

## Auras Technology (3324.TW/3324 TT)

#### Growing liquid cooling sales to boost margins

Outperform • Mai	intained
Price as of March 8 (NT\$)	571

12M target price (NT\$)	660
Previous target price (NT\$)	445.0
Revised up (%)	48.3
Upside (%)	15.6

#### Key message

#### 1. 4Q23 EPS of NT\$2.59 missed on lowerthan-expected gross margin and forex losses.

- 1Q24F sales to be 2024 bottom on single-digit QoQ decline. Server business to drive 2024F sales and earnings growth, with rising liquid cooling sales boosting gross margin.
- 3. GB200 launch by Nvidia (US) to fuel liquid cooling penetration.

#### **Trading data**

Mkt cap (NT\$bn/US\$	5mn)	51.21/	1,623					
Outstanding shares	(mn)	89.68						
Foreign ownership (r	mn)	21.05						
3M avg. daily trading	g (mn)	4.61						
52-week trading ran	ae (NT\$)	156.0 –628						
52 Week adding full	ge (1114)		020					
Performance	3M	6M	12M					
<u> </u>								
Performance	3M	6M	12M					

#### Quarterly EPS

NT\$	1Q	2Q	3Q	4Q
2022	3.42A	4.15A	4.74A	2.37A
2023	3.22A	2.78A	5.71A	2.59A
2024	3.69F	4.47F	6.21F	6.29F

#### Share price chart



#### Event

Auras Technology's 4Q23 EPS arrived at NT\$2.59, down 55% QoQ, but up 9% YoY, missing consensus due to lower-then-expected gross margin and forex losses. However, the firm's product mix will improve in 2024F, with server sales as the main sales catalyst, as well as margins and EPS growth.

#### Impact

**4Q23 EPS missed consensus.** 4Q23 EPS arrived at NT\$2.59, below consensus and our estimate on lower-than-expected gross margin and forex losses. Gross margin came in at 24.2%, with operating margin of 11.5%, both down QoQ, but up YoY, due to lower sales and an unfavorable product mix. The 4Q23 sales weighting of high-margin servers declined to 21%, versus 25% in 3Q23, while the sales weighting of graphics cards and other products expanded to a respective 27% and 7%, from 23% and 4% in 3Q23. With forex losses of NT\$105mn in 4Q23, 4Q23 EPS missed, and 2023 EPS arrived at NT\$14.28, down 3% YoY, 10% below our estimate. The firm will pay a cash dividend of NT\$6.5 per share, for a payout ratio of 46.4% and cash yield of 1%.

1Q24F to be 2024F bottom, with stable gross margin; strong 2H24-2025F sales & EPS growth. The firm reported February sales of NT\$735mn, down 42% MoM and 26% YoY, with January-February sales up 5% YoY. With March sales set to rebound MoM, the firm guides 1Q24 sales will fall by single-digits QoQ, but gross margin will remain stable QoQ, thanks to product mix improvement, with server sales contributions rebounding QoQ. We think 1Q24F sales, gross margin, and EPS will be the 2024F bottom. On the mass production of Nvidia's (US) GH200/ GB200 (ARM inference) and B100 /B200 (x86 training), Auras' thermal solution development is focused upon liquid cooling. After small shipments of liquid cooling cold plate modules commenced in 2Q-3Q23, and coolant distribution units (CDU) in 2H23, Aurus will start manifold production with quick connectors in 1H24F. Liquid cooling sales contributions will grow from 2% in 2023 to 5-10% in 2024F, mainly for two CSP clients. The content value of liquid cooling thermal solutions will rise to US\$40-50k for a rack with six main parts (cold plate module, CDU, manifold with quick connectors, rack chassis, fan door, and RDHx), which is much higher than US\$80-100 for 3D VC (air cooling), and also higher than the US\$400-2,000 for a cold plate module or US\$10-30k for CDU and manifold. We expect thermal design power (TDP) rising to over 1,000W in small form factors will boost liquid cooling penetration and drive strong sales growth in 2025F. Increasing GB200 demand in 2H24-2025F will be the key driver of the firm's liquid cooling sales and EPS growth, on gross margin of over 30%. With server sales growth of 50% per year expected in 2024-25F, profit contributions from server sales should rise to 40-50%, versus a sales contribution of 30-40% in 2025. We forecast 2024F EPS of NT\$20.66, up 45% YoY, and 2025F EPS of NT\$27.06, up 31% YoY.

