

DELTA ELECTRONICS

THAILAND / ELECTRONIC COMPONENT

DELTA TB

REDUCE

UNCHANGED

TARGET PRICE	THB61.00
CLOSE	THB73.75
UP/DOWNSIDE	-17.3%
PRIOR TP	THB70.00
CHANGE IN TP	-12.9%
TP vs CONSENSUS	-15.0%

More cautious short-term view

- 1Q24 profit missed our estimate due to one significant expense.
- DELTA started to tone down EV production capacity this year after its EU customers had high inventory levels.
- Cut 2024E profit by 11% to reflect substantial recurring fees paid to Delta Taiwan.

We are disappointed with the 1Q24 performance

DELTA reported a 1Q24 net profit of THB4.3b (-8.6% q-q, +19% y-y), missing our estimate by 7%. Excluding an FX gain of THB230m and compensation for contract decommitment of THB277m, the normalized earnings were equal to THB3.8b (-11% q-q, +10% y-y). Despite total revenue growth of 2.9% q-q and 12.4% y-y to USD1.05b, DELTA continued to face sizable recurring expenses. To elaborate, SG&A-to-sales remained high at 11.2% due mainly to technical service fees of THB920m paid to Delta Taiwan. In addition, DELTA recorded an inventory provision of THB797m, resulting in a lower gross margin of 21% from 24.5% in 4Q23.

Expect EV and data center orders to rebound in 2H24

We have a negative view of the analyst meeting on 29 Apr 2024. DELTA toned down its EV production expansion target to +30-40% from +40-60% due to slower-than-expected orders from EU customers, which had high inventory levels. Also, the 1Q24 data center revenue declined both q-q and y-y, driven by the non-AI segment, while AI-related revenue grew sharply due to low base effect and high demand. However, DELTA guided that EV and data center orders should rebound in 2H24. Hence, it maintains its 2024 revenue growth target at 10-20% y-y and gross margin at 22-23%.

Continued burden from substantial recurring fees

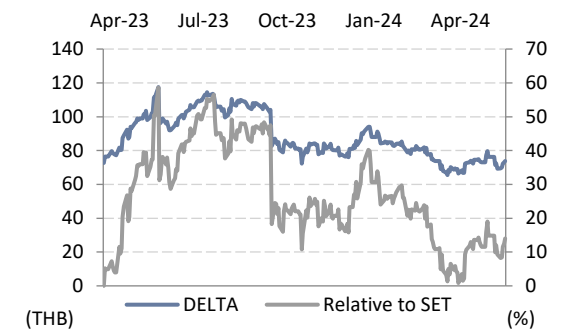
However, AI revenue relies on technology from Delta Taiwan, resulting in royalty fees (c5-8%) and technical service fees, which DELTA paid THB920m in 1Q24 and may have to pay THB900m per quarter for the rest of this year, totaling THB3.6b or 17% of our full-year net profit. DELTA did not disclose the method to calculate technical service fees but stated that despite the high expenses, the business is still profitable and may require more time for the AI business to scale.

Cut 2024E net profit growth to only 4%

We have cut our 2024-26E net profit by 10-14% to reflect high expenses. It now implies a modest growth of 4% to THB19.1b in 2024. Similarly, we have decreased our TP to THB61 from THB70, with the same PE of 40x. Finally, we keep our REDUCE call unchanged.

KEY STOCK DATA

YE Dec (THB m)	2023	2024E	2025E	2026E
Revenue	146,371	166,307	186,514	204,363
Net profit	18,423	19,157	21,931	24,809
EPS (THB)	1.48	1.54	1.76	1.99
vs Consensus (%)	-	(5.9)	(6.1)	(7.2)
EBITDA	22,992	24,959	28,266	30,961
Recurring net profit	17,201	19,157	21,931	24,809
Core EPS (THB)	1.38	1.54	1.76	1.99
Chg. In EPS est. (%)	-	(10.5)	(11.5)	(14.0)
EPS growth (%)	18.1	11.4	14.5	13.1
Core P/E (x)	53.5	48.0	41.9	37.1
Dividend yield (%)	0.6	0.6	0.7	1.3
EV/EBITDA (x)	39.8	36.5	32.2	29.3
Price/book (x)	13.6	11.5	9.7	8.6
Net debt/Equity (%)	(6.0)	(11.0)	(11.5)	(12.2)
ROE (%)	28.1	26.0	25.1	24.5



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(0.3)	(10.1)	(17.7)
Relative to country (%)	0.9	(9.5)	(6.6)
Mkt cap (USD m)	24,890		
3m avg. daily turnover (USD m)	25.8		
Free float (%)	0		
Major shareholder Delta Electronics International (Singapore) Pte Ltd (43%)			
12m high/low (THB)	119.50/63.25		
Issued shares (m)	12,473.82		

Sources: Bloomberg consensus; FSSIA estimates



Sureeporn Teewasuwet

Fundamental Investment Analyst on Securities; License no. 040694
sureeporn.t@fssia.com, +66 2646 9972

Investment thesis

We have a bullish view of DELTA's growth since its main product, i.e., Power Supply, is crucial to several product groups, such as Automotive, Industrial, Data Center, Cloud Computing, and Medical. Besides, DELTA has expanded to downstream businesses, such as EV power and EV battery chargers, Telecommunication Infrastructure, and Regional Energy Management.

