Management's Discussion and Analysis

Third Quarter ending 30th September 2021

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 30% year on year to THB 6.2 billion for the third quarter of 2021 from THB 4.8 billion for the third quarter 2020. Sales Revenue in USD terms increased 23% to USD 190m in Q3 2021 from USD 154m in Q3 2020. Earnings from Operations increased 90% to THB 696m in Q3 2021 from THB 367m in Q3 2020.

Net Profit increased 76% to THB 564m in Q321 from THB 320m in Q320, due to 79% higher operating earnings in Q321.

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	<u>Q321</u>		<u>Q320</u>		<u>Q321-Q320</u>	<u>Q321-Q320</u>
PCBA (Lamphun, Thailand)	2,706,447	44%	2,123,902	45%	582,545	27%
PCBA (Jiaxing, China)	886,794	14%	693,780	14%	193,014	28%
PCBA (Cambodia)	21,301	0%	19,863	0%	1,438	7%
IC (Ayutthaya, Thailand)	2,035,904	33%	1,592,377	33%	443,527	28%
IC (Jiaxing, China)	334,232	5%	186,134	4%	148,098	80%
HTI (Ohio, USA)	246,917	4%	197,649	4%	49,268	25%
Total Revenue	6,231,595	100%	4,813,705	100%	1,417,890	29%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 3 2021 sales revenue for the group increased 23% year-on-year in USD terms to USD 190m from USD 154m in Q320. The average exchange rate for Q321 was 5% weaker at THB/USD 32.9 from THB/USD 31.3 in Q320. As a result the sales revenue in THB terms increased 30% year on year for the quarter. Year-on-year, in USD terms, the microelectronics divisions sales increased by 22%. Sales in Lamphun increased 22% and Jiaxing increased by 22% year on year. The IC divisions sales revenues increased 27% in Q321, with revenues of the IC division in Ayutthaya increasing 22% and Jiaxing increasing by 71%. Hana Technologies Inc, "HTI" the Microdisplay/RFID operation in Ohio sales revenue increased 19% in Q321 from Q320.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group decreased 2% to USD 190m in Q321 from USD 193m in Q221. Sales in the microelectronics divisions were similar with Lamphun decreasing 4% and Jiaxing increasing 16%. Sales revenues from the IC divisions decreased 5% in Q321 from Q221 with Ayutthaya sales decreasing 6% and Jiaxing IC sales increasing by 5%. HTI sales decreased 7% in Q321 compared to Q221.

Sales Revenue Split

	<u>Q3 2021</u>	<u>Q2 2021</u>	<u>Q1 2021</u>	<u>Q4 2020</u>	<u>Q3 2020</u>
PCBA (Lamphun, Thailand)	44%	45%	47%	46%	45%
PCBA (Jiaxing, China)	14%	12%	11%	13%	14%
PCBA (Cambodia)	0%	0%	0%	1%	0%
IC (Ayutthaya, Thailand)	33%	34%	35%	33%	33%
IC (Jiaxing, China)	5%	5%	4%	4%	4%
HTI (Ohio, USA)	4%	4%	3%	3%	4%
	100%	100%	100%	100%	100%

Gross Profit / Cost of Sales Analysis

The Gross Profit margin increased 4% points to 16% in Q321 from 12% Q320. Gross Margin in Q321 was higher due to higher sales revenue providing better economies of scale in Q321 compared to Q320 and weaker THB/USD exchange rate.

Operating Profit Analysis, Sales and Administration Analysis

Year-on-year Earnings from Operations, were 90% higher at THB 696m in Q321 compared to THB 367m in Q320. The Operating margin was up 3 percentage points to 11% in Q321 from 8% in Q320 due to the higher Gross Margin and better economies of scale also. SG&A expenses were 18% higher in Q321 than Q320 due to lower employee bonuses paid in 2020 and higher salaries in 2021.

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 Q321 was THB/USD 32.92, Q320 was THB/USD 31.33 (and Q221 was THB/USD 31.36).

