

HANA MICROELECTRONICS

THAILAND / ELECTRONIC COMPONENT

HANA TB

HOLD

UNCHANGED

TARGET PRICE	THB22.00
CLOSE	THB20.10
UP/DOWNSIDE	+9.5%
PRIOR TP	THB18.00
CHANGE IN TP	+22.2%
TP vs CONSENSUS	+11.0%

Stop the bleeding for survival

- Overall demand remains weak. Customers requested production base relocations from China to Thailand and Cambodia.
- HANA is adjusting its sales strategy and discontinuing unprofitable businesses to ensure its survival.
- Maintain HOLD call with a new TP of THB22.

Low inventory levels amid unclear demand recovery

Despite customers carrying lower inventory, resulting in a short-term pickup in orders, overall demand remains weak. The uncertainty from U.S. tariffs has prompted customers to start negotiating the relocation of production from China to Thailand and Cambodia. HANA currently derives c47% of its revenue from the U.S. (12% direct and 35% indirect exports). Although semiconductors are exempt from U.S. tariffs, this segment accounts for only 3% of revenue from its Ayutthaya plant. Currently, most customers remain cautious and are in a wait-and-see mode.

Possible China downsizing due to tariff impact

We expect 2Q25 revenue to be flat q-q. While the Lamphun plant may soften, IC in Ayutthaya has started to recover. However, management mentioned it's still too early to confirm whether the worst has passed since the China plant remains weak. Finally, a downsizing in China might be necessary. PMS's losses have narrowed due to reduced depreciation following the exit of its Si business. HANA should complete relocating its Si line to China in 3Q25 for Phase 1 (surface), and 1Q26 for Phase 2 (Epi). More importantly, we would like a revenue recovery in SiC to reduce the risk of impairment charges on SiC production lines.

Long-term negative view on the shift to a consignment model

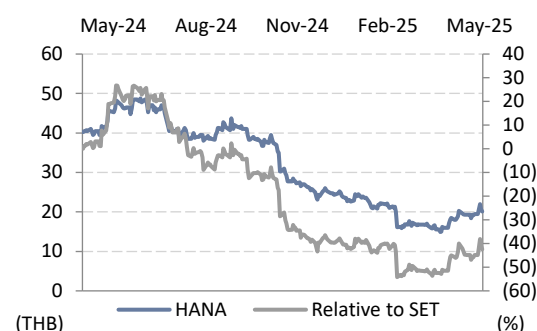
HANA has transitioned from a turnkey model (HANA sources raw materials) to consignment (customers supply raw materials and HANA earns a production fee) for PCBA sales. The shift aims to reduce the risk of facing a GMT rate of 15% and also inventory risk. However, we have a slightly negative view. We believe effective inventory management is essential for any business. The reliance on customer-supplied materials may introduce supply uncertainties, disrupt production planning, and increase revenue volatility. In addition, HANA will have no chance to receive marginal benefits from material during periods of economic expansion.

Maintain HOLD call with a new TP of THB22 (15x P/E)

We raise our 2025E net profit by 22% to THB1.32b, mainly due to revenue from technology transfers. However, we maintain our core profit forecast at THB1.1b (+18.6% y-y). We think that HANA has seen its bottom in 1Q25. However, we remain cautious of the recovery outlook, given a persistently uncertain demand picture. We maintain our HOLD call.

KEY STOCK DATA

YE Dec (THB m)	2024	2025E	2026E	2027E
Revenue	24,801	23,009	24,530	25,523
Net profit	(634)	1,318	1,436	1,553
EPS (THB)	(0.72)	1.49	1.62	1.75
vs Consensus (%)	-	7.3	(3.4)	1.7
EBITDA	2,631	2,923	3,387	3,595
Recurring net profit	911	1,080	1,436	1,553
Core EPS (THB)	1.03	1.22	1.62	1.75
Chg. In EPS est. (%)	-	0.5	15.9	14.8
EPS growth (%)	(54.7)	18.6	33.0	8.2
Core P/E (x)	19.5	16.5	12.4	11.5
Dividend yield (%)	3.7	4.4	4.8	5.2
EV/EBITDA (x)	3.0	2.5	2.1	1.9
Price/book (x)	0.7	0.6	0.6	0.6
Net debt/Equity (%)	(36.4)	(37.7)	(37.4)	(37.5)
ROE (%)	3.2	3.9	5.1	5.4



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	17.5	(9.0)	(50.1)
Relative to country (%)	12.0	(3.2)	(42.5)
Mkt cap (USD m)	535		
3m avg. daily turnover (USD m)	7.1		
Free float (%)	58		
Major shareholder	OMAC and related companies (29%)		
12m high/low (THB)	49.75/14.00		
Issued shares (m)	885.36		

Sources: Bloomberg consensus; FSSIA estimates


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Investment thesis

HANA is a leading EMS provider in Southeast Asia, with over 45 years of experience. Since its inception in 1978, even though it is mainly a midstream producer, its strength has come from its diversification to several end products, such as telecommunications, computers, consumer products, automobiles, radio frequency identification (RFID), and medical products. It also has manufacturing bases in several countries while constantly developing new products, i.e., SiC, to catch up with industrial customer demands, particularly in EVs.

Company profile

HANA provides integrated electronic manufacturing services (EMS), including IC PCBA, RFID, and LCOS. It has seven manufacturing bases in Thailand, China, the U.S., Cambodia, and South Korea, with a total production area of 1.7m SQF and over 10,000 employees worldwide. At the end of 2024, HANA generated revenue mainly from PCBA (64% of total revenue), followed by IC (27%), RFID (7%), and SiC (2%).

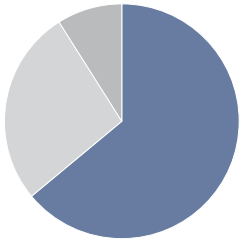
www.hanagroup.com

Principal activities (revenue, 2024)

■ PCBA - 64.0 %

■ IC - 27.1 %

■ IC Assemble (RFID / Microdisplay) - 9.0 %



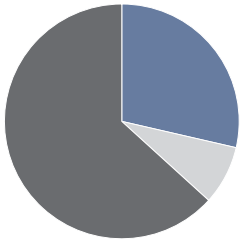
Source: Hana Microelectronics

Major shareholders

■ OMAC and related companies - 28.6 %

■ LGT Bank (Singapore) Ltd - 8.1 %

■ Others - 63.3 %



Source: Hana Microelectronics

Catalysts

Potential catalysts for HANA’s earnings growth in 2025 are 1) a recovery in the global economy and purchasing power, especially in China, 2) a decrease in raw material costs, and 3) a faster-than-expected capacity expansion.

Risks to our call

Downside and upside risks to our P/E-based TP include 1) a slower or faster-than-expected recovery in the global economy and purchasing power, 2) higher or lower-than-expected raw material costs, 3) the Baht strength or weakness, and 4) a higher minimum wage and labor shortages.