However, DELTA is fully valued, in our view. It is trading at a high 2024-25E PE of 48x and 42x, respectively, higher than its historical average and electronic component peers' average.

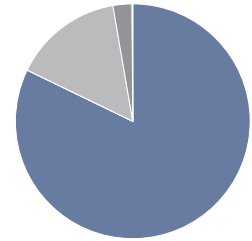
Company profile

DELTA is an electronics manufacturer and exporter of power supplies and electronic components comprising cooling fans, EMI filters, and solenoids. Key power management products consist of switching power supplies, EV chargers, DC-DC converters, and solar inverters. Its operations cover regions such as Asia, Europe, and South America. In 2022, its revenue contribution came mainly from power electronics at 80.4%, with infrastructure/automation/others at 15.1%/2.6%/0.1%, respectively.

www.deltathailand.com

Principal activities (revenue, 2023)

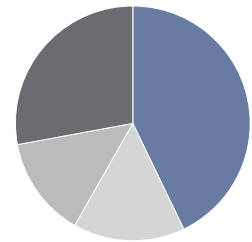
- Power electronics - 82.2 %
- Category 2
- Infrastructure - 15.1 %
- Automation - 2.6 %
- Others - 0.1 %



Source: Delta Electronics

Major shareholders

- Delta Electronics International (Singapore) Pte Ltd - 42.9 %
- Delta International Holding Limited - 15.4 %
- Delta Electronics Inc. - 13.9 %
- Others - 27.9 %



Source: Delta Electronics

Catalysts

Potential catalysts for DELTA's earnings growth in 2024 are 1) purchase order growth from EV Power with supporting capacity expansion, 2) a recovery in Data Centre and Fan, 3) lower raw material costs and an absence of inventory provision, and 4) successful market expansion.

Risks to our call

Upside risks to our P/E-based TP include 1) higher-than-expected global EV sales growth; 2) a sooner-than-expected decrease in raw material costs; and 3) a weaker-than-expected THB.

Event calendar

Date	Event
July-August 2024	2Q24 results announcement

Key assumptions

	2024E	2025E	2026E
Power electronics (USD m)	2,700	3,051	3,357
Infrastructure (USD m)	750	803	859
Automation (USD m)	127	145	160
Total revenue (USD m)	5,040	5,652	6,193
FX rate (USD/THB)	33.0	33.0	33.0
Gross margin (%)	22.3	22.5	22.5

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, we estimate 2024 net profit to fall by 1.8%, and vice versa, all else being equal.

