loss).

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	Q416		Q415		Q416-Q415	Q416-Q415
PCBA (Lamphun, Thailand)	2,249,913	39%	2,064,961	41%	184,952	9%
PCBA (Jiaxing, China)	997,219	17%	958,475	19%	38,744	4%
PCBA (Cambodia)	39,454	1%	14,038	0%	25,416	
IC (Ayutthaya, Thailand)	1,808,380	32%	1,681,344	33%	127,036	8%
IC (Jiaxing, China)	294,710	5%	310,455	6%	(15,745)	-5%
HMT (Ohio, USA)	336,477	6%	95,393	2%	241,084	253%
Total Revenue	5,726,153	100%	5,124,666	101%	601,487	12%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 4 2016 sales revenue for the group increased 13% year-on-year in USD terms, from USD 143m in Q415 to USD 162m in Q416. The average exchange rate for Q416 was 1% stronger at THB/USD 35.4 from THB/USD 35.8 in Q415. As a result the sales revenue in THB terms increased 12% year on year for the quarter.

Year-on-year, the microelectronics divisions sales increased by 9% in USD terms. Sales in Lamphun increased 11% whilst JiaXing increased by 6%. The IC divisions USD sales revenues increased 7% in Q416, with revenues of the IC divisions in Ayutthaya increasing by 9% and JiaXing decreasing by 3%. "HMT" the Microdisplay/RFID operation in Ohio sales revenue increased 254%.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter Group sales increased by 7% from USD 152m in Q316 to USD 162m in Q416. In THB equivalent the group sales were up 8% in Q416 compared to Q316 due to the average THB/USD exchange rate being 1.6% weaker at 35.4 in Q416 from 34.8 in Q316. Sales in the microelectronics division increased 12% with Lamphun increasing 17% and JiaXing increasing 1%. Sales revenues from the IC divisions were 3% lower in Q416 with Ayutthaya sales decreasing by 5% and JiaXing IC sales increasing by 10%. The Microdisplay division sales increased 20% in Q416 compared to Q316.

Sales Revenue Split

	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015
PCBA (Lamphun, Thailand)	39%	36%	37%	41%	40%
PCBA (Jiaxing, China)	17%	18%	19%	17%	19%
PCBA (Cambodia)	1%	0%	0%	0%	0%
IC (Ayutthaya, Thailand)	32%	36%	35%	34%	33%
IC (Jiaxing, China)	5%	5%	5%	5%	6%
HMT (Ohio, USA)	6%	5%	4%	3%	2%
	100%	100%	100%	100%	100%

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

The Gross Profit margin was 17% in Q416 down from Q415 at 18% due lower selling prices leading to a higher percentage of material costs (1%).

Operating Profit Analysis

Year-on-year operating profits were 3% higher at THB 725m in Q416 compared to THB 701m in Q415. The Operating margin was 13% in Q416 down 1% from 14% in Q415 due to lower gross margin (1%). SG&A expenses were 7% higher in Q416 than in Q415 due to higher salary expenses. SG&A expenses in Q416 were 1% lower than Q316.

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 Q416 was Baht/USD 35.39, Q415 was Baht/USD 35.83 (and Q316 was Baht/USD 34.84).

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 35.83 at 31/12/16, and Baht/USD 36.09 at 31/12/15 (34.70 at 30/09/16) or the respective rate applicable to each offshore subsidiary's base currency.

Payout Analysis

In Q416 THB 805m dividend of THB 1.00 per share was paid as an interim dividend from the profits of 2016.

In Q216 THB 805m final dividend of THB 1.00 per share was paid during the quarter from the profits of 2015.

In Q415 THB 805m dividend of THB 1.00 per share was paid as an interim dividend from the profits of 2015.

In Q215 THB 805m final dividend of THB 1.00 per share was paid during the quarter from the profits of 2014.

In Q414 THB 805m dividend of THB 1.00 per share was paid as an interim dividend from the profits of 2014.