Event calendar

Date	Event
August 2025	2Q25 results announcement

Key assumptions

	2025E	2026E	2027E
USD total revenue (USD m)	697	743	773
SiC revenue (USD m)	10	13	15
FX rate (USD/THB)	33	33	33
THB revenue growth (%)	(7.2)	6.6	4.0
Gross margin (%)	10.0	11.2	11.4

Source: FSSIA estimates

Earnings sensitivity

- For every THB1/USD increase, we estimate 2025 net profit to fall by 6.8%, and vice versa, all else being equal.
- For every 0.5% increase in GPM, we estimate 2025 net profit to rise by 5.7%, and vice versa, all else being equal.
- For every 0.2% increase in SG&A, we estimate 2025 net profit to fall by 1.3%, and vice versa, all else being equal.
- For every 10% increase in labor cost, we estimate 2025 net profit to fall by 6.6%, and vice versa, all else being equal.

Source: FSSIA estimates

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FINANSIA

19 MAY 2025

1Q25 profit seemed to recover well, but due to extra items

HANA reported a 1Q25 net profit of THB478m (a turnaround from a loss of THB1.7b in 4Q24, +53% y-y). Excluding an FX gain of THB20m and revenue from technology transfers to the joint venture company FT1 of THB238m (this transaction occurred a long time ago but has only been paid recently), its core profit was THB220m (-38% y-y).

However, the 1Q25 core profit of THB220m included the positive impact from a reversal of inventory provision of THB175m and a reversal of obsolete inventory of THB205m. Although management clarified during the meeting that the two items did not impact the profit and loss statement, but only the balance sheet in this quarter, we note that they appeared in the cash flow statement under operating activities.

The reported gross margin was 10.1%, a strong recovery from 5.3% in 4Q24. If adjusted for a reversal of obsolete inventory, the actual gross margin would be 6.7%, a slight q-q improvement.

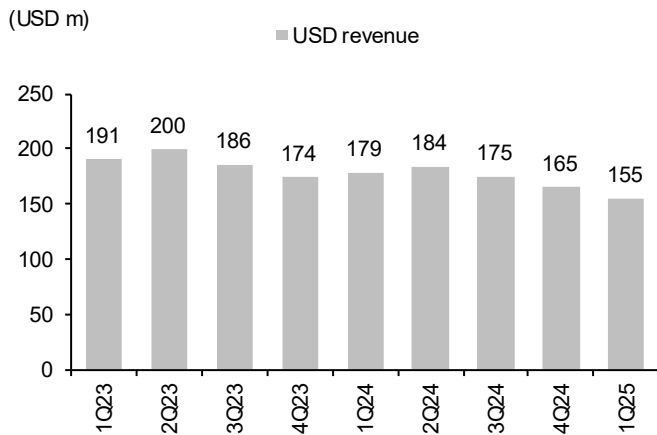
Management further mentioned that the company has changed its sales conditions for PCBA with some customers from a turnkey model (where HANA procures materials and manufactures the product) to consignment (where customers supply the materials and HANA charges a manufacturing fee). This change has resulted in an improvement in the gross margin.

Total revenue has yet to recover, at USD155m (-6% q-q, -13% y-y). It declined across all factories, led by China, Thailand, and the U.S. Although Cambodia showed a rebound, its revenue contribution remains very small. Also, the PMS plant in South Korea saw a decline in revenue both q-q and y-y.

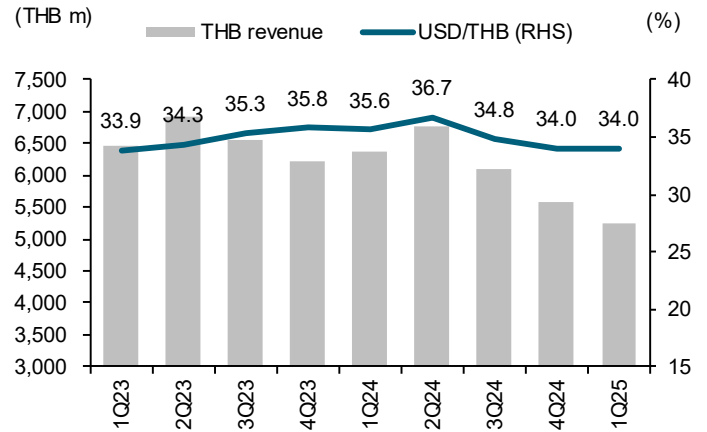
Exhibit 1: HANA – 1Q25 earnings results

	1Q24 (THB m)	2Q24 (THB m)	3Q24 (THB m)	4Q24 (THB m)	1Q25 (THB m)	----- Change -----		2024 (THB m)	2025E (THB m)	Change (y-y%)	% 1Q25 to 2025E
						(q-q%)	(y-y%)				
Total revenue	6,371	6,752	6,100	5,579	5,252	(5.9)	(17.6)	24,801	23,009	(7.2)	22.8
Cost of sales	5,683	5,918	5,722	5,284	4,722	(10.6)	(16.9)	22,607	20,708	(8.4)	22.8
Gross profit	687	834	378	295	530	80.0	(22.8)	2,194	2,301	4.9	23.0
SG&A	415	419	425	432	421	(2.5)	1.4	1,691	1,599	(5.4)	26.3
Operating profit	272	415	(46)	(137)	109	nm	(59.8)	503	702	39.5	15.6
Other income	95	80	106	71	102	44.0	7.1	352	345	(1.9)	29.6
Tax expense	27	31	16	13	23	76.4	(14.3)	86	81	(5.6)	28.1
Other gain (-loss)	(39)	(111)	345	(1740)	258	nm	nm	(1545)	238	nm	nm
Reported net profit	313	376	406	(1729)	478	nm	52.7	(634)	1,318	nm	36.3
Core profit	352	487	61	11	220	1949.5	(37.5)	911	1,080	18.6	20.4
Key Ratios (%)											
						(ppt)	(ppt)				
Gross margin	10.8	12.4	6.2	5.3	10.1	4.8	(0.7)	8.8	10.0	1.2	
SG&A to sales	6.5	6.2	7.0	7.7	8.0	0.3	1.5	6.8	7.0	0.1	
Operating margin	4.3	6.1	(0.8)	(2.5)	2.1	4.5	(2.2)	2.0	3.0	1.0	
Net margin	4.9	5.6	6.7	(31.0)	9.1	40.1	4.2	(2.6)	5.7	8.3	
Core margin	5.5	7.2	1.0	0.2	4.2	4.0	(1.3)	3.7	4.7	1.0	
Operating statistics (THB m)											
USD revenue (USD m)	179	184	175	165	155	(6.1)	(13.4)	703	697	(0.8)	22.2
THB/USD	35.6	36.7	34.8	34.0	34.0	0.0	(4.5)	34.8	35.2	1.1	
PCBA - Lamphun	3,176	3,232	2,952	2,792	2,719	(2.6)	(14.4)	12,153	10,884	(10.4)	
PCBA - Jiaxing	884	1,004	776	808	649	(19.7)	(26.6)	3,472	3,514	1.2	
PCBA - Cambodia	61	70	79	38	76	96.5	24.2	248	148	(40.1)	
IC - Ayuttaya	1,624	1,604	1,530	1,194	1,186	(0.7)	(26.9)	5,952	8,825	48.3	
IC - Jiaxing	125	168	178	273	192	(29.8)	53.9	744	1,279	71.8	
HMT - USA	411	504	458	364	350	(3.8)	(14.8)	1,736	1,653	(4.8)	
IC - South Korea	90	170	128	108	81	(25.2)	(10.5)	496	330	(33.5)	
Total IC revenue	2,249	2,445	2,294	1,940	1,809	(6.8)	(19.6)	8,989	7,143	(20.5)	
Total PCBA revenue	4,121	4,306	3,806	3,639	3,443	(5.4)	(16.4)	11,029	12,003	8.8	
Revenue from China	1,009	1,172	954	1,082	841	(22.3)	(16.7)	3,005	2,943	(2.1)	
Revenue from Thailand	4,800	4,836	4,482	3,987	3,905	(2.1)	(18.6)	12.1	12.8	6.1	

