

KCE ELECTRONICS

THAILAND / ELECTRONIC COMPONENT

KCE TB**BUY**

UNCHANGED

TARGET PRICE	THB46.00
CLOSE	THB38.25
UP/DOWNSIDE	+20.3%
PRIOR TP	THB50.00
CHANGE IN TP	-8.0%
TP vs CONSENSUS	-6.3%

2H may not be as good as expected

- 3Q24 revenue may only be stable q-q due to the lackluster automotive industry and HDI production capacity constraints.
- We lower our 2024 core profit forecast by 9% to THB2b, with high growth of 31% y-y due to a very low base last year.
- Maintain BUY call, expecting an automotive recovery in 2025.

Purchase orders are still recovering slowly

We have a negative outlook from the latest analyst meeting. Management has given a short-term view indicating that 3Q24 revenue may only remain stable q-q due to a purchasing power slowdown and the lackluster automotive industry, which impacts the revenue of multilayer PCBs. Even though HDI orders are still growing, KCE faces production capacity constraints and is in the process of installing additional machinery to increase HDI production. Therefore, management has revised the 2024 PCB revenue growth target down to 2-3% y-y from the previous 4-7% y-y (1H24 PCB revenue was at -3.6% y-y).

3Q24 core profit may be flat q-q, lower than previously anticipated

The gross margin in 2Q24 increased to 24.8% from 23.1% in 1Q24 due to the weaker baht and cost-savings. We expect that the 2H24 gross margin might weaken from 2Q24, even though the in-house chemical production remains beneficial. We anticipate that this cannot fully offset the negative effects as the baht begins to strengthen again and copper prices rise. We now expect 3Q24 core profit to remain stable q-q at THB525m (but grow 11.6% y-y due to the low base last year), which is lower than our previous expectation of good q-q growth.

Revising down 2024 core profit

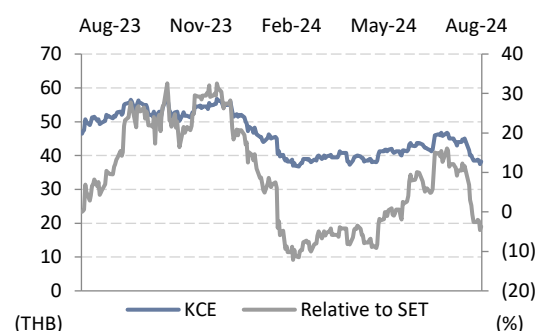
We lower our 2024 core profit forecast by 9% to THB2b, with high growth of 31% y-y due to a very low base last year. This revision includes a revenue decline of -5% y-y (from +0.9% y-y previously) and a reduction in the gross margin to 24.1% from the previous estimate of 24.6%. The plan to expand the factory in Rojana remains unchanged, with construction expected to begin in late 2024 and commercial operations anticipated in 2026. We believe this is good timing for adding new production capacity to support the automotive industry's recovery. This will be a line for producing HDI, accounting for about 50% of the new production capacity.

Expect next year to be brighter

Similarly, we cut our 2024 target price to THB46 from THB50, based on the same P/E of 25x, with a 20% upside potential. KCE announced a dividend of THB0.6 per share for 1H24, yielding 1.6%. We expect the automotive industry to improve in 2025, and maintain our BUY recommendation.

KEY STOCK DATA

YE Dec (THB m)	2023	2024E	2025E	2026E
Revenue	16,344	15,530	16,721	18,845
Net profit	1,720	2,200	2,335	2,666
EPS (THB)	1.45	1.86	1.97	2.26
vs Consensus (%)	-	1.5	(3.6)	1.2
EBITDA	2,944	3,485	3,950	4,431
Recurring net profit	1,569	2,059	2,335	2,666
Core EPS (THB)	1.33	1.74	1.97	2.26
Chg. In EPS est. (%)	-	(9.1)	(7.5)	(2.2)
EPS growth (%)	(31.2)	31.2	13.4	14.2
Core P/E (x)	28.8	22.0	19.4	17.0
Dividend yield (%)	2.9	3.7	3.9	4.4
EV/EBITDA (x)	15.5	13.1	11.9	10.8
Price/book (x)	3.3	3.2	3.1	2.9
Net debt/Equity (%)	3.6	1.6	11.2	15.7
ROE (%)	11.6	14.7	16.1	17.6



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(18.2)	(7.3)	(19.0)
Relative to country (%)	(17.0)	(2.0)	(5.6)
Mkt cap (USD m)	1,292		
3m avg. daily turnover (USD m)	12.7		
Free float (%)	0		
Major shareholder	Ongkosit Group (34%)		
12m high/low (THB)	57.50/36.50		
Issued shares (m)	1,182.06		

Sources: Bloomberg consensus; FSSIA estimates

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Investment thesis

We have a negative outlook from latest analyst meeting. Management has given a short-term view indicating that 3Q24 revenue may only remain stable q-q due to a purchasing power slowdown and a lackluster automotive industry. Therefore, management has revised the 2024 PCB revenue growth target down to 2-3% y-y from the previous 4-7% y-y (1H24 PCB revenue: -3.6% y-y).

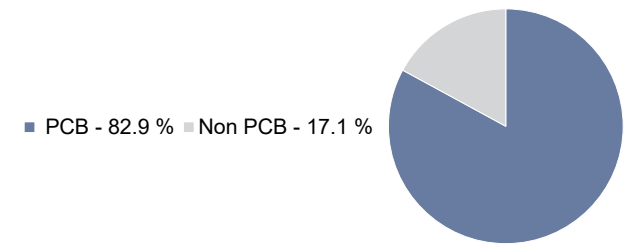
The plan to expand the factory in Rojana remains unchanged, with construction expected to begin in late 2024 and commercial operations anticipated in 2026. We believe this is good timing for adding new production capacity to support the automotive industry's recovery. This will be a line for producing HDI, accounting for about 50% of the new production capacity.

