

HANA MICROELECTRONICS  
THAILAND / ELECTRONIC COMPONENT

## HANA TB

BUY  
UNCHANGED

## กำลังฟื้นตัวใน 3Q23 แต่ไม่แรงมาก

- ผู้บริหารแสดงความกังวลเกี่ยวกับเศรษฐกิจของจีนซึ่งทำให้การฟื้นตัวในช่วง 2H23 น่าจะไม่สูงมาก
- เราคาดว่ากำไรสุทธิ 3Q23 จะทรงตัว q-q อยู่ที่ 750 ลบ. แต่กระโดดเพิ่ม 80% y-y จากผลขาดทุนจากอัตราแลกเปลี่ยนเงินจำนวนมากใน 3Q22
- เราปรับราคาเป้าหมายของเราไปในปี 2024 ซึ่งทำให้ได้ราคาเป้าหมายที่ 67 บาท

TARGET PRICE	THB67.00
CLOSE	THB60.25
UP/DOWNSIDE	+11.2%
PRIOR TP	THB46.00
CHANGE IN TP	+45.7%
TP vs CONSENSUS	+17.7%

## การดำเนินงานใน 3Q23 ไม่น่าจะฟื้นตัวแรง

เราได้มุมมองเชิงบวกเล็กน้อยจากที่ประชุมนักวิเคราะห์ในวันที่ 18 ส.ค. 2023 ผู้บริหารได้แสดงความกังวลเกี่ยวกับเศรษฐกิจของจีน ด้วยเหตุดังกล่าวการฟื้นตัวในช่วง 2H23 จึงไม่น่าจะแรงมากโดยผู้บริหารคาดว่าฟื้นตัวของจีนจะเกิดขึ้นในช่วง 2H24 ในขณะที่คำสั่งซื้อจากสหรัฐฯ ทรงตัวในช่วง 2H23 ในแง่ของ Application กลุ่มยานยนต์ยังอยู่ในเกณฑ์ดีจากการลดลงของราคารถยนต์ซึ่งช่วยหนุนความต้องการยานยนต์ ในทางตรงกันข้ามคอมพิวเตอร์และ Smartphone กลับลดลงต่อเนื่องสอดคล้องกับความต้องการที่อ่อนแอ อย่างไรก็ตาม HANA ระบุว่าระดับสินค้าคงคลังของลูกค้าน่าจะแตะจุดต่ำสุดไปแล้ว เราคาดว่ากลุ่มดังกล่าวจะฟื้นตัวในปี 2024

## ความต้องการ SiC ยังอยู่ในเกณฑ์ดีแต่การผลิตมีข้อจำกัด

ความต้องการ Silicon carbide (SiC) ยังอยู่ในเกณฑ์ดีตามที่ผู้บริหารคาด อย่างไรก็ตาม การเติบโตของ SiC ยังมีข้อจำกัดในด้านการผลิต ในระยะสั้นเวลาหยุดทำงาน (Downtime) ในสายการผลิตเดี่ยวจะกระทบผลผลิต ในขณะที่ HANA วางแผนเพิ่มกำลังการผลิต SiC ใน 4Q23 และช่วง 1H24 พร้อมเพิ่มอุปกรณ์ในการผลิต SiC จากข้อจำกัดในด้านการผลิต HANA ปรับลดเป้ารายได้จาก SiC ในปี 2023-24 อีกครั้งเป็น USD20 ล้าน (จาก USD25-30 ล้าน) และ USD45-48 ล้าน (จาก USD50m) ตามลำดับ ผู้บริหารตั้งเป้าเชิงรุกในปี 2025-26 อยู่ที่ USD90-94 ล้านและ USD110 ล้านตามลำดับ

## คาดผลประกอบการ 3Q23 จะทรงตัว q-q

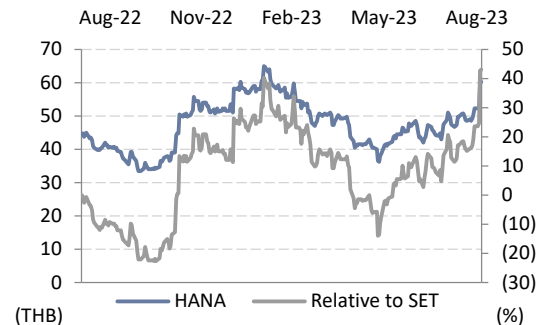
ผู้บริหารคาดว่าคำสั่งซื้อจากลูกค้าในจีนจะชะลอตัว ด้วยเหตุดังกล่าวเราจึงคาดว่ารายได้ 3Q23 จะทรงตัว q-q ที่ประมาณ USD200 ล้าน นอกจากนี้เรายังคาดว่าอัตรากำไรขั้นต้นจะทรงตัวในระดับสูงที่ 15% โดยได้ปัจจัยหนุนจาก 1) ปริมาณการผลิตที่อยู่ในระดับสูง; และ 2) ค่าเงินบาทที่อ่อนตัวลงเมื่อเทียบกับเงินเหรียญสหรัฐฯ (USD) เราคาดว่ากำไรสุทธิ 3Q23 จะทรงตัว q-q อยู่ที่ 750 ลบ. แต่กระโดดเพิ่ม 80% y-y จากผลขาดทุนจากอัตราแลกเปลี่ยนเงินจำนวนมากใน 3Q22

## ปรับเพิ่มประมาณการและราคาเป้าหมายไปในปี 2024

จากผลประกอบการ 2Q23 ที่สูงเกินคาด เราปรับเพิ่มประมาณการกำไรสุทธิปี 2023-24 ขึ้น 14.3% และ 14.8% ตามลำดับ เราปรับราคาเป้าหมายไปในปี 2024 ซึ่งทำให้ได้ราคาเป้าหมายที่ 67 บาท (P/E) ปัจจุบันเราประเมินมูลค่า HANA ไว้ที่ 23x ของค่า 2024E P/E (1.5SD สูงกว่าค่าเฉลี่ย 5 ปีในอดีต) เทียบกับ 20x ของค่า 2024E P/E ก่อนหน้า (สูงกว่าค่าเฉลี่ย 5 ปีย้อนหลังเล็กน้อย) ราคาเป้าหมายใหม่ของเรา Upside อยู่ 12% เพราะฉะนั้นเราคงแนะนำซื้อ

## KEY STOCK DATA

YE Dec (THB m)	2022	2023E	2024E	2025E
Revenue	27,167	26,725	28,557	30,487
Net profit	2,102	2,116	2,347	2,535
EPS (THB)	2.61	2.63	2.92	3.15
vs Consensus (%)	-	2.1	(7.4)	(13.1)
EBITDA	4,054	3,935	4,325	4,616
Recurring net profit	2,398	2,116	2,347	2,535
Core EPS (THB)	2.98	2.63	2.92	3.15
Chg. In EPS est. (%)	-	14.3	14.8	6.7
EPS growth (%)	5.4	(11.8)	10.9	8.0
Core P/E (x)	20.2	22.9	20.7	19.1
Dividend yield (%)	1.7	1.7	2.2	2.4
EV/EBITDA (x)	11.1	11.6	10.7	9.9
Price/book (x)	2.0	1.9	1.8	1.8
Net debt/Equity (%)	(14.1)	(11.2)	(9.2)	(9.5)
ROE (%)	10.2	8.6	9.1	9.4



