Management's Discussion and Analysis

Second Quarter ending 30th June 2021

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue increased 32% year on year to THB 6.1 billion for the second quarter of 2021 from THB 4.6 billion for the second quarter 2020. Sales Revenue in USD terms increased 35% to USD 194m in Q2 2021 from USD 144m in Q2 2020. Earnings from Operations increased 59% to THB 759m in Q2 2021 from THB 476m in Q2 2020.

Net Profit increased 8% to THB 736m in Q221 from THB 682m in Q220, due to 59% higher operating earnings in Q221 but exchange loss in Q221 of THB 32m compared to exchange gain of THB 207m in Q220.

	<u>Quarter</u>		<u>Quarter</u>			<u>%</u>
THB '000	<u>Q221</u>		<u>Q220</u>		<u>Q221-Q220</u>	<u>Q221-Q220</u>
PCBA (Lamphun, Thailand)	2,681,488	45%	1,852,489	40%	828,999	45%
PCBA (Jiaxing, China)	724,861	12%	740,150	16%	(15,289)	-2%
PCBA (Cambodia)	25,138	0%	25,670	1%	(532)	-2%
IC (Ayutthaya, Thailand)	2,070,376	34%	1,577,629	34%	492,747	31%
IC (Jiaxing, China)	303,431	5%	212,872	5%	90,559	43%
HTI (Ohio, USA)	252,457	4%	183,559	4%	68,898	38%
Total Revenue	6,057,751	100%	4,592,369	100%	1,465,382	32%

Sales Revenue Analysis

Year on Year Sales Revenue Analysis

Quarter 2 2021 sales revenue for the group increased 35% year-on-year in USD terms to USD 194m from USD 144m in Q220. The average exchange rate for Q221 was 2% stronger at THB/USD 31.4 from THB/USD 32.0 in Q220. As a result the sales revenue in THB terms increased 32% year on year for the quarter. Year-on-year, in USD terms, the microelectronics divisions sales increased by 35%. Sales in Lamphun increased 50% whilst Jiaxing was similar year on year. The IC divisions sales revenues increased 35% in Q221, with revenues of the IC division in Ayutthaya increasing 34% and Jiaxing increasing by 46%. Hana Technologies Inc, "HTI" the Microdisplay/RFID operation in Ohio sales revenue increased 40% in Q221 from Q220.

Quarter on Quarter Sales Revenue Analysis

Quarter-on-Quarter, in USD terms, sales for the group increased 12% to USD 194m in Q221 from USD 172m in Q121. Sales in the microelectronics divisions increased 12% with Lamphun increasing 10% and Jiaxing increasing 24%. Sales revenues from the IC divisions increased 11% in Q221 from Q121 with Ayutthaya sales increasing 8% and Jiaxing IC sales increasing by 32%. HTI sales increased 35% in Q221 compared to Q121.

Sales Revenue Split

	<u>Q2 2021</u>	<u>Q1 2021</u>	<u>Q4 2020</u>	<u>Q3 2020</u>	<u>Q2 2020</u>
PCBA (Lamphun, Thailand)	45%	47%	46%	45%	40%
PCBA (Jiaxing, China)	12%	11%	13%	14%	16%
PCBA (Cambodia)	0%	0%	1%	0%	1%
IC (Ayutthaya, Thailand)	34%	35%	33%	33%	34%
IC (Jiaxing, China)	5%	4%	4%	4%	5%
HTI (Ohio, USA)	4%	3%	3%	4%	4%
	100%	100%	100%	100%	100%

Gross Profit / Cost of Sales Analysis

The Gross Profit margin increased 2% points to 17% in Q221 from 15% Q220. Gross Margin in Q221 was higher due to higher sales revenue providing better economies of scale in Q221 compared to Q220.

Operating Profit Analysis, Sales and Administration Analysis

Year-on-year Earnings from Operations, were 59% higher at THB 759m in Q221 compared to THB 476m in Q220. The Operating margin was up 3 percentage points to 13% in Q221 from 10% in Q220 due to the higher Gross Margin and better economies of scale also. SG&A expenses were 14% higher in Q221 than Q220 due to increased R&D expenses at the IC division in Korea.

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 Q221 was Baht/USD 31.36, Q220 was Baht/USD 31.95 (and Q121 was Baht/USD 30.26).