Financial Status

The group currently has no interest bearing debt. Cash reserves and financial investments at the 31st December, 2016 were THB 9.9 billion up from THB 9.1 billion at 31st December, 2015.

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 56 days in Q416 and 58 days in Q415.

Trade Receivables	<u>31-Dec-16</u>	<u>31-Dec-15</u>	THB '000
Less than 3 months	3,404,803	3,110,049	
3 - 6 months	18,549	61,075	
6 - 12 months	26,032	2,511	
More than 12 months	4,443	1,306	_
Total accounts receivable - other companies	3,453,827	3,174,941	_
Less : Allowance for doubtful accounts	(19,855)	(24,245)	
•	3,433,972	3,150,696	-

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 69 days as at 31st December, 2016 and 72 days as at 31st December, 2015.

Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring

EBITDA) in Q4 2016 was THB 1,025m which was 2% higher than Q4 2015 was THB 1,006m.

Capital Expenditure

Capital Expenditure was THB 167m in Q4 2016, and THB 315m in Q4 2015. 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

HANA MICROELECTRONICS GROUP

CONSOLIDATED STATEMENT OF EARNINGS

	Quarter		Quarter			%
'000 Baht	Q416		Q415		Q416-Q415	Q416-Q415
REVENUES						
Sales	5,726,153		5,124,665		601,488	12%
consisting of:						
PCBA (Lamphun, Thailand)	2,249,913	39%	2,064,961	41%	184,952	9%
PCBA (Jiaxing, China)	997,219	17%	958,475	19%	38,744	4%
PCBA (Cambodia)	39,454	1%	14,038	0%	25,416	181%
IC (Ayutthaya, Thailand)	1,808,380	32%	1,681,344	33%	127,036	8%
IC (Jiaxing, China)	294,710	5%	310,455	6%	(15,745)	-5%
HMT (Ohio, USA)	336,477	6%	95,393	2%	241,084	253%
	5,726,153	100%	5,124,666	101%	601,487	12%
Share of Assoc. company Profit	-		-		-	
Other Income - Operating	53,934		51,879		2,055	4%
TOTAL OPERATING REVENUES	5,780,087	•	5,176,545	,	603,542	12%
EXPENSES						
Cost of Sales	4,767,845	83%	4,206,272	82%	561,573	13%
Selling & Admin. Expenses	287,131	5%	268,988	5%	18,143	7%
TOTAL EXPENSES	5,054,976	88%	4,475,260	87%	579,716	13%
OPERATING EARNINGS	725,112	13%	701,286	14%	23,826	3%
Other Income - Non Operating	8,823		1,327		7,496	
Interest	52,958		55,310		(2,352)	-4%
Interest Expenses	(2,172)		(2,269)		97	
EARNINGS before Income Tax	784,721	14%	755,653	15%	29,068	4%
Corporate Income Tax	(20,632)	0%	(4,789)	0%	(15,843)	331%
Earnings before Exch. & Exceptional Items	764,089	•	750,864	•	13,225	2%
Exchange Gain (Loss)	(128,626)		70,909		(199,535)	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	635,463	11%	821,773	16%	(186,310)	-23%