Company profile

KCE produces and distributes printed circuit boards (PCB). Its key customer base comes from manufacturers of automotive electronic equipment, which accounted for 70% of total revenue in 2023. In particular, KCE is a supplier to the fast-growing electric vehicle (EV) market. Its crucial export markets include Europe (49.4% of total revenue in 2023), followed by the US (22.9%), China (12.6%), and Asia (5.1%), with Thailand representing 10.1%.

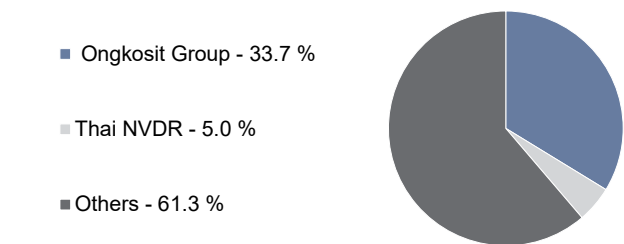
www.kcethai.in.th

Principal activities (revenue, 2023)



Source: KCE Electronics

Major shareholders



Source: KCE Electronics

Catalysts

Potential catalysts for KCE's earnings growth in 2024 include 1) a global economic recovery and faster global auto sales recovery than expected; 2) a decline in raw material prices; 3) higher production efficiency due to an increased utilization rate; and 4) successful capacity expansion as planned.

Risks to our call

Downside risks to our P/E-based TP include 1) slower-than-expected global economic and car sales recoveries; 2) lower-than-expected decrease in raw material costs; 3) a weaker-than-expected THB; and 4) a minimum wage increase or a labor shortage.

Event calendar

Date	Event
November 2024	3Q24 results announcement

Key assumptions

	2024E	2025E	2026E
Sales volume (m sq.ft.)	28.4	31.3	35.1
ASP (USD per sq.ft.)	13.5	13.6	13.8
Total revenue (USD m)	440	492	554
Gross margin (%)	24.1	24.8	25.0

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in USD revenue, we estimate 2024 net profit to rise by 0.9%, and vice versa, all else being equal.
- For every THB1/USD increase, we estimate 2024 net profit to fall by 6.5%, and vice versa, all else being equal.
- For every 0.5% increase in GPM, we estimate 2024 net profit to rise by 3.4%, and vice versa, all else being equal.
- For every 0.2% increase in SG&A to sales, we estimate 2024 net profit to fall by 1.8%, and vice versa, all else being equal.

Source: FSSIA estimates

Exhibit 1: KCE – 3Q24 earnings preview

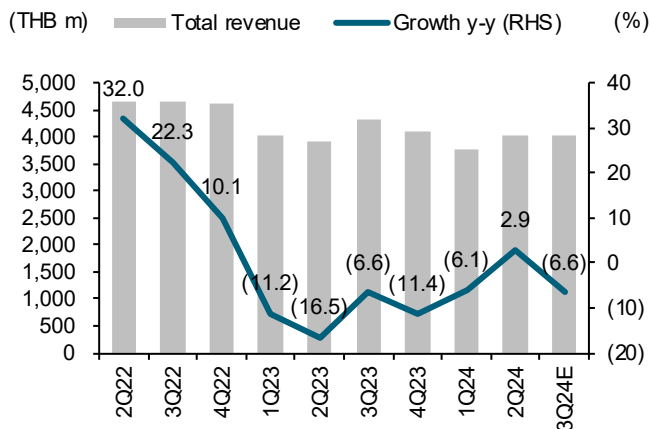
	3Q23	4Q23	1Q24	2Q24	3Q24E	----- Change -----		9M24E	Change	2024E	% 9M24E
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(y-y%)	(THB m)	to 2024E
Sales	4,326	4,095	3,780	4,012	4,040	0.7	(6.6)	11,832	(3.4)	15,530	76.2
Cost of sales	3,375	3,177	2,906	3,018	3,070	1.7	(9.0)	8,994	(7.9)	11,788	76.3
Gross profit	951	917	874	994	970	(2.5)	2.0	2,838	14.2	3,743	75.8
SG&A	458	420	422	461	452	(1.8)	(1.2)	1,335	(1.4)	1,677	79.6
Operating profit	493	497	452	533	517	(3.0)	4.9	1,503	32.7	2,066	72.7
Interest expense	27	24	15	18	18	1.0	(34.2)	50	(36.9)	64	79.2
Tax expense	33	49	64	28	22	(20.9)	(33.7)	114	38.9	132	86.7
Other gain (Loss)	49	14	95	107	0	nm	nm	201	47.8	141	142.7
Reported net profit	520	478	515	635	525	(17.3)	1.1	1,675	35.0	2,200	76.1
Core profit	471	464	421	528	525	(0.7)	11.6	1,474	33.4	2,059	71.6

Key ratios (%)						(ppt)	(ppt)				
Gross margin	22.0	22.4	23.1	24.8	24.0	(0.8)	2.0	24.0	3.7	24.1	
SG&A to Sales	10.6	10.3	11.2	11.5	11.2	(0.3)	0.6	11.3	0.2	10.8	
Operating margin	11.4	12.1	12.0	13.3	12.8	(0.5)	1.4	12.7	3.5	13.3	
Net margin	12.0	11.7	13.6	15.8	13.0	(2.8)	1.0	14.2	4.0	14.2	
Core margin	10.9	11.3	11.1	13.2	13.0	(0.2)	2.1	12.5	3.4	13.3	

Operating statistics (USD m)											
PCB sales	102	94	94	95	95	0.3	(7.2)	284	(4.8)	383	74.2
Non-PCB sales	21	21	12	15	15	(0.1)	(29.7)	42	(27.9)	57	73.6
Total sales	124	115	106	110	110	0.3	(11.1)	326	(8.6)	440	74.1

