Management's Discussion and Analysis

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue was similar year on year at THB 5.3 billion for the third quarter of 2016. Sales Revenue in USD terms increased by 1% to USD 152m from USD 150m in Q3 2015.

Net Profit increased 73% to THB 569m in Q316 from THB 329m in Q315, due to lower operating profit offset by Bht 448m positive change in foreign exchange gain (loss).

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	Q316		Q315		Q316-Q315	Q316-Q315
PCBA (Lamphun, Thailand)	1,883,467	36%	2,161,766	41%	(278,299)	-13%
PCBA (Jiaxing, China)	972,632	18%	1,010,857	19%	(38,225)	-4%
PCBA (Cambodia)	21,776	0%	8,086	0%	13,690	
IC (Ayutthaya, Thailand)	1,873,856	36%	1,681,717	32%	192,139	11%
IC (Jiaxing, China)	263,680	5%	333,131	6%	(69,451)	-21%
HMT (Ohio, USA)	274,985	5%	88,943	2%	186,042	209%
Total Revenue	5,290,396	100%	5,284,500	100%	5,896	0%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 3 2016 sales revenue for the group increased 1% year-on-year in USD terms, from USD 150m in Q315 to USD 152m in Q316. The average exchange rate for Q316 was 1% stronger at THB/USD 34.8 from THB/USD 35.3 in Q315. As a result the sales revenue in THB terms was similar year on year. Year-on-year, the microelectronics divisions sales decreased by 9% in USD terms. Sales in Lamphun decreased 12% whilst JiaXing decreased by 3%. The IC divisions USD sales revenues increased 8% in Q316, with revenues of the IC divisions in Ayutthaya increasing by 13% and JiaXing decreasing by 15%. "HMT" the microdisplay/RFID operation in Ohio sales revenue increased 311%.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter Group sales increased by 13% from USD 135m in Q216 to USD 152m in Q316. Sales in the microelectronics division increased 10% with Lamphun increasing 10% and JiaXing increasing 13%. Sales revenues from the IC divisions were 14% higher in Q316 with Ayutthaya sales increasing by 14% and JiaXing IC sales increasing by 9%. The microdisplay division sales increased 133% in Q316 compared to Q216. In THB equivalent the group sales were up 11% in Q316 compared to Q216. The average THB/USD exchange rate was 1% stronger at 34.8 in Q316 from 35.3 in Q216.

Sales Revenue Split

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

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

The Gross Profit margin was 14% in Q316 down from Q315 at 17% due to a stronger exchange rate (1%), change in product mix and lower selling prices leading to a higher percentage of material costs (2%).

Operating Profit Analysis

Year-on-year operating profits were 18% lower at THB 534m in Q316 compared to THB 649m in Q315. The Operating margin was 10% in Q316 down 2% from 12% in Q315 due to lower gross margin (3%) and lower SGA expenses 1%. SG&A expenses were 7% lower in Q316 than in Q315. SG&A expenses in Q316 were 8% higher than Q216.

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 Q316 was Baht/USD 34.84, Q315 was Baht/USD 35.25 (and Baht/USD 35.28 in Q216).

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 34.70 at 30/09/16, and Baht/USD 36.37 at 30/09/15 (35.18 at 30/06/16) 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 (and financial investments) reserves at the 30th September, 2016 were THB 10.0 billion up from 30th September, 2015 were THB 9.5 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 62 days in Q316 and 62 days in Q315.

Trade Receivables	30-Sep-16	30-Sep-15	THB '000
Less than 3 months	3,444,247	3,427,931	
3 - 6 months	29,329	23,477	
6 - 12 months	8,076	8,694	
More than 12 months	3,880	3,186	
Total accounts receivable - other companies	3,485,532	3,463,288	-
Less : Allowance for doubtful accounts	(17,143)	(28,025)	
•	3,468,389	3,435,263	-

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 71 days as at 30th September, 2016 and 69 days as at 30th September, 2015.

Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q3 2016 was THB 828m which was 12% lower than Q3 2015 was THB 937m.

Capital Expenditure

Capital Expenditure was THB 242m in Q3 2016, and THB 547m in Q3 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