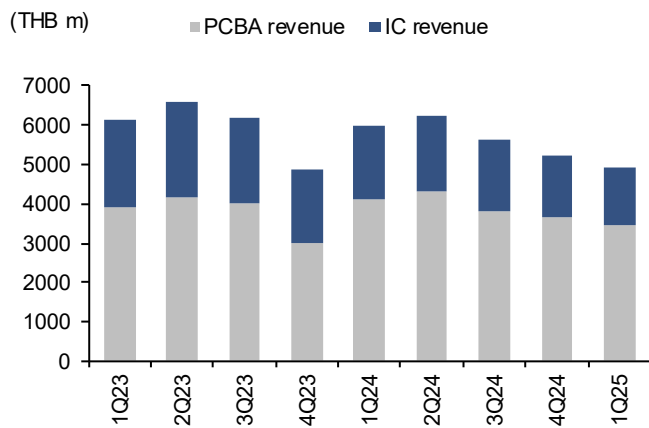
Sources: HANA, FSSIA's compilation

Exhibit 2: Quarterly USD revenue


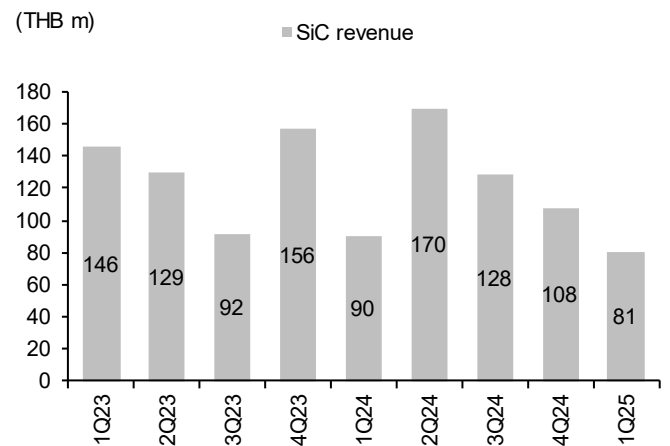
Sources: HANA, FSSIA's compilation

Exhibit 3: Quarterly THB revenue


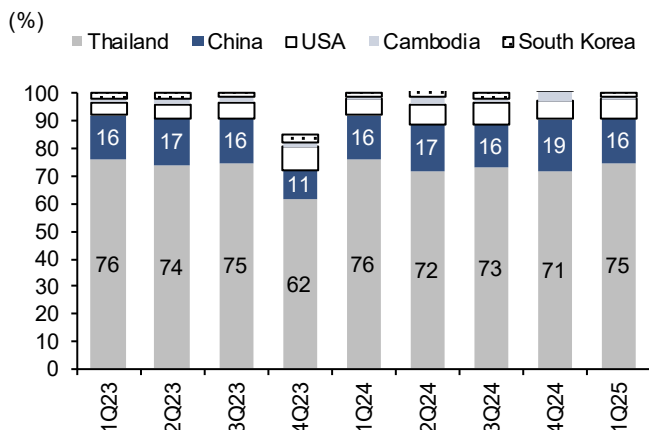
Sources: HANA, FSSIA's compilation

Exhibit 4: Quarterly revenue by product segment


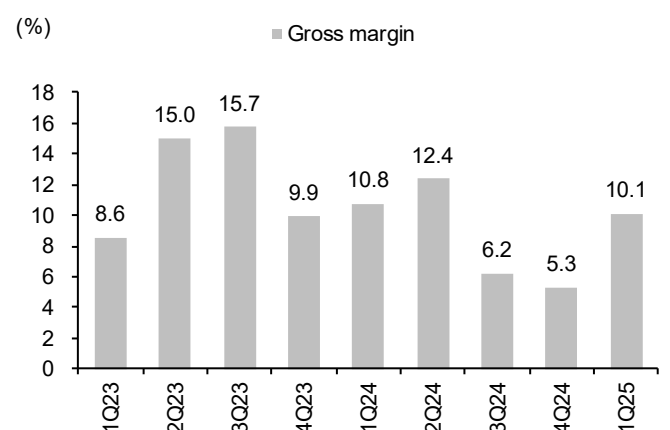
Sources: HANA, FSSIA's compilation

Exhibit 5: Quarterly SiC revenue


Sources: HANA, FSSIA's compilation

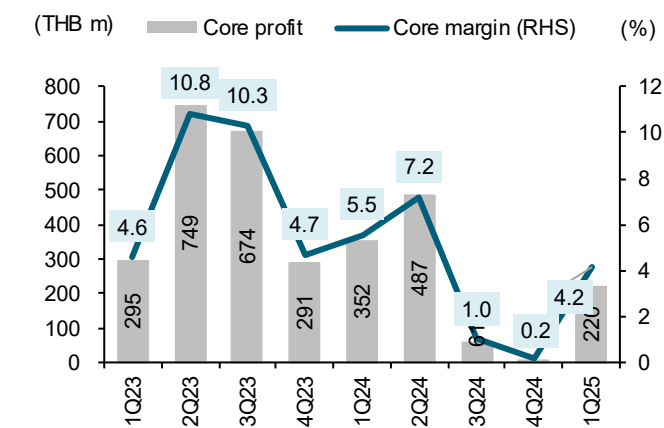
Exhibit 6: Quarterly revenue by location base


Sources: HANA, FSSIA's compilation

Exhibit 7: Quarterly gross margin


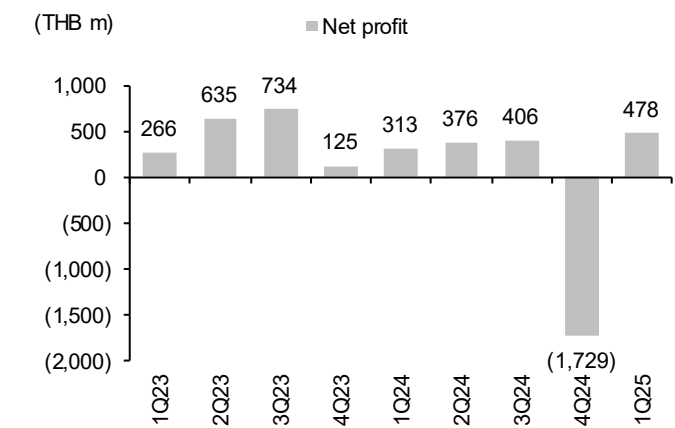
Sources: HANA, FSSIA's compilation

Exhibit 8: Quarterly core profit



Sources: HANA, FSSIA's compilation

Exhibit 9: Quarterly net profit



Sources: HANA, FSSIA's compilation

Low inventory levels amid unclear demand recovery

We have a neutral view of the analyst meeting. Despite customers carrying lower inventory than HANA had previously anticipated, resulting in a short-term pickup in orders, overall demand remains weak. Also, the uncertainty from U.S. tariffs and verification of raw material origins have prompted customers to start negotiating the relocation of production from HANA's China facility to its plants in Thailand and Cambodia.

