

Management's Discussion and Analysis

First Quarter ending 31st March 2019

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue decreased 1% year on year at THB 5.1 billion for the first quarter of 2019 from THB 5.2 billion for the first quarter 2018. Sales Revenue in USD terms decreased 1% to USD 162m for Q1 2019 from USD 165m in Q1 2018. Operating Profits decreased 52% to THB 164m in Q1 2019 from THB 343m in Q1 2018.

Net Profit decreased 45% to THB 303m in Q119 from THB 553m in Q118, due to higher costs due to increased capacity in Q119 compared to Q118 and THB strengthening from Q418 affecting margins in Q119.

THB '000	Quarter		Quarter		%	
	Q119		Q118		Q119-Q118	Q119-Q118
PCBA (Lamphun, Thailand)	2,250,944	44%	2,242,565	43%	8,379	0%
PCBA (Jiaxing, China)	744,633	15%	813,220	16%	(68,587)	-8%
PCBA (Cambodia)	9,100	0%	5,378	0%	3,722	69%
IC (Ayutthaya, Thailand)	1,702,076	33%	1,597,705	31%	104,371	7%
IC (Jiaxing, China)	216,262	4%	307,129	6%	(90,867)	-30%
HTI (Ohio, USA)	209,738	4%	228,859	4%	(19,121)	-8%
Total Revenue	5,132,752	100%	5,194,856	100%	(62,104)	-1%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 1 2019 sales revenue for the group decreased 1% year-on-year in USD terms to USD 162m from USD 165m in Q118. The average exchange rate for Q119 was similar at THB/USD 31.6 from THB/USD 31.5 in Q118. As a result the sales revenue in THB terms also decreased 1% year on year for the quarter.

Year-on-year, in USD terms, the microelectronics divisions sales decreased by 2%. Sales in Lamphun increased 1% whilst Jiaxing decreased by 9%. The IC divisions sales revenues were similar in Q119, with revenues of the IC division in Ayutthaya increasing 6% and Jiaxing decreasing by 30%. "HTI" the Microdisplay/RFID operation in Ohio sales revenue decreased 8%.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group decreased 5% to USD 163m in Q119 from USD 184m in Q418. In THB equivalent the group sales were down 8% in Q119 compared to Q418 due to the average THB/USD exchange rate being 4% stronger at 31.6 in Q119 from 32.8 in Q418. Sales in the microelectronics divisions decreased 2% with Lamphun increasing 7% and Jiaxing decreasing 20%. Sales revenues from the IC divisions were 7% lower in Q119 with Ayutthaya sales decreasing 6% and Jiaxing IC sales decreasing by 9%. The Microdisplay division sales decreased 26% in Q119 compared to Q418.

Sales Revenue Split

	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
PCBA (Lamphun, Thailand)	44%	40%	38%	39%	43%
PCBA (Jiaxing, China)	15%	17%	16%	18%	16%
PCBA (Cambodia)	0%	0%	0%	0%	0%
IC (Ayutthaya, Thailand)	33%	34%	35%	34%	31%
IC (Jiaxing, China)	4%	4%	6%	5%	6%
HTI (Ohio, USA)	4%	5%	5%	4%	4%
	100%	100%	100%	100%	100%

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

The Gross Profit margin was 3 percentage points lower at 8% in Q119 up from Q118 at 11% due to higher higher labour costs 1%, higher depreciation 1%, higher salaries expenses 1% .

Operating Profit Analysis

Year-on-year operating profits, excluding R&D expenses, were 52% lower at THB 164m in Q119 compared to THB 343m in Q118. The Operating margin was 4 percentage points lower at 3% in Q119 down from 7% in Q118 due to lower gross margin 3% and higher SGA expenses 1%. SG&A expenses were 3% higher in Q119 from Q118 due to higher salary 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 Q119 was Baht/USD 31.61, Q118 was Baht/USD 31.54 (and Q418 Baht/USD 32.81).

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 31.81 at 31/03/19, and Baht/USD 31.23 at 31/03/18 (32.45 at 31/12/18) or the respective rate applicable to each offshore subsidiary's base currency.

Payout Analysis

No dividends were paid in Q119 or Q118.

Financial Status

The group currently has no interest bearing debt. Cash reserves and financial investments at the 31st March 2019 were THB 8.5 billion down from 31st March 2018 were THB 9.8 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 66 days in Q119 and 65 days in Q118.

	<u>31-Mar-19</u>	<u>31-Mar-18</u>	THB '000
Trade Receivables			
Less than 3 months	3,638,692	3,601,360	
3 - 6 months	19,982	17,499	
6 - 12 months	3,101	1,855	
More than 12 months	1,903	4,612	
Total accounts receivable - other companies	3,663,678	3,625,326	
Less : Allowance for doubtful accounts	(14,884)	(10,307)	
	<u>3,648,794</u>	<u>3,615,019</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 96 days as at 31st March, 2019 and 80 days as at 31st March, 2018 .

Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q1 2019 was THB 453m which was 25% lower than Q1 2018 was THB 607m .

Capital Expenditure

Net Capital Expenditure was THB 180m in Q1 2019, and THB 266m in Q1 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