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 33.92 at 30/09/21, and Baht/USD 31.66 at 30/09/20 (Baht 32.05 at 30/06/21) 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 8.5 billion at the 30th September 2021 down from THB 9.8 billion at the 30th September 2020.

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 Q321 and 60 days in Q320.

Trade Receivables	<u>30-Sep-21</u>	<u>30-Sep-20</u> THB '000
Less than 3 months	4,189,573	3,088,232
3 - 6 months	4,787	13,475
6 - 12 months	541	4,025
More than 12 months	5,791	2,370
Total accounts receivable - other companies	4,200,692	3,108,102
Less : Allowance for doubtful accounts	(8,853)	(5,891)
	4,191,839	3,102,211

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 107 days as at 30th September, 2021 and 107 days as at 30th September, 2020.

<u>Liquidity</u>

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q3 2021 was THB 1,036m which was 57% higher than Q3 2020 at THB 660m.

Capital Expenditure

Net Capital Expenditure was THB 1,166m in Q3 2021 and THB 202m in Q3 2020. 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 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

<u>Subsequent Event</u> None

Forward Looking Statement None

CONSOLIDATED STATEMENT OF EARNINGS

	Quarter		Quarter			%
'000 Baht	Q321		Q320		Q321-Q320	Q321-Q320
REVENUES				i	· · · · · ·	
Sales	6,241,013		4,813,707		1,427,306	30%
consisting of:	0,2 11,010		1,010,707		1,127,000	50/0
PCBA (Lamphun, Thailand)	2,706,447	44%	2,123,902	45%	582,545	27%
PCBA (Jiaxing, China)	886,794	14%	693,780	14%	193,014	28%
PCBA (Cambodia)	21,301	0%	19,863	0%	1,438	7%
IC (Ayutthaya, Thailand)	2,035,904	33%	1,592,377	33%	443,527	28%
IC (Jiaxing, China)	334,232	5%	186,134	4%	148,098	80%
HTI (Ohio, USA)	246,917	4%	197,649	4%	49,268	25%
IC (Korea)	9,418	0%	-		9,418	0%
	6,241,013	100%	4,813,705	100%	1,427,308	30%
Other Income	94,893		111,848		(16,955)	-15%
TOTAL OPERATING REVENUES	6,335,906	-	4,925,553		1,410,353	29%
EXPENSES						
Cost of Sales	5,264,742	84%	4,242,063	88%	1,022,679	24%
Selling & Admin. Expenses	345,704	6%	286,230	6%	59,475	21%
R&D Expenses	29,508	0%	30,593	1%	(1,086)	-4%
Other Expenses	-	0%	-	0%	-	0%
TOTAL EXPENSES	5,639,954	90%	4,558,886	95%	1,081,068	24%
OPERATING EARNINGS	695 <i>,</i> 952	11%	366,667	7%	329,285	90%
Other Income - non operating	484		775		(291)	-38%
Interest	28,626		30,741		(2,115)	-7%
Finance Expenses	(1,571)		(1,897)		326	
EARNINGS before Income Tax	723,491	11%	396,286	8%	327,205	83%
Corporate Income Tax	(21,919)	0%	(31,020)	-1%	9,101	-29%
Earnings before Exch. & Exceptional Items	701,572		365,266		336,306	92%
Exchange Gain (Loss)	(137,793)		(45,222)		(92,571)	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	563,779	9%	320,044	6%	243,735	76%
EARNINGS % of SALES	9%		7%		2%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	0.87		0.45		0.42	
EARNINGS per SHARE (baht) after exceptionals	0.70		0.40		0.30	
Earnings from Operations	695,952		366,669		329,283	90%
Earnings from Operations Margin	11%		8%			
Depreciation	340,017		293,518		46,499	
EBITDA (excl exchange gain/loss)	1,035,969		660,187		375,784	57%
EBITDA % of Sales Revenue	17%		14%			