HANA currently derives c47% of its revenue from the U.S., comprising 12% direct and 35% indirect exports. Although semiconductors are exempt from U.S. tariffs, this segment accounts for only 3% of revenue from its Ayutthaya plant. Currently, most customers remain cautious and are in a wait-and-see mode.

Possible downsizing from tariff impact, South Korea losses narrowing amid demand uncertainty

In the short term, we expect 2Q25 revenue to be flat q-q. While the Lamphun plant may soften, IC in Ayutthaya has started to recover. However, management mentioned it's still too early to confirm whether the worst has passed. Overall, the China plant remains weak. Although there may be some recovery in the EV segment, this is not driven by pre-tariff stockpiling. Finally, a downsizing in China might be necessary.

For PMS in South Korea, losses have narrowed due to reduced depreciation following the exit of its Si (silicon) business. However, the demand outlook for SiC (silicon carbide) remains uncertain. HANA is focusing on marketing and product development to reach EBITDA breakeven by the end of this year. Moreover, it should complete relocating its Si production line to China in 3Q25 for Phase 1 (surface), and 1Q26 for Phase 2 (Epi), which could help reduce further losses. More importantly, we would like a revenue recovery in the SiC segment to mitigate the risk of impairment charges on the remaining SiC production lines.

Regarding the technology transfers from PMS to FT1, management clarified that it was a past transaction and did not indicate whether FT1 would start operations. Discussions with the other shareholder (PTT TB) are ongoing, and we should have a conclusion shortly.

Slightly negative long-term view on the shift to consignment

Management explained that the company has transitioned from a Turnkey model (HANA sources raw materials) to consignment (customers supply raw materials and HANA earns a production fee) for PCBA sales. While this reduces revenue, it improves product mix and was one of the factors behind the recovery in gross margin in 1Q25. This leads us to expect a stable to slightly higher gross margin in 2Q25.

The shift in sales model also aims to reduce the risk of facing a GMT rate of 15% (up from the current 4%) by deferring group revenues from exceeding EUR750m per year.

However, we have a neutral to slightly negative view. While the consignment model reduces inventory risk, we believe effective inventory management is essential for any business. The reliance on customer-supplied materials under consignment may introduce supply uncertainties, disrupt production planning, and increase revenue volatility. In addition, HANA will have no chance to receive marginal benefits from material procurement during periods of economic expansion.

Maintain HOLD call while monitoring recovery

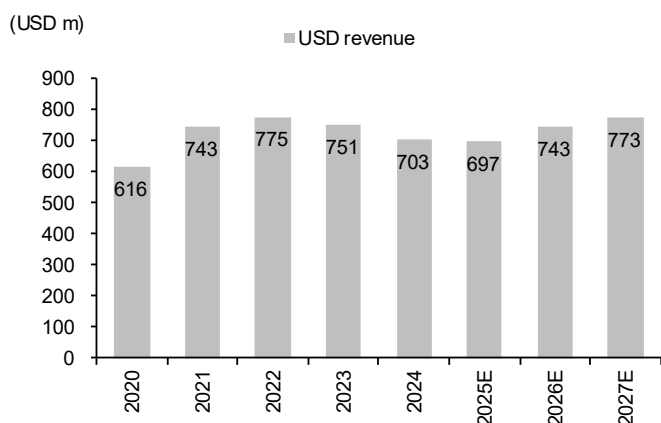
We raise our 2025E net profit by 22% to THB1.32b, turning from a loss of THB1.7b last year, mainly due to revenue from the technology transfers. However, we maintain our 2025E core profit at THB1.1b (+18.6% y-y). We think HANA has seen its bottom in 1Q25, while it continues to focus on cost reduction by downsizing and discontinuing unprofitable businesses. However, we remain cautious of the recovery outlook, given a persistently uncertain demand picture. We maintain our HOLD call with a new target price of THB22, based on 15x PE.

Exhibit 10: Changes in keys assumptions for HANA

	Current			Previous			Change		
	2025E (THB m)	2026E (THB m)	2027E (THB m)	2025E (THB m)	2026E (THB m)	2027E (THB m)	2025E (%)	2026E (%)	2027E (%)
Total sales value (THB m)	23,009	24,530	25,523	22,904	23,841	24,915	0.5	2.9	2.4
Costs	20,708	21,783	22,613	20,614	21,338	22,249	0.5	2.1	1.6
Gross profit	2,301	2,747	2,910	2,290	2,503	2,666	0.5	9.7	9.1
SG&A expense	1,599	1,705	1,774	1,592	1,657	1,732	0.5	2.9	2.4
Interest expense	69	62	52	69	62	52	0.0	0.0	0.0
Reported net profit	1,318	1,436	1,553	1,075	1,239	1,353	22.6	15.9	14.8
Core profit	1,080	1,436	1,553	1,075	1,239	1,353	0.5	15.9	14.8
EPS (THB/share)	1.49	1.62	1.75	1.21	1.40	1.53	22.6	15.9	14.8
Key ratios (%)									
Total revenue growth	(7.2)	6.6	4.0	(7.6)	4.1	4.5	0.4	2.5	(0.5)
Net profit growth	nm	9.0	8.2	nm	15.3	9.2	nm	(6.3)	(1.0)
Core profit growth	18.6	33.0	8.2	18.0	15.3	9.2	0.6	17.7	(1.0)
Gross margin	10.0	11.2	11.4	10.0	10.5	10.7	0.0	0.7	0.7
SG&A to sales	7.0	7.0	7.0	7.0	7.0	7.0	0.0	0.0	0.0
Net margin	5.7	5.9	6.1	4.7	5.2	5.4	1.0	0.7	0.7
Core margin	4.7	5.9	6.1	4.7	5.2	5.4	0.0	0.7	0.7
Operating statistics									
Total revenue (USD m)	697	743	773	694	722	755	0.5	2.9	2.4
SiC revenue (USD m)	10	13	15	10	13	15	0.0	0.0	0.0
FX rate (THB/USD)	33.0	33.0	33.0	33.0	33.0	33.0	0.0	0.0	0.0

