

Quanta Computer (2382.TW/2382 TT)

To ride AI server sales growth in 2024-25F

FTSE4Good TIP Taiwan ESG Index stock

Outperform · Maintained

Price as of November 29 (NT\$)	201.0
12M target price (NT\$)	310.0
Previous target price (NT\$)	310.0
Unchanged (%)	0.0
Upside (%)	54.2

Key message

- Booming AI server demand to boost server sales growth in 2024-25F.
- NB demand recovery in 2024F to drive sales growth.
- Auto business to be another sales driver in 2024F, with sales above NT\$100bn.

Trading data

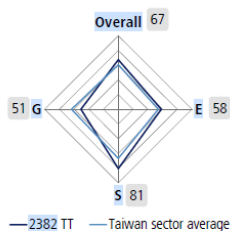
Mkt cap (NT\$bn/US\$mn)	776 / 24,634
Outstanding shares (mn)	3,863
Foreign ownership (mn)	906
3M avg. daily trading (mn)	39.50
52-week trading range (NT\$)	70.20 - 272.5

Performance	3M	6M	12M
Absolute (%)	-17.8	76.3	181.1
Relative (%)	-22.3	71.9	163

Quarterly EPS

NT\$	1Q	2Q	3Q	4Q
2022	1.75A	1.03A	2.40A	2.33A
2023	1.68A	2.63A	3.32A	2.50F
2024	2.04F	2.64F	3.94F	4.81F

ESG score card



Source: Refinitiv, KGI

Event

We expect AI server demand to grow YoY in 2024, with improving GPU supply, while edge AI will enhance NB demand in 2H24-2025. Quanta Computer's server and NB sales will benefit from these trends, which will boost earnings growth in 2024-25F.

Impact

Key AI server demand beneficiary. Quanta is primarily a server rack supplier for US CSPs. As we estimate global training AI server shipments will grow 56% YoY to 191k units in 2023, 199% YoY in 2024 to 572k units, and 74% YoY in 2025 to 993k units, Quanta will see significant sales contribution from AI server racks, with high ASP (2-3x higher than that of general purpose server racks). Although the firm is facing GPU supply constraints in 2H23, Quanta has recently gained new AI server projects and clients, indicating strong competitiveness and AI server growth will continue in 2025-26F. The firm guides GPU supply improvement will continue through 2H24, and server sales will see substantial double-digit growth in 2024. We forecast total server sales will rise 85% YoY to NT\$720bn (45% of total sales) in 2024, after 10-15% YoY growth in 2023 (34% of total sales), and server sales will total NT\$1.0tn in 2025. Although AI server gross margin may be lower than that of general servers due to high GPU cost, we expect higher sales to shore up operating margin of AI server racks to the corporate average level, driving earnings growth in 2024-25.

NB & auto business to also drive sales. Management guides NB will comprise 40-45% of sales in 2023, and expects NB demand to recover in 2024 on a better economic environment. Furthermore, the launch of AI PCs will stimulate demand in 2H24-2025F. The firm expects EV/auto sales to continue robust growth in 2024, while auto sales will exceed NT\$100bn in 2024, accounting for 9% of total sales. The firm supplies ADAS automotive computer systems and electronic control units (ECU) for Tesla (US), and will expand sales from several auto brands in 2024-25F, on client and order wins. Double-digit gross margin of the auto business is much higher than the corporate average of 6-8%. On robust server and auto sales growth, and improving NB sales, we forecast overall sales will grow 42% YoY in 2024, with operating margin expansion thanks to high sales and greater auto sales contribution, resulting in 2024 EPS growth of 33% YoY to NT\$13.43. On continued growth of the server and auto businesses, we estimate 2025 EPS growth of 30% YoY to NT\$17.52.

Valuation & Action

We maintain Outperform and our target price of NT\$310, based on 20x 2024-25F average EPS, on bright cloud server/AI server and EV sales growth outlooks.

Risks

Weak NB demand; low AI server margins; poor EV/auto sales.

Key financials and valuations

	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
Revenue (NT\$mn)	1,129,453	1,280,429	1,107,140	1,571,031	2,075,656
Gross profit (NT\$mn)	72,111	70,915	85,193	108,414	132,266
Operating profit (NT\$mn)	37,277	31,189	44,114	64,141	85,139
Net profit (NT\$mn)	33,653	28,957	39,045	51,781	67,515
EPS (NT\$)	8.73	7.51	10.13	13.43	17.52
Cash DPS (NT\$)	6.60	6.00	8.09	10.72	13.98
EPS growth (%)	32.9	(14.0)	34.8	32.6	30.4
PE (x)	23.0	26.8	19.8	15.0	11.5
PB (x)	4.8	4.6	4.4	4.1	3.9
EV/EBITDA (x)	17.9	20.3	11.6	9.2	7.7
Net debt to equity (%)	16.1	28.0	Net cash	Net cash	7.4
Dividend yield (%)	3.3	3.0	4.0	5.3	7.0
Return on average equity (%)	22.0	17.5	22.6	28.4	34.8