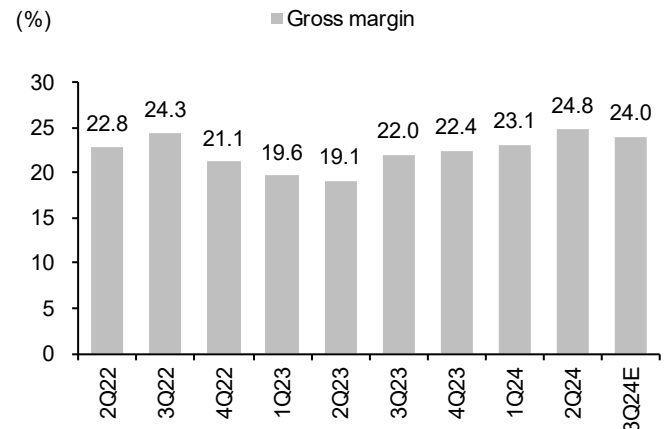
Sources: KCE, FSSIA estimates

Exhibit 2: Quarterly total revenue and growth



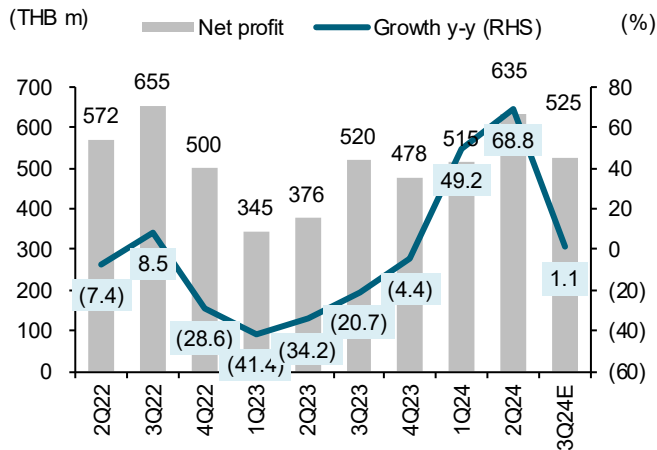
Sources: KCE, FSSIA estimates

Exhibit 3: Quarterly gross margin



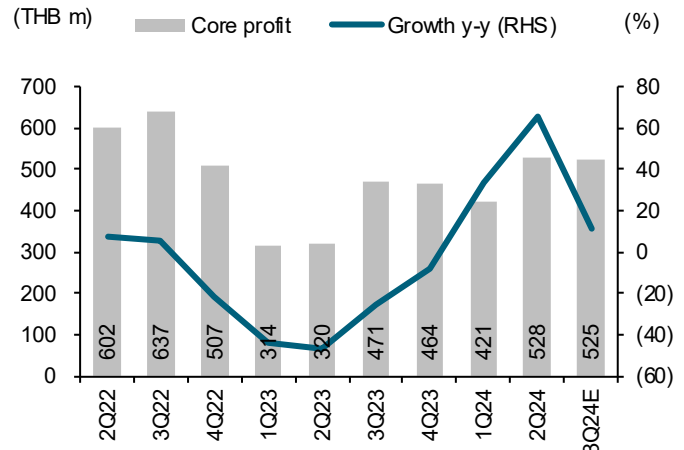
Sources: KCE, FSSIA estimates

Exhibit 4: Quarterly net profit and growth



Sources: KCE, FSSIA estimates

Exhibit 5: Quarterly core profit and growth



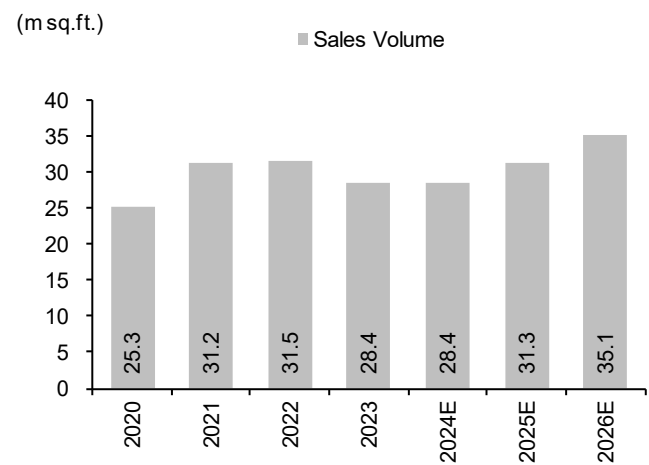
Sources: KCE, FSSIA estimates

Exhibit 6: Changes in key assumptions for KCE

	Current			Previous			Change		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(%)	(%)	(%)
Total sales value (THB m)	15,530	16,721	18,845	16,483	18,214	19,707	(5.8)	(8.2)	(4.4)
Costs	11,788	12,574	14,134	12,428	13,697	14,820	(5.2)	(8.2)	(4.6)
Gross profit	3,743	4,147	4,711	4,055	4,517	4,887	(7.7)	(8.2)	(3.6)
SG&A expense	1,677	1,806	2,035	1,780	1,967	2,128	(5.8)	(8.2)	(4.4)
Interest expense	64	104	117	64	104	117	0.0	0.0	0.0
Reported net profit	2,200	2,335	2,666	2,381	2,524	2,725	(7.6)	(7.5)	(2.2)
Core profit	2,059	2,335	2,666	2,266	2,524	2,725	(9.1)	(7.5)	(2.2)
Key ratios (%)									
Total revenue growth	(5.0)	7.7	12.7	0.9	10.5	8.2			
Net profit growth	28.0	6.1	14.2	38.5	6.0	8.0			
Core profit growth	31.2	13.4	14.2	44.4	11.4	8.0			
Gross margin	24.1	24.8	25.0	24.6	24.8	24.8	(0.5)	0.0	0.2
SG&A to sales	10.8	10.8	10.8	10.8	10.8	10.8	0.0	0.0	0.0
Net margin	14.2	14.0	14.1	14.4	13.9	13.8	(0.3)	0.1	0.3
Core margin	13.3	14.0	14.1	13.7	13.9	13.8	(0.5)	0.1	0.3
Operating statistics (THB m)									
Sales volume (m sq.ft.)	28.4	31.3	35.1	30.1	33.2	35.8	(5.6)	(5.6)	(1.9)
ASP (USD per sq.ft.)	13.5	13.6	13.8	13.9	14.0	14.2	(3.0)	(3.0)	(3.0)
Total revenue (USD m)	440.0	491.8	554.3	499.5	552	597.2	(11.9)	(10.9)	(7.2)
FX rate (THB/USD)	35.3	34.0	34.0	33.0	33.0	33.0	7.0	3.0	3.0