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	17.2	57.2	27.8
Relative to country (%)	17.9	56.8	36.8
Mkt cap (USD m)	1,359		
3m avg. daily turnover (USD m)	16.2		
Free float (%)	58		
Major shareholder	OMAC and related companies (32%)		
12m high/low (THB)	65.00/32.75		
Issued shares (m)	1,020.00		



Sureeporn Teewasuwet

Analyst register no. 040694

sureeporn.t@fssia.com, +66 2646 9972

PREPARED BY FSS INTERNATIONAL INVESTMENT ADVISORY SECURITIES CO LTD (FSSIA). ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES CAN BE FOUND AT THE END OF THIS REPORT

บทวิเคราะห์ฉบับนี้แปลมาจากต้นฉบับภาษาอังกฤษ ที่ออกรายงานเมื่อวันที่ 21 สิงหาคม 2023



**Sureporn Teewasuwet**

Analyst register no. 040694

sureporn.t@fssia.com, +66 2646 9972

### Investment thesis

The company provides electronic manufacturing services to original equipment manufacturers (OEM), manufacturing products based on the customer’s specifications and designs. HANA’s strengths are: 1) its products can support a wider range of end applications such as telecommunications, computers, consumer products, automobiles, radio frequency identification (RFID), and medical products; and 2) it has diversified production plants. Aside from that, HANA is improving its own technology and new product called silicon carbide (SiC) to satisfy customer demand. We have a bullish view on its SiC demand for the EV industry in the long term.

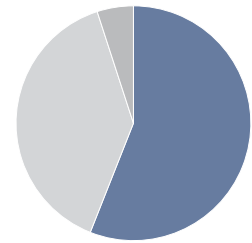
### Company profile

HANA is one of South East Asia’s leading independent electronics manufacturing service providers. The company produces PCBA, IC, assembles and tests micro-displays, and RFID. The company’s headquarters are in Bangkok and there are six manufacturing facilities in Thailand, China, the USA, Cambodia, and South Korea. In 2022, Its revenue contribution came mainly from PCBA (56% of total revenue), followed by IC (38%), RFID (5%), and SiC (1%).

[www.hanagroup.com](http://www.hanagroup.com)

### Principal activities (revenue, 2022)

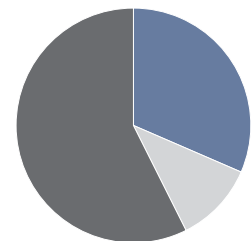
- PCBA - 56.0 %
- IC - 39.0 %
- IC Assemble (RFID / Microdisplay) - 5.0 %



Source: Hana Microelectronics

### Major shareholders

- OMAC and related companies - 31.5 %
- LGT Bank (Singapore) Ltd - 11.1 %
- Others - 57.4 %



Source: Hana Microelectronics

### Catalysts

Potential catalysts for HANA’s earnings growth in 2023 are 1) a stronger global economy and a consumption recovery; 2) a decline in raw material costs; and 3) a faster-than-expected capacity expansion.

### Risks to our call

Downside risks to our P/E-based TP include 1) a slower-than-expected consumption recovery; 2) a potential rise in raw material costs; and 3) a stronger-than-expected THB against USD.

### Event calendar

Date	Event
November 2023	3Q23 results announcement

### Key assumptions

	2023E	2024E	2025E
USD total revenue (USD m)	786	840	897
SiC revenue (USD m)	20	48	80
FX rate (USD/THB)	34	34	34
THB revenue growth (%)	(1.6)	6.9	6.8
Gross margin (%)	12.3	12.6	12.8

Source: FSSIA estimates

### Earnings sensitivity

- For every THB1/USD increase, we estimate 2023 net profit to fall by 6.8%, and vice versa, all else being equal.
- For every 0.5% increase in GPM, we estimate 2023 net profit to rise by 5.7%, and vice versa, all else being equal.
- For every 0.2% increase in SG&A, we estimate 2023 net profit to fall by 1.3%, and vice versa, all else being equal.
- For every 10% increase in labour cost, we estimate 2023 net profit to fall by 6.6%, and vice versa, all else being equal.

Source: FSSIA estimates



## Surprising net profit in 2Q23

HANA posted a surprising net profit of THB635m (+138% q-q, +159% y-y). Excluding an FX gain of THB105m and a derivative loss of THB218m, the company's core profit was equal to THB749m (+154% q-q, +24% y-y).

USD revenue grew by 4.7% q-q and 7.5% y-y to USD200m, supported by higher printed circuit board assembly (PCBA) revenue (+5.3% q-q, +17% y-y). Meanwhile, integrated circuit (IC) revenue recovered by 7.5% q-q, from both the Ayutthaya and Jiaxing factories, but it still dropped y-y due to the high base last year.

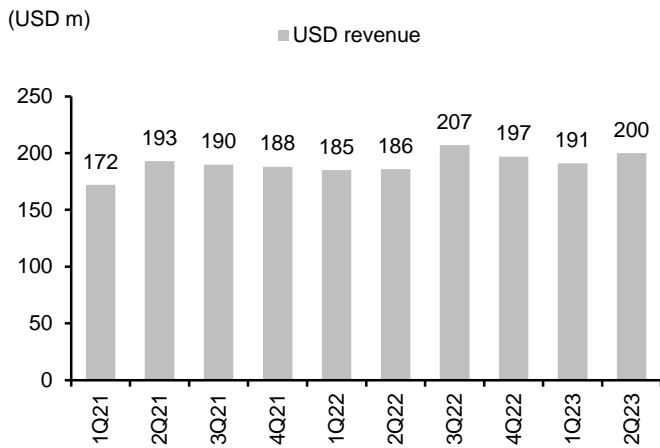
We are impressed with the spike in its gross margin to 15% in 2Q23, up from 8.6% in 1Q23 and 13.7% in 2Q22. This mainly came from cost reduction, production efficiency, and a weaker THB with higher revenue. Its 2Q23 SG&A to sales ratio was at 5.7%, decreasing 20bps from 1Q23 and 60bps from 2Q22.