CONSOLIDATED STATEMENT OF EARNINGS

	YTD		YTD		YTD	YTD %
'000 Baht	30-Sep-21		30-Sep-20		Q321-Q320	Q321-Q320
REVENUES	<u> </u>	-				<u> </u>
Sales	17,520,181		14,015,737		3,504,444	25%
consisting of:	_//0_0/20_		,00,7 0,7		0,000,000	2070
PCBA (Lamphun, Thailand)	7,749,275	45%	6,197,690	43%	1,551,585	25%
PCBA (Jiaxing, China)	2,178,483	12%	1,899,745	14%	278,738	15%
PCBA (Cambodia)	71,604	0%	75,586	1%	(3,982)	-5%
IC (Ayutthaya, Thailand)	5,955,478	34%	4,774,002	34%	1,181,476	25%
IC (Jiaxing, China)	860,760	5%	545,460	4%	315,300	58%
HTI (Ohio, USA)	680,465	4%	523,254	4%	157,211	30%
IC (Korea)	24,116			0%	24,116	0%
	17,520,181	100%	14,015,737	100%	3,504,444	25%
Other Income	288,243		284,126		4,117	1%
TOTAL OPERATING REVENUES	17,808,424	-	14,299,863		3,508,561	25%
EXPENSES						
Cost of Sales	14,906,390	85%	12,032,425	86%	2,873,965	24%
Selling & Admin. Expenses	985,741	6%	931,588	7%	54,153	6%
R&D Expenses	88,259	1%	35,186	0%	53,073	151%
Other Expenses	-	0%	-	0%	-	0%
TOTAL EXPENSES	15,980,390	91%	12,999,199	93%	2,981,191	23%
OPERATING EARNINGS	1,828,034	10%	1,300,664	9%	527,370	41%
Other Income - non operating	1,607		1,605		2	
Interest	86,284		110,750		(24,466)	-22%
Finance Expenses	(4,763)		(9,536)		4,773	
EARNINGS before Income Tax	1,911,162	11%	1,403,483	10%	507,679	36%
Corporate Income Tax	(41,428)	2%	(77,507)	6%	36,079	-47%
Earnings before Exch. & Exceptional Items	1,869,734	-	1,325,976		543,758	41%
Exchange Gain (Loss)	(267,984)		(119,912)		(148,072)	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	1,601,750	9%	1,206,064	8%	395,686	33%
EARNINGS % of SALES	9%		9%		1%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	2.32		1.65		0.67	
EARNINGS per SHARE (baht) after exceptionals	1.99		1.50		0.49	
Earnings from Operations	1,828,034		1,300,664		527,370	
Earnings from Operations Margin	10%		9%			
Depreciation	973 <i>,</i> 595		863,623		109,972	
EBITDA (excl exchange gain/loss)	2,801,629		2,164,287		637,342	
EBITDA % of Sales Revenue	16%		15%			

