Management's Discussion and Analysis

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 21% year on year to THB 7.5 billion for the third quarter of 2022 from THB 6.2 billion for the third quarter 2021. Sales Revenue in USD terms increased 9% to USD 207m in Q3 2022 from USD 190m in Q3 2021. Earnings from Operations increased 24% to THB 864m in Q3 2022 from THB 696m in Q3 2021.

Net Profit decreased 26% to THB 416m in Q322 from a profit of THB 564m in Q321, due to higher exchange loss in Q322.

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	Q322		<u>Q321</u>		Q322-Q321	Q322-Q321
PCBA (Lamphun, Thailand)	2,962,554	39%	2,706,447	44%	256,107	9%
PCBA (Jiaxing, China)	1,188,876	16%	886,795	14%	302,081	34%
PCBA (Cambodia)	67,469	1%	21,301	0%	46,168	217%
IC (Ayutthaya, Thailand)	2,463,527	33%	2,035,904	33%	427,623	21%
IC (Jiaxing, China)	383,807	5%	334,231	5%	49,576	15%
HTI (Ohio, USA)	369,584	5%	246,918	4%	122,666	50%
IC Korea	109,349	1%	9,417	0%	99,932	1061%
Total Revenue	7,545,166	100%	6,241,013	100%	1,304,153	21%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 3 2022 sales revenue for the group increased 9% year-on-year in USD terms to USD 207m from USD 190m in Q321. The average exchange rate for Q322 was 11% weaker at THB/USD 36.4 from THB/USD 32.92 in Q321. As a result the sales revenue in THB terms increased 21% year on year for the quarter.

Year-on-year, in USD terms, the microelectronics divisions sales increased by 5%. Sales in Lamphun decreased 1% and Jiaxing increased by 21% year on year. The IC divisions sales revenues increased 9% ir Q322, with revenues of the IC division in Ayutthaya increasing 9% and Jiaxing increasing by 4%. Hana Technologies Inc. "HTI" the Microdisplay/RFID operation in Ohio sales revenue increased 36% in Q322 from Q321.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group increased 12% to USD 207m in Q322 from USD 186m in Q222. Sales in the microelectronics divisions increased 14% with Lamphun increasing 8% and Jiaxing increasing 34%. Sales revenues from the IC divisions increased 4% in Q322 from Q222 with Ayutthaya sales increasing 2% and Jiaxing IC sales increasing by 20%. HTI sales increased 12% in Q322 compared to Q222.

Sales Revenue Split

	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021
PCBA (Lamphun, Thailand)	39%	41%	44%	39%	44%
PCBA (Jiaxing, China)	16%	13%	12%	15%	14%
PCBA (Cambodia)	1%	0%	1%	1%	0%
IC (Ayutthaya, Thailand)	33%	36%	33%	36%	33%
IC (Jiaxing, China)	5%	5%	5%	5%	5%
HTI (Ohio, USA)	5%	5%	4%	4%	4%
IC Korea	1%	0%	1%		
	100%	100%	100%	100%	100%

Gross Profit / Cost of Sales Analysis

The Gross Profit margin decreased 1 percentage point to 15% in Q322 from 16% Q321. Gross Margin in Q322 decreased despite higher Revenue during the quarter due to higher material costs.

Operating Profit Analysis, Sales and Administration Analysis

Year-on-year Earnings from Operations, were 24% higher at THB 864m in Q322 compared to THB 696m in Q321. The Operating margin was similar at 11% in Q322 and Q321. SG&A expenses were 10% higher in Q322 than Q321 due to higher salary and R&D costs.

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 Q322 was THB/USD 36.41, Q321 was Baht/USD 32.92 (and Q222 was THB/USD 34.40).

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 THB/USD 37.91 at 30/09/22, and 33.92 at 30/09/21 (35.30 at 30/06/22) 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 were THB 3.8 billion at the 30thSeptember 2022 down from THB 8.5 billion at the 30th September 2021.

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 70 days in Q322 and 64 days in Q321.

Trade Receivables	<u>30-Jun-22</u>	30-Sep-21 THB '000
Less than 3 months	5,551,726	4,189,573
3 - 6 months	13,647	4,787
6 - 12 months	3,686	541
More than 12 months	11,128	5,791
Total accounts receivable - other companies	5,580,187	4,200,692
Less : Allowance for doubtful accounts	(20,669)	(8,853)
	5,559,518	4,191,839

<u>Inventory</u>

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 129 days as at 30th September, 2022 and 107 days as at 30th September, 2021.

Accounts Payable

Credit terms with suppliers are mostly open account with credit terms varying from cash in advance to 90 days. The credit term has been determined in accordance with the principles of fair dealing between the Company and suppliers. Average accounts payable were 68 days in Q322, 64 days in Q321.

Liquidity

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q3 2022 was THB 1,284m which was 24% higher than Q3 2021 was THB 1,036m.

Capital Expenditure

Net Capital Expenditure was THB 805m in Q3 2022 and THB 1,166m in Q3 2021. Generally, capital expenditure for production equipment will follow the increase in sales, particularly in the IC division. However, there is a 6 to 12 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 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

Forward Looking Statement

Factors That May Effect the financial condition of the Operating Results

The principle risks which may affect the company's operations are, but not limited to: Customer retention, winning new customers, product price erosion, customers products success in their respective markets and lifecycle of such products, consistently manufacturing products to agreed specifications and delivery schedules with customers, recall, product liability risks in the event of product failures, suppliers price and consistent supply of raw materials to agreed specifications, supplier financial solvency, fluctuation in foreign exchange rates for each of our operations compared to both product sales currency which is primarily USD, materials purchasing currency which is primarily USD and the operating currency in each country which we operate, wages and salaries increases, availability and turnover of direct labour and skilled staff, credit risks, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks.

Our success in executing and completing mergers and acquisitions and subsequent operational risks.

Our success in developing and marketing new products and factory processes.

Success in protecting intellectual property developed.

Macro-economic stability of the countries in which we, our customers and suppliers operate. Global financial stability which may affect interest rates and access of funding of the company, its customers and suppliers. Pandemic risks such as the continuing severity, magnitude and duration of the COVID-19 pandemic, including impacts of the pandemic, of businesses' and governments' responses to the pandemic the extent to which the COVID-19 pandemic and related impacts, including global supply chain disruptions.