### Exhibit 1: 2Q23 earnings results

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	----- Change -----		1H22	1H23	Change
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(THB m)	(y-y%)
Total revenue	6,107	6,390	7,545	7,125	6,466	6,910	6.9	8.1	12,497	13,376	7.0
Cost of sales	5,445	5,512	6,378	6,171	5,913	5,871	(0.7)	6.5	10,956	11,784	7.6
Gross profit	663	878	1,167	954	553	1,039	87.8	18.3	1,541	1,592	3.3
SG&A	381	401	408	505	382	392	2.8	(2.1)	782	774	(1.0)
Operating profit	282	477	759	449	171	646	277.2	35.5	759	818	7.8
Interest expense	1.5	2.7	2.5	5.9	1.8	8.0	354.2	201.9	4	10	138.3
Tax expense	15	15	46	31	12	33	180.9	119.3	30	45	50.1
Reported net profit	365	245	417	1,075	266	635	138.4	159.4	610	902	47.9
Core profit	399	603	843	553	295	749	154.2	24.3	1,002	1,044	4.2
<b>Key Ratios (%)</b>							<b>(ppt)</b>	<b>(ppt)</b>			
Gross margin	10.8	13.7	15.5	13.4	8.6	15.0	6.5	1.3	12.3	11.9	(0.4)
SG&A to sales	6.2	6.3	5.4	7.1	5.9	5.7	(0.2)	(0.6)	6.3	5.8	(0.5)
Operating margin	4.6	7.5	10.1	6.3	2.7	9.4	6.7	1.9	6.1	6.1	0.0
Net margin	6.0	3.8	5.5	15.1	4.1	9.2	5.1	5.4	4.9	6.7	1.9
Core margin	6.5	9.4	11.2	7.8	4.6	10.8	6.3	1.4	8.0	7.8	(0.2)
<b>Operating statistics (THB m)</b>											
PCBA - Lamphun	2,759	2,603	2,963	2,814	3,032	3,142	3.6	20.7	5,362	6,175	15.2
PCBA - Jiaxing	710	838	1,189	1,066	797	893	12.1	6.6	1,548	1,691	9.2
PCBA - Cambodia	73	74	75	76	77	78	1.3	5.4	147	155	5.4
IC - Ayuttaya	2,010	2,275	2,464	2,217	1,816	1,983	9.2	(12.8)	4,285	3,799	(11.3)
IC - Jiaxing	286	301	384	388	247	293	18.6	(2.7)	587	540	(8.0)
HMT - USA	263	312	370	414	345	341	(1.3)	9.3	575	686	19.4
IC - South Korea	41	31	109	91	146	129	(11.4)	323.2	72	275	283.4
Total IC revenue	2,600	2,918	3,326	3,109	2,554	2,746	7.5	(5.9)	5,518	5,300	(3.9)
Total PCBA revenue	3,542	3,515	4,226	3,957	3,907	4,114	5.3	17.0	7,057	8,020	13.7

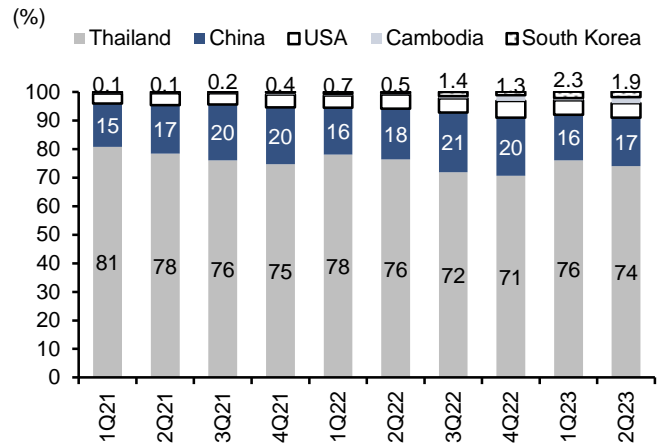
Sources: HANA, FSSIA's compilation

**Exhibit 2: Quarterly USD revenue**



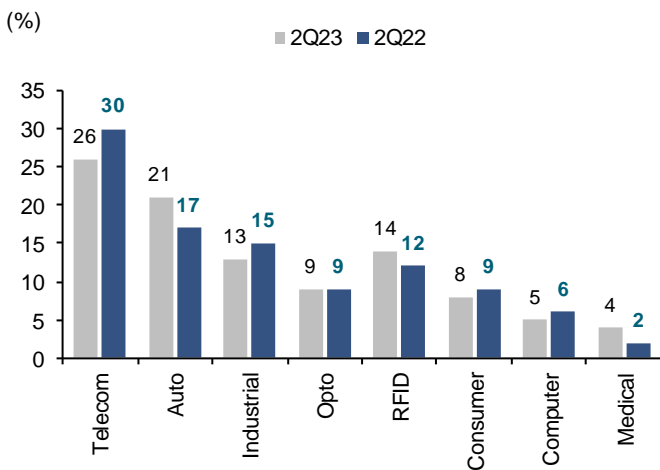
Sources: HANA, FSSIA's compilation

**Exhibit 3: Quarterly revenue breakdown by factory**



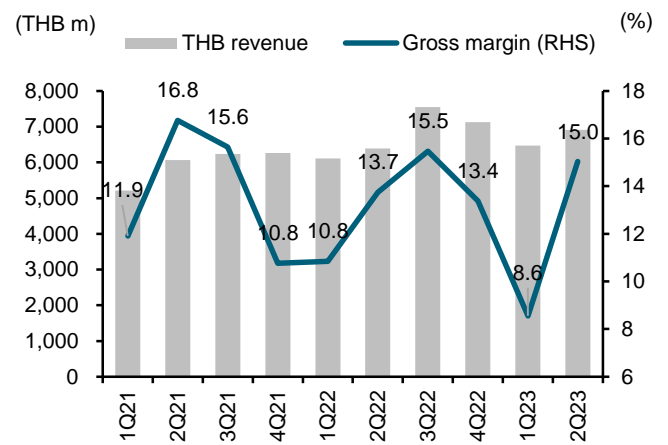
Sources: HANA, FSSIA's compilation

**Exhibit 4: Quarterly revenue breakdown by application**



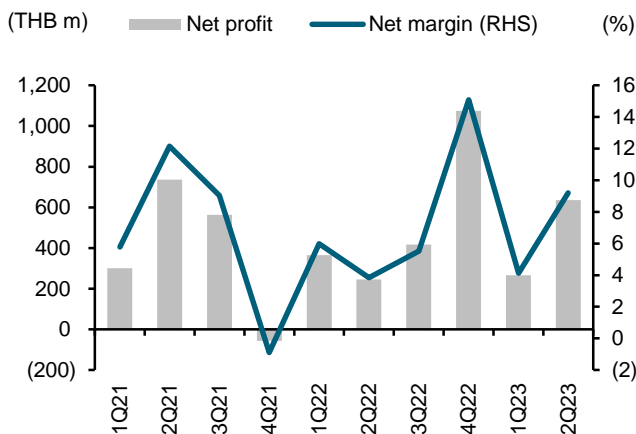
Sources: HANA, FSSIA's compilation

**Exhibit 5: Quarterly THB revenue and gross margin**



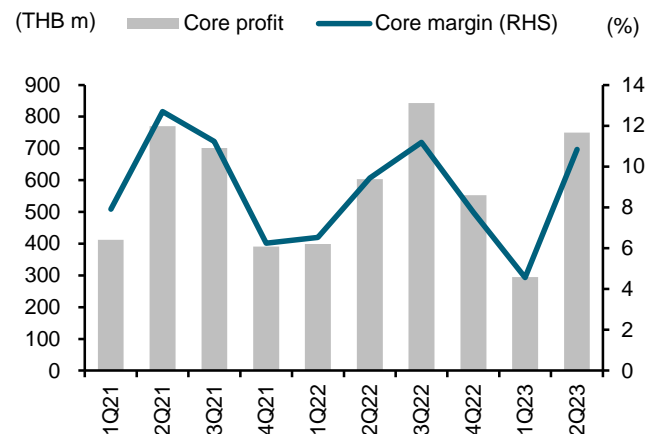
Sources: HANA, FSSIA's compilation

**Exhibit 6: Quarterly net profit and net margin**



Sources: HANA, FSSIA's compilation

**Exhibit 7: Quarterly core profit and core margin**



Sources: HANA, FSSIA's compilation

### 3Q23 operations are unlikely to have a V-shaped recovery

We have a slightly positive view from the analyst meeting on 18 August 2023. Management has shown some concern over China’s economy, and hence the 2H23 recovery is not likely to be in a V-shaped pattern. Management expects China’s recovery to occur in 2H24. Meanwhile, US purchase orders have stabilised in 2H23.