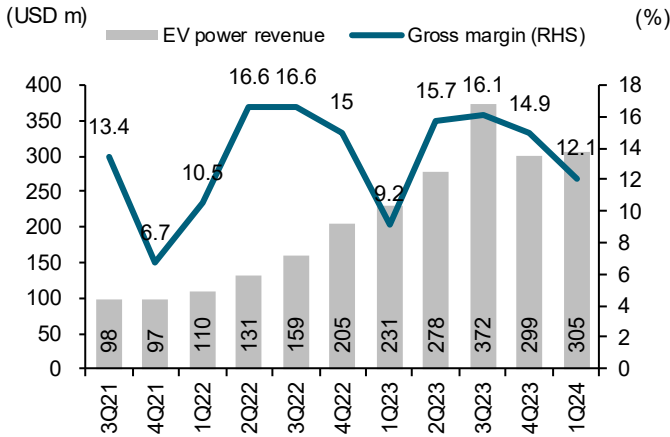
Source: FSSIA estimates

Exhibit 1: DELTA – 1Q24 earnings results

	1Q23	2Q23	3Q23	4Q23	1Q24	----- Change -----		2024E	Change	% 1Q24
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(y-y%)	to 2024E
Sales	32,294	35,840	40,478	37,759	37,989	0.6	17.6	166,307	13.6	22.8
Cost of sales	25,581	27,472	31,333	28,495	30,017	5.3	17.3	127,890	13.3	23.5
Gross profit	6,713	8,369	9,145	9,264	7,972	(14.0)	18.7	38,417	14.7	20.8
SG&A	3,236	3,796	4,098	4,353	4,252	(2.3)	31.4	16,963	9.6	25.1
Operating profit	3,477	4,573	5,047	4,911	3,720	(24.3)	7.0	21,454	19.1	17.3
Interest expense	25	22	34	28	34	22.6	36.5	100	(8.3)	34.2
Tax expense	121	279	167	506	113	(77.7)	(6.5)	662	(38.3)	17.0
Other gain (Loss)	166	234	380	441	507	14.8	204.4	0	nm	nm
Reported net profit	3,614	4,668	5,429	4,711	4,308	(8.6)	19.2	19,000	3.1	22.7
Core profit	3,459	4,434	5,049	4,270	3,801	(11.0)	9.9	19,000	10.5	20.0
Key Ratios (%)						(ppt)	(ppt)		(ppt)	
Gross margin	20.8	23.4	22.6	24.5	21.0	(3.6)	0.2	23.1	0.2	
SG&A / Sales	10.0	10.6	10.1	11.5	11.2	(0.3)	1.2	10.2	(0.4)	
Operating margin	10.8	12.8	12.5	13.0	9.8	(3.2)	(1.0)	12.9	0.6	
Net margin	11.2	13.0	13.4	12.5	11.3	(1.1)	0.1	11.4	(1.2)	
Core margin	10.7	12.4	12.5	11.3	10.0	(1.3)	(0.7)	11.4	(0.3)	
Operating Statistics										
THB total revenue (THB m)	32,294	35,840	40,478	37,759	37,989	0.6	17.6	166,307	13.6	22.8
USD total revenue (USD m)	940	1,014	1,129	1,027	1,057	2.9	12.4	5,040	22.6	21.0
Revenue by segment (USD m)										
Power Electronics	495	549	583	556	554	(0.4)	11.9	2,700	23.7	20.5
Mobility	231	278	372	299	305	2.0	32.0	1,458	23.7	20.9
Infrastructure	183	158	147	145	169	16.6	(7.7)	750	18.5	22.5
Automation	30	29	25	25	27	8.0	(10.0)	127	15.0	21.3
Revenue by key product (USD m)										
EV power	231	278	372	299	305	2.0	32.0	1,474	25.0	20.7
Fan & Thermal management	97	100	90	81	91	11.6	(6.9)	424	15.0	21.4
India business	86	90	82	100	116	15.7	34.3	394	10.0	29.4
Gross margin by key product (%)						(ppt)	(ppt)		(ppt)	
EV power	9.2	15.7	16.1	14.9	12.1	(2.8)	2.9	14.5	0.2	
Fan & Thermal management	17.5	19.3	18.3	18.8	23.3	4.5	5.8	20.0	1.5	
India business	19.3	18.6	15.6	15.5	16.5	1.0	(2.8)	17.0	(0.2)	