HANA MICROELECTRONICS GROUP CONSOLIDATED Balance Sheet

CONSOLIDATED Balance Sheet	Quarter	Quarter	
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'000 Baht	21-D.M10	31-ธ.ค15	Q416-Q415
ASSETS			
CURRENT ASSETS			
Cash in Hand & at Banks	6,347,595	6,450,054	(102,459)
Financial Investments	3,292,934	2,670,990	621,945
Accounts Receivable - trade	3,561,206	3,317,966	243,240
Amounts due from Related Companies	-	-	
Inventories	3,676,207	3,366,602	309,605
Other Current Assets	159,638	202,023	(42,386)
TOTAL CURRENT ASSETS	17,037,580	16,007,635	1,029,945
Fixed Deposit	313,262	-	313,262
FIXED ASSETS (net)	6,217,792	6,901,339	(683,547)
OTHER ASSETS	212,149	213,866	(1,716)
TOTAL ASSETS	23,780,784	23,122,840	657,944
LIABILITIES			
CURRENT LIABILITIES			
Bank Overdrafts & Loans	-	-	
Accounts & Notes Payable	2,813,467	2,412,958	400,509
Corporate Income Tax Payable	42,023	19,269	22,753
Accrued Expenses	358,307	347,248	11,059
Other Current Liabilities	150,343	385,350	(235,007)
TOTAL CURRENT LIABILITIES	3,364,139	3,164,825	199,314
LONG TERM LIABILITIES	454,879	534,440	(79,560)
TOTAL LIABILITIES	3,819,019	3,699,265	119,754
SHAREHOLDERS EQUITY			
Share Capital	804,879	804,879	0
Treasury Shares	-	-	
Share Premium	1,723,219	1,723,219	0
Retained Earnings			
Appropriated Statutory Reserve	428,284	416,331	11,953
Unappropriated	16,088,535	15,491,802	596,734
Translation adj. & Investment revaluation	916,848	987,344	(70,496)
Unrealised gain(loss) on change in investments	-	-	
Excess Cost over Net Book Value of Subsidiary Investments	-	-	
TOTAL SHAREHOLDERS EQUITY	19,961,765	19,423,575	538,190
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	23,780,784	23,122,840	657,944

HANA MICROELECTRONICS GROUP

CONSOLIDATED Summary Statement of Cashflows

	Quarter	Quarter
'000 Baht	31-ธ.ค16	31-ธ.ค15
Cashflow from Operating Activities		
Net Earnings before tax	656,095	826,562
Adjustments to reconcile net earnings to net cash provided		
by operating activities		
Non Cash items		
Depreciation	292,509	301,298
Unrealised (gain) Loss on exchange	138,701	(170,318)
Increase (Decrease) in allowance for doubtful debts	2,712	(3,780)
Increase (Decrease) in allowance for obsolete inventories	(152)	58,139
Change in other provisions	(80,151)	(49,690)
	353,618	135,649
	333,613	100,010
Working Capital (increase) decrease		
Trade accounts receivable	100,690	288,978
Inventories	(75,979)	(77,280)
Trade accounts payable	57,231	(517,095)
Other	(60,632)	107,303
	21,310	(198,094)
Net Cashflow from Operating Activities	1,031,023	764,117
Cashflow from Investing Activities		
Cashflow from Investing Activities (Increase) decrease in short term investment	548,454	(9,743)
Increase in property, plant and equipment	(410,492)	(296,883)
Proceeds from sale of fixed assets	109	9,333
Increase (decrease) in translation adjustment	222,739	(146,280)
Revaluation deficit on investments	23,220	23,637
Other	23,220	23,037
	384,029	(419,936)
Cashflow from Financing Activities		
Cash received from increase in share capital	-	-
Dividend paid	(804,879)	(804,879)
Other	-	
Net cash (used in) from financing activties	(804,879)	(804,879)
Net Cash, equivalents and short term liquid investments	610,173	(460,697)
increase (decrease)		
Cash and Equivalents at the beginning of the period	5,737,422	5,887,193
Cash and Equivalents at the end of the period	6,347,595	5,426,495

HANA MICROELECTRONICS GROUP

Financial Ratios

	Quarter	Quarter	
'000 Baht	31-ธ.ค15	31-ธ.ค15	Q <u>416-Q4</u> 15
Profitability Ratios			
Gross Profit Margin (%)	17%	18%	-1%
Operating Profit Margin (%)	13%	14%	-1%
Net Profit before Exceptional Margin (%)	13%	15%	-2%
Net Profit after Exceptional Margin (%)	11%	16%	-5%
EBITDA margin (%)	18%	20%	-2%
Return On Equity (%) pa	13%	17%	-4%
Return On Assets (%) pa	11%	14%	-3%
Return On Operating Capital Employed (%) pa	28%	26%	2%
Efficiency Ratios			
Working Capital turnover	5	5	
Account Receivable days	56	58	- 2
Inventory days	69	72	- 3
Accounts Payable days	53	52	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	