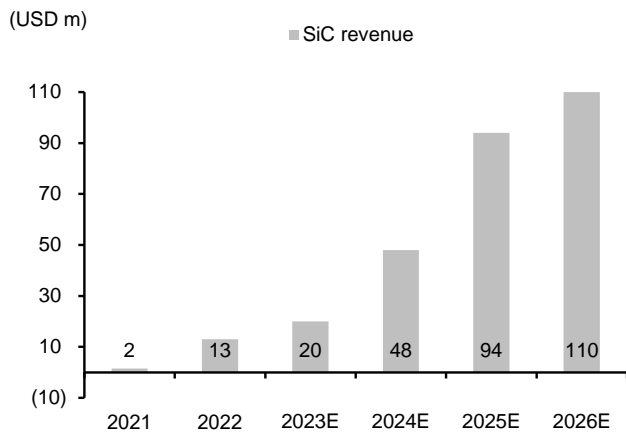
In terms of application, the automotive segment remains strong, due to a reduction in car prices that can support automotive demand, especially EV-related parts. HANA’s 2Q23 automotive contribution increased to 21% of total revenue, up from 17% in 2Q22. Conversely, the computer and smartphone segments have continued to decline, in line with the weak demand. However, HANA mentioned that customers’ inventory levels are likely to have bottomed. We expect to see these segments recover in 2024.

According to Gartner’s report, they forecast worldwide semiconductor revenue to drop by 11% y-y to USD532m in 2023, but expect a sharp recovery by 18.5% y-y to USD631m in 2024.

In addition, SiC demand remains strong as management expected, but SiC growth is still constrained by production. In the short term, its single-line production downtime is continuing to impact output. Meanwhile, HANA plans to increase its SiC capacity in 4Q23 and 1H24 with additional SiC equipment. Aside from that, the company expects to start producing SiC for xEV (on-board) automotives in 1Q24, after gaining a number of qualifications.

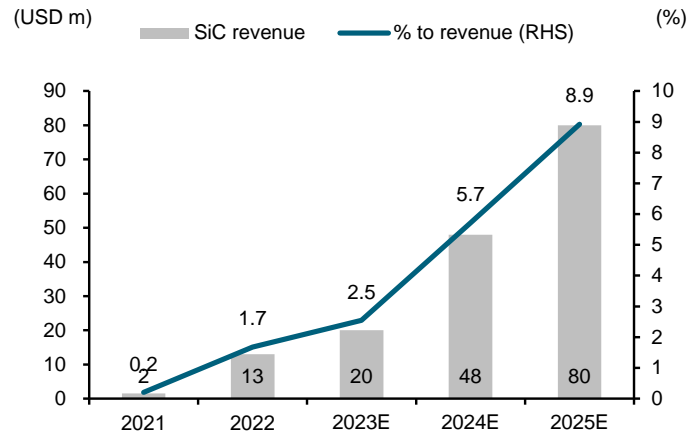
With its production constrained, HANA revised down its 2023-24 SiC revenue targets again to USD20m (from USD25m-30m) and USD45m-48m (from USD50m), respectively. Meanwhile, management has bullish targets in 2025-26 of USD90m-94m and USD110m, respectively. However, the SiC EBITDA breakeven point target is in 1Q24.

**Exhibit 8: HANA’s SiC revenue targets**



Source: HANA

**Exhibit 9: FSSIA’s SiC revenue assumptions**



Source: FSSIA estimates

## Expect 3Q23 results to stabilise q-q

HANA's 1H23 net profit rose by 48% y-y. Excluding the FX gain/loss, its 1H23 core profit was at THB1b (+4.2% y-y). Preliminarily, we estimate 3Q23 net profit to stabilise q-q at THB750m, but jump 80% y-y due to a huge FX loss in 3Q22.

Management guides for a slowdown in orders from customers in China, hence, we expect its 3Q23 revenue to be flat q-q at around USD200m. In addition, we expect its gross margin to maintain at a high level of 15%, supported by 1) a high production volume; and 2) a weaker THB against USD.

### Exhibit 10: 3Q23 earnings preview

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23E	----- Change -----		9M22	9M23E	Change
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(THB m)	(y-y%)
Total revenue	6,107	6,390	7,545	7,125	6,466	6,910	7,070	2.3	(6.3)	20,042	20,446	2.0
Cost of sales	5,445	5,512	6,378	6,171	5,913	5,871	6,024	2.6	(5.6)	17,335	17,808	2.7
Gross profit	663	878	1,167	954	553	1,039	1,046	0.7	(10.3)	2,707	2,638	(2.6)
SG&A	381	401	408	505	382	392	396	0.9	(2.9)	1,189	1,170	(1.6)
Operating profit	282	477	759	449	171	646	650	0.6	(14.3)	1,518	1,468	(3.3)
Interest expense	1.5	2.7	2.5	5.9	1.8	8.0	8.0	(0.5)	218.3	7	18	168.7
Tax expense	15	15	46	31	12	33	35	7.5	(23.6)	76	80	5.2
Reported net profit	365	245	417	1,075	266	635	750	18.1	80.0	1,027	1,652	60.9
Core profit	399	603	843	553	295	749	750	0.1	(11.1)	1,845	1,794	(2.8)
<b>Key ratios (%)</b>								<b>(ppt)</b>	<b>(ppt)</b>			
Gross margin	10.8	13.7	15.5	13.4	8.6	15.0	14.8	(0.2)	(0.7)	13.5	12.9	(0.6)
SG&A to sales	6.2	6.3	5.4	7.1	5.9	5.7	5.6	(0.1)	0.2	5.9	5.7	(0.2)
Operating margin	4.6	7.5	10.1	6.3	2.7	9.4	9.2	(0.2)	(0.9)	7.6	7.2	(0.4)
Net margin	6.0	3.8	5.5	15.1	4.1	9.2	10.6	1.4	5.1	5.1	8.1	3.0
Core margin	6.5	9.4	11.2	7.8	4.6	10.8	10.6	(0.2)	(0.6)	9.2	8.8	(0.4)

Source: FSSIA estimates



## Revise up our 2023-24 forecasts and roll over TP to 2024

In accordance with the higher-than-expected 2Q23 operations, we revise up our 2023-24 net profit forecasts by 14.3% and 14.8% to THB2.1b (+0.7% y-y) and THB2.3b (+10.9% y-y), respectively. We cut our SiC revenue assumptions to be in line with management's new target, but we lift our 2023-24 gross margin estimates by 80bps and 60bps, respectively.