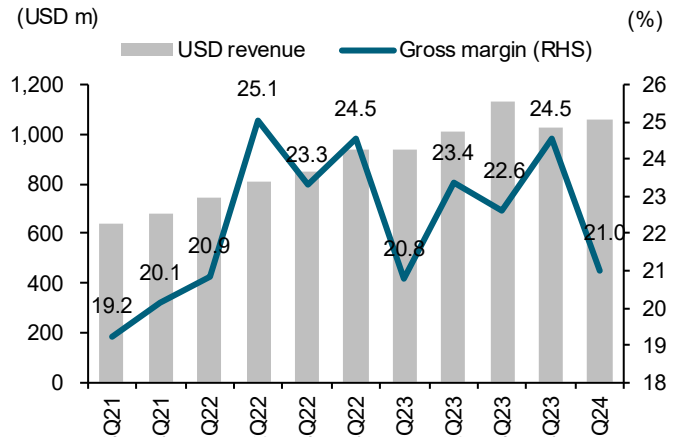
Sources: DELTA; FSSIA estimates

Exhibit 2: Quarterly EV revenue and gross margin



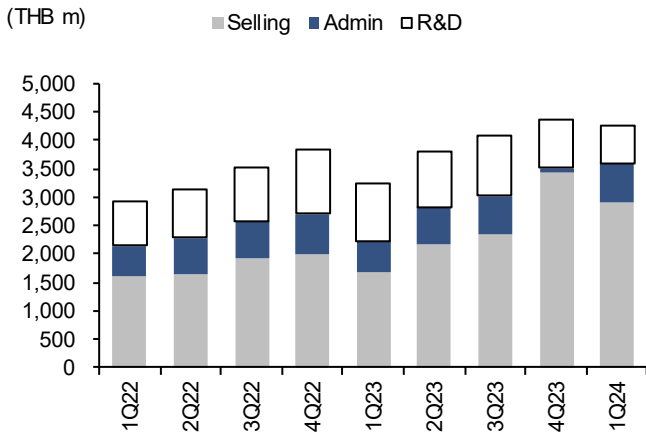
Sources: DELTA, FSSIA's compilation

Exhibit 3: Quarterly total revenue and gross margin



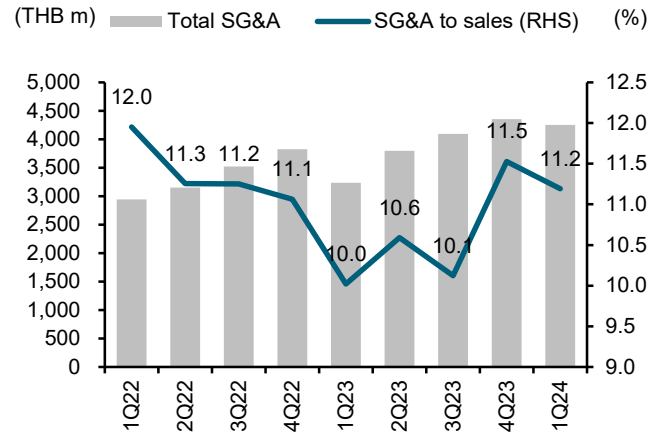
Sources: DELTA, FSSIA's compilation

Exhibit 4: Quarterly expenses breakdown



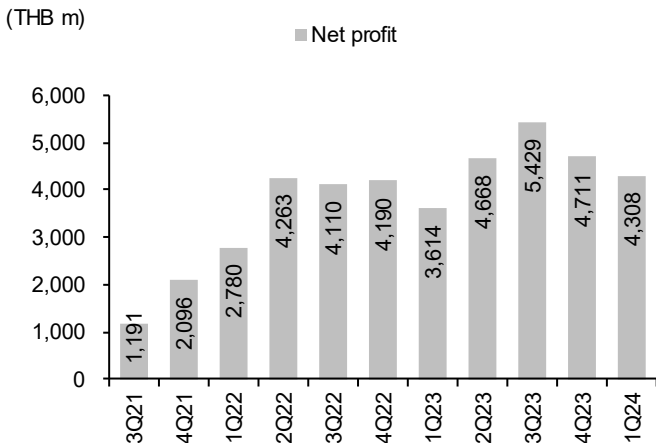
Sources: DELTA, FSSIA's compilation

Exhibit 5: Quarterly SG&A to sales



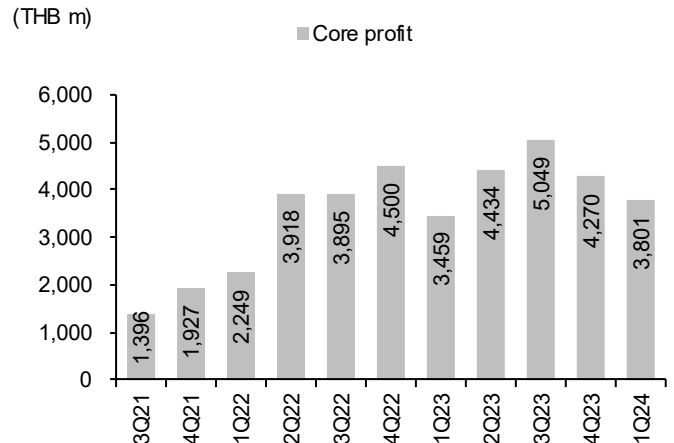
Sources: DELTA, FSSIA's compilation

Exhibit 6: Quarterly net profit



Sources: DELTA, FSSIA's compilation

Exhibit 7: Quarterly core profit



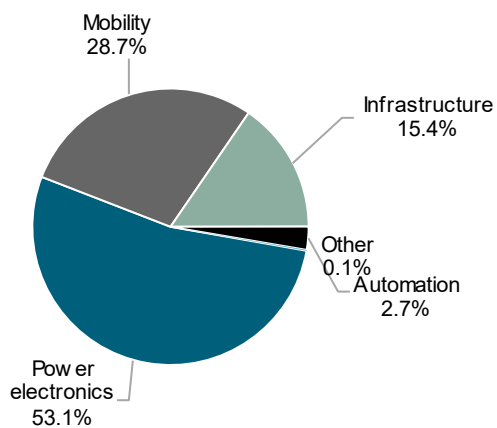
Sources: DELTA, FSSIA's compilation

Exhibit 8: Change in key assumptions for DELTA

	Current			Previous			Change		
	2024E (THB m)	2025E (THB m)	2026E (THB m)	2024E (THB m)	2025E (THB m)	2026E (THB m)	2024E (%)	2025E (%)	2026E (%)
Total sale value (THB m)	166,307	186,514	204,363	166,307	186,514	204,363	0.0	0.0	0.0
Costs	129,220	144,548	158,382	127,890	142,683	155,521	1.0	1.3	1.8
Gross profit	37,086	41,966	45,982	38,417	43,831	48,843	(3.5)	(4.3)	(5.9)
SG&A expense	17,961	20,144	22,071	16,963	19,024	20,845	5.9	5.9	5.9
Interest expense	100	47	43	100	95	90	0.0	(50.1)	(52.5)
Reported net profit	19,157	21,931	24,809	21,416	24,780	28,849	(10.5)	(11.5)	(14.0)
Core profit	19,157	21,931	24,809	21,416	24,780	28,849	(10.5)	(11.5)	(14.0)
Key ratios (%)									
Total revenue growth	13.6	12.2	9.6	13.6	12.2	9.6	0.0	0.0	0.0
Net profit growth	4.0	14.5	13.1	16.2	15.7	16.4	(12.3)	(1.2)	(3.3)
Core profit growth	11.4	14.5	13.1	24.5	15.7	16.4	(13.1)	(1.2)	(3.3)
Gross margin	22.3	22.5	22.5	23.1	23.5	23.9	(0.8)	(1.0)	(1.4)
SG&A to sales	10.8	10.8	10.8	10.2	10.2	10.2	0.6	0.6	0.6
Net margin	11.5	11.8	12.1	12.9	13.3	14.1	(1.4)	(1.5)	(2.0)
Core margin	11.5	11.8	12.1	12.9	13.3	14.1	(1.4)	(1.5)	(2.0)
Operating statistics									
Total revenue (USD m)	5,040	5,652	6,193	5,040	5,652	6,193	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
Power electronics (USD m)	2,700	3,051	3,357	2,700	3,051	3,357	0.0	0.0	0.0
Infrastructure (USD m)	750	803	859	750	803	859	0.0	0.0	0.0
Automation (USD m)	127	145	160	127	145	160	0.0	0.0	0.0