Source: Company data, KGI Research estimates

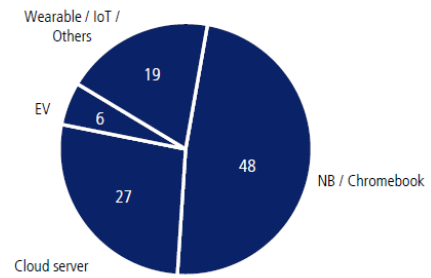
Figure 1: Company profile

Established in 1988, Quanta is the world's second largest NB ODM, with shipment volume of 57.7mn units and a global market share of 31% in 2022. Its major customers include the top-six global NB brands including Apple (US), HP (US), Asustek and Acer. Quanta has over 30k employees worldwide. It is currently expanding into other businesses including server, all-in-one (AIO), wearables and AI. The cloud business is expected to be the long-term driver. In 2022, non-NB business was 52% of sales.

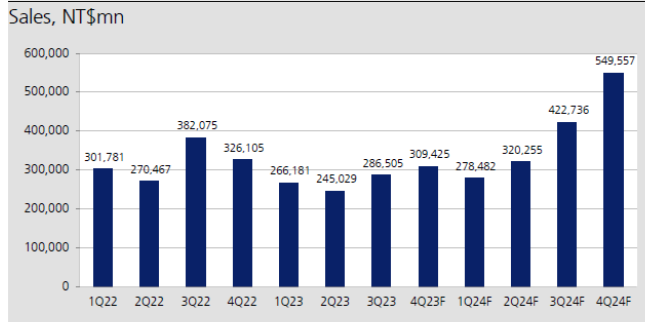
Source: KGI Research

Figure 2: Sales mix in 2022

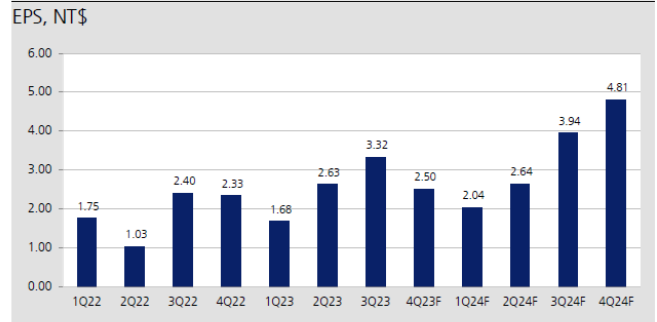
Sales weighting, percent