CONSOLIDATED Balance Sheet

CONSOLIDATED Balance Sheet	Quarter	Quartar	
	Quarter	Quarter	
'000 Baht	30-Sep-21	30-Sep-20	Q321-Q320
ASSETS			
CURRENT ASSETS			
Cash in Hand & at Banks	4,870,784	4,961,351	(90,567)
Financial Investments	3,642,720	4,835,603	(1,192,883)
Accounts Receivable - trade	4,441,469	3,229,737	1,211,732
Amounts due from Related Companies	-	-	
Inventories	6,288,155	5,027,071	1,261,084
Other Current Assets	153,493	58,712	94,781
TOTAL CURRENT ASSETS	19,396,621	18,112,474	1,284,147
Long Term Financial Investments	97	79,242	(79,145)
FIXED ASSETS (net)	9,110,246	6,953,726	2,156,520
OTHER ASSETS	566,352	390,597	175,755
TOTAL ASSETS	29,073,316	25,536,039	3,537,277
LIABILITIES			
CURRENT LIABILITIES			
Bank Overdrafts & Loans	-	-	
Accounts & Notes Payable	3,748,856	2,399,279	1,349,577
Short Term Provisions	346,301	316,579	29,722
Corporate Income Tax Payable	24,729	19,176	5,553
Accrued Expenses	-	-	444 007
Other Current Liabilities	251,711	139,724	111,987
TOTAL CURRENT LIABILITIES	4,371,597	2,874,758	1,496,839
LONG TERM LIABILITIES	792,245	749,821	42,424
TOTAL LIABILITIES	5,163,842	3,624,579	1,539,263
SHAREHOLDERS EQUITY			
Share Capital	804,879	804,879	
Treasury Shares	-	-	
Share Premium	1,723,219	1,723,219	
Retained Earnings			
Appropriated Statutory Reserve	456,463	456,463	
Unappropriated	20,237,651	19,124,696	1,112,955
Translation adj. & Investment revaluation	687,262	(197,797)	885,059
Unrealised gain(loss) on change in investments	-	-	
Excess Cost over Net Book Value of Subsidiary Investments	-	-	
TOTAL SHAREHOLDERS EQUITY	23,909,474	21,911,460	1,998,014
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	29,073,316	25,536,039	3,537,277

CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Quarter 30-Sep-21	Quarter 30-Sep-20
Cashflow from Operating Activities		
Net Earnings before tax	585,698	351,064
Adjustments to reconcile net earnings to net cash provided by operating activities		
Non Cash items		
Depreciation	340,017	293,518
Unrealised (gain) Loss on exchange	72,206	70,827
Increase (Decrease) in allowance for doubtful debts	4,398	(3,120)
Increase (Decrease) in allowance for obsolete inventories	7,801	42,441
Change in other provisions	12,306	(27,585)
	436,728	376,081
	430,720	570,081
Working Capital (increase) decrease		
Trade accounts receivable	(189,359)	(98,042)
Inventories	(839,740)	154,689
Trade accounts payable	247,455	(108,937)
Other	(25,916)	(33,535)
	(807,560)	(85,825)
Net Cashflow from Operating Activities	214,866	641,320
Cashflow from Investing Activities		
(Increase) decrease in short term investment	506,663	(522,973)
Increase in property, plant and equipment	(1,415,993)	544,972
Proceeds from sale of fixed assets	6,127	(799,552)
Increase (decrease) in translation adjustment	575,834	(1,333,803)
Revaluation deficit on investments	19,400	(1,535,555)
Other	23).00	(02,07.1)
	(307,969)	(2,143,930)
Cashflow from Financing Activities		
Cash received from increase in share capital	-	-
Dividend paid	-	523,171
Other	(2,024)	500,000
Net cash (used in) from financing activties	(2,024)	1,023,171
Net Cash, equivalents and short term liquid investments increase (decrease)	(95,127)	(479,439)
Cash and Equivalents at the beginning of the period	4,965,911	4,742,155
Cash and Equivalents at the end of the period	4,870,784	4,262,716

Financial Ratios

'000 Baht	Quarter 30-Sep-21	Quarter 30-Sep-20	Q321-Q320
Profitability Ratios			
Gross Profit Margin (%)	16%	12%	4%
Operating Profit Margin (%)	12%	8%	4%
Net Profit before Exceptional Margin (%)	11%	8%	3%
Net Profit after Exceptional Margin (%)	9%	7%	2%
EBITDA margin (%)	17%	14%	3%
Return On Equity (%) pa	9%	6%	3%
Return On Assets (%) pa	8%	5%	3%
Return On Operating Capital Employed (%) pa	17%	11%	6%
Efficiency Ratios			
Working Capital turnover	4	3	1
Account Receivable days	64	60	4
Inventory days	107	107	
Accounts Payable days	64	51	13
Liquidity Ratios			
Current Ratio	4	6	- 2
Quick Ratio	3	5	- 2
Financial Capital Ratios			
Debt / Equity	0	0	
Net Debt to Equity	0	0	
Interest Coverage	n/a	n/a	