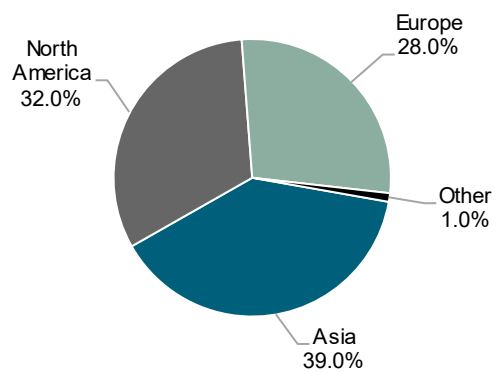
Source: FSSIA estimates

Exhibit 9: Revenue breakdown by segment



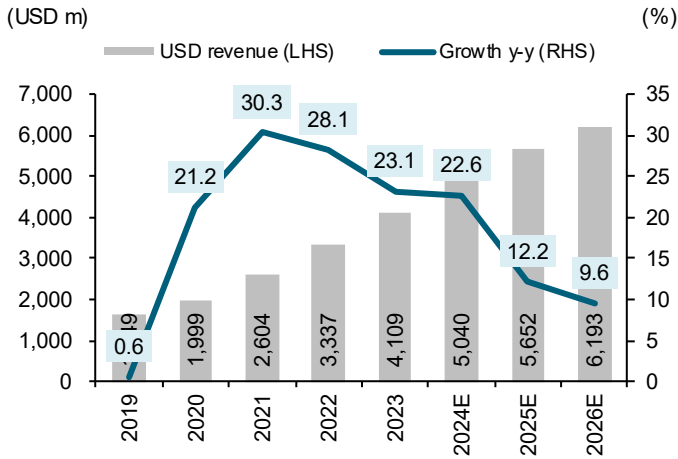
Source: DELTA

Exhibit 10: Revenue breakdown by destination



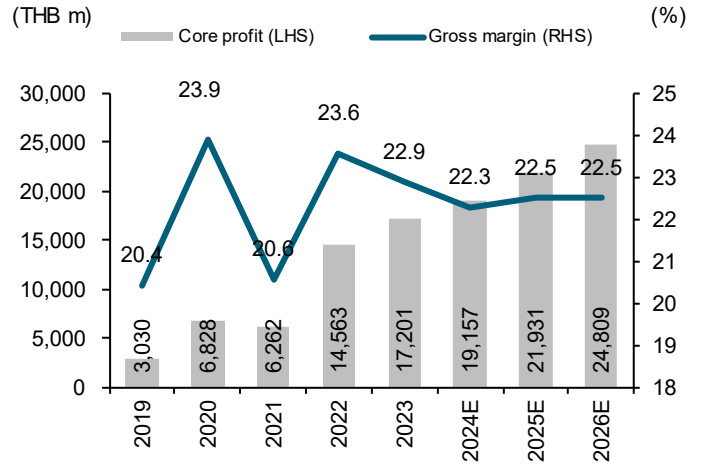
Source: DELTA

Exhibit 11: Yearly total revenue and growth



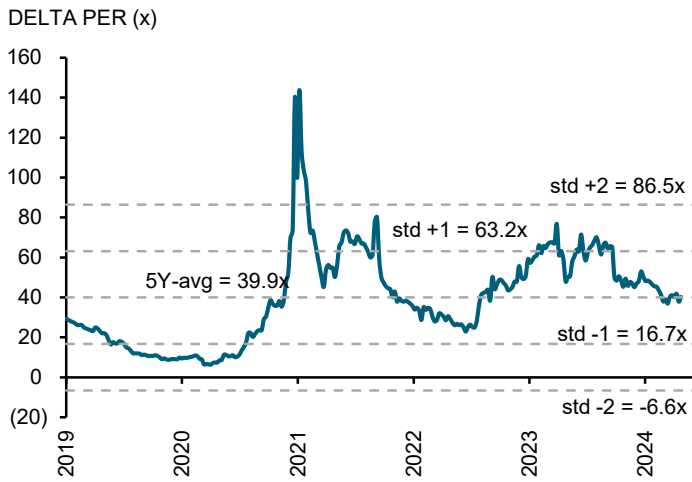
Sources: DELTA; FSSIA estimates

Exhibit 12: Yearly core profit and gross margin



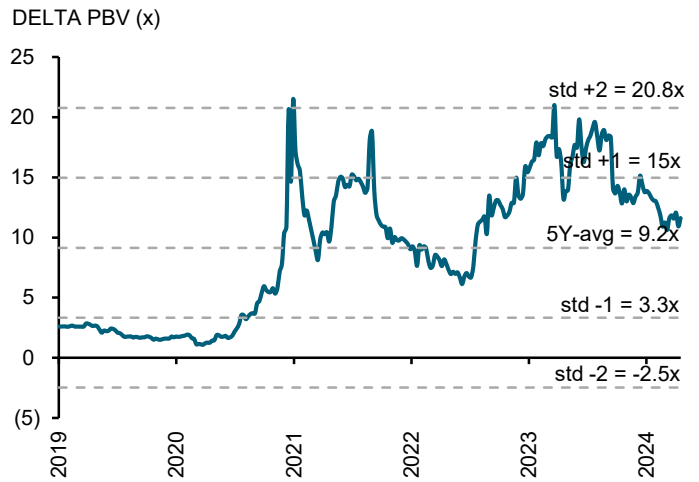
Sources: DELTA; FSSIA estimates

Exhibit 13: Historical P/E band



Sources: Bloomberg; FSSIA estimates

Exhibit 14: Historical P/BV band



Sources: Bloomberg; FSSIA estimates

Financial Statements

Delta Electronics

Profit and Loss (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Revenue	118,558	146,371	166,307	186,514	204,363
Cost of goods sold	(90,618)	(112,881)	(129,220)	(144,548)	(158,382)
Gross profit	27,940	33,491	37,086	41,966	45,982
Other operating income	613	758	998	1,119	1,226
Operating costs	(13,502)	(15,865)	(18,232)	(20,426)	(22,354)
Operating EBITDA	18,240	22,992	24,959	28,266	30,961
Depreciation	(3,190)	(4,608)	(5,108)	(5,608)	(6,108)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	15,050	18,384	19,852	22,658	24,854
Net financing costs	(20)	(109)	(100)	(47)	(43)
Associates	0	0	0	0	0
Recurring non-operating income	0	0	0	0	0
Non-recurring items	781	1,221	0	0	0
Profit before tax	15,811	19,496	19,752	22,611	24,811
Tax	(467)	(1,073)	(593)	(678)	0
Profit after tax	15,345	18,423	19,159	21,933	24,811
Minority interests	(1)	0	(2)	(2)	(2)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	15,343	18,423	19,157	21,931	24,809
Non-recurring items & goodwill (net)	(781)	(1,221)	0	0	0
Recurring net profit	14,563	17,201	19,157	21,931	24,809
Per share (THB)					
Recurring EPS *	1.17	1.38	1.54	1.76	1.99
Reported EPS	1.23	1.48	1.54	1.76	1.99
DPS	0.40	0.45	0.46	0.53	0.99
Diluted shares (used to calculate per share data)	12,474	12,474	12,474	12,474	12,474
Growth					
Revenue (%)	40.6	23.5	13.6	12.2	9.6
Operating EBITDA (%)	109.9	26.1	8.6	13.2	9.5
Operating EBIT (%)	143.5	22.1	8.0	14.1	9.7
Recurring EPS (%)	139.7	18.1	11.4	14.5	13.1
Reported EPS (%)	129.0	20.1	4.0	14.5	13.1