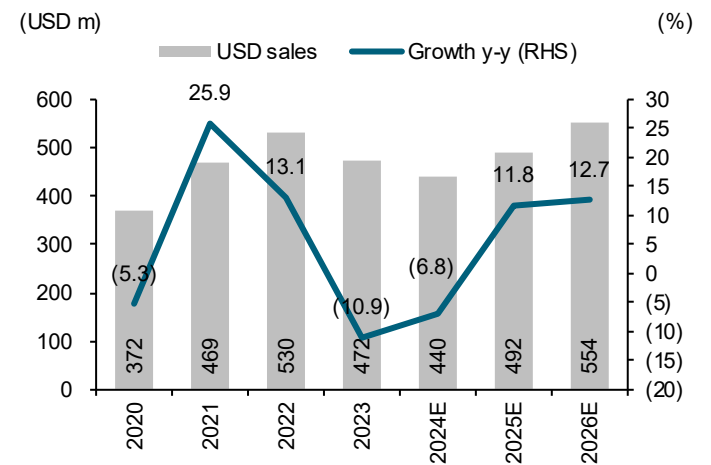
Sources: KCE, FSSIA estimates

Exhibit 7: Yearly sales volume



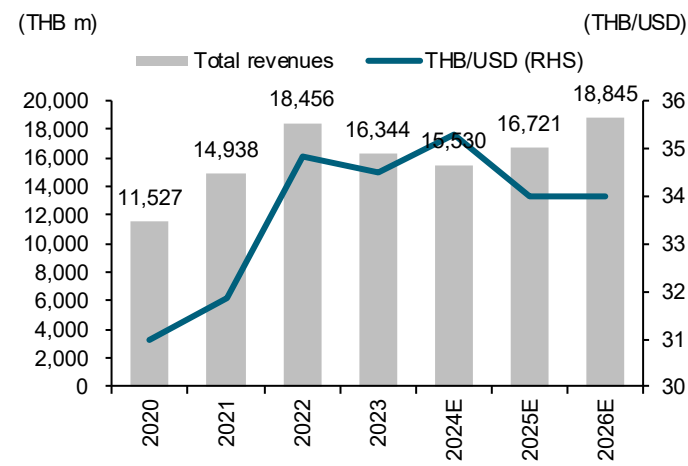
Sources: KCE, FSSIA estimates

Exhibit 8: Yearly USD sales and growth



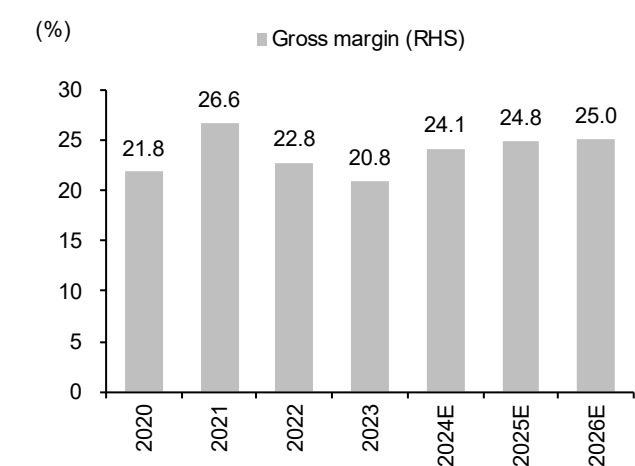
Sources: KCE, FSSIA estimates

Exhibit 9: Yearly total revenue and THB/USD assumption



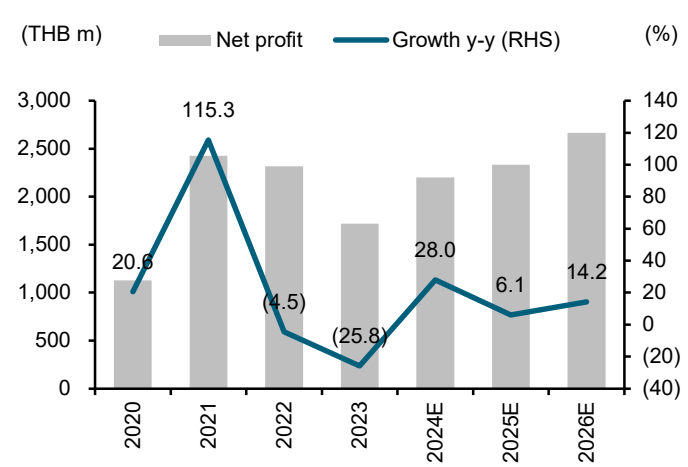
Sources: KCE, FSSIA estimates

Exhibit 10: Yearly gross margin



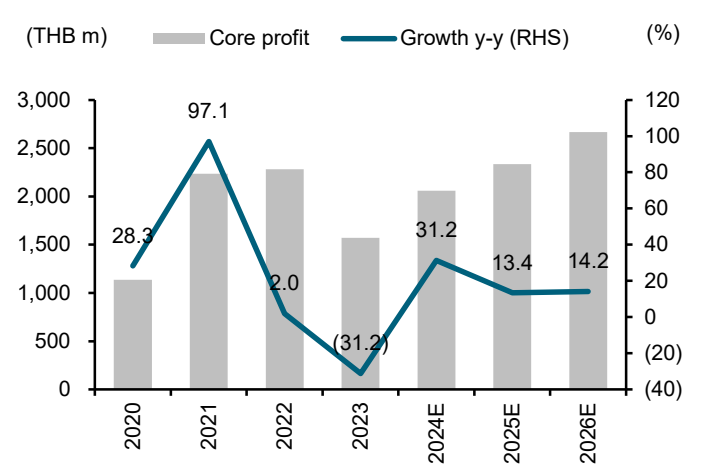
Sources: KCE, FSSIA estimates

Exhibit 11: Yearly net profit and growth



Sources: KCE, FSSIA estimates

Exhibit 12: Yearly core profit and growth



Sources: KCE, FSSIA estimates

Exhibit 13: Historical P/E band



Sources: Bloomberg; FSSIA estimates

Exhibit 14: Historical P/BV band



Sources: Bloomberg; FSSIA estimates

Exhibit 15: Peer comparisons as of 16 Aug 2024

Company	BBG	Rec	Share price			Market Cap	PE		ROE		PBV		EV/EBITDA	
			Current	Target	Upside		24E	25E	24E	25E	24E	25E	24E	25E
			(LCY)	(LCY)	(%)		(USD m)	(x)	(x)	(%)	(%)	(x)	(x)	(x)
Thailand														
Delta Electronics (Thailand)*	DELTA TB	HOLD	104.00	110.00	6	37,071	64.2	47.6	27.9	32.3	16.8	14.2	49.8	38.5
KCE Electronics*	KCE TB	BUY	38.25	46.00	20	1,292	22.0	19.4	14.7	16.1	3.2	3.1	13.1	11.9
Hana Microelectronics*	HANA TB	BUY	39.50	50.00	27	999	16.0	14.3	7.4	7.9	1.2	1.1	6.8	6.1
SVI	SVI TB	n/a	8.40	n/a	n/a	520	13.0	12.8	19.8	16.6	2.3	2.0	10.3	10.3
Cal-Comp Electronics	CCET TB	n/a	3.54	n/a	n/a	1,064	15.4	13.6	8.9	9.9	1.4	1.3	n/a	n/a
Stars Microelectronics	SMT TB	n/a	1.23	n/a	n/a	29	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Thailand average						40,977	26.1	21.5	15.8	16.6	5.0	4.3	20.0	16.7
Regional														
Taiwan Semiconductor	2330 TT	n/a	969.00	n/a	n/a	778,322	23.1	18.2	27.5	28.4	5.9	4.8	12.8	10.3
STMicroelectronics	STMPA FP	n/a	27.79	n/a	n/a	27,862	18.2	13.3	9.0	11.9	1.6	1.4	7.4	5.8
ROHM	6963 JP	n/a	1,705.00	n/a	n/a	4,755	13.7	31.5	5.1	2.0	0.7	0.7	6.5	7.4
Infineon	IFX GR	n/a	31.60	n/a	n/a	45,410	17.2	14.8	12.4	13.9	2.3	2.0	10.0	8.3
Mitsubishi Electric	6503 JP	n/a	2,461.50	n/a	n/a	34,796	19.2	16.3	8.1	8.1	1.5	1.3	8.9	8.0
On Semiconductor	ON US	n/a	75.84	n/a	n/a	32,487	18.9	15.8	19.6	20.1	3.5	3.0	12.8	10.9
SMIC	688981 CH	n/a	49.46	n/a	n/a	26,915	93.3	70.8	2.8	3.5	2.7	2.6	12.3	10.1
Regional average						950,548	29.1	25.8	12.1	12.6	2.6	2.3	10.1	8.7