#### **Valuation & Action**

We maintain Outperform on 2024-25F gross margin and EPS growth, a CAGR of 38% in 2023-25F, and raise our target price from NT\$445 to NT\$660, on 26x 2025F fully diluted EPS.

#### Risks

Material price hikes; weak demand.

#### Key financials and valuations

	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
Revenue (NT\$mn)	14,258	13,857	12,713	15,350	18,530
Gross profit (NT\$mn)	2,663	2,722	3,005	3,991	4,951
Operating profit (NT\$mn)	1,379	1,173	1,376	2,152	2,883
Net profit (NT\$mn)	1,133	1,264	1,232	1,782	2,335
EPS (NT\$)	13.12	14.68	14.28	20.66	27.06
Cash DPS (NT\$)	6.00	6.50	6.50	9.17	12.02
EPS growth (%)	1.9	11.9	(2.7)	44.7	31.0
PE (x)	43.5	38.9	40.0	27.6	21.1
PB (x)	10.6	9.1	7.6	6.6	5.7
EV/EBITDA (x)	26.4	29.5	26.6	18.9	14.2
Net debt to equity (%)	4.5	4.6	Net cash	Net cash	Net cash
Dividend yield (%)	1.1	1.1	1.1	1.6	2.1
Return on average equity (%)	24.3	24.5	20.2	25.0	28.3

Source: Company data, KGI Research estimates



#### Figure 1: Breakdown of 4Q23 results & 1Q24 forecast revisions vs. consensus

				4Q23							1Q24F			
		KGI												
NT\$mn	Actual	forecast	Diff. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)
Sales	3,344	3,597	(7.0)	(4.2)	(2.4)	3,528	(5.2)	3,211	3,345	(4.0)	(4.0)	(2.1)	3,280	(2.1)
Gross profits	810	935	(13.4)	(12.6)	13.0	907	(10.7)	787	803	(2.0)	(2.9)	7.4	783	0.5
Operating income	384	468	(17.9)	(19.6)	19.6	452	(15.0)	369	401	(8.0)	(3.9)	1.0	376	(1.8)
Pretax income	317	480	(34.1)	(47.1)	21.1	446	(28.9)	394	426	(7.3)	24.5	11.9	418	(5.6)
Net income	224	357	(37.3)	(54.5)	9.6	360	(37.9)	318	344	(7.4)	42.5	14.9	330	(3.5)
EPS (NT\$)	2.59	4.14	(37.4)	(54.6)	9.3	4.17	(37.9)	3.69	3.99	(7.6)	42.5	14.7	3.83	(3.5)
Gross margin (%)	24.2	26.0	(1.8)ppts	(2.3)ppts	3.3 ppts	25.7	(1.5)ppts	24.5	24.0	0.5 ppts	0.3 ppts	2.2 ppts	23.9	0.6 ppts
OP margin (%)	11.5	13.0	(1.5)ppts	(2.2)ppts	2.1 ppts	12.8	(1.3)ppts	11.5	12.0	(0.5)ppts	0.0 ppts	0.4 ppts	11.5	0.0 ppts
Net margin (%)	6.7	9.9	(3.2)ppts	(7.4)ppts	0.7 ppts	10.2	(3.5)ppts	9.9	10.3	(0.4)ppts	3.2 ppts	1.5 ppts	10.1	(0.1)ppts