Operating performance					
Gross margin inc. depreciation (%)	23.6	22.9	22.3	22.5	22.5
Gross margin exc. depreciation (%)	26.3	26.0	25.4	25.5	25.5
Operating EBITDA margin (%)	15.4	15.7	15.0	15.2	15.2
Operating EBIT margin (%)	12.7	12.6	11.9	12.1	12.2
Net margin (%)	12.3	11.8	11.5	11.8	12.1
Effective tax rate (%)	3.0	5.5	3.0	3.0	0.0
Dividend payout on recurring profit (%)	34.3	32.6	30.0	30.0	50.0
Interest cover (X)	771.2	168.1	198.1	480.1	579.7
Inventory days	93.2	97.4	97.6	93.6	97.1
Debtor days	75.0	76.5	76.5	75.7	76.5
Creditor days	109.1	105.0	99.3	93.3	89.5
Operating ROIC (%)	28.3	26.3	23.3	23.3	22.2
ROIC (%)	27.1	25.3	22.5	22.4	21.3
ROE (%)	30.3	28.1	26.0	25.1	24.5
ROA (%)	18.2	17.4	16.7	16.9	17.1
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Power electronics	91,252	120,290	89,112	100,697	110,767
Mobility			48,128	54,385	59,823
Infrastructure	24,185	22,105	24,753	26,486	28,340
Automation	3,009	3,830	4,175	4,801	5,281

Sources: Delta Electronics; FSSIA estimates

Financial Statements

Delta Electronics

Cash Flow (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Recurring net profit	14,563	17,201	19,157	21,931	24,809
Depreciation	3,190	4,608	5,108	5,608	6,108
Associates & minorities	-	-	-	-	-
Other non-cash items	-	(546)	0	0	0
Change in working capital	(5,108)	(10,111)	(1,994)	(8,381)	(6,450)
Cash flow from operations	12,644	11,152	22,271	19,157	24,467
Capex - maintenance	-	-	-	-	-
Capex - new investment	(7,788)	(11,633)	(10,000)	(10,000)	(10,000)
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	213	(595)	(488)	(802)	(268)
Cash flow from investing	(7,575)	(12,227)	(10,488)	(10,802)	(10,268)
Dividends paid	(1,855)	(5,188)	(5,747)	(6,579)	(12,404)
Equity finance	0	0	0	0	0
Debt finance	569	3,568	(1,745)	(578)	277
Other financing cash flows	(213)	(376)	(1,174)	0	0
Cash flow from financing	(1,499)	(1,996)	(8,666)	(7,157)	(12,127)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	546	0	0	0
Net other adjustments	0	546	0	0	0
Movement in cash	3,571	(2,525)	3,117	1,198	2,071
Free cash flow to firm (FCFF)	5,088.89	(965.85)	11,883.37	8,402.20	14,241.80
Free cash flow to equity (FCFE)	5,425.24	2,663.13	8,864.05	7,777.15	14,475.92