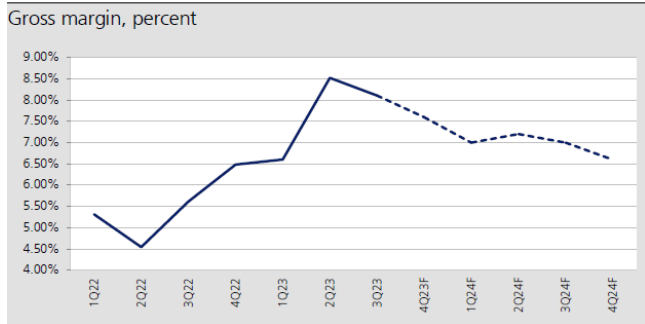
Source: company data; KGI Research

Figure 3: Sales


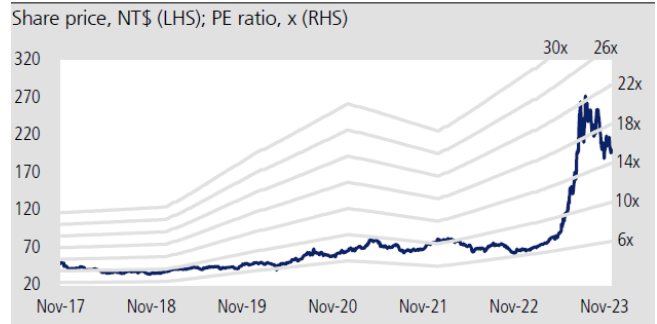
Source: KGI Research

Figure 4: EPS


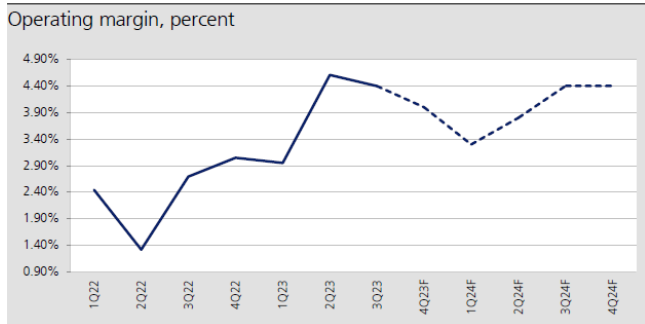
Source: KGI Research

Figure 5: Gross Margin


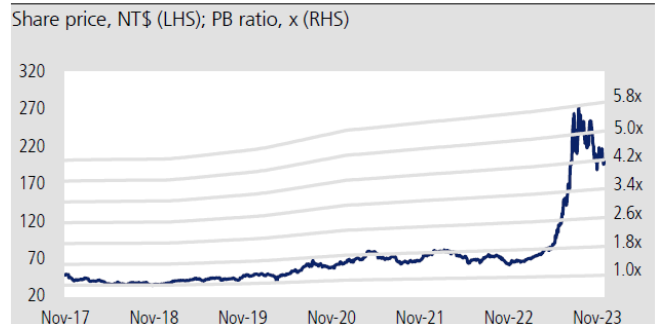
Source: KGI Research

Figure 6: 12M forward PE band


Source: TEJ; KGI Research

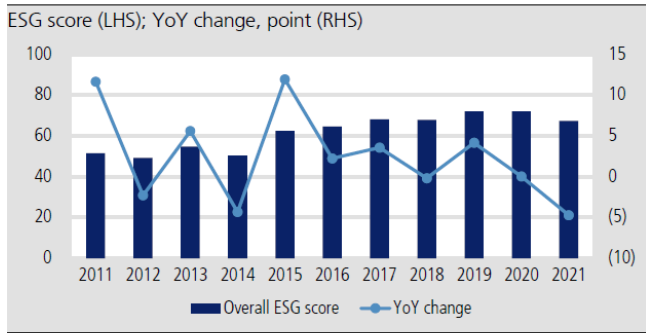
Figure 7: Operating Margin


Source: KGI Research

Figure 8: 12M forward PB band


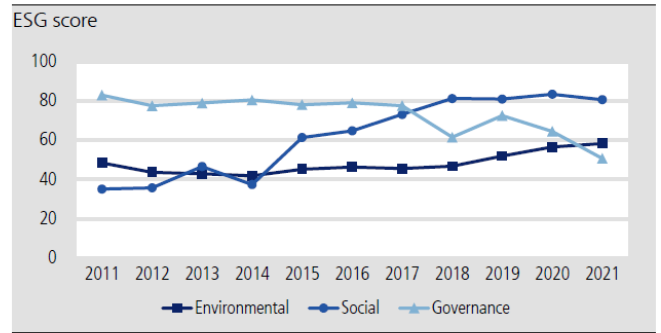
Source: TEJ; KGI Research

Figure 9: Overall ESG score



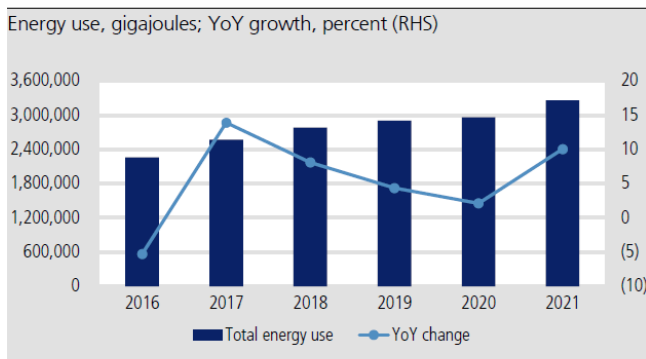
Source: Refinitiv, KGI Research, company

Figure 10: ESG scores



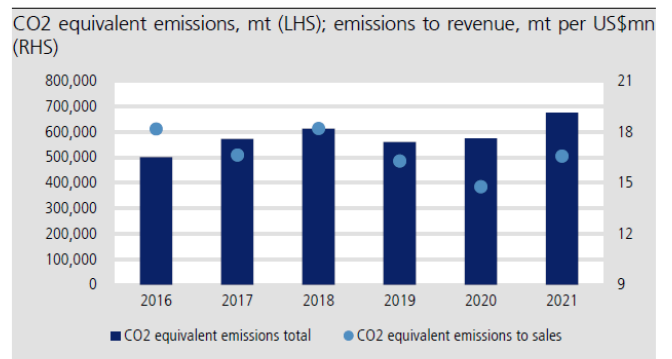
Source: Refinitiv, KGI Research, company