Source: Bloomberg, KGI Research estimates

#### Figure 2: Breakdown of 2023 results & 2024-25 forecast revisions vs. consensus

			23					202	4F		1	2025F							
	KGI																		
Actual	forecast	Diff. (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)		
2,713	12,965	(1.9)	(8.3)	12,878	(1.3)	15,350	15,692	(2.2)	20.7	15,256	0.6	18,530	19,069	(2.8)	20.7	16,877	9.8		
3,005	3,130	(4.0)	10.4	3,097	(3.0)	3,991	4,046	(1.4)	32.8	3,852	3.6	4,951	4,995	(0.9)	24.1	4,331	14.3		
1,376	1,460	(5.7)	17.3	1,440	(4.4)	2,152	2,198	(2.1)	56.4	2,030	6.0	2,883	2,813	2.5	34.0	2,293	25.7		
1,568	1,731	(9.4)	(3.7)	1,703	(7.9)	2,253	2,295	(1.8)	43.7	2,171	3.8	2,943	2,873	2.4	30.6	2,448	20.2		
1,232	1,365	(9.8)	(2.5)	1,363	(9.6)	1,782	1,816	(1.8)	44.7	1,712	4.1	2,335	2,279	2.5	31.0	1,944	20.1		
14.28	15.86	(9.8)	(2.7)	15.80	(9.6)	20.66	21.09	(1.8)	44.7	19.85	4.1	27.06	26.47	2.5	31.0	22.54	20.1		
23.6	24.1	(0.5)ppts	4.0 ppts	24.1	(0.4)ppts	26.0	25.8	0.2 ppts	2.4 ppts	25.3	0.7 ppts	26.7	26.2	0.5 ppts	0.7 ppts	25.7	1.1 ppts		
10.8	11.3	(0.4)ppts	2.4 ppts	11.2	(0.4)ppts	14.0	14.0	0.0 ppts	3.2 ppts	13.3	0.7 ppts	15.6	14.8	0.8 ppts	1.5 ppts	13.6	2.0 ppts		
9.7	10.5	(0.8)ppts	0.6 ppts	10.6	(0.9)ppts	11.6	11.6	0.0 ppts	1.9 ppts	11.2	0.4 ppts	12.6	11.9	0.6 ppts	1.0 ppts	11.5	1.1 ppts		
2,: 3,0 1,: 1,: 1,: 1,: 14 2	713 005 376 568 232 .28 3.6 0.8 9.7	713     12,965       005     3,130       376     1,460       568     1,731       232     1,365       .28     15.86       3.6     24.1       0.8     11.3       9.7     10.5	713     12,965     (1.9)       005     3,130     (4.0)       376     1,460     (5.7)       568     1,731     (9.4)       232     1,365     (9.8)       .28     15.86     (9.8)       3.6     24.1     (0.5)ppts       0.8     11.3     (0.4)ppts	713     12,965     (1.9)     (8.3)       005     3,130     (4.0)     10.4       376     1,460     (5.7)     17.3       568     1,731     (9.4)     (3.7)       232     1,365     (9.8)     (2.5)       .28     15.86     (9.8)     (2.7)       3.6     24.1     (0.5)ptpts     4.0 ptpts       0.8     11.3     (0.4)ptpts     2.4 ptpts       9.7     10.5     (0.8)ptpts     0.6 ptpts	713     12,965     (1.9)     (8.3)     12,878       005     3,130     (4.0)     10.4     3,097       376     1,460     (5.7)     17.3     1,440       568     1,731     (9.4)     (3.7)     1,703       232     1,365     (9.8)     (2.5)     1,363       .28     15.86     (9.8)     (2.7)     15.80       3.6     24.1     (0.5)pts     4.0 pts     24.11       0.8     11.3     (0.4)pts     2.4 pts     11.2       9.7     10.5     (0.8)pts     0.6 pts     10.6	713     12,965     (1.9)     (8.3)     12,878     (1.3)       005     3,130     (4.0)     10.4     3,097     (3.0)       376     1,460     (5.7)     17.3     1,440     (4.4)       568     1,731     (9.4)     (3.7)     1,703     (7.9)       232     1,365     (9.8)     (2.5)     1,363     (9.6)       .28     15.86     (9.8)     (2.7)     15.80     (9.6)       .3.6     24.1     (0.5)ppts     4.0 ppts     24.1     (0.4)ppts       0.8     11.3     (0.4)ppts     2.4 ppts     11.2     (0.4)ppts       9.7     10.5     (0.8)ppts     0.6 ppts     10.6     (0.9)ppts	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,782       2.28     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66       3.6     24.1     (0.5)ppts     4.0 ppts     24.1     (0.4)ppts     26.0       0.8     11.3     (0.4)ppts     2.4 ppts     11.2     (0.4)ppts     14.0       9.7     10.5     (0.8)ppts     0.6 ppts     10.6     (0.9)ppts     