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 32.05 at 30/06/20, and Baht/USD 30.89 at 30/06/20 (Baht/USD 31.34 at 31/03/21) or the respective rate applicable to each offshore subsidiary's base currency.

Payout Analysis

In Q221 THB 604m final dividend of THB 0.75 per share was paid during the quarter from the profits of 2020.

In Q220 THB 523m final dividend of THB 0.65 per share was paid during the quarter from the profits of 2019.

Financial Status

Net Cash reserves and financial investments were THB 9.1 billion at the 30th June 2021 up from THB 9.0 billion at the 30th June 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 63 days in Q221 and 60 days in Q220.

Trade Receivables	<u>30-Jun-21</u>	<u>30-Jun-20</u> THB '000
Less than 3 months	3,977,257	2,900,455
3 - 6 months	2,047	15,978
6 - 12 months	19	1,265
More than 12 months	4,806	3,305
Total accounts receivable - other companies	3,984,129	2,921,003
Less : Allowance for doubtful accounts	(4,455)	(9,011)
	3,979,674	2,911,992

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 97 days as at 30th June, 2021 and 121 days as at 30th June, 2020.

<u>Liquidity</u>

Liquidity ratios are high at approximately 4 times current liabilities. Operating Cashflow (Recurring EBITDA) in Q2 2021 was THB 1,070m which was 40% higher than Q2 2020 at THB 763m.

Capital Expenditure

Net Capital Expenditure was THB 1,121m in Q2 2021 and THB 216m in Q2 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

Subsequent Event

None

Forward Looking Statement

Currently Hana Ayutthaya plant is experiencing levels of Covid-19 infection. Due to quarantining of both infected staff and high risk (those close to infected staff) this will have a temporary impact on the plant's manufacturing capacity. Currently there is no impact (from infections) at any other Hana locations (Lamphun Thailand, Ohio USA, Koh Kong Cambodia, Korea & Hong Kong). Additionally, Covid-19 infections are also impacting our supply chain as certain suppliers in the Asean region are also impacted.

At this time, we estimate the impact to the Hana Microelectronics Group for Q3/21 based on Q2/21 revenues to be a reduction of between 4.0% - 5.0% in THB terms. We have based this on the assumption the average USD/THB exchange rate in Q3/21 will remain the same as the average in Q2/21 which was THB/USD 31.36.

CONSOLIDATED STATEMENT OF EARNINGS

	Quarter		Quarter			%
'000 Baht	Q221		Q220		Q221-Q220	Q221-Q220
REVENUES					<u> </u>	<u> </u>
Sales	6,064,693		4,592,370		1,472,323	32%
consisting of:	0,004,000		4,552,570		1,472,525	52/0
PCBA (Lamphun, Thailand)	2,681,488	45%	1,852,489	40%	828,999	45%
PCBA (Jiaxing, China)	724,861	12%	740,150	16%	(15,289)	-2%
PCBA (Cambodia)	25,138	0%	25,670	1%	(532)	-2%
IC (Ayutthaya, Thailand)	2,070,376	34%	1,577,629	34%	492,747	31%
IC (Jiaxing, China)	303,431	5%	212,872	5%	90,559	43%
HTI (Ohio, USA)	252,457	4%	183,559	4%	68,898	38%
IC (Korea)	6,942	0%	-		6,942	0%
	6,064,693	100%	4,592,369	100%	1,472,324	32%
Other Income	116,280		98,751		17,529	18%
TOTAL OPERATING REVENUES	6,180,973		4,691,120		1,489,853	32%
EXPENSES						
Cost of Sales	5,048,385	83%	3,888,950	85%	1,159,435	30%
Selling & Admin. Expenses	315,208	5%	305,540	7%	9,667	3%
R&D Expenses	58,751	1%	20,513	0%	38,239	186%
Other Expenses	-	0%	-	0%	-	0%
TOTAL EXPENSES	5,422,344	89%	4,215,003	92%	1,207,341	29%
OPERATING EARNINGS	758,629	12%	476,117	10%	282,512	59%
Other Income - non operating	713		430		283	66%
Interest	28,594		36,471		(7 <i>,</i> 877)	-22%
Finance Expenses	(1,758)		(4 <i>,</i> 586)		2,828	
EARNINGS before Income Tax	786,178	13%	508,432	11%	277,746	55%
Corporate Income Tax	(17,684)	0%	(32,982)	-1%	15,298	-46%
Earnings before Exch. & Exceptional Items	768,494		475,450		293,044	62%
Exchange Gain (Loss)	(31,718)		206,851		(238,569)	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	736,776	12%	682,301	15%	54,475	8%
EARNINGS % of SALES	12%		15%		-3%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	0.95		0.59		0.36	
EARNINGS per SHARE (baht) after exceptionals	0.92		0.85		0.07	
Earnings from Operations	758,629		476,118		282,511	59%
Earnings from Operations Margin	13%		10%			
Depreciation	311,802		287,260		24,542	
EBITDA (excl exchange gain/loss)	1,070,431		763,378		307,054	40%
EBITDA % of Sales Revenue	18%		17%			