CONSOLIDATED STATEMENT OF EARNINGS

	Quarter		Quarter			%
'000 Baht	Q316	_	Q315	•	Q316-Q315	Q316-Q315
REVENUES						
Sales	5,290,396		5,284,500		5,896	0%
consisting of:						
PCBA (Lamphun, Thailand)	1,883,467	36%	2,161,766	41%	(278,299)	-13%
PCBA (Jiaxing, China)	972,632	18%	1,010,857	19%	(38,225)	-4%
PCBA (Cambodia)	21,776	0%	8,086	0%	13,690	
IC (Ayutthaya, Thailand)	1,873,856	36%	1,681,717	32%	192,139	11%
IC (Jiaxing, China)	263,680	5%	333,131	6%	(69,451)	-21%
HMT (Ohio, USA)	274,985	5%	88,943	2%	186,042	209%
	5,290,396	100%	5,284,500	100%	5,896	0%
Share of Assoc. company Profit	-		-		-	
Other Income - Operating	74,324		65,172		9,152	14%
TOTAL OPERATING REVENUES	5,364,720	. <u>-</u>	5,349,672	•	15,048	0%
EXPENSES						
Cost of Sales	4,541,741	86%	4,390,442	83%	151,299	3%
Selling & Admin. Expenses	288,981	5%	309,863	6%	(20,882)	-7%
TOTAL EXPENSES	4,830,722	91%	4,700,305	89%	130,417	3%
OPERATING EARNINGS	533,998	10%	649,367	12%	(115,369)	-18%
Other Income - Non Operating	6,372		17,272		(10,900)	
Interest	48,287		55,228		(6,941)	-13%
Interest Expenses	(1,780)		(1,998)		218	
EARNINGS before Income Tax	586,877	11%	719,869	13%	(132,992)	-18%
Corporate Income Tax	(87,615)	-2%	(12,560)	0%	(75,055)	598%
Earnings before Exch. & Exceptional Items	499,262	_	707,309	•	(208,047)	-29%
Exchange Gain (Loss)	69,752		(378,650)		448,402	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	569,014	11%	328,659	6%	240,355	73%
EARNINGS % of SALES	11%		6%		5%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	0.62		0.88		- 0.26	
EARNINGS per SHARE (baht) after exceptionals	0.71		0.41		0.30	
Operating Profit (EBIT)	533,999		649,367		(115,368)	-18%
Operating Profit Margin	10%		12%			
Depreciation	294,155		287,352		6,803	
EBITDA (excl exchange gain/loss)	828,153		936,719		(108,566)	-12%
EBITDA % of Sales Revenue	16%		18%			
Cashflow Earnings per Share	1.03		1.16		- 0.13	

CONSOLIDATED STATEMENT OF EARNINGS

	YTD		YTD		YTD	YTD %
'000 Baht	30-Sep-16	_	30-Sep-15		Q316-Q315	Q316-Q315
REVENUES				-		
Sales	14,796,471		15,396,688		(600,217)	-4%
consisting of:						
PCBA (Lamphun, Thailand)	5,523,181	38%	6,625,032	44%	(1,101,851)	-17%
PCBA (Jiaxing, China)	2,672,371	18%	3,000,790	19%	(328,419)	-11%
PCBA (Cambodia)	45,513	0%	8,086	0%	37,427	
IC (Ayutthaya, Thailand)	5,162,907	35%	4,618,169	30%	544,738	12%
IC (Jiaxing, China)	780,124	5%	932,682	6%	(152,558)	-16%
HMT (Ohio, USA)	612,375	4%	211,929	1%	400,446	189%
	14,796,471	100%	15,396,688	100%	(600,217)	-4%
Other Income - Operating	179,040		163,758		15,282	9%
TOTAL OPERATING REVENUES	14,975,511	•	15,560,446	-	(584,935)	-4%
EXPENSES						
Cost of Sales	12,878,968	87%	13,284,636	86%	(405,668)	-3%
Selling & Admin. Expenses	880,318	6%	845,624	5%	34,694	4%
TOTAL EXPENSES	13,759,286	93%	14,130,260	92%	(370,974)	-3%
OPERATING EARNINGS	1,216,225	8%	1,430,186	9%	(213,961)	-15%
Other Income - Non Operating	18,550		28,157		(9,607)	-34%
Interest	149,581		167,121		(17,540)	-10%
Interest Expenses	(5,212)		(5,728)		516	
EARNINGS before Income Tax	1,379,144	9%	1,619,736	10%	(240,592)	-15%
Corporate Income Tax	(116,584)	8%	(42,459)	3%	(74,125)	175%
Earnings before Exch. & Exceptional Items	1,262,560	•	1,577,277	•	(314,717)	-20%
Exchange Gain (Loss)	207,396		(332,679)		540,075	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	1,469,956	10%	1,244,598	8%	225,358	18%
				•		
EARNINGS % of SALES	10%		8%		2%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	1.57		1.96		- 0.39	
EARNINGS per SHARE (baht) after exceptionals	1.83		1.55		0.28	
Operating Profit (EBIT)	1,216,225		1,430,186		(213,961)	
Operating Profit Margin	8%		9%		(213)331)	
Depreciation	880,241		863,837		16,404	
EBITDA (excl exchange gain/loss)	2,096,466		2,294,023		(197,557)	
EBITDA % of Sales Revenue	14%		15%		(== , , , , , ,)	
Cashflow Earnings per Share	2.60		2.85		- 0.25	
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HANA MICROELECTRONICS GROUP CONSOLIDATED Balance Sheet