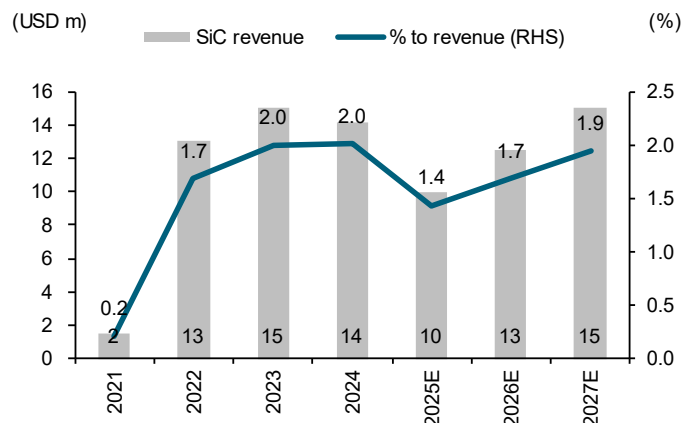
Source: FSSIA estimates

Exhibit 11: Yearly USD revenue



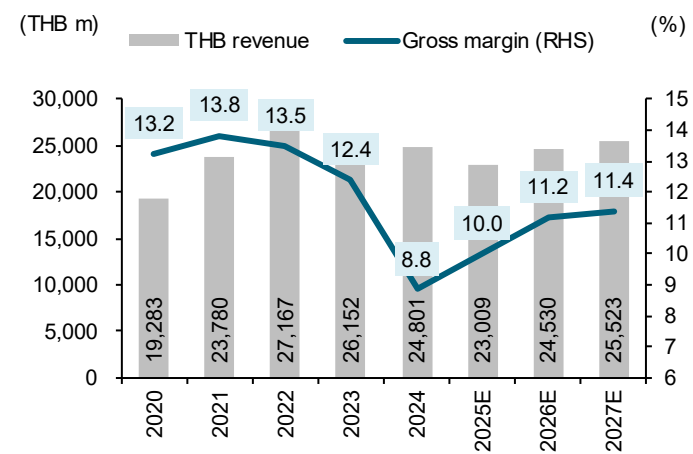
Sources: HANA; FSSIA estimates

Exhibit 12: Yearly SiC revenue



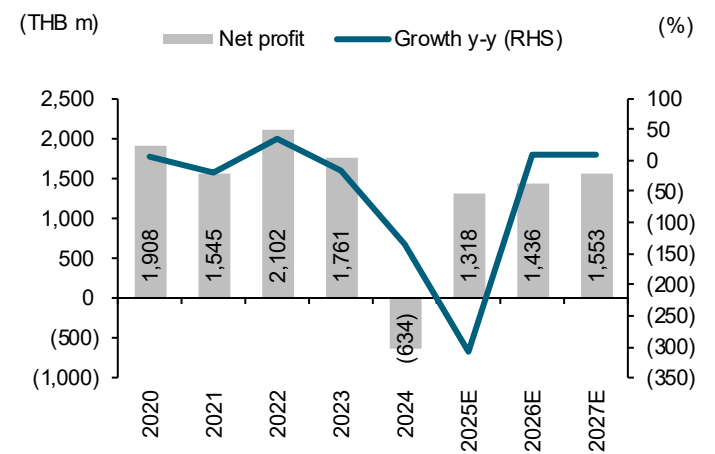
Sources: HANA; FSSIA estimates

Exhibit 13: Yearly THB revenue and gross margin



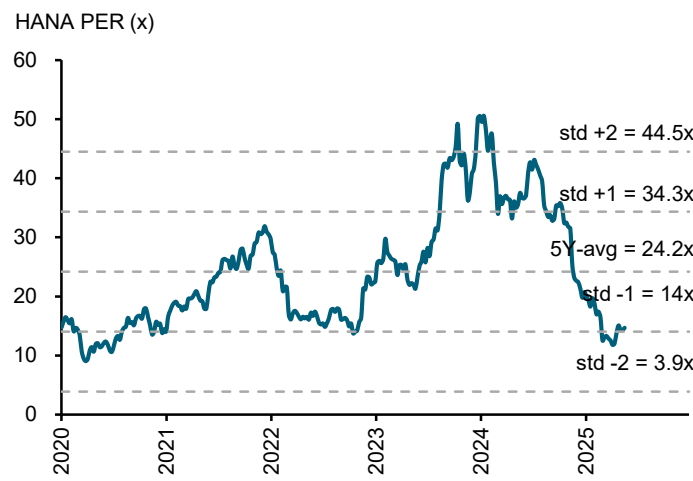
Sources: HANA; FSSIA estimates

Exhibit 14: Yearly net profit and growth



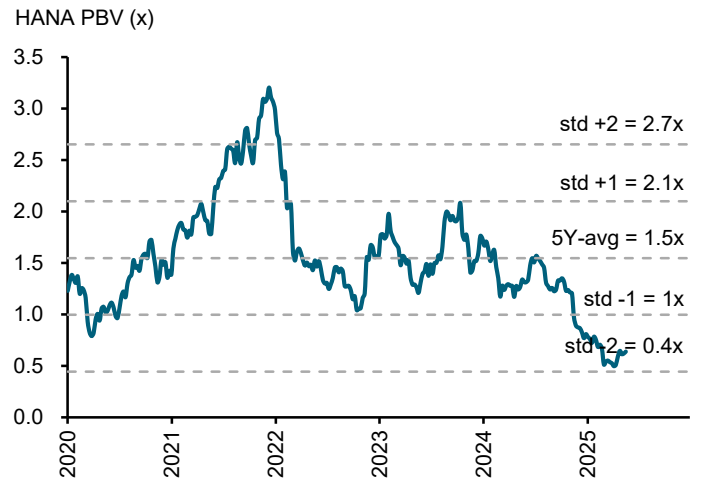
Sources: HANA; FSSIA estimates

Exhibit 15: Historical P/E band



Sources: Bloomberg, FSSIA estimates

Exhibit 16: Historical P/BV band



Sources: Bloomberg, FSSIA estimates

Financial Statements

Hana Microelectronics

Profit and Loss (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Revenue	26,152	24,801	23,009	24,530	25,523
Cost of goods sold	(22,910)	(22,607)	(20,708)	(21,783)	(22,613)
Gross profit	3,242	2,194	2,301	2,747	2,910
Other operating income	439	352	345	368	383
Operating costs	(1,631)	(1,691)	(1,599)	(1,705)	(1,774)
Operating EBITDA	3,752	2,631	2,923	3,387	3,595
Depreciation	(1,702)	(1,777)	(1,877)	(1,977)	(2,077)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	2,050	855	1,047	1,410	1,519
Net financing costs	45	129	115	134	152
Associates	0	13	0	0	0
Recurring non-operating income	0	13	0	0	0
Non-recurring items	(249)	(1,545)	238	0	0
Profit before tax	1,846	(548)	1,399	1,544	1,670
Tax	(85)	(86)	(81)	(108)	(117)
Profit after tax	1,761	(634)	1,318	1,436	1,553
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	1,761	(634)	1,318	1,436	1,553
Non-recurring items & goodwill (net)	249	1,545	(238)	0	0
Recurring net profit	2,009	911	1,080	1,436	1,553
Per share (THB)					
Recurring EPS *	2.27	1.03	1.22	1.62	1.75
Reported EPS	1.99	(0.72)	1.49	1.62	1.75
DPS	1.00	0.75	0.89	0.97	1.05
Diluted shares (used to calculate per share data)	885	885	885	885	885
Growth					
Revenue (%)	(3.7)	(5.2)	(7.2)	6.6	4.0
Operating EBITDA (%)	(7.5)	(29.9)	11.1	15.9	6.1
Operating EBIT (%)	(15.5)	(58.3)	22.5	34.7	7.7
Recurring EPS (%)	(23.8)	(54.7)	18.6	33.0	8.2
Reported EPS (%)	(23.9)	nm	nm	9.0	8.2
Operating performance					
Gross margin inc. depreciation (%)	12.4	8.8	10.0	11.2	11.4
Gross margin exc. depreciation (%)	18.9	16.0	18.2	19.3	19.5
Operating EBITDA margin (%)	14.3	10.6	12.7	13.8	14.1
Operating EBIT margin (%)	7.8	3.4	4.5	5.7	5.9
Net margin (%)	7.7	3.7	4.7	5.9	6.1
Effective tax rate (%)	4.6	(15.7)	5.8	7.0	7.0
Dividend payout on recurring profit (%)	44.1	72.5	73.2	60.0	60.0
Interest cover (X)	(45.4)	(6.7)	(9.1)	(10.5)	(10.0)
Inventory days	158.6	140.8	132.0	123.4	124.3
Debtor days	70.9	71.1	68.0	63.0	63.7
Creditor days	65.0	56.2	56.8	53.6	54.0
Operating ROIC (%)	7.7	3.5	4.9	6.6	7.0
ROIC (%)	7.5	3.4	4.6	6.2	6.5
ROE (%)	7.6	3.2	3.9	5.1	5.4
ROA (%)	6.1	2.4	3.0	4.0	4.2