Figure 11: Energy Use



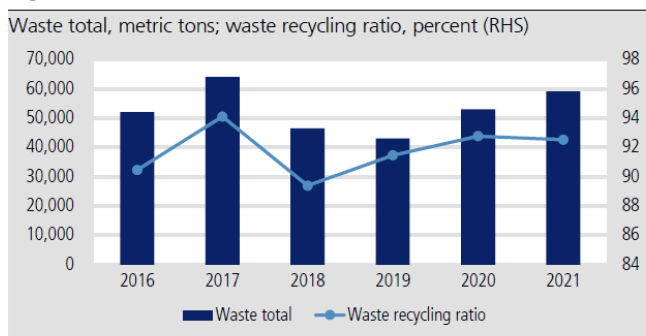
Source: Refinitiv, KGI Research, company

Figure 12: CO2 equivalent emissions



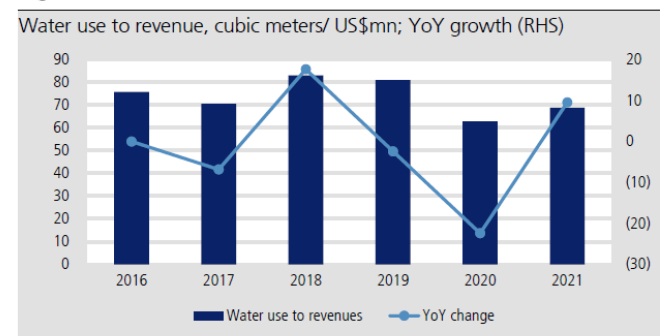
Source: Refinitiv, KGI Research, company

Figure 13: Waste total



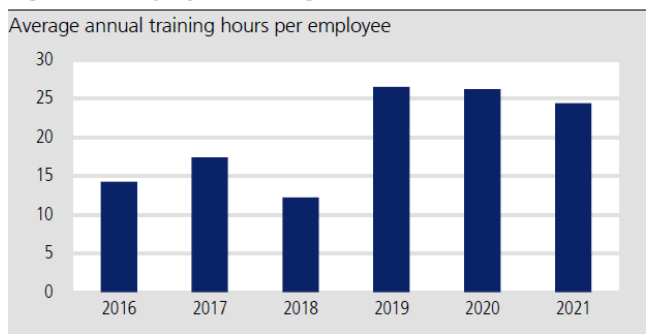
Source: Refinitiv, KGI Research, company

Figure 14: Water use to revenue



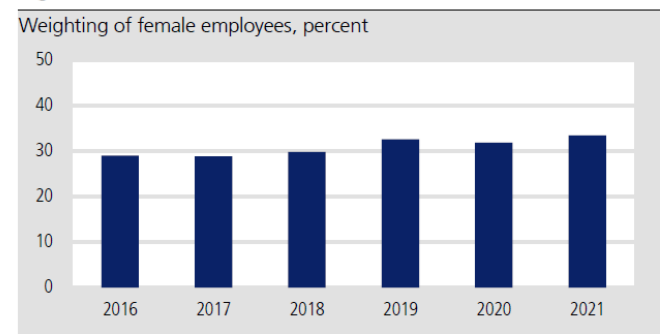
Source: Refinitiv, KGI Research, company