Overall average						991,525	27.8	24.0	13.6	14.2	3.6	3.1	13.7	11.6

Sources: Bloomberg; *FSSIA estimates

Financial Statements

KCE Electronics

Profit and Loss (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Revenue	18,456	16,344	15,530	16,721	18,845
Cost of goods sold	(14,254)	(12,941)	(11,788)	(12,574)	(14,134)
Gross profit	4,202	3,403	3,743	4,147	4,711
Other operating income	224	190	194	201	226
Operating costs	(1,919)	(1,774)	(1,677)	(1,806)	(2,035)
Operating EBITDA	3,622	2,944	3,485	3,950	4,431
Depreciation	(1,114)	(1,126)	(1,226)	(1,409)	(1,529)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	2,508	1,818	2,260	2,542	2,902
Net financing costs	(72)	(104)	(64)	(104)	(117)
Associates	19	14	19	19	21
Recurring non-operating income	19	14	19	19	21
Non-recurring items	36	150	141	0	0
Profit before tax	2,490	1,879	2,356	2,457	2,806
Tax	(144)	(131)	(132)	(98)	(111)
Profit after tax	2,347	1,747	2,224	2,360	2,694
Minority interests	(29)	(28)	(23)	(25)	(28)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	2,317	1,720	2,200	2,335	2,666
Non-recurring items & goodwill (net)	(36)	(150)	(141)	0	0
Recurring net profit	2,281	1,569	2,059	2,335	2,666
Per share (THB)					
Recurring EPS *	1.93	1.33	1.74	1.97	2.26
Reported EPS	1.96	1.45	1.86	1.97	2.26
DPS	1.60	1.11	1.40	1.48	1.69
Diluted shares (used to calculate per share data)	1,182	1,182	1,182	1,182	1,182
Growth					
Revenue (%)	23.6	(11.4)	(5.0)	7.7	12.7
Operating EBITDA (%)	1.8	(18.7)	18.4	13.3	12.2
Operating EBIT (%)	(0.5)	(27.5)	24.3	12.5	14.2
Recurring EPS (%)	1.6	(31.2)	31.2	13.4	14.2
Reported EPS (%)	(4.8)	(25.8)	28.0	6.1	14.2
Operating performance					
Gross margin inc. depreciation (%)	22.8	20.8	24.1	24.8	25.0
Gross margin exc. depreciation (%)	28.8	27.7	32.0	33.2	33.1
Operating EBITDA margin (%)	19.6	18.0	22.4	23.6	23.5
Operating EBIT margin (%)	13.6	11.1	14.6	15.2	15.4
Net margin (%)	12.4	9.6	13.3	14.0	14.1
Effective tax rate (%)	5.8	7.0	5.6	4.0	4.0
Dividend payout on recurring profit (%)	82.9	83.3	80.1	75.0	75.0
Interest cover (X)	35.0	17.7	35.8	24.7	24.9
Inventory days	135.4	134.4	121.3	109.1	105.9
Debtor days	91.9	103.6	101.5	93.9	89.6
Creditor days	104.1	92.3	91.8	92.9	95.3
Operating ROIC (%)	13.4	10.0	13.1	13.6	13.9
ROIC (%)	12.6	9.4	12.4	12.9	13.3
ROE (%)	17.0	11.6	14.7	16.1	17.6
ROA (%)	11.0	8.4	11.1	12.0	12.6