Per share (THB)

FCFF per share	0.41	(0.08)	0.95	0.67	1.14
FCFE per share	0.43	0.21	0.71	0.62	1.16
Recurring cash flow per share	1.42	1.70	1.95	2.21	2.48

Balance Sheet (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Tangible fixed assets (gross)	37,631	47,866	57,866	67,866	77,866
Less: Accumulated depreciation	(14,449)	(17,659)	(22,767)	(28,374)	(34,482)
Tangible fixed assets (net)	23,182	30,207	35,099	39,492	43,384
Intangible fixed assets (net)	629	591	629	629	629
Long-term financial assets	248	236	236	236	236
Invest. in associates & subsidiaries	-	-	-	-	-
Cash & equivalents	10,142	7,617	10,734	11,932	14,004
A/C receivable	28,132	33,237	36,451	40,880	44,792
Inventories	25,049	32,747	33,633	37,622	43,392
Other current assets	2,702	1,965	3,326	3,730	4,087
Current assets	66,025	75,566	84,144	94,164	106,275
Other assets	901	1,545	1,996	2,798	3,065
Total assets	90,984	108,145	122,103	137,318	153,589
Common equity	54,680	67,539	79,775	95,126	107,531
Minorities etc.	0	0	0	0	0
Total shareholders' equity	54,680	67,539	79,775	95,126	107,531
Long term debt	930	969	954	874	794
Other long-term liabilities	2,705	3,461	3,326	3,730	4,087
Long-term liabilities	3,635	4,431	4,280	4,604	4,881
A/C payable	30,202	32,096	35,403	35,642	39,053
Short term debt	1,011	2,607	982	80	80
Other current liabilities	1,457	1,472	1,663	1,865	2,044
Current liabilities	32,670	36,176	38,048	37,587	41,177
Total liabilities and shareholders' equity	90,984	108,145	122,103	137,318	153,589
Net working capital	24,225	34,380	36,344	44,725	51,175
Invested capital	49,184	66,959	74,303	87,879	98,489

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

Per share (THB)

Book value per share	4.38	5.41	6.40	7.63	8.62
Tangible book value per share	4.33	5.37	6.34	7.58	8.57

Financial strength

Net debt/equity (%)	(15.0)	(6.0)	(11.0)	(11.5)	(12.2)
Net debt/total assets (%)	(9.0)	(3.7)	(7.2)	(8.0)	(8.5)
Current ratio (x)	2.0	2.1	2.2	2.5	2.6
CF interest cover (x)	678.1	131.7	189.2	377.7	571.9

Valuation	2022	2023	2024E	2025E	2026E
Recurring P/E (x) *	63.2	53.5	48.0	41.9	37.1
Recurring P/E @ target price (x) *	52.3	44.2	39.7	34.7	30.7
Reported P/E (x)	60.0	49.9	48.0	41.9	37.1
Dividend yield (%)	0.5	0.6	0.6	0.7	1.3
Price/book (x)	16.8	13.6	11.5	9.7	8.6
Price/tangible book (x)	17.0	13.7	11.6	9.7	8.6
EV/EBITDA (x) **	50.0	39.8	36.5	32.2	29.3
EV/EBITDA @ target price (x) **	41.3	32.9	30.1	26.5	24.2
EV/invested capital (x)	18.5	13.7	12.3	10.3	9.2

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

Sources: Delta Electronics; FSSIA estimates

Delta Electronics Thailand (DELTA TB)

FSSIA ESG rating

87.59 /100
Exhibit 15: 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 16: ESG – peer comparison

	FSSIA ESG score	Domestic ratings					Global ratings						Bloomberg		
		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 17: 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	3.90	3.63	3.92	4.13	4.06	4.24	4.03	4.15
BESG environmental pillar score	4.87	4.68	5.12	5.75	5.33	5.80	5.25	—
BESG social pillar score	2.72	2.72	2.72	2.72	2.72	2.72	2.72	—
BESG governance pillar score	3.91	3.27	3.71	3.65	3.90	3.94	3.91	—
ESG disclosure score	61.65	63.10	63.96	60.99	65.87	67.09	68.34	—
Environmental disclosure score	59.71	63.03	65.00	63.03	63.03	69.86	70.52	—
Social disclosure score	37.79	38.82	39.42	32.47	47.13	43.95	47.07	—
Governance disclosure score	87.36	87.36	87.36	87.36	87.36	87.36	87.36	—
Environmental								
Emissions reduction initiatives	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate change policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate change opportunities discussed	No	No	No	No	No	No	Yes	Yes
Risks of climate change discussed	No	No	No	No	No	No	Yes	Yes
GHG scope 1	0	0	0	0	0	1	1	1
GHG scope 2 location-based	40	41	40	39	42	40	51	60
GHG Scope 3	—	28	19	46	40	82	127	167
Carbon per unit of production	—	—	—	—	—	—	—	—
Biodiversity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy efficiency policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total energy consumption	76	80	80	92	84	80	102	121
Renewable energy use	0	0	3	7	9	10	10	—
Electricity used	74	78	79	92	80	80	91	120
Fuel used - natural gas	—	—	—	—	—	196	233	—