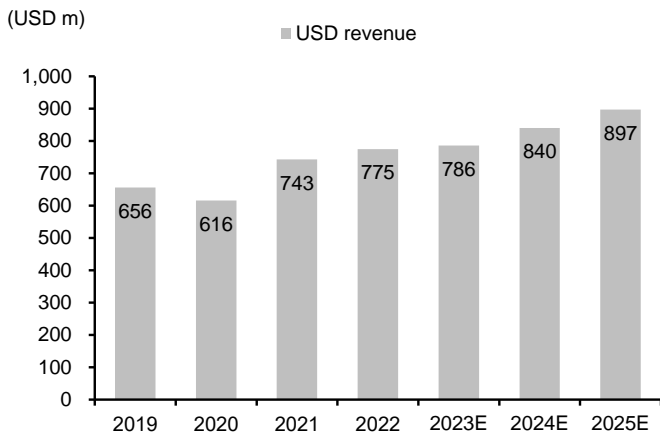
We roll our P/E-based TP forward by a year to 2024, leading to a TP of THB67. We now value HANA at 23x 2024E P/E (1.5SD above the 5-year historical average) vs 20x 2024E P/E previously (slightly above its 5-year average). We have a brighter outlook for HANA's operations; hence, the company deserves a higher target P/E multiple. Our new TP has an upside of 11%. Therefore, we retain our BUY recommendation.

### Exhibit 11: Changes in key assumptions for HANA

	Current			Previous			Change		
	2023E (THB m)	2024E (THB m)	2025E (THB m)	2023E (THB m)	2024E (THB m)	2025E (THB m)	2023E (%)	2024E (%)	2025E (%)
Total sale value (THB m)	26,725	28,557	30,487	25,963	27,454	29,252	2.9	4.0	4.2
Costs	23,438	24,958	26,584	22,977	24,160	25,507	2.0	3.3	4.2
Gross profit	3,287	3,598	3,902	2,986	3,294	3,744	10.1	9.2	4.2
SG&A expense	1,630	1,713	1,829	1,610	1,702	1,814	1.3	0.7	0.9
Interest expense	11	11	12	11	11	12	0.0	0.0	0.0
Reported net profit	2,116	2,347	2,535	1,852	2,045	2,375	14.3	14.8	6.7
Core profit	2,116	2,347	2,535	1,852	2,045	2,375	14.3	14.8	6.7
<b>Key ratios (%)</b>									
Total revenue growth	(1.6)	6.9	6.8	(4.4)	5.7	6.5	2.8	1.1	0.2
Net profit growth	0.7	10.9	8.0	(11.9)	10.5	16.1	12.6	0.5	(8.1)
Core profit growth	(11.8)	10.9	8.0	(22.8)	10.5	16.1	11.0	0.5	(8.1)
<b>Operating statistics</b>									
Total revenue (USD m)	786	840	897	787	832	886	(0.1)	1.0	1.2
SiC revenue (USD m)	20	48	80	25	50	80	(20.0)	(4.0)	0.0
FX rate (THB/USD)	34.0	34.0	34.0	33.0	33.0	33.0	3.0	3.0	3.0