* Pre-exceptional, pre-goodwill and fully diluted

Revenue by Division (THB m)	2022	2023	2024E	2025E	2026E
PCB	15,134	13,554	13,522	14,495	16,397
Non PCB	3,323	2,790	2,009	2,225	2,448

Sources: KCE Electronics; FSSIA estimates

Financial Statements

KCE Electronics

Cash Flow (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Recurring net profit	2,281	1,569	2,059	2,335	2,666
Depreciation	1,114	1,126	1,226	1,409	1,529
Associates & minorities	-	-	-	-	-
Other non-cash items	(19)	(14)	(19)	(19)	(21)
Change in working capital	(1,186)	832	528	330	(571)
Cash flow from operations	2,191	3,513	3,795	4,054	3,603
Capex - maintenance	-	-	-	-	-
Capex - new investment	(993)	(402)	(2,000)	(3,660)	(2,400)
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	121	76	13	(8)	(15)
Cash flow from investing	(872)	(325)	(1,987)	(3,668)	(2,415)
Dividends paid	(2,322)	(1,419)	(1,650)	(1,751)	(1,999)
Equity finance	10	4	0	0	0
Debt finance	173	(1,150)	(32)	769	422
Other financing cash flows	(2)	(1)	(1)	(1)	(1)
Cash flow from financing	(2,141)	(2,566)	(1,683)	(983)	(1,579)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(821)	622	125	(598)	(391)
Free cash flow to firm (FCFF)	1,391.42	3,291.81	1,871.53	488.88	1,305.12
Free cash flow to equity (FCFE)	1,490.66	2,036.57	1,775.10	1,152.73	1,608.49

Per share (THB)

FCFF per share	1.18	2.78	1.58	0.41	1.10
FCFE per share	1.26	1.72	1.50	0.98	1.36
Recurring cash flow per share	2.86	2.27	2.76	3.15	3.53

Balance Sheet (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Tangible fixed assets (gross)	19,658	18,912	20,912	24,572	26,972
Less: Accumulated depreciation	(10,779)	(10,758)	(11,984)	(13,392)	(14,921)
Tangible fixed assets (net)	8,878	8,154	8,928	11,180	12,051
Intangible fixed assets (net)	323	284	284	284	284
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	575	554	554	554	554
Cash & equivalents	1,145	1,767	1,891	1,293	902
A/C receivable	4,900	4,379	4,255	4,352	4,905
Inventories	4,908	3,793	3,229	3,445	3,872
Other current assets	127	141	140	150	170
Current assets	11,079	10,079	9,516	9,241	9,849
Other assets	138	122	109	117	132
Total assets	20,993	19,193	19,391	21,376	22,870
Common equity	13,389	13,689	14,239	14,822	15,489
Minorities etc.	56	61	60	58	57
Total shareholders' equity	13,445	13,749	14,298	14,881	15,546
Long term debt	910	515	525	1,058	1,350
Other long-term liabilities	395	367	311	351	396
Long-term liabilities	1,305	882	836	1,409	1,746
A/C payable	3,249	2,728	2,584	3,100	3,485
Short term debt	2,915	1,748	1,596	1,902	1,999
Other current liabilities	80	85	78	84	94
Current liabilities	6,244	4,562	4,257	5,086	5,579
Total liabilities and shareholders' equity	20,993	19,193	19,391	21,376	22,870
Net working capital	6,606	5,499	4,963	4,763	5,367
Invested capital	16,520	14,613	14,838	16,898	18,389

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

Per share (THB)

Book value per share	11.33	11.58	12.05	12.54	13.10
Tangible book value per share	11.06	11.34	11.81	12.30	12.86

Financial strength

Net debt/equity (%)	19.9	3.6	1.6	11.2	15.7
Net debt/total assets (%)	12.8	2.6	1.2	7.8	10.7
Current ratio (x)	1.8	2.2	2.2	1.8	1.8
CF interest cover (x)	35.5	24.5	60.3	47.5	35.2

Valuation	2022	2023	2024E	2025E	2026E
Recurring P/E (x) *	19.8	28.8	22.0	19.4	17.0
Recurring P/E @ target price (x) *	23.8	34.6	26.4	23.3	20.4
Reported P/E (x)	19.5	26.3	20.5	19.4	17.0
Dividend yield (%)	4.2	2.9	3.7	3.9	4.4
Price/book (x)	3.4	3.3	3.2	3.1	2.9
Price/tangible book (x)	3.5	3.4	3.2	3.1	3.0
EV/EBITDA (x) **	13.2	15.5	13.1	11.9	10.8
EV/EBITDA @ target price (x) **	15.8	18.7	15.7	14.2	12.8
EV/invested capital (x)	2.9	3.1	3.1	2.8	2.6

