

Management's Discussion and Analysis

Third Quarter ending 30th September 2019

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue decreased 14% year on year to THB 5.2 billion for the third quarter of 2019 from THB 6.0 billion for the third quarter 2018. Sales Revenue in USD terms decreased 8% to USD 168m for Q3 2019 from USD 182m in Q3 2018. Operating Profits decreased 53% to THB 381m in Q3 2019 from THB 815m in Q3 2018.

Net Profit decreased 55% to THB 407m in Q319 from THB 905m in Q318, due to lower operating profits in Q319 vs Q318.

THB '000	Quarter		Quarter		Q319-Q318	%
	Q319		Q318			
PCBA (Lamphun, Thailand)	2,348,104	45%	2,302,595	38%	45,509	2%
PCBA (Jiaxing, China)	659,502	13%	960,153	16%	(300,651)	-31%
PCBA (Cambodia)	29,227	1%	16,082	0%	13,145	82%
IC (Ayutthaya, Thailand)	1,678,416	32%	2,115,779	35%	(437,363)	-21%
IC (Jiaxing, China)	242,954	5%	348,936	6%	(105,982)	-30%
HTI (Ohio, USA)	211,446	4%	274,527	5%	(63,081)	-23%
Total Revenue	5,169,649	100%	6,018,072	100%	(848,423)	-14%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 3 2019 sales revenue for the group decreased 8% year-on-year in USD terms to USD 168m from USD 188m in Q318. The average exchange rate for Q319 was 7% stronger at THB/USD 30.7 from THB/USD 33.0 in Q318. As a result the sales revenue in THB terms decreased 14% year on year for the quarter.

Year-on-year, in USD terms, the microelectronics divisions sales decreased by 1%. Sales in Lamphun increased 9% whilst Jiaxing decreased by 26%. The IC divisions sales revenues decreased 16% in Q319, with revenues of the IC division in Ayutthaya decreasing 15% and Jiaxing decreasing by 25%. "HTI" the Microdisplay/RFID operation in Ohio sales revenue decreased 18% in Q319 from Q318.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group increased 3% to USD 168m in Q319 from USD 163m in Q219. In THB equivalent the group sales were up similar in Q319 compared to Q219. Sales in the microelectronics divisions increased 3% with Lamphun increasing 7% and Jiaxing decreasing 9%. Sales revenues from the IC divisions were 4% higher in Q319 with Ayutthaya sales increasing 4% and Jiaxing IC sales increasing by 7%. The Microdisplay division sales decreased 10% in Q319 compared to Q219.

Sales Revenue Split

	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018
PCBA (Lamphun, Thailand)	45%	44%	44%	40%	38%
PCBA (Jiaxing, China)	13%	14%	15%	17%	16%
PCBA (Cambodia)	1%	0%	0%	0%	0%
IC (Ayutthaya, Thailand)	32%	32%	33%	34%	35%
IC (Jiaxing, China)	5%	5%	4%	4%	6%
HTI (Ohio, USA)	4%	5%	4%	5%	5%
	100%	100%	100%	100%	100%

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

The Gross Profit margin was 6 percentage points lower at 12% in Q319 down from Q318 at 18% due to reduced economies of scale from lower sales revenue [-2%], stronger THB/USD exchange rate [-2%], change in product mix [-1%] and higher labour and salaries expenses [-1%].

Operating Profit Analysis

Year-on-year operating profits, were 53% lower at THB 381m in Q319 compared to THB 815m in Q318. The Operating margin was 7 percentage points lower at 7% in Q319 down from 14% in Q318 due to lower gross margin 6%. SG&A expenses were 2% higher in Q319 from Q318 due to increased R&D expenses.

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 Q319 was Baht/USD 30.71, Q318 was Baht/USD 32.97 (and Q219 was Baht/USD 31.59).

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 30.59 at 30/09/19, and Baht/USD 32.41 at 30/09/18 (30.74 at 30/06/19) or the respective rate applicable to each offshore subsidiary's base currency.

Payout Analysis

No dividends were paid out during the quarter.

Financial Status

Net Cash reserves and financial investments at the 30th September 2019 were THB 8.5 billion down THB 1.0 billion from 30th September 2018 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 64 days in Q319 and 61 days in Q318.

	<u>30-Jun-19</u>	<u>30-Sep-18</u>	THB '000
Trade Receivables			
Less than 3 months	3,548,010	3,932,726	
3 - 6 months	20,406	19,661	
6 - 12 months	9,001	1,629	
More than 12 months	2,974	3,354	
Total accounts receivable - other companies	<u>3,580,391</u>	<u>3,957,370</u>	
Less : Allowance for doubtful accounts	(5,609)	(8,525)	
	<u>3,574,782</u>	<u>3,948,845</u>	

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 89 days as at 30th September, 2019 and 85 days as at 30th September, 2018 .

Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q3 2019 was THB 664m which was 40% lower than Q3 2018 was THB 1,098m.

Capital Expenditure

Net Capital Expenditure was THB 297m in Q3 2019, and THB 812m in Q3 2018. 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. $(1 - 0.60) \times \text{Sales Revenue} \times 10\%$).

Out of the groups foreign exchange exposure, USD 120m 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