Sources: Bloomberg; FSSIA's compilation

Exhibit 18: 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	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hazardous waste	0	0	0	0	0	0	0	0
Total waste	2	2	2	2	3	6	8	9
Waste recycled	1	2	2	2	3	4	4	5
Waste sent to landfills	0	0	0	0	0	0	0	0
Environmental supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	—	—	—	434	445	536
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	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	No	Yes	Yes	Yes	No
Pct women in workforce	84	80	75	71	71	65	69	—
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	—	—	—	—	0	—	0	0
Total recordable incident rate - employees	1	1	0	0	1	0	—	—
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	10,466	9,764	10,691	11,088	11,297	13,852	16,951	20,022
Employee turnover pct	13	11	—	—	7	6	7	3
Total hours spent by firm - employee training	131,464	96,865	115,161	128,431	168,455	678,748	1,017,000	1,561,720
Social supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Governance								
Board size	9	8	8	9	9	9	9	9
No. of independent directors (ID)	4	3	3	4	4	4	4	4
No. of women on board	1	0	0	1	1	1	1	1
No. of non-executive directors on board	7	6	6	7	6	6	6	6
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	5	5	6	6	6	5	5	6
Board meeting attendance pct	93	97	93	96	100	100	98	98
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	52	53	54	55	52	53	54	61
Age of the oldest director	72	71	72	73	73	73	74	75
No. of executives / company managers	5	5	5	5	5	3	4	4
No. of female executives	1	1	1	1	0	0	1	1
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	5	4	4	4	4	4	4	4
Audit meeting attendance %	100	90	92	100	100	100	100	100
Size of compensation committee	3	5	3	3	3	3	3	3
No. of ID on compensation committee	2	3	2	2	2	2	2	2
No. of compensation committee meetings	2	4	4	4	4	5	5	6
Compensation meeting attendance %	60	91	83	83	100	93	100	94
Size of nomination committee	3	5	3	3	3	3	3	3
No. of nomination committee meetings	2	4	4	4	4	5	5	6
Nomination meeting attendance %	60	91	83	83	100	93	100	94
Sustainability governance								
Verification type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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 (50-59), 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 Sustainalytics	The Sustainalytics' 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 border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>NEGL</th> <th>Low</th> <th>Medium</th> <th>High</th> <th>Severe</th> </tr> </thead> <tbody> <tr> <td>0-10</td> <td>10-20</td> <td>20-30</td> <td>30-40</td> <td>40+</td> </tr> </tbody> </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 border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <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> </tbody> </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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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

Sureeporn Teewasuwet FSS International Investment Advisory Securities Co., Ltd

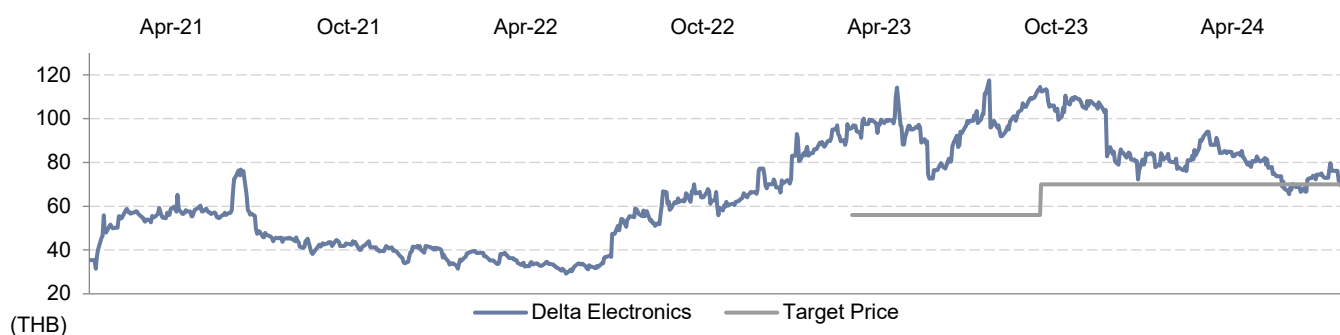
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

Delta Electronics (DELTA TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
17-Feb-2023	REDUCE	56.00	02-Aug-2023	REDUCE	70.00	-	-	-

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

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Delta Electronics	DELTA TB	THB 73.75	REDUCE	Upside risks to our P/E-based TP include 1) higher-than-expected global EV sales growth; 2) a sooner-than-expected decrease in raw material costs; and 3) a weaker-than-expected THB.

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 26-Apr-2024 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.