11.6	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,782     1,816       .28     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66     21.09       3.6     24.1     (0.5)pts     4.0 pts     24.1     (0.4)ppts     24.58     14.0     14.0       9.7     10.5     (0.8)pts     0.4 pts     11.2     (0.4)ppts     14.0     14.0	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692     (2.2)       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046     (1.4)       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198     (2.1)       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295     (1.8)       2232     1,365     (9.8)     (2.5)     1,363     (9.6)     1,782     1,816     (1.8)       .28     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66     21.09     (1.8)       3.6     24.1     (0.5)ppts     4.0 ppts     24.1     (0.4)ppts     26.0     25.8     0.2 ppts       0.8     11.3     (0.4)ppts     2.4 ppts     11.2     (0.4)ppts     14.0     14.0     0.0 ppts       9.7     10.5     (0.8)ppts     0.6 ppts     10.6     (0.9)ppts     11.6     11.6     0.0 ppts <	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692     (2.2)     20.7       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046     (1.4)     32.8       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198     (2.1)     56.4       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295     (1.8)     43.7       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,782     1,816     (1.8)     44.7       3.6     24.1     (0.5)pts     4.0 pts     24.1     (0.4)ppts     2.4 pts     11.2     (0.4)ppts     14.0     0.0 pts     3.2 pts       9.7     10.5     (0.8)ppts     0.6 ppts     10.6     (0.9)ppts     11.6     11.6     0.0 ppts     1.9 pts	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692     (2.2)     20.7     15,256       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046     (1.4)     32.8     3,852       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198     (2.1)     56.4     2,030       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295     (1.8)     43.7     2,171       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,772     1,816     (1.8)     44.7     1,712       2.28     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66     21.09     (1.8)     44.7     19.85       3.6     24.1     (0.5)pts     4.0 pts     24.1     (0.4)ppts     2.4 ppts     25.3       0.8     11.3     (0.4)ppts     2.4 ppts     11.2     (0.4)ppts     14.0     14.0     0.0 pp	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692     (2.2)     20.7     15,256     0.6       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046     (1.4)     32.8     3,852     3.6       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198     (2.1)     56.4     2,030     6.0       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295     (1.8)     43.7     2,171     3.8       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,782     1,816     (1.8)     44.7     1,712     4.1       .28     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66     21.09     (1.8)     44.7     19.85     4.1       .36     24.1     (0.5)ppts     4.0 ppts     24.1     (0.4)ppts     24.0     0.0 ppts     2.2 ppts     2.3     0.7 ppts	713     12,965     (1.9)     (8.3)     12,878     (1.3)     15,350     15,692     (2.2)     20.7     15,256     0.6     18,530       005     3,130     (4.0)     10.4     3,097     (3.0)     3,991     4,046     (1.4)     32.8     