* Pre-exceptional, pre-goodwill and fully diluted

Revenue by Division (THB m)	2023	2024	2025E	2026E	2027E
PCBA	15,956	15,866	16,659	17,992	19,971
IC	8,235	6,709	4,012	4,014	2,750
IC Assemble (RFID / Microdisplay)	1,961	2,226	2,337	2,524	2,802

Sources: Hana Microelectronics; FSSIA estimates

Financial Statements

Hana Microelectronics

Cash Flow (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Recurring net profit	2,009	911	1,080	1,436	1,553
Depreciation	1,702	1,777	1,877	1,977	2,077
Associates & minorities	-	-	-	-	-
Other non-cash items	(241)	(1,554)	238	0	0
Change in working capital	(491)	2,215	693	(439)	(310)
Cash flow from operations	2,980	3,348	3,888	2,973	3,320
Capex - maintenance	-	-	-	-	-
Capex - new investment	(2,550)	(597)	(2,000)	(2,000)	(2,000)
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	162	(324)	(276)	(23)	(143)
Cash flow from investing	(2,389)	(921)	(2,276)	(2,023)	(2,143)
Dividends paid	(859)	(701)	(798)	(862)	(932)
Equity finance	4,588	0	0	0	0
Debt finance	1,280	(435)	224	(153)	(145)
Other financing cash flows	(342)	(633)	(256)	46	30
Cash flow from financing	4,667	(1,769)	(830)	(969)	(1,047)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	1,195	0	0	0
Net other adjustments	0	1,195	0	0	0
Movement in cash	5,258	1,852	781	(19)	130
Free cash flow to firm (FCFF)	643.40	2,490.95	1,681.42	1,012.89	1,230.15
Free cash flow to equity (FCFE)	1,529.93	2,553.10	1,579.86	843.25	1,062.51
Per share (THB)					
FCFF per share	0.73	2.81	1.90	1.14	1.39
FCFE per share	1.73	2.88	1.78	0.95	1.20
Recurring cash flow per share	3.92	1.28	3.61	3.85	4.10
Balance Sheet (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Tangible fixed assets (gross)	29,984	30,403	32,403	34,403	36,403
Less: Accumulated depreciation	(18,283)	(21,076)	(22,952)	(24,929)	(27,006)
Tangible fixed assets (net)	11,701	9,328	9,451	9,474	9,398
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	72	528	700	700	700
Invest. in associates & subsidiaries	-	-	-	-	-
Cash & equivalents	8,893	10,745	11,526	11,507	11,638
A/C receivable	5,178	4,481	4,097	4,368	4,545
Inventories	8,969	7,096	6,524	6,863	7,125
Other current assets	119	98	115	123	128
Current assets	23,159	22,419	22,263	22,862	23,435
Other assets	373	241	345	368	510
Total assets	35,306	32,516	32,759	33,404	34,044
Common equity	29,147	27,078	27,673	28,248	28,869
Minorities etc.	0	0	0	0	0
Total shareholders' equity	29,147	27,078	27,673	28,248	28,869
Long term debt	204	336	306	276	246
Other long-term liabilities	921	1,004	690	736	766
Long-term liabilities	1,125	1,340	996	1,012	1,012
A/C payable	3,391	3,026	2,837	2,984	3,098
Short term debt	1,105	557	793	670	555
Other current liabilities	538	515	460	491	510
Current liabilities	5,034	4,098	4,090	4,145	4,163
Total liabilities and shareholders' equity	35,306	32,516	32,759	33,404	34,044
Net working capital	10,338	8,133	7,440	7,879	8,189
Invested capital	22,485	18,230	17,936	18,422	18,798
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	32.92	30.58	31.26	31.90	32.61
Tangible book value per share	32.92	30.58	31.26	31.90	32.61
Financial strength					
Net debt/equity (%)	(26.0)	(36.4)	(37.7)	(37.4)	(37.5)
Net debt/total assets (%)	(21.5)	(30.3)	(31.8)	(31.6)	(31.8)
Current ratio (x)	4.6	5.5	5.4	5.5	5.6
CF interest cover (x)	(89.4)	(23.3)	(30.2)	(20.2)	(19.2)
Valuation	2023	2024	2025E	2026E	2027E
Recurring P/E (x) *	8.9	19.5	16.5	12.4	11.5
Recurring P/E @ target price (x) *	9.7	21.4	18.0	13.6	12.5
Reported P/E (x)	10.1	(28.1)	13.5	12.4	11.5
Dividend yield (%)	5.0	3.7	4.4	4.8	5.2
Price/book (x)	0.6	0.7	0.6	0.6	0.6
Price/tangible book (x)	0.6	0.7	0.6	0.6	0.6
EV/EBITDA (x) **	2.7	3.0	2.5	2.1	1.9
EV/EBITDA @ target price (x) **	3.2	3.7	3.1	2.6	2.4
EV/invested capital (x)	0.5	0.4	0.4	0.4	0.4
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: Hana Microelectronics; FSSIA estimates

Hana Microelectronics PCL (HANA TB)

FSSIA ESG rating


56.35 /100

Exhibit 17: FSSIA ESG score implication

Rating	Score	Implication
★★★★★	>79-100	Leading its industry peers in managing the most significant ESG risks which not only better cost efficiency but also lead to higher profitability.
★★★★★	>59-79	A mixed track record of managing the most significant ESG risks and opportunities relative to industry peers.
★★★	>39-59	Relevant ESG materiality matrix has been constructively addressed, well-managed and incorporated into day-to-day operations, in which targets and achievements are evaluated annually.
★★	>19-39	Relevant ESG materiality matrix has been identified with key management in charge for progress to be followed up on and to provide intensive disclosure. Most targets are conventional and achievable.
★	1-19	The company has adopted the United Nations Sustainable Development Goals (UN SDGs), established sustainability management guidelines and fully complies with regulations or ESG suggested guidance from related organizations such as the SET and SEC.