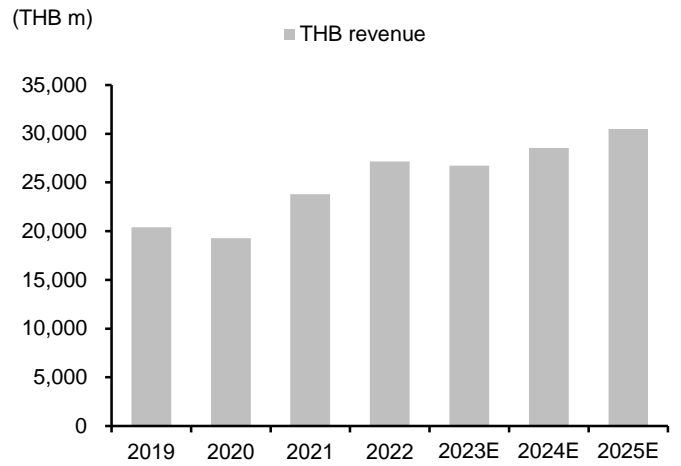
Source: FSSIA estimates

**Exhibit 12: Yearly USD revenue**



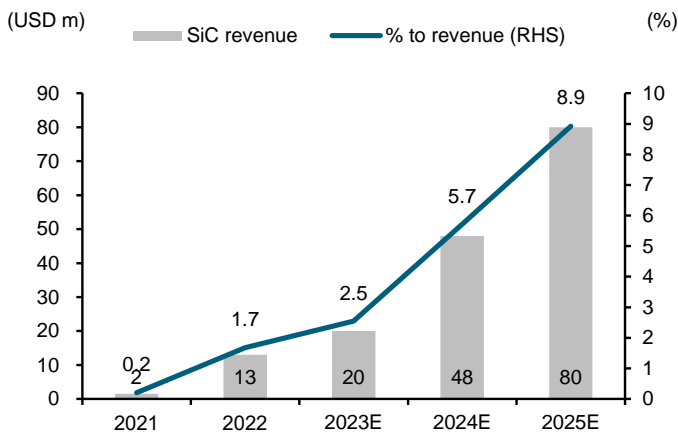
Sources: HANA; FSSIA estimates

**Exhibit 13: Yearly THB revenue**



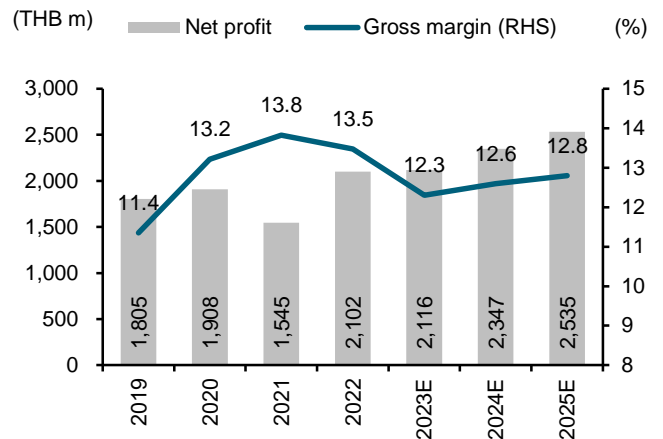
Sources: HANA; FSSIA estimates

**Exhibit 14: Yearly SiC revenue**



Sources: HANA; FSSIA estimates

**Exhibit 15: Yearly net profit and gross margin**



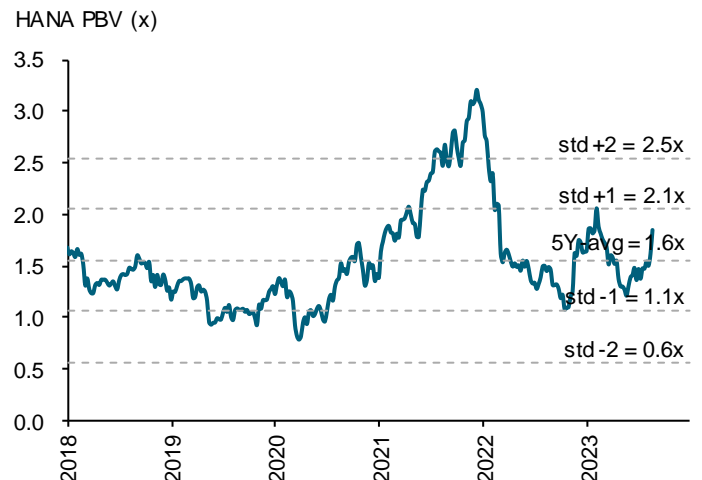
Sources: HANA; FSSIA estimates

**Exhibit 16: Historical P/E band**



Sources: Bloomberg, FSSIA's compilation

**Exhibit 17: Historical P/BV band**



Sources: Bloomberg, FSSIA's compilation

## Financial Statements

Hana Microelectronics

Profit and Loss (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Revenue	23,780	27,167	26,725	28,557	30,487
Cost of goods sold	(20,493)	(23,506)	(23,438)	(24,958)	(26,584)
<b>Gross profit</b>	<b>3,287</b>	<b>3,661</b>	<b>3,287</b>	<b>3,598</b>	<b>3,902</b>
Other operating income	357	458	473	485	488
Operating costs	(1,423)	(1,695)	(1,630)	(1,713)	(1,829)
<b>Operating EBITDA</b>	<b>3,522</b>	<b>4,054</b>	<b>3,935</b>	<b>4,325</b>	<b>4,616</b>
Depreciation	(1,301)	(1,630)	(1,805)	(1,955)	(2,055)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>2,221</b>	<b>2,425</b>	<b>2,130</b>	<b>2,370</b>	<b>2,561</b>
Net financing costs	106	81	75	75	79
Associates	0	0	0	0	0
Recurring non-operating income	0	0	0	0	0
Non-recurring items	(729)	(296)	0	0	0
<b>Profit before tax</b>	<b>1,598</b>	<b>2,209</b>	<b>2,204</b>	<b>2,445</b>	<b>2,640</b>
Tax	(53)	(107)	(88)	(98)	(106)
<b>Profit after tax</b>	<b>1,545</b>	<b>2,102</b>	<b>2,116</b>	<b>2,347</b>	<b>2,535</b>
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>1,545</b>	<b>2,102</b>	<b>2,116</b>	<b>2,347</b>	<b>2,535</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>729</b>	<b>296</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>2,274</b>	<b>2,398</b>	<b>2,116</b>	<b>2,347</b>	<b>2,535</b>
<b>Per share (THB)</b>					
Recurring EPS *	2.83	2.98	2.63	2.92	3.15
Reported EPS	1.92	2.61	2.63	2.92	3.15
DPS	2.00	1.00	1.05	1.31	1.42
Diluted shares (used to calculate per share data)	805	805	805	805	805
<b>Growth</b>					
Revenue (%)	23.3	14.2	(1.6)	6.9	6.8
Operating EBITDA (%)	21.4	15.1	(2.9)	9.9	6.7
Operating EBIT (%)	28.6	9.2	(12.1)	11.3	8.0
Recurring EPS (%)	26.5	5.4	(11.8)	10.9	8.0
Reported EPS (%)	(19.0)	36.0	0.7	10.9	8.0
<b>Operating performance</b>					
Gross margin inc. depreciation (%)	13.8	13.5	12.3	12.6	12.8
Gross margin exc. depreciation (%)	19.3	19.5	19.1	19.4	19.5
Operating EBITDA margin (%)	14.8	14.9	14.7	15.1	15.1
Operating EBIT margin (%)	9.3	8.9	8.0	8.3	8.4
Net margin (%)	9.6	8.8	7.9	8.2	8.3
Effective tax rate (%)	3.3	4.9	4.0	4.0	4.0
Dividend payout on recurring profit (%)	70.8	33.6	40.0	45.0	45.0
Interest cover (X)	(20.9)	(29.9)	(28.6)	(31.6)	(32.3)
Inventory days	108.0	136.1	150.2	136.8	136.6
Debtor days	61.5	64.0	66.5	62.9	62.9
Creditor days	55.7	64.0	62.2	52.6	52.5
Operating ROIC (%)	12.1	10.2	8.0	8.3	8.5
ROIC (%)	11.6	9.9	7.8	8.1	8.3
ROE (%)	10.2	10.2	8.6	9.1	9.4
ROA (%)	8.3	8.1	6.9	7.6	7.8
* Pre-exceptional, pre-goodwill and fully diluted					
<b>Revenue by Division (THB m)</b>					
PCBA	13,425	15,214	14,699	14,850	14,987
IC	9,394	10,595	10,860	12,042	13,130
IC Assemble (RFID / Microdisplay)	961	1,358	1,166	1,665	2,370

Sources: Hana Microelectronics; FSSIA estimates

## Financial Statements

### Hana Microelectronics

Cash Flow (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Recurring net profit	2,274	2,398	2,116	2,347	2,535
Depreciation	1,301	1,630	1,805	1,955	2,055
Associates & minorities	-	-	-	-	-
Other non-cash items	(455)	24	0	0	0
Change in working capital	(2,566)	(2,626)	360	(632)	(671)
<b>Cash flow from operations</b>	<b>554</b>	<b>1,426</b>	<b>4,281</b>	<b>3,670</b>	<b>3,918</b>
Capex - maintenance	-	-	-	-	-
Capex - new investment	(4,026)	(2,821)	(3,500)	(3,000)	(2,000)
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	(99)	14	0	(37)	34
<b>Cash flow from investing</b>	<b>(4,124)</b>	<b>(2,807)</b>	<b>(3,500)</b>	<b>(3,037)</b>	<b>(1,966)</b>
Dividends paid	(1,382)	(1,191)	(868)	(1,056)	(1,141)
Equity finance	0	0	0	0	0
Debt finance	(5)	(2)	5	(1)	(5)
Other financing cash flows	1,289	209	(458)	17	(652)
<b>Cash flow from financing</b>	<b>(98)</b>	<b>(984)</b>	<b>(1,320)</b>	<b>(1,040)</b>	<b>(1,798)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>(5)</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>(3,668)</b>	<b>(2,365)</b>	<b>(544)</b>	<b>(406)</b>	<b>154</b>
Free cash flow to firm (FCFF)	(3,562.70)	(1,368.15)	791.79	644.24	1,964.11
Free cash flow to equity (FCFE)	(2,285.87)	(1,174.20)	323.67	650.00	1,294.62

#### Per share (THB)

FCFF per share	(3.49)	(1.34)	0.78	0.63	1.93
FCFE per share	(2.24)	(1.15)	0.32	0.64	1.27
Recurring cash flow per share	3.88	5.03	4.87	5.35	5.70