CONSOLIDATED STATEMENT OF EARNINGS

	YTD		YTD		YTD	YTD %
'000 Baht	30-Jun-21		30-Jun-20		Q221-Q220	Q221-Q220
REVENUES						
Sales	11,279,168		9,202,030		2,077,138	23%
consisting of:						
PCBA (Lamphun, Thailand)	5,042,828	45%	4,073,787	43%	969,041	24%
PCBA (Jiaxing, China)	1,291,689	11%	1,205,965	13%	85,724	7%
PCBA (Cambodia)	50,303	0%	55,723	1%	(5,420)	-10%
IC (Ayutthaya, Thailand)	3,919,574	35%	3,181,625	35%	737,949	23%
IC (Jiaxing, China)	526,528	5%	359,326	4%	167,203	47%
HTI (Ohio, USA)	433,548	4%	325,605	4%	107,943	33%
IC (Korea)	14,698			0%	14,698	0%
	11,279,168	100%	9,202,030	100%	2,077,138	23%
Other Income	193,350		172,278		21,072	12%
TOTAL OPERATING REVENUES	11,472,518	_	9,374,308		2,098,210	22%
EXPENSES						
Cost of Sales	9,641,648	85%	7,790,362	85%	1,851,286	24%
Selling & Admin. Expenses	640,037	6%	620,875	7%	19,162	3%
R&D Expenses	58,751	1%	28,653	0%	30,098	105%
Other Expenses	-	0%	-	0%	-	0%
TOTAL EXPENSES	10,340,436	92%	8,439,890	92%	1,900,546	23%
OPERATING EARNINGS	1,132,082	10%	934,418	10%	197,664	21%
Other Income - non operating	1,123		830		293	
Interest	57,658		80,009		(22,351)	-28%
Finance Expenses	(3,192)		(8,062)		4,870	
EARNINGS before Income Tax	1,187,671	10%	1,007,195	11%	180,476	18%
Corporate Income Tax	(19,509)	2%	(46,487)	5%	26,978	-58%
Earnings before Exch. & Exceptional Items	1,168,162		960,708		207,454	22%
Exchange Gain (Loss)	(130,191)		(74,690)		(55,501)	
Exceptional Items	-		-		-	
NET EARNINGS for the Period	1,037,971	9%	886,018	9%	151,953	17%
EARNINGS % of SALES	9%		10%		0%	
Average number of shares (1 Baht par)	804,879		804,879		-	
EARNINGS per SHARE (baht) before exch. & exceptionals	1.45		1.19		0.26	
EARNINGS per SHARE (baht) after exceptionals	1.29		1.10		0.19	
Earnings from Operations	1,132,082		934,418		197,664	
Earnings from Operations Margin	10%		10%			
Depreciation	633,578		570,105		63,473	
EBITDA (excl exchange gain/loss)	1,765,660		1,504,523		261,137	
EBITDA % of Sales Revenue	16%		16%			