Sources: FSSIA estimates

Exhibit 18: ESG – peer comparison

	FSSIA ESG score	Domestic ratings						Global ratings					Bloomberg		
		DJSI	SET ESG	THSI	CG score	AGM level	Thai CAC	Morningstar ESG risk	ESG Book	MSCI	Moody's	Refinitiv	S&P Global	ESG score	Disclosure score
SET100	69.20	5.34	4.40	4.40	4.76	4.65	3.84	Medium	51.76	BBB	20.87	58.72	63.91	3.72	28.17
Coverage	67.12	5.11	4.15	4.17	4.83	4.71	3.53	Medium	52.04	BB	16.97	56.85	62.09	3.40	31.94
DELTA	87.59	Y	Y	Y	5.00	5.00	Certified	Low	68.81	AA	--	91.19	74.00	4.15	--
HANA	56.35	--	Y	Y	5.00	5.00	Certified	Negligible	56.93	BBB	--	44.01	31.00	1.81	--
KCE	45.77	--	--	--	5.00	5.00	Certified	Medium	52.70	--	--	61.53	16.00	2.16	52.98

 Sources: [SETTRADE.com](https://www.settrade.com); FSSIA's compilation

Exhibit 19: ESG score by Bloomberg

FY ending Dec 31	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
ESG financial materiality scores - ESG score	0.91	0.98	0.99	1.39	1.61	1.81	—
BESG environmental pillar score	0.00	0.00	0.00	0.00	0.00	0.00	—
BESG social pillar score	0.37	0.37	0.37	1.14	1.63	1.66	—
BESG governance pillar score	3.51	3.89	3.96	3.95	3.95	4.88	—
ESG disclosure score	25.98	25.98	25.98	30.50	36.02	36.02	—
Environmental disclosure score	1.66	1.66	1.66	7.13	22.92	22.92	—
Social disclosure score	15.90	15.90	15.90	24.00	24.79	24.79	—
Governance disclosure score	60.26	60.26	60.26	60.26	60.26	60.26	—
Environmental							
Emissions reduction initiatives	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate change policy	No	No	No	Yes	Yes	Yes	Yes
Climate change opportunities discussed	No	No	No	Yes	Yes	Yes	Yes
Risks of climate change discussed	No	No	No	No	No	No	No
GHG scope 1	—	—	—	—	1	1	1
GHG scope 2 location-based	—	—	—	26	26	23	23
GHG Scope 3	—	—	—	—	—	—	—
Carbon per unit of production	—	—	—	—	—	—	—
Biodiversity policy	No	No	No	No	No	No	No
Energy efficiency policy	No	No	No	No	No	No	Yes
Total energy consumption	—	—	—	—	—	—	—
Renewable energy use	—	—	—	—	—	—	—
Electricity used	—	—	—	—	—	—	—
Fuel used - natural gas	—	—	—	—	—	—	—

Sources: Bloomberg; FSSIA's compilation

Exhibit 20: ESG score by Bloomberg (cont.)

FY ending Dec 31	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Fuel used - crude oil/diesel	No	No	No	No	No	No	No
Waste reduction policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hazardous waste	—	—	—	—	—	—	—
Total waste	—	—	—	—	—	—	—
Waste recycled	—	—	—	—	—	—	—
Waste sent to landfills	—	—	—	—	—	—	—
Environmental supply chain management	No	No	No	No	Yes	Yes	Yes
Water policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	—	—	—	—	—
Social							
Human rights policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Policy against child labor	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quality assurance and recall policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consumer data protection policy	No	No	No	No	No	No	No
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	No	No	No	No
Pct women in workforce	—	—	—	73	73	72	—
Pct disabled in workforce	—	—	—	1	1	1	—
Business ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anti-bribery ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health and safety policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lost time incident rate - employees	—	—	—	0	0	0	—
Total recordable incident rate - employees	—	—	—	—	—	—	—
Training policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fair remuneration policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of employees – CSR	4,038	3,947	3,969	3,957	3,742	3,636	3,324
Employee turnover pct	—	—	—	—	—	—	—
Total hours spent by firm - employee training	199,881	165,774	182,574	197,850	179,616	207,252	150,148
Social supply chain management	No	No	No	No	Yes	Yes	Yes
Governance							
Board size	6	6	6	6	6	6	8
No. of independent directors (ID)	3	3	3	3	3	3	4
No. of women on board	1	1	1	1	1	1	2
No. of non-executive directors on board	3	3	3	3	3	3	4
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	7	7	7	7	7	7	6
Board meeting attendance pct	100	100	100	100	100	100	100
Board duration (years)	—	—	—	—	—	—	—
Director share ownership guidelines	No	No	No	No	No	No	No
Age of the youngest director	56	53	54	55	56	57	58
Age of the oldest director	82	72	73	73	74	75	65
No. of executives / company managers	5	5	5	5	5	5	6
No. of female executives	1	1	1	1	1	1	1
Executive share ownership guidelines	No	No	No	No	No	No	No
Size of audit committee	3	3	3	3	3	3	4
No. of ID on audit committee	3	3	3	3	3	3	4
Audit committee meetings	4	4	4	4	4	4	4
Audit meeting attendance %	100	100	100	100	100	100	100
Size of compensation committee	0	0	0	0	0	0	0
No. of ID on compensation committee	—	—	—	—	—	—	—
No. of compensation committee meetings	—	—	—	—	—	—	—
Compensation meeting attendance %	—	—	—	—	—	—	—
Size of nomination committee	3	3	3	3	3	3	4
No. of nomination committee meetings	3	2	3	3	2	3	3
Nomination meeting attendance %	100	100	100	100	100	100	100
Sustainability governance							
Verification type	No	No	No	No	No	No	No