3,852     3.6     4,951       376     1,460     (5.7)     17.3     1,440     (4.4)     2,152     2,198     (2.1)     56.4     2,030     6.0     2,883       568     1,731     (9.4)     (3.7)     1,703     (7.9)     2,253     2,295     (1.8)     43.7     2,171     3.8     2,943       232     1,365     (9.8)     (2.7)     15.80     (9.6)     1,782     1,816     (1.8)     44.7     1,712     4.1     2,335       228     15.86     (9.8)     (2.7)     15.80     (9.6)     20.66     21.09     (1.8)     44.7     19.85     4.1     27.06       3.6     24.1     (0.5)ppts     40.9 pts     24.1     (0.4)ppts	713   12,965   (1.9)   (8.3)   12,878   (1.3)   15,350   15,692   (2.2)   20.7   15,256   0.6   18,530   19,069     005   3,130   (4.0)   10.4   3,097   (3.0)   3,991   4,046   (1.4)   32.8   3,852   3.6   4,951   4,995     376   1,460   (5.7)   17.3   1,440   (4.4)   2,152   2,198   (2.1)   56.4   2,030   6.0   2,883   2,813     568   1,731   (9.4)   (3.7)   1,703   (7.9)   2,253   2,295   (1.8)   43.7   2,171   3.8   2,943   2,873     232   1,365   (9.8)   (2.7)   15.80   (9.6)   1,782   1,816   (1.8)   44.7   1,712   4.1   2,335   2,279     2.8   15.86   (9.8)   (2.7)   15.80   (9.6)   20.66   21.09   (1.8)   44.7   1,712   4.1   2,335   2,279     2.8   0.4   (0.5)pits   4.0 pits   24.1   (0.4)pits   24.91   26.0	713   12,965   (1.9)   (8.3)   12,878   (1.3)   15,350   15,692   (2.2)   20.7   15,256   0.6   18,530   19,069   (2.8)     005   3,130   (4.0)   10.4   3,097   (3.0)   3,991   4,046   (1.4)   32.8   3,852   3.6   4,951   4,995   (0.9)     376   1,460   (5.7)   17.3   1,440   (4.4)   2,152   2,198   (2.1)   56.4   2,030   6.0   2,883   2,813   2.5     568   1,731   (9.4)   (3.7)   1,703   (7.9)   2,253   2,295   (1.8)   43.7   2,171   3.8   2,943   2,873   2.4     232   1,365   (9.8)   (2.7)   15.80   (9.6)   1,782   1,816   (1.8)   44.7   1,712   4.1   2,335   2,279   2.5     2.8   15.86   (9.8)   (2.7)   15.80   (9.6)   20.66   21.09   (1.8)   44.7   19.85   4.1   2.706   26.7   2.5     3.6   24.1   (0.5)p	713   12,965   (1.9)   (8.3)   12,878   (1.3)   15,350   15,692   (2.2)   20.7   15,256   0.6   18,530   19,069   (2.8)   20.7     005   3,130   (4.0)   10.4   3,097   (3.0)   3,991   4,046   (1.4)   32.8   3,852   3.6   4,951   4,995   (0.9)   24.1     376   1,460   (5.7)   17.3   1,440   (4.4)   2,152   2,198   (2.1)   56.4   2,030   6.0   2,883   2,813   2.5   34.0     568   1,731   (9.4)   (3.7)   1,703   (7.9)   2,253   2,295   (1.8)   43.7   2,171   3.8   2,943   2,873   2.4   30.6     232   1,365   (9.8)   (2.7)   15.80   (9.6)   1,782   1,816   (1.8)   44.7   1,712   4.1   2,335   2,279   2.5   31.0     2.8   15.86   (9.8)   (2.7)   15.80   (9.6)   20.66   21.09   (1.8)   44.7   19.85   4.1   27.06   26.	713   12,965   (1.9)   (8.3)   12,878   (1.3)   15,350   15,692   (2.2)   20.7   15,256   0.6   18,530   19,069   (2.8)   20.7   16,877     005   3,130   (4.0)   10.4   3,097   (3.0)   3,991   4,046   (1.4)   32.8   3,852   3.6   4,951   4,995   (0.9)   24.1   4,331     376   1,460   (5.7)   17.3   1,440   (4.4)   2,152   2,198   (2.1)   56.4   2,030   6.0   2,883   2,813   2.5   34.0   2,293     568   1,731   (9.4)   (3.7)   1,703   (7.9)   2,253   2,295   (1.8)   43.7   2,171   3.8   2,943   2,873   2.4   30.6   2,448     232   1,365   (9.8)   (2.7)   15.80   (9.6)   1,782   1,816   (1.8)   44.7   1,712   4.1   2,335   2,279   2.5   31.0   1,944     .28   15.86   (9.8)   (2.7)   15.80   (9.6)   20.66   21.09 <td< td=""></td<>		