Balance Sheet (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Tangible fixed assets (gross)	26,004	28,300	31,800	34,800	36,800
Less: Accumulated depreciation	(16,342)	(17,446)	(19,251)	(21,206)	(23,261)
<b>Tangible fixed assets (net)</b>	<b>9,663</b>	<b>10,853</b>	<b>12,549</b>	<b>13,594</b>	<b>13,539</b>
<b>Intangible fixed assets (net)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Long-term financial assets	72	72	72	72	0
Invest. in associates & subsidiaries	-	-	-	-	-
Cash & equivalents	5,999	3,634	3,090	2,685	2,840
A/C receivable	4,553	4,981	4,759	5,085	5,429
Inventories	6,857	9,457	8,348	8,889	9,468
Other current assets	162	171	134	143	152
<b>Current assets</b>	<b>17,570</b>	<b>18,243</b>	<b>16,331</b>	<b>16,802</b>	<b>17,890</b>
Other assets	548	534	534	571	610
<b>Total assets</b>	<b>27,853</b>	<b>29,703</b>	<b>29,486</b>	<b>31,040</b>	<b>32,038</b>
Common equity	23,058	23,862	25,218	26,509	27,232
Minorities etc.	0	0	0	0	0
<b>Total shareholders' equity</b>	<b>23,058</b>	<b>23,862</b>	<b>25,218</b>	<b>26,509</b>	<b>27,232</b>
Long term debt	3	0	6	5	0
Other long-term liabilities	763	813	267	286	305
<b>Long-term liabilities</b>	<b>766</b>	<b>814</b>	<b>273</b>	<b>291</b>	<b>305</b>
A/C payable	3,506	4,161	3,211	3,419	3,642
Short term debt	8	274	250	250	250
Other current liabilities	515	593	534	571	610
<b>Current liabilities</b>	<b>4,029</b>	<b>5,027</b>	<b>3,995</b>	<b>4,240</b>	<b>4,501</b>
<b>Total liabilities and shareholders' equity</b>	<b>27,853</b>	<b>29,703</b>	<b>29,486</b>	<b>31,040</b>	<b>32,038</b>
Net working capital	7,550	9,856	9,495	10,127	10,799
Invested capital	17,833	21,316	22,651	24,365	24,947

\* Includes convertibles and preferred stock which is being treated as debt

#### Per share (THB)

Book value per share	28.65	29.65	31.33	32.94	33.83
Tangible book value per share	28.65	29.65	31.33	32.94	33.83

#### Financial strength

Net debt/equity (%)	(26.0)	(14.1)	(11.2)	(9.2)	(9.5)
Net debt/total assets (%)	(21.5)	(11.3)	(9.6)	(7.8)	(8.1)
Current ratio (x)	4.4	3.6	4.1	4.0	4.0
CF interest cover (x)	(15.3)	(19.3)	(50.3)	(47.7)	(40.5)

Valuation	2021	2022	2023E	2024E	2025E
<b>Recurring P/E (x) *</b>	<b>21.3</b>	<b>20.2</b>	<b>22.9</b>	<b>20.7</b>	<b>19.1</b>
<b>Recurring P/E @ target price (x) *</b>	<b>23.7</b>	<b>22.5</b>	<b>25.5</b>	<b>23.0</b>	<b>21.3</b>
Reported P/E (x)	31.4	23.1	22.9	20.7	19.1
Dividend yield (%)	3.3	1.7	1.7	2.2	2.4
Price/book (x)	2.1	2.0	1.9	1.8	1.8
Price/tangible book (x)	2.1	2.0	1.9	1.8	1.8
EV/EBITDA (x) **	12.1	11.1	11.6	10.7	9.9
EV/EBITDA @ target price (x) **	13.6	12.5	13.0	11.9	11.1
EV/invested capital (x)	2.4	2.1	2.0	1.9	1.8

\* Pre-exceptional, pre-goodwill and fully diluted \*\* EBITDA includes associate income and recurring non-operating income

Sources: Hana Microelectronics; FSSIA estimates

## Public disclosures related to sustainable development evaluation of Thai listed companies

**Rating** regarding the sustainable development of Thai listed companies, both on the SET and MAI, are publicly available on the website of the Securities and Exchange Commission of Thailand (SEC). Currently, ratings available are 1) "**CG Score**" by the Thai Institute of Directors Association (Thai IOD); 2) "**AGM Checklist**" by the Thai Investors Association (TIA), a "**CAC certified member**" of the Thai Private Sector Collective Action Against Corruption (CAC); and 3) "**Sustainability Investment List (THSI)**" by the Stock Exchange of Thailand. The ratings are updated on an annual basis. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such ratings.

### CG Score by the Thai Institute of Directors Association (Thai IOD)<sup>1</sup>

The **CG Score** indicates corporate governance (CG) strength in the sustainable development of Thai listed companies. Annually, the Thai IOD, with support from the Stock Exchange of Thailand (SET), surveys and assesses the CG practices of companies and publishes the results on the [Thai IOD website](#) in a bid to promote and enhance the CG of Thai listed companies in order to promote compliance with international standards for better investment decisions. The results are from the perspective of a third party, not an evaluation of operations, as of the date appearing in the report, and may be changed after that date.

The **five underlying categories and weighting** used for the CG scoring in 2022 include the rights of shareholders and equitable treatment of shareholders (weight 25% combined), the role of stakeholders (25%), disclosure and transparency (15%), and board responsibilities (35%).

The CGR report rates CG in six categories: 5 for Excellent (score range 90-100), 4 for Very Good (score range 80-89), 3 for Good (Score range 70-79), 2 for Fair (score range 60-69), 1 for Pass (score range 60-69), and not rated (score below 50).

### Corporate Governance Report Disclaimer

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of companies listed on the Stock Exchange of Thailand and the Market of Alternative Investment disclosed to the public and able to be accessed by a general public investor at [Thai IOD website](#). The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the data appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. **FSSIA** does not confirm nor certify the accuracy of such survey result.

### AGM Checklist by the Thai Investors Association (TIA)<sup>2</sup>

The "**AGM Checklist**" quantifies the extent to which shareholders' rights and equitable treatment are incorporated into business operations and the extent to which information is sufficiently disclosed and the level of its transparency. All the considered factors form important elements of two out of five the CG components. Annually, the TIA, with support from the SEC, leads the project to evaluate the quality of Annual General Meetings of Shareholders (AGMs) and to rate quality of the meetings.

The **Checklist** contains the minimum requirements under law that companies must comply with, or best practices according to international CG guidance. Representatives of the TIA will attend the meetings and perform the evaluation. The assessment criteria cover AGM procedures before the meeting (45%), at the meeting date (45%), and after the meeting (10%). The first assesses 1) advance circulation of sufficient information for voting; and 2) facilitating of how voting rights can be exercised. The second assesses 1) the ease of attending meetings; 2) transparency and verifiability; and 3) openness for Q&A. The third involves the meeting minutes that should contain discussion issues, resolutions and voting results.

The results are classified into four categories: 5 for Excellent (score 100), 4 for Very Good (score 90-99), 3 for Fair (score 80-89), and not rated (score below 79).

### CAC certified member by the Thai Private Sector Collective Action Against Corruption (CAC)<sup>3</sup>

A **CAC certified member** is a listed company whose Checklist satisfies the CAC Certification's criteria and is approved by the CAC Council. The core elements of the Checklist include corruption risk assessment, establishment of key controls, and the monitoring and developing of policies. Note that the CAC does not certify the behaviour of the employees nor whether the companies have engaged in bribery, and Certification is good for three years.

Companies deciding to become a CAC certified member **start with** by submitting a Declaration of Intent signed by the Chairman of the Board to kick off the 18-month deadline for companies to submit the CAC Checklist for Certification. The 18-month provision is for risk assessment, in place of policy and control, training of managers and employees, establishment of whistleblowing channels, and communication of policies to all stakeholders.