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

Sources: KCE Electronics; FSSIA estimates

KCE Electronics PCL (KCE TB)

FSSIA ESG rating


45.77 /100

Exhibit 16: 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 17: ESG – peer comparison

	FSSIA	Domestic ratings						Global ratings					Bloomberg		
	ESG score	DJSI	SET THSI	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 18: ESG score by Bloomberg

FY ending Dec 31	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
ESG financial materiality scores - ESG score	1.34	1.35	1.35	1.36	1.37	1.70	2.06	2.16
BESG environmental pillar score	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
BESG social pillar score	0.80	0.80	0.80	0.80	0.80	1.44	1.45	1.58
BESG governance pillar score	4.64	4.67	4.67	4.77	4.83	4.83	4.71	4.90
ESG disclosure score	40.30	41.69	40.30	40.64	46.82	53.50	54.91	52.98
Environmental disclosure score	19.21	19.21	19.21	19.21	33.59	49.50	53.76	52.13
Social disclosure score	20.44	24.61	20.44	21.46	25.63	29.78	29.78	25.60
Governance disclosure score	81.10	81.10	81.10	81.10	81.10	81.10	81.10	81.10
Environmental								
Emissions reduction initiatives	No	No	No	No	No	No	No	Yes
Climate change policy	No	No	No	No	No	No	No	No
Climate change opportunities discussed	No	No	No	No	No	No	No	No
Risks of climate change discussed	No	No	No	No	No	No	No	No
GHG scope 1	—	—	—	—	—	—	3	3
GHG scope 2 location-based	—	—	—	—	—	—	64	70
GHG Scope 3	—	—	—	—	—	—	—	—
Carbon per unit of production	—	—	—	—	—	—	4	4
Biodiversity policy	No	No	No	No	No	No	No	No
Energy efficiency policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total energy consumption	—	—	—	—	—	121	152	163
Renewable energy use	—	—	—	—	—	1	2	4
Electricity used	—	—	—	—	—	112	140	152
Fuel used - natural gas	—	—	—	—	—	850	1,100	1,130

Sources: Bloomberg; FSSIA's compilation

Exhibit 19: ESG score by Bloomberg (cont.)

FY ending Dec 31	FY 2015	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	No
Waste reduction policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hazardous waste	6	8	9	12	8	3	5	—
Total waste	7	11	13	15	12	13	17	20
Waste recycled	—	—	—	—	—	11	15	16
Waste sent to landfills	—	—	—	—	—	2	3	3
Environmental supply chain management	No	No	No	No	Yes	Yes	Yes	Yes
Water policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	—	—	—	1,650	2,232	2,612
Social								
Human rights policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Policy against child labor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quality assurance and recall policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consumer data protection policy	No	No	No	Yes	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	No	No	No	No	No
Pct women in workforce	—	—	—	—	—	52	46	52
Pct disabled in workforce	—	—	—	—	—	—	—	—
Business ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anti-bribery ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health and safety policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lost time incident rate - employees	—	—	—	—	—	—	—	1
Total recordable incident rate - employees	3	1	1	1	1	1	1	—
Training policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fair remuneration policy	No	No	No	No	No	No	No	No
Number of employees – CSR	2,388	2,696	1,021	1,042	1,019	984	974	1,049
Employee turnover pct	—	—	—	—	—	11	10	11
Total hours spent by firm - employee training	176,855	198,156	187,310	229,906	83,545	33,247	44,164	67,795
Social supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Governance								
Board size	9	9	9	9	9	9	9	9
No. of independent directors (ID)	3	3	3	3	3	3	3	3
No. of women on board	4	3	3	3	3	3	3	3
No. of non-executive directors on board	6	6	6	6	6	6	6	6
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	12	12	12	12	12	13	12	12
Board meeting attendance pct	99	97	97	94	95	96	99	99
Board duration (years)	3	3	3	3	3	3	3	3
Director share ownership guidelines	No	No	No	No	No	No	No	No
Age of the youngest director	35	36	37	38	39	40	41	42
Age of the oldest director	78	79	80	81	82	74	75	76
No. of executives / company managers	9	9	10	10	10	10	10	11
No. of female executives	2	2	2	3	3	3	3	3
Executive share ownership guidelines	No	No	No	No	No	No	No	No
Size of audit committee	3	3	3	3	3	3	3	3
No. of ID on audit committee	3	3	3	3	3	3	3	3
Audit committee meetings	4	4	5	5	6	5	4	5
Audit meeting attendance %	100	92	100	100	83	100	75	93
Size of compensation committee	3	3	3	3	3	3	3	3
No. of ID on compensation committee	2	2	2	2	2	2	2	2
No. of compensation committee meetings	2	2	2	2	3	2	3	1
Compensation meeting attendance %	100	100	100	83	89	100	100	100
Size of nomination committee	3	3	3	3	3	3	3	3
No. of nomination committee meetings	2	2	2	2	3	2	3	1
Nomination meeting attendance %	100	100	100	83	89	100	100	100
Sustainability governance								
Verification type	No	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.																				
Sustainability Investment List (THSI) by The Stock Exchange of Thailand (SET)	THSI 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 THSI 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. SETTHSI Index is extended from the THSI 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 Sustainability	The Sustainability's 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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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																			
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

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Sureporn Teewasuwet FSS International Investment Advisory Securities Co., Ltd