Figure 15: Employee training



Source: Refinitiv, KGI Research, company

Figure 16: Gender diversification



Source: Refinitiv, KGI Research, company

ESG chart definition

Item	Definition	Remarks
Energy use	<p>Total direct and indirect energy consumption in gigajoules.</p> <ul style="list-style-type: none"> - the total amount of energy that has been consumed within the boundaries of the company's operations - total energy use = total direct energy consumption + indirect energy consumption - purchased energy and produced energy are included in total energy use - for utilities, transmission/ grid loss as part of its business activities is considered as total energy consumed and data does not consider electricity produced to answer energy use (utility company produces to sell) - for utilities, raw materials such as coal, gas or nuclear used in the production of energy are not considered under 'total energy use' 	
Renewable energy purchased	<p>Total primary renewable energy purchased in gigajoules.</p> <ul style="list-style-type: none"> - energy consumed by the company from various sources and among the purchased energy, how much energy is renewable in nature (solar, wind, hydro, biomass, geothermal) are in scope - if there is no evidence that renewable energy is produced by the company, then we consider the reported energy figure as renewable energy purchased 	
Renewable energy use ratio	Renewable energy to total energy used	
CO2 equivalent emissions	<p>Direct CO2 and CO2 equivalent emissions in metric tons.</p> <ul style="list-style-type: none"> - direct emissions from sources that are owned or controlled by the company (scope 1 emissions) - following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3) 	
CO2 equivalent emissions to sales	<p>Direct CO2 and CO2 equivalent emissions (metric tons) to sales (NT\$mn)</p> <ul style="list-style-type: none"> - direct emissions from sources that are owned or controlled by the company (scope 1 emissions) - following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3) 	
Waste total	<p>Total amount of waste produced in metric tons.</p> <ul style="list-style-type: none"> - total waste = non-hazardous waste + hazardous waste - only solid waste is taken into consideration, exceptionally if liquid waste is reported in metric tons, then we do the summation to derive total including liquid waste - for sectors like mining, oil & gas, waste generation like tailings, waste rock, coal and fly ash are also considered 	
Waste recycling ratio	<p>The waste recycling ratio as reported by the company.</p> <ul style="list-style-type: none"> - waste recycling ratio = waste recycled/total waste*100 - waste to energy or waste incinerated with energy recovery are considered as waste recycled - waste recovered via composting is considered as recycled waste 	
Water withdrawal total	<p>Total water withdrawal in cubic meters.</p> <ul style="list-style-type: none"> - the total volume of water withdrawn from any water source that was either withdrawn directly by the reporting organization or through intermediaries such as water utilities - different sources of water like wells, town/utility/municipal water, river water, and surface water are considered 	
Environmental expenditures	<p>Total amount of environmental expenditures.</p> <ul style="list-style-type: none"> - all environmental investment & expenditures for environmental protection or to prevent, reduce, control environmental aspects, impacts, and hazards. It also includes disposal, treatment, sanitation, and clean-up expenditures 	
Turnover of employees	<p>Percentage of employee turnover.</p> <ul style="list-style-type: none"> - includes employees who left the company for any reason (voluntary or involuntary), such as resignations, retirement, natural departure/death, medical incapacitation, redundancy, layoffs, restructuring, dismissal, retrenchment or end of a fixed-term contract - employees turnover rate = (employees leaving/average number of employees)*100 - where the average number of employees = (employees at the end of the current year + employees at the end of the previous year)/2 - employees at the end of the current fiscal year = employees at the end of the previous fiscal year + new employees - employees leaving 	
Women managers	<p>Percentage of women managers.</p> <ul style="list-style-type: none"> - percentage of women managers among total managers of the company - if there is a breakdown by category in percentage, such as top, senior, middle, and junior management, then we consider the percentage of middle women managers - percentage of women managers = number of women managers/total number of managers*100 	
Women employees	<p>Percentage of women employees.</p> <ul style="list-style-type: none"> - percentage of women employees to the total number of employees of the company - percentage of women employees = number of women/total number of employees*100 	
Training hours total	<p>Total training hours performed by all employees.</p> <ul style="list-style-type: none"> - consider only employee training hours - includes all types of training given to general employees (such as health & safety, environmental, emergency response, skills & career development training) - if the value is given in days, multiply by 8, assuming that 1 day = 8 hours worked 	
Training hours per employee	Training hours per employee per year	