The checklist document will be reviewed by the CAC Certification Committee for adequate information and evidence. It is worth noting that the committee consists of nine professionals in business law, corporate governance, internal audit, financial audit and experienced representatives from certified members.

A passed Checklist will move on to the **CAC Council** for granting certification approvals. The CAC Council consists of twelve prominent individuals who are highly respected in professionalism and ethical achievements. Among them are former ministers, a former central bank governor, the former head of the Thai Listed Companies Association, Chairman of Anti-Corruption Organizations (Thailand), Chairman of Thai Institute of Directors, and reputable academic scholars.

### Sustainability Investment (THSI)<sup>4</sup> by the Stock Exchange of Thailand (SET)

Thailand Sustainability Investment (**THSI**) quantifies responsibility in **Environmental**, and **Social** issues, by managing business with transparency in **Governance**. The THSI serves as another choice for investors who desire to adopt a responsible investment approach, according to the SET.

Annually, the SET will announce the voluntary participation of the company candidates which pass the preemptive criteria, and whose two key crucial conditions are met, i.e. no irregular trading of the board members and executives and a free float of >150 by the number of shareholders, and combined holding must >15% of paid-up capital. Some key disqualifying criteria include a CG score of below 70%; independent directors and free float violation; executives' wrongdoing related to CG, social and environmental impacts, equity in negative territory, and earnings in the red for more than three years in the last five years. To become eligible for THSI, the candidate must pass three indicators in data declaration: **Economic** (CG, risk management, customer relation management, supply chain management, and innovation); **Environmental** (environmental management, eco-efficiency, and climate risk); **Social** (human rights, talent attraction, operational health & safety, community development, and stakeholder engagement); and the incorporation of ESG in business operations.

To be approved for THSI inclusion, verified data must be scored at a 50% minimum for each indicator, unless the company is a part of the Dow Jones Sustainability Indices<sup>5</sup> (DJSI) during the assessment year. The scoring will be fairly weighted against the nature of the relevant industry and materiality.

Note that, from the **THSI list**, the SET further developed a sustainability **SETTHSI Index** in June 2018 from selected THSI companies whose 1) market capitalisation > THB5b (-USD150b); 2) free float >20%; and 3) liquidity >0.5% of paid-up capital for at least 9 out of 12 months. The SETTHSI Index is a market capitalisation-weighted index, cap 5% quarterly weight at maximum, and no cap for number of stocks.

Sources: [SEC](#); [Thai IOD](#); [Thai CAC](#); [SET](#); FSSIA's compilation

#### Disclaimer:

<sup>1</sup> Thai Institute of Directors Association ([Thai IOD](#)) was established in December 1999 and is a membership organisation that strives to promote professionalism in directorship. The Thai IOD offers directors certification and professional development courses, provides a variety of seminars, forums and networking events, and conducts research on board governance issues and practices. Membership comprises board members from companies ranging from large publicly listed companies to small private firms.

<sup>2</sup> Thai Investors Association ([TIA](#)) was established in 1983 with a mission to promote investment knowledge and to protect the investment rights of Thai investors. In 2002, the association was appointed by the Securities and Exchange Commission (SEC) to represent individual shareholders. To obtain information for evaluation, the association recruits volunteer investors to join AGMs and score the meetings. Weightings for each meeting are at a 45:45:10 ratio. They have been applied since 2017 and subject to change.

<sup>3</sup> Thai Private Sector Collective Action against Corruption ([CAC](#)) was founded in 2010 and is 100% privately funded. It is an initiative by the Thai private sector to take part in tackling corruption problems via collective action. The CAC promotes the implementation of effective anti-corruption policies in order to create a transparent business ecosystem by developing a unique certification program for large/medium/small companies to apply for and to control corruption risk systematically and efficiently. The CAC's operations are sponsored by the US-based Center for Private Enterprise (CIPE) and the UK Prosperity Fund.

<sup>4</sup> Sustainability Investment List ([THSI](#)), created by the Stock Exchange of Thailand in 2015, comprises the listed companies that conduct sustainable business operations.

<sup>5</sup> Dow Jones Sustainability Indices – [Wikipedia](#) – Launched in 1999, DJSI evaluates the sustainability performance of companies based on corporate economic, environmental, and social performance.

## GENERAL DISCLAIMER

### ANALYST(S) CERTIFICATION

#### Sureeporn Teewasuwet FSS International Investment Advisory Securities Co., Ltd

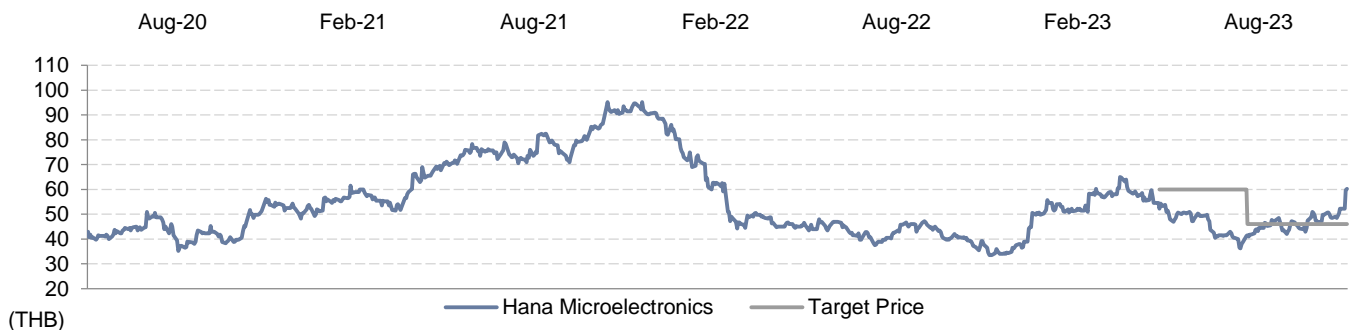
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

This report has been prepared by FSS International Investment Advisory Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSS makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSS has no intention to solicit investors to buy or sell any security in this report. In addition, FSS does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

### History of change in investment rating and/or target price

#### Hana Microelectronics (HANA TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
07-Mar-2023	HOLD	60.00	22-May-2023	BUY	46.00	-	-	-

Sureeporn Teewasuwet started covering this stock from 07-Mar-2023

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Hana Microelectronics	HANA TB	THB 60.25	BUY	Downside risks to our P/E-based TP include 1) a slower-than-expected consumption recovery; 2) a potential rise in raw material costs; and 3) a stronger-than-expected THB against USD.

Source: FSSIA estimates

### Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 17-Aug-2023 unless otherwise stated.

## RECOMMENDATION STRUCTURE

### Stock ratings

Stock ratings are based on absolute upside or downside, which we define as  $(\text{target price}^* - \text{current price}) / \text{current price}$ .

**BUY (B).** The upside is 10% or more.

**HOLD (H).** The upside or downside is less than 10%.

**REDUCE (R).** The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

\* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

### Industry Recommendations

**Overweight.** The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

**Neutral.** The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

**Underweight.** The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

### Country (Strategy) Recommendations

**Overweight (O).** Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Neutral (N).** Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Underweight (U).** Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.