Management's Discussion and Analysis

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 6% year on year to THB 6,466 million for the first quarter of 2023 from THB 6,107 million for the first quarter 2022. Sales Revenue in USD terms increased 3% to USD 191m in Q1 2023 from USD 185m in Q1 2022. Earnings from Operations decreased -28% to THB 275m in Q1 2023 from THB 384m in Q1 2022.

Net Profit decreased to THB 266m in Q123 from THB 365m in Q122, due to lower IC assembly revenues and increased electricity costs.

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	<u>Q123</u>		<u>Q122</u>		<u>Q123-Q122</u>	<u>Q123-Q122</u>
PCBA (Lamphun, Thailand)	3,032,375	48%	2,759,158	44%	273,217	10%
PCBA (Jiaxing, China)	797,259	12%	709,931	12%	87,328	12%
PCBA (Cambodia)	82,263	1%	38,244	1%	44,019	115%
IC (Ayutthaya, Thailand)	1,815,832	28%	2,010,292	33%	(194,460)	-10%
IC (Jiaxing, China)	247,111	4%	285,644	5%	(38,533)	-13%
HTI (Ohio, USA)	345,321	5%	262,783	4%	82,538	31%
IC Korea	145,817	2%	41,208	1%	104,609	254%
Total Revenue	6,465,978	100%	6,107,260	100%	358,718	6%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 1 2023 sales revenue for the group increased 3% year-on-year in USD terms to USD 191m from USD 185m in Q122. The average exchange rate for Q123 was 2% weaker at THB/USD 33.9 from THB/USD 33.1 in Q122. As a result the sales revenue in THB terms increased 6% year on year for the quarter.

Year-on-year, in USD terms, the microelectronics divisions sales increased by 8%. Sales in Lamphun increased 7% and Jiaxing increased by 9% year on year. The IC divisions sales revenues decreased -12% in Q123, with revenues of the IC division in Ayutthaya decreasing -12% and Jiaxing decreasing by -15%. Hana Technologies Inc. 'HTI' the Microdisplay/RFID operation in Ohio sales revenue increased 29% in Q123 from Q122.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group decreased -3% to 191m in Q123 from USD 196m in Q422. Sales in the microelectronics divisions increased 6% with Lamphun increasing 16% and Jiaxing decreasing -21%. Sales revenues from the IC divisions decreased -16% in Q123 from Q422 with Ayutthaya sales decreasing -15% and Jiaxing IC sales decreasing by -23%. HTI sales decreased -6% in Q123 compared to Q422.

Sales Revenue Split

	<u>Q1 2023</u>	<u>Q4 2022</u>	<u>Q3 2022</u>	<u>Q2 2022</u>	<u>Q1 2022</u>
PCBA (Lamphun, Thailand)	48%	39%	39%	41%	44%
PCBA (Jiaxing, China)	12%	15%	16%	13%	12%
PCBA (Cambodia)	1%	1%	1%	0%	1%
IC (Ayutthaya, Thailand)	28%	32%	33%	36%	33%
IC (Jiaxing, China)	4%	5%	5%	5%	5%
HTI (Ohio, USA)	5%	6%	5%	5%	4%
IC Korea	2%	2%	1%	0%	1%
	100%	100%	100%	100%	100%

Gross Profit / Cost of Sales Analysis

The Gross Profit margin decreased -2% points to 9% in Q123 from 11% Q122. Gross Margin in Q123 decreased due to lower semiconductor assembly revenues and higher electricity expenses.

Operating Profit Analysis, Sales and Administration Analysis

Year-on-year Earnings from Operations, were -28% lower at THB 275m in Q123 compared to THB 384m in Q122. The Operating margin was -2% points lower at 4% in Q123 and 6% in Q122. SG&A expenses increased 3% in Q123 compared to Q122.

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 Q123 was THB/USD 33.91, Q122 was THB/USD 33.09 (and Q422 was THB/USD 36.38).

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 34.10 at 31/03/23, and 33.33 at 31/03/22 (34.56 at 31/12/22) or the respective rate applicable to each offshore subsidiary's base currency.

Payout Analysis

No dividends were paid in Q123 or Q122.

Financial Status

Net Cash reserves and financial investments were THB 3.1 billion at the 31st March 2023 down from THB 5.5 billion at the 31st March 2022.

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 were 71 days at 31st March, 2023, and 72 days in 2022.

Trade Receivables	<u>31-Mar-23</u>	31-Mar-22 THB '000
Less than 3 months	4,854,561	4,542,704
3 - 6 months	45,243	24,826
6 - 12 months	7,068	10,549
More than 12 months	10,149	5,386
Total accounts receivable - other companies	4,917,021	4,583,465
Less : Allowance for doubtful accounts	(17,601)	(14,751)
	4,899,420	4,568,714

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 141 days as at 31st March, 2023 and 122 days as at 31st March, 2022.

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 54 days in Q123, 66 days in Q122.

<u>Liquidity</u>

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q1 2023 was THB 696m which was -6% lower than Q1 2022 at THB 743m.

Capital Expenditure

Capital Expenditure was THB 463m in Q1 2023 and THB 789m in Q1 2022. 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	Subsequent Event
None	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.