Source: Refinitiv; KGI Research

Income statement

	Quarterly								Annually		
	Mar-23A	Jun-23A	Sep-23A	Dec-23F	Mar-24F	Jun-24F	Sep-24F	Dec-24F	Dec-23F	Dec-24F	Dec-25F
Income statement (NTSmn)											
Revenue	266,181	245,029	286,505	309,425	278,482	320,255	422,736	549,557	1,107,140	1,571,031	2,075,656
Cost of goods sold	(248,615)	(224,147)	(263,276)	(285,909)	(258,989)	(297,196)	(393,145)	(513,287)	(1,021,947)	(1,462,617)	(1,943,390)
Gross profit	17,566	20,882	23,228	23,516	19,494	23,058	29,592	36,271	85,193	108,414	132,266
Operating expenses	(9,713)	(9,595)	(10,631)	(11,139)	(10,304)	(10,889)	(10,991)	(12,090)	(41,078)	(44,274)	(47,127)
Operating profit	7,858	11,287	12,597	12,377	9,190	12,170	18,600	24,181	44,114	64,141	85,139
Depreciation of fixed assets	(2,375)	(2,430)	(2,456)	(7,925)	(4,135)	(4,135)	(4,135)	(4,135)	(15,185)	(16,538)	(17,891)
Amortisation of intangible assets	(405)	(388)	(429)	(566)	(447)	(447)	(447)	(447)	(1,788)	(1,788)	(1,788)
EBITDA	10,639	14,105	15,482	20,867	13,771	16,751	23,182	28,762	61,087	82,466	104,818
Interest income	2,230	3,042	2,453	3,075	2,628	2,628	2,628	2,628	10,800	10,512	9,564
Investment income	-	11	-	79	25	25	25	25	90	100	100
Other non-op income	1,295	2,173	2,663	269	750	750	750	750	6,400	3,000	3,000
Non-operating income	3,525	5,226	5,117	3,423	3,403	3,403	3,403	3,403	17,290	13,612	12,664
Interest expense	(2,430)	(2,082)	(2,010)	(2,447)	(2,101)	(2,101)	(2,101)	(2,101)	(8,970)	(8,405)	(7,871)
Investment loss	(13)	(11)	(11)	(15)	(13)	(13)	(13)	(13)	(50)	(50)	(50)
Other non-op expenses	(0)	0	(0)	(300)	(125)	(125)	(125)	(125)	(300)	(500)	(450)
Non-operating expenses	(2,443)	(2,094)	(2,022)	(2,762)	(2,239)	(2,239)	(2,239)	(2,239)	(9,320)	(8,955)	(8,371)
Pre-tax profit	8,940	14,419	15,693	13,038	10,354	13,334	19,765	25,345	52,085	68,798	89,432
Current taxation	(2,328)	(4,146)	(2,640)	(3,126)	(2,278)	(2,934)	(4,348)	(6,608)	(12,240)	(16,168)	(21,016)
Minorities	(139)	(149)	(253)	(260)	(213)	(213)	(213)	(213)	(800)	(850)	(900)
Normalised net profit	6,474	10,125	12,800	9,652	7,864	10,188	15,204	18,525	39,045	51,781	67,515
Extraordinary items	0	0	0	(0)	-	-	-	-	-	-	-
Net profit	6,474	10,125	12,800	9,652	7,864	10,188	15,204	18,525	39,045	51,781	67,515
EPS (NT\$)	1.68	2.63	3.32	2.50	2.04	2.64	3.94	4.81	10.13	13.43	17.52
Margins (%)											
Gross profit margin	6.6	8.5	8.1	7.6	7.0	7.2	7.0	6.6	7.7	6.9	6.4
Operating margin	3.0	4.6	4.4	4.0	3.3	3.8	4.4	4.4	4.0	4.1	4.1
EBITDA margin	4.0	5.8	5.4	6.7	4.9	5.2	5.5	5.2	5.5	5.2	5.0
Pretax profit margin	3.4	5.9	5.5	4.2	3.7	4.2	4.7	4.6	4.7	4.4	4.3
Net profit margin	2.4	4.1	4.5	3.1	2.8	3.2	3.6	3.4	3.5	3.3	3.3
Sequential growth (%)											
Revenue growth	(18.4)	(7.9)	16.9	8.0	(10.0)	15.0	32.0	30.0			
Gross profit growth	(16.9)	18.8	11.2	1.2	(17.1)	18.3	28.3	22.6			
Operating profit growth	(20.9)	43.6	11.6	(1.8)	(25.7)	32.4	52.8	30.0			
EBITDA growth	(16.5)	32.6	9.8	34.8	(34.0)	21.6	38.4	24.1			
Pretax profit growth	(27.1)	61.3	8.8	(16.9)	(20.6)	28.8	48.2	28.2			
Net profit growth	(28.0)	56.4	26.4	(24.6)	(18.5)	29.6	49.2	21.8			
YoY growth (%)											
Revenue growth	(11.8)	(9.4)	(25.0)	(5.1)	4.6	30.7	47.5	77.6	(13.5)	41.9	32.1
Gross profit growth	9.6	70.0	8.4	11.1	11.0	10.4	27.4	54.2	20.1	27.3	22.0
Operating profit growth	6.5	215.6	22.4	24.5	16.9	7.8	47.7	95.4	41.4	45.4	32.7
EBITDA growth	10.9	135.2	19.4	63.8	29.4	18.8	49.7	37.8	47.9	35.0	27.1
Pretax profit growth	(3.7)	147.9	16.9	6.4	15.8	(7.5)	25.9	94.4	27.7	32.1	30.0
Net profit growth	(4.1)	155.5	38.3	7.4	21.5	0.6	18.8	91.9	34.8	32.6	30.4