	Quarter	Quarter		
'000 Baht	30-Sep-16	30-Sep-15	Q316-Q315	
ASSETS				
CURRENT ASSETS				
Cash in Hand & at Banks	7,092,704	5,887,193	1,205,511	
Financial Investments	2,879,861	3,289,830	(409,969)	
Accounts Receivable - trade	3,617,651	3,632,723	(15,072)	
Amounts due from Related Companies	-	-		
Inventories	3,567,526	3,347,462	220,064	
Other Current Assets	161,408	173,433	(12,025)	
TOTAL CURRENT ASSETS	17,319,150	16,330,641	988,509	
Fixed Deposit	-	357,396	(357,396)	
FIXED ASSETS (net)	6,273,543	6,954,421	(680,878)	
OTHER ASSETS	214,427	216,601	(2,174)	
TOTAL ASSETS	23,807,120	23,859,059	(51,939)	
LIABILITIES				
CURRENT LIABILITIES				
Bank Overdrafts & Loans	-	-		
Accounts & Notes Payable	2,870,806	2,991,444	(120,638)	
Corporate Income Tax Payable	-	9,306	(9,306)	
Accrued Expenses	346,999	343,414	3,585	
Other Current Liabilities	141,392	391,780	(250,388)	
TOTAL CURRENT LIABILITIES	3,359,197	3,735,944	(376,747)	
LONG TERM LIABILITIES	577,613	590,140	(12,527)	
TOTAL LIABILITIES	3,936,810	4,326,084	(389,274)	
SHAREHOLDERS EQUITY				
Share Capital	804,879	804,879	0	
Treasury Shares	-	-		
Share Premium	1,723,219	1,723,219	0	
Retained Earnings	427.554	442.424	44.427	
Appropriated Statutory Reserve	427,551	413,124	14,427	
Unappropriated Translation adj. & Investment revaluation	16,145,659 769,002	15,441,700 1,150,053	703,959 (381,051)	
Unrealised gain(loss) on change in investments	703,002	1,130,033	(381,031)	
Excess Cost over Net Book Value of Subsidiary Investments	-	-		
TOTAL SHAREHOLDERS EQUITY	19,870,310	19,532,975	337,335	
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	23,807,120	23,859,059	(51,939)	
	-	0		
Cash & Equivalents	9,972,565	9,534,419	438,146	5%
Liabilities	3,936,810	4,326,084	-389,274	
Debt/Equity	0.20	0.22	-0.02	
Net Debt (Net cash)	-6,035,755	-5,208,335	-827,420	
Net Debt/Equity	-0.30	-0.27	-0.04	

CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Quarter 30-Sep-16	Quarter 30-Sep-15
Cashflow from Operating Activities		
Net Earnings before tax	656,629	341,219
Adjustments to reconcile net earnings to net cash provided		
by operating activities		
Non Cash items		
Depreciation	296,478	288,403
Unrealised (gain) Loss on exchange	(17,359)	389,790
Increase (Decrease) in allowance for doubtful debts	3,521	15,884
Increase (Decrease) in allowance for obsolete inventories	14,645	(28,901)
Change in other provisions	(87,224)	(9,710)
	210,061	655,466
Working Capital (increase) decrease		
Trade accounts receivable	(634,087)	(302,766)
Inventories	79,962	(95,119)
Trade accounts payable	77,543	370,374
Other	41,734	(170,441)
	(434,848)	(197,952)
Net Cashflow from Operating Activities	431,842	798,733
Cashflow from Investing Activities		
(Increase) decrease in short term investment	(37,779)	(116,444)
Increase in property, plant and equipment	(127,747)	(515,896)
Proceeds from sale of fixed assets	213,992	11,328
Increase (decrease) in translation adjustment	(150,872)	716,243
Revaluation deficit on investments	4,846	(17,486)
Other		
	(97,561)	77,745
Cashflow from Financing Activities		
Cash received from increase in share capital	-	-
Dividend paid	<u>-</u>	-
Other	<u>-</u>	-
Net cash (used in) from financing activties	-	-
Net Cash, equivalents and short term liquid investments increase (decrease)	334,282	876,478
Cash and Equivalents at the beginning of the period	6,758,422	5,010,715
Cash and Equivalents at the end of the period	7,092,704	5,887,193
·	•	•

Financial Ratios

	Quarter	Quarter		
'000 Baht	30-Sep-16	30-Sep-15	Q316-Q315	
Profitability Ratios				
Gross Profit Margin (%)	14%	17%	-3%	
Operating Profit Margin (%)	10%	12%	-2%	
Net Profit before Exceptional Margin (%)	9%	13%	-4%	
Net Profit after Exceptional Margin (%)	11%	6%	5%	
EBITDA margin (%)	16%	18%	-2%	
Return On Equity (%) pa	11%	7%	4%	
Return On Assets (%) pa	10%	6%	4%	
Return On Operating Capital Employed (%) pa	21%	25%	-4%	
Efficiency Ratios				
Working Capital turnover	5	5		
Account Receivable days	62	62		
Inventory days	71	69	2	
Accounts Payable days	57	61	- 4	
Liquidity Ratios				
Current Ratio	5	4	1	
Quick Ratio	4	3	1	
Financial Capital Ratios	0	0		
Debt / Equity	0	0		
Net Debt to Equity	0	0		
Interest Coverage	n/a	n/a		