CONSOLIDATED Balance Sheet

CONSOLIDATED Balance Sheet	Quartar	Quartar	
	Quarter	Quarter	
'000 Baht	30-Jun-21	30-Jun-20	Q221-Q220
ASSETS			
CURRENT ASSETS			
Cash in Hand & at Banks	9,093,887	4,742,155	4,351,732
Financial Investments	-	4,298,900	(4,298,900)
Accounts Receivable - trade	4,249,342	3,051,070	1,198,272
Amounts due from Related Companies	-	-	
Inventories	5,465,145	5,226,857	238,288
Other Current Assets	135,768	63,091	72,677
TOTAL CURRENT ASSETS	18,944,142	17,382,073	1,562,069
Long Term Financial Investments	97	139,104	(139,007)
FIXED ASSETS (net)	8,177,996	6,945,902	1,232,094
OTHER ASSETS	594,836	300,784	294,052
TOTAL ASSETS	27,717,071	24,767,863	2,949,208
LIABILITIES			
CURRENT LIABILITIES			
Bank Overdrafts & Loans	-	-	
Accounts & Notes Payable	3,614,509	2,454,551	1,159,958
Short Term Provisions	327,459	-	327,459
Corporate Income Tax Payable	28,340	26,468	1,872
Accrued Expenses	-	308,905	(308,905)
Other Current Liabilities	193,074	110,845	82,229
TOTAL CURRENT LIABILITIES	4,163,382	2,900,769	1,262,613
LONG TERM LIABILITIES	777,197	737,278	39,919
TOTAL LIABILITIES	4,940,579	3,638,047	1,302,532
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	19,673,872	18,804,650	869,222
Translation adj. & Investment revaluation	118,059	(659,395)	777,454
Unrealised gain(loss) on change in investments	-	-	
Excess Cost over Net Book Value of Subsidiary Investments	-	-	
TOTAL SHAREHOLDERS EQUITY	22,776,492	21,129,816	1,646,676
TOTAL LIABILITIES & SHAREHOLDERS EQUITY	27,717,071	24,767,863	2,949,208

CONSOLIDATED Summary Statement of Cashflows

'000 Baht	Quarter 30-Jun-21	Quarter 30-Jun-20
Cashflow from Operating Activities		
Net Earnings before tax	754,460	715,283
Adjustments to reconcile net earnings to net cash provided by operating activities		
Non Cash items		
Depreciation	311,802	287,260
Unrealised (gain) Loss on exchange	(4,945)	(176,853)
Increase (Decrease) in allowance for doubtful debts	(614)	(69)
Increase (Decrease) in allowance for obsolete inventories	(16,761)	(1,237)
Change in other provisions	21,200	(14,866)
	310,682	94,235
	,	- ,
Working Capital (increase) decrease		
Trade accounts receivable	(223,979)	123,278
Inventories	(704,343)	(362,198)
Trade accounts payable	486,610	139,149
Other	(50,341)	71,588
	(492,053)	(28,183)
Net Cashflow from Operating Activities	573,089	781,335
Cashflow from Investing Activities		
(Increase) decrease in short term investment	702,999	174,894
Increase in property, plant and equipment	(1,076,908)	(214,352)
Proceeds from sale of fixed assets	-	4,342
Increase (decrease) in translation adjustment	317,378	(636,815)
Revaluation deficit on investments	10,017	7,543
Other		,
	(46,514)	(664,388)
Cashflow from Financing Activities		
Cash received from increase in share capital	-	-
Dividend paid	(603,659)	(523,171)
Other	(2,004)	-
Net cash (used in) from financing activties	(605,663)	(523,171)
Net Cash, equivalents and short term liquid investments increase (decrease)	(79,088)	(406,224)
Cash and Equivalents at the beginning of the period	5,044,999	5,148,378
Cash and Equivalents at the end of the period	4,965,911	4,742,154

Financial Ratios

	Quarter	Quarter	
'000 Baht	30-Jun-21	30-Jun-20	Q221-Q220
Profitability Ratios			
Gross Profit Margin (%)	17%	15%	2%
Operating Profit Margin (%)	13%	11%	2%
Net Profit before Exceptional Margin (%)	13%	10%	3%
Net Profit after Exceptional Margin (%)	12%	15%	-3%
EBITDA margin (%)	18%	17%	1%
Return On Equity (%) pa	13%	13%	
Return On Assets (%) pa	11%	11%	
Return On Operating Capital Employed (%) pa	21%	15%	6%
Efficiency Ratios			
Working Capital turnover	4	3	1
Account Receivable days	63	60	3
Inventory days	97	121	- 24
Accounts Payable days	64	57	7
Liquidity Ratios			
Current Ratio	5	6	- 1
Quick Ratio	3	4	- 1
Financial Capital Ratios	2	<u> </u>	
Debt / Equity	0	0	
Net Debt to Equity	0	0	
Interest Coverage	n/a	n/a	