Source: Company data, KGI Research estimates

Balance sheet

NT\$mn	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
Total assets	717,570	816,134	883,279	1,064,438	1,259,757
Current assets	649,417	733,270	805,515	991,130	1,194,252
Cash & ST securities	177,375	214,499	430,272	461,944	494,418
Inventory	196,596	225,856	153,992	219,792	292,840
Accounts receivable	265,119	283,992	212,328	300,470	398,071
Other current assets	10,326	8,923	8,923	8,923	8,923
Non-current assets	68,152	82,864	77,764	73,308	65,506
LT investments	3,933	4,353	4,438	4,520	4,609
Net fixed assets	52,223	63,225	58,040	53,502	45,611
Other assets	11,996	15,286	15,286	15,286	15,286
Total liabilities	549,442	639,610	698,147	868,099	1,049,016
Current liabilities	520,721	628,591	641,824	824,877	999,427
Accounts payable	229,941	213,514	181,991	259,754	346,083
Interest bearing ST liabilities	166,588	249,525	286,221	381,322	456,955
Other current liabilities	124,193	165,552	173,612	183,801	196,389
Non-current liabilities	28,721	11,019	56,323	43,222	49,589
Long-term debt	22,675	4,525	49,829	36,728	43,095
Other L-T liabilities	3,688	3,732	3,732	3,732	3,732
Total equity	168,127	176,523	185,132	196,339	210,742
Share capital	38,626	38,626	38,626	38,626	38,626
Retained earnings reserve	68,181	71,674	79,483	89,839	103,342
Minority interests	6,988	7,365	8,165	9,015	9,915
Preferred shareholders funds	-	-	-	-	-

Key ratios

	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
Growth					
Revenue growth	3.5%	13.4%	(13.5%)	41.9%	32.1%
Operating profit growth	14.9%	(16.3%)	41.4%	45.4%	32.7%
EBITDA growth	12.4%	(9.5%)	47.9%	35.0%	27.1%
Net profit growth	32.9%	(14.0%)	34.8%	32.6%	30.4%
EPS growth	32.9%	(14.0%)	34.8%	32.6%	30.4%
Profitability					
Gross profit margin	6.4%	5.5%	7.7%	6.9%	6.4%
Operating margin	3.3%	2.4%	4.0%	4.1%	4.1%
EBITDA margin	4.0%	3.2%	5.5%	5.2%	5.0%
Net profit margin	3.0%	2.3%	3.5%	3.3%	3.3%
Return on average assets	4.9%	3.8%	4.6%	5.3%	5.8%
Return on average equity	22.0%	17.5%	22.6%	28.4%	34.8%
Stability					
Gross debt to equity	112.6%	143.9%	181.5%	212.9%	237.3%
Net debt to equity	16.1%	28.0%	Net cash	Net cash	7.4%
Interest coverage (x)	39.9	10.3	6.8	9.2	12.4
Interest & ST debt coverage (x)	0.2	0.1	0.1	0.1	0.1
Cash flow interest coverage(x)	(21.3)	2.6	18.7	(0.7)	0.4
Cash flow/int. & ST debt (x)	(0.1)	0.0	0.6	(0.0)	0.0
Current ratio (x)	1.2	1.2	1.3	1.2	1.2
Quick ratio (x)	0.9	0.8	1.0	0.9	0.9
Net debt (NT\$mn)	27,005	49,412	(84,361)	(34,033)	15,493
Per share data					
EPS (NT\$)	8.73	7.51	10.13	13.43	17.52
CFPS (NT\$)	(6.17)	2.96	43.58	(1.59)	0.73
BVPS (NT\$)	41.72	43.79	45.82	48.50	51.99
Adj BVPS (NT\$)	41.81	43.89	45.91	48.60	52.10
SPS (NT\$)	293.02	332.19	287.23	407.58	538.50
EBITDA/share (NT\$)	11.83	10.71	15.85	21.39	27.19
Cash DPS (NT\$)	6.60	6.00	8.09	10.72	13.98
Activity					
Sales / avg assets	1.64	1.67	1.30	1.61	1.79
Days receivable	85.7	81.0	70.0	70.0	70.0
Days inventory	67.9	68.2	55.0	55.0	55.0
Days payable	79.4	64.4	65.0	65.0	65.0
Cash cycle	74.2	84.7	60.0	60.0	60.0

Source: Company data, KGI Research estimates

Profit & loss

NT\$mn	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
Revenue	1,129,453	1,280,429	1,107,140	1,571,031	2,075,656
Cost of goods sold	(1,057,342)	(1,209,514)	(1,021,947)	(1,462,617)	(1,943,390)
Gross profit	72,111	70,915	85,193	108,414	132,266
Operating expenses	(34,833)	(39,725)	(41,078)	(44,274)	(47,127)
Operating profit	37,277	31,189	44,114	64,141	85,139
Non-operating income	7,902	13,977	17,290	13,612	12,664
Interest income	2,389	5,018	10,800	10,512	9,564
Investment income	200	496	90	100	100
Other non-op income	5,313	8,462	6,400	3,000	3,000
Non-operating expenses	(1,743)	(4,385)	(9,320)	(8,955)	(8,371)
Interest expense	(1,116)	(4,370)	(8,970)	(8,405)	(7,871)
Investment loss	(61)	(15)	(50)	(50)	(50)
Other non-op expenses	(566)	0	(300)	(500)	(450)
Pre-tax profit	43,436	40,781	52,085	68,798	89,432
Current taxation	(9,077)	(11,058)	(12,240)	(16,168)	(21,016)
Minorities	(707)	(475)	(800)	(850)	(900)
Extraordinary items	-	0	-	-	-
Net profit	33,653	28,957	39,045	51,781	67,515
EBITDA	45,602	41,292	61,087	82,466	104,818
EPS (NT\$)	8.73	7.51	10.13	13.43	17.52