Sources: Bloomberg; FSSIA's compilation

Disclaimer for ESG scoring

ESG score	Methodology	Rating																				
The Dow Jones Sustainability Indices (DJSI) By S&P Global	The DJSI World applies a transparent, rules-based component selection process based on the companies' Total Sustainability Scores resulting from the annual S&P Global Corporate Sustainability Assessment (CSA). Only the top-ranked companies within each industry are selected for inclusion.	Be a member and invited to the annual S&P Global Corporate Sustainability Assessment (CSA) for DJSI. Companies with an S&P Global ESG Score of less than 45% of the S&P Global ESG Score of the highest scoring company are disqualified. The constituents of the DJSI indices are selected from the Eligible Universe.																				
SET ESG Ratings List (SETESG) by The Stock Exchange of Thailand (SET)	SET ESG quantifies responsibility in Environmental and Social issues by managing business with transparency in Governance, updated annually. Candidates must pass the preemptive criteria, with two crucial conditions: 1) no irregular trading of the board members and executives; and 2) free float of >150 shareholders, and combined holding must be >15% of paid-up capital. Some key disqualifying criteria include: 1) CG score of below 70%; 2) independent directors and free float violation; 3) executives' wrongdoing related to CG, social & environmental impacts; 4) equity in negative territory; and 5) earnings in red for > 3 years in the last 5 years.	To be eligible for SETESG inclusion , verified data must be scored at a minimum of 50% for each indicator, unless the company is a part of DJSI during the assessment year. The scoring will be fairly weighted against the nature of the relevant industry and materiality. SETESG Index is extended from the SET ESG Ratings companies whose 1) market capitalization > 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.																				
CG Score by Thai Institute of Directors Association (Thai IOD)	An indicator of CG strength in sustainable development, measured annually by the Thai IOD, with support from the Stock Exchange of Thailand (SET). The results are from the perspective of a third party, not an evaluation of operations.	Scores are rated in six categories: 5 for Excellent (90-100), 4 for Very Good (80-89), 3 for Good (70-79), 2 for Fair (60-69), 1 for Pass (60-69), and not rated for scores below 50. Weightings include: 1) the rights; 2) and equitable treatment of shareholders (weight 25% combined); 3) the role of stakeholders (25%); 4) disclosure & transparency (15%); and 5) board responsibilities (35%).																				
AGM level By Thai Investors Association (TIA) with support from the SEC	It quantifies the extent to which shareholders' rights and equitable treatment are incorporated into business operations and information is transparent and sufficiently disclosed. All form important elements of two out of five the CG components to be evaluated annually. The assessment criteria cover AGM procedures before the meeting (45%), at the meeting date (45%), and after the meeting (10%). <i>(The first assesses 1) advance circulation of sufficient information for voting; and 2) facilitating 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.)</i>	The scores are classified into four categories: 5 for Excellent (100), 4 for Very Good (90-99), 3 for Fair (80-89), and not rated for scores below 79.																				
Thai CAC By Thai Private Sector Collective Action Against Corruption (CAC)	The core elements of the Checklist include corruption risk assessment, establishment of key controls, and the monitoring and developing of policies. The Certification is good for three years. <i>(Companies deciding to become a CAC certified member start by submitting a Declaration of Intent to kick off an 18-month deadline to submit the CAC Checklist for Certification, including risk assessment, in place of policy and control, training of managers and employees, establishment of whistleblowing channels, and communication of policies to all stakeholders.)</i>	The document will be reviewed by a committee of nine professionals. A passed Checklist will move for granting certification by the CAC Council approvals whose members are twelve highly respected individuals in professionalism and ethical achievements.																				
Morningstar Sustainabilitys	The Sustainabilitys' ESG risk rating provides an overall company score based on an assessment of how much of a company's exposure to ESG risk is unmanaged. <i>Sources to be reviewed include corporate publications and regulatory filings, news and other media, NGO reports/websites, multi-sector information, company feedback, ESG controversies, issuer feedback on draft ESG reports, and quality & peer reviews.</i>	A company's ESG risk rating score is the sum of unmanaged risk. The more risk is unmanaged, the higher ESG risk is scored. <table><tr><th>NEGL</th><th>Low</th><th>Medium</th><th>High</th><th>Severe</th></tr><tr><td>0-10</td><td>10-20</td><td>20-30</td><td>30-40</td><td>40+</td></tr></table>	NEGL	Low	Medium	High	Severe	0-10	10-20	20-30	30-40	40+										
NEGL	Low	Medium	High	Severe																		
0-10	10-20	20-30	30-40	40+																		
ESG Book	The ESG score identifies sustainable companies that are better positioned to outperform over the long term. The methodology considers the principle of financial materiality including information that significantly helps explain future risk-adjusted performance. Materiality is applied by over-weighting features with higher materiality and rebalancing these weights on a rolling quarterly basis.	The total ESG score is calculated as a weighted sum of the features scores using materiality-based weights. The score is scaled between 0 and 100 with higher scores indicating better performance.																				
MSCI	MSCI ESG ratings aim to measure a company's management of financially relevant ESG risks and opportunities. It uses a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers. <table><tr><td>AAA</td><td>8.571-10.000</td><td rowspan="3">Leader:</td><td rowspan="3">leading its industry in managing the most significant ESG risks and opportunities</td></tr><tr><td>AA</td><td>7.143-8.570</td></tr><tr><td>A</td><td>5.714-7.142</td></tr><tr><td>BBB</td><td>4.286-5.713</td><td rowspan="3">Average:</td><td rowspan="3">a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers</td></tr><tr><td>BB</td><td>2.857-4.285</td></tr><tr><td>B</td><td>1.429-2.856</td></tr><tr><td>CCC</td><td>0.000-1.428</td><td>Laggard:</td><td>lagging its industry based on its high exposure and failure to manage significant ESG risks</td></tr></table>	AAA	8.571-10.000	Leader:	leading its industry in managing the most significant ESG risks and opportunities	AA	7.143-8.570	A	5.714-7.142	BBB	4.286-5.713	Average:	a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers	BB	2.857-4.285	B	1.429-2.856	CCC	0.000-1.428	Laggard:	lagging its industry based on its high exposure and failure to manage significant ESG risks	
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B	1.429-2.856																					
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Moody's ESG solutions	Moody's assesses the degree to which companies take into account ESG objectives in the definition and implementation of their strategy policies. It believes that a company integrating ESG factors into its business model and relatively outperforming its peers is better positioned to mitigate risks and create sustainable value for shareholders over the medium to long term.																					
Refinitiv ESG rating	Designed to transparently and objectively measure a company's relative ESG performance, commitment and effectiveness across 10 main themes, based on publicly available and auditable data. The score ranges from 0 to 100 on relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly. <i>(Score ratings are 0 to 25 = poor; >25 to 50 = satisfactory; >50 to 75 = good; and >75 to 100 = excellent.)</i>																					
S&P Global	The S&P Global ESG Score is a relative score measuring a company's performance on and management of ESG risks, opportunities, and impacts compared to its peers within the same industry classification. The score ranges from 0 to 100.																					
Bloomberg	ESG Score	Bloomberg score evaluating the company's aggregated Environmental, Social and Governance (ESG) performance. The score is based on Bloomberg's view of ESG financial materiality. The score is a weighted generalized mean (power mean) of Pillar Scores, where the weights are determined by the pillar priority ranking. Values range from 0 to 10; 10 is the best.																				
Bloomberg	ESG Disclosure Score	Disclosure of a company's ESG used for Bloomberg ESG score. The score ranges from 0 for none to 100 for disclosure of every data point, measuring the amount of ESG data reported publicly, and not the performance on any data point.																				

[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**"; 2) "**AGM Level**"; 3) "**Thai CAC**"; and 4) **THSI**. The ratings are updated on an annual basis. FSSIA does not confirm nor certify the accuracy of such ratings.

Source: FSSIA's compilation

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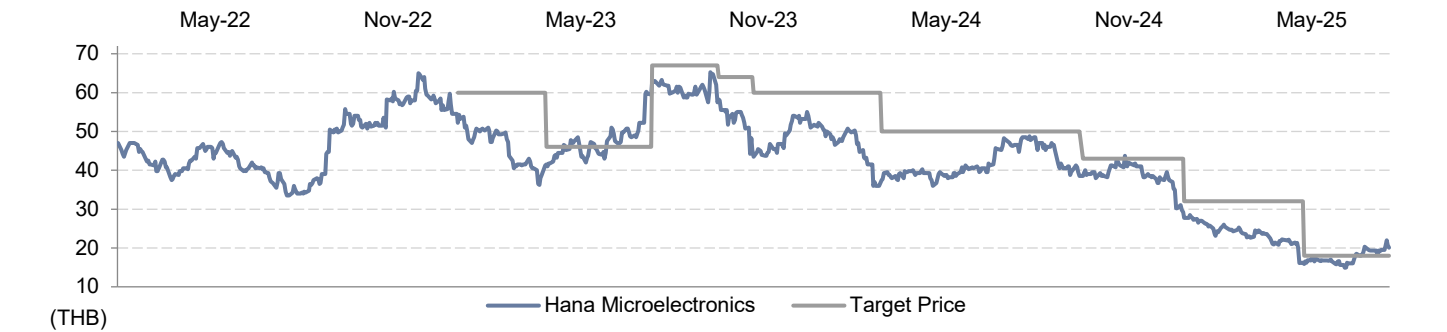
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History of change in investment rating and/or target price

Hana Microelectronics (HANA TB)



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 20.10	HOLD	Downside and upside risks to our P/E-based TP include 1) a slower or faster-than-expected recovery in the global economy and purchasing power, 2) higher or lower-than-expected raw material costs, 3) the Baht strength or weakness, and 4) a higher minimum wage and labor shortages.

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.

All share prices are as at market close on 16-May-2025 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.