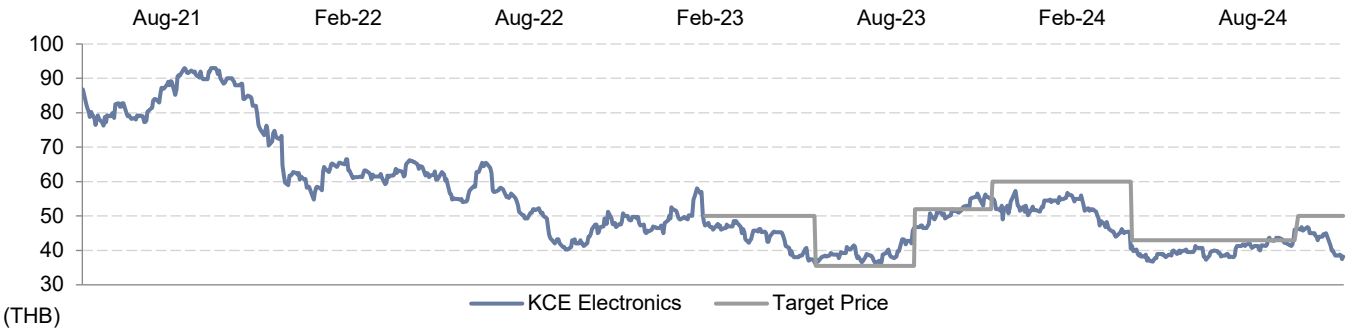
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

KCE Electronics (KCE TB)



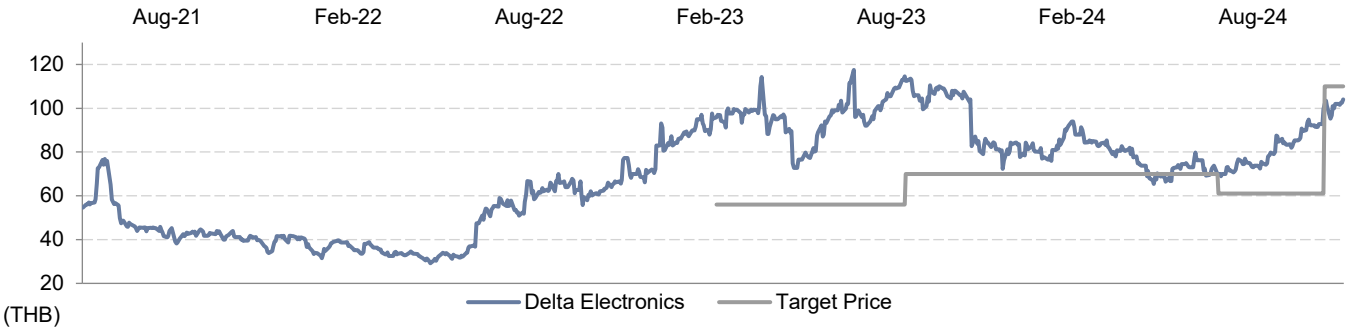
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Feb-2023	HOLD	50.00	10-Aug-2023	BUY	52.00	14-Feb-2024	HOLD	43.00
16-May-2023	HOLD	35.50	16-Oct-2023	HOLD	60.00	05-Jul-2024	BUY	50.00

Sureporn Teewasuwet started covering this stock from 09-Feb-2023

Price and TP are in local currency

Source: FSSIA estimates

Delta Electronics (DELTA TB)



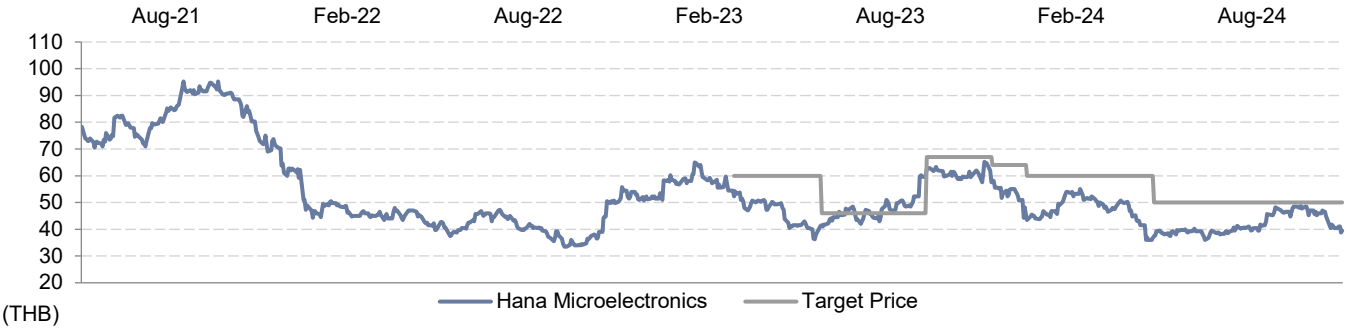
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
17-Feb-2023	REDUCE	56.00	29-Apr-2024	REDUCE	61.00	-	-	-
02-Aug-2023	REDUCE	70.00	30-Jul-2024	HOLD	110.00			

Sureporn Teewasuwet started covering this stock from 17-Feb-2023

Price and TP are in local currency

Source: FSSIA estimates

Hana Microelectronics (HANA TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
07-Mar-2023	HOLD	60.00	21-Aug-2023	BUY	67.00	16-Nov-2023	BUY	60.00
22-May-2023	BUY	46.00	17-Oct-2023	BUY	64.00	05-Mar-2024	BUY	50.00

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
KCE Electronics	KCE TB	THB 38.25	BUY	Downside risks to our P/E-based TP include 1) slower-than-expected global economic and car sales recoveries; 2) lower-than-expected decrease in raw material costs; 3) a weaker-than-expected THB; and 4) a minimum wage increase or a labor shortage.
Delta Electronics	DELTA TB	THB 104.00	HOLD	Downside and upside risks to our P/E-based TP include 1) lower or higher-than-expected global EV sales growth; 2) a sooner or later-than-expected decrease in raw material costs; and 3) a stronger or weaker-than-expected THB.
Hana Microelectronics	HANA TB	THB 39.50	BUY	Downside risks to our P/E-based TP include 1) a slower-than-expected recovery in the global economy and purchasing power, 2) higher-than-expected raw material costs, 3) Baht strength, and 4) 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-Aug-2024 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / 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.