Cash flow

NT\$mn	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
Operations cash flow	(23,793)	11,415	167,982	(6,122)	2,825
Net profit	33,653	28,957	39,045	51,781	67,515
Depreciation & amortisation	8,325	10,103	16,973	18,326	19,679
Decrease in working capital	(75,616)	(63,213)	112,004	(76,179)	(84,319)
Other operating cash flow	9,845	35,567	(40)	(50)	(50)
Investing cash flow	13,536	(14,143)	(11,833)	(13,820)	(11,827)
Sale of ST investment	19,287	1,560	-	-	-
New investments	(72)	(19)	(45)	(32)	(39)
Capital expenditure	(11,538)	(16,892)	(10,000)	(12,000)	(10,000)
Others investing cashflow	5,859	1,208	(1,788)	(1,788)	(1,788)
Free cash flow	(50,609)	(48,850)	150,937	(22,573)	(11,297)
Financing cash flow	(33,213)	31,295	59,624	51,614	41,476
Increase in short term debt	1,276	34,188	80,000	80,000	80,000
Increase in long term loans	(13,809)	24,293	2,000	2,000	2,000
New ordinary shares issued	-	-	-	-	-
Ordinary dividends paid	(20,254)	(26,009)	(23,176)	(31,236)	(41,424)
Other financing cashflow	(427)	(1,177)	800	850	900
Foreign effects	(1,644)	13,813	-	-	-
Total cash generated	(45,114)	42,380	215,773	31,672	32,474

ROIC

	Dec-21A	Dec-22A	Dec-23F	Dec-24F	Dec-25F
1 - COGS/revenue					
- Operating exp./revenue	3.1%	3.1%	3.7%	2.8%	2.3%
= After-tax margin	3.3%	2.4%	4.0%	4.1%	4.1%
1 / (Working capital/revenue	0.1	0.1	0.0	0.1	0.1
+ Net PPE/revenue	0.0	0.0	0.1	0.0	0.0
+ Other assets/revenue)	0.0	0.0	0.0	0.0	0.0
= Capital turnover	6.6	6.2	13.8	11.1	10.1
Operating margin	3.3%	2.4%	4.0%	4.1%	4.1%
x Capital turnover	6.6	6.2	13.8	11.1	10.1
x (1 - tax rate)	79.1%	72.9%	76.5%	76.5%	76.5%
= After-tax ROIC	17.1%	11.1%	42.0%	34.6%	31.7%

Source: Company data, KGI Research estimates

All the above named KGI analyst(s) is SFC licensed person accredited to KGI Asia Ltd to carry on the relevant regulated activities. Each of them and/or his/her associate(s) does not have any financial interest in the respectively covered stock, issuer and/or new listing applicant.

Disclaimer

All the information contained in this report is not intended for use by persons or entities located in or residing in jurisdictions which restrict the distribution of this information by KGI Asia Limited ("KGI") or a affiliate of KGI. Such information shall not constitute investment advice, or an offer to sell, or an invitation, solicitation or recommendation to subscribe for or invest in any securities or investment products or services nor a distribution of information for any such purpose in any jurisdiction. In particular, the information herein is not for distribution and does not constitute an offer to sell or the solicitation of any offer to buy any securities in the United States of America, or to or for the benefit of United States persons (being residents of the United States of America or partnerships or corporations organised under the laws of the United States of America or any state, territory or possession thereof). All the information contained in this report is for general information and reference purpose only without taking into account of any particular investor's objectives, financial situation or needs. Such information is not intended to provide professional advice and should not be relied upon in that regard.

Some of KGI equity research and earnings estimates are available electronically on www.kgi.com.hk. Please contact your KGI representative for information. The information and opinions in this report are those of KGI internal research activity. KGI does not make any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information and opinions contained in this report. The information and opinions contained in this report are subject to change without any notice. No person accepts any liability whatsoever for any loss however arising from any use of this report or its contents. This report is not to be construed as an invitation or offer to buy or sell securities and/or to participate in any investment activity. This report is being supplied solely for informational purposes and may not be redistributed, reproduced or published (in whole or in part) by any means for any purpose without the prior written consent of KGI. Members of the KGI group and their affiliates may provide services to any companies and affiliates of such companies mentioned herein. Members of the KGI group, their affiliates and their directors, officers and employees may from time to time have a position in any securities mentioned herein.