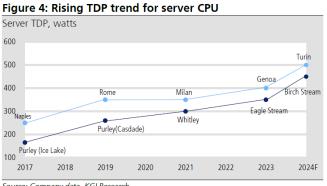
Source: Bloomberg; KGI Research estimates

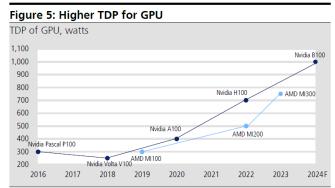
#### Figure 3: Product mix forecasts

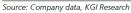
Sales weighting (%)	2019	2020	2021	2022	2023	2024F	2024F guidance	2025F	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23
NB	23	31	34	36	36	32	32	29	36	39	36	33	31	39	39	37
DT	9	7	7	6	10	8	7	7	4	5	8	8	10	11	9	8
Gaming PC & VGA & MB	27	33	35	29	26	23	22	21	34	29	25	28	33	21	23	27
Server	17	16	16	22	23	29	30	36	17	20	25	26	23	23	25	21
Smartphone	19	9	4	4	3	4	5	4	5	3	3	3	2	4	3	4
Auto/others	5	4	4	3	2	4	4	4	4	4	3	1	1	2	1	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sales (NT\$mn)																
NB	2,357	3,786	4,902	4,975	4,577	4,943	4,882	5,437	1,363	1,290	1,180	1,141	1,017	1,013	1,362	1,237
DT	922	855	934	869	1,271	1,170	1,068	1,287	151	165	267	285	328	286	314	268
Gaming PC & VGA & MB	2,716	4,031	5,045	4,036	3,305	3,537	3,356	3,890	1,287	959	834	955	1,082	545	803	903
Server	1,742	1,954	2,305	3,042	2,924	4,386	4,577	6,579	644	662	834	903	754	597	873	702
Smartphone	1,985	1,099	499	504	381	648	763	687	189	99	100	116	66	104	105	134
Auto/others	512	489	573	431	254	667	610	650	151	132	120	27	33	52	35	100
Total	10,248	12,214	14,258	13,857	12,713	15,350	15,255	18,530	3,786	3,309	3,335	3,428	3,280	2,596	3,492	3,344
Sales YoY (%)																
NB	14	61	29	1	(8)	8	7	10	18	39	(9)	(25)	(25)	(22)	15	8
DT	(7)	(7)	9	(7)	46	(8)	(16)	10	(54)	(8)	20	38	117	73	18	(6)
Gaming PC & VGA & MB	14	48	25	(20)	(18)	7	2	10	1	(22)	(30)	(30)	(16)	(43)	(4)	(5)
Server	26	12	18	32	(4)	50	57	50	56	38	32	15	17	(10)	5	(22)
Smartphone	332	(45)	(55)	1	(24)	70	100	6	38	11	(32)	(7)	(65)	5	5	16
Others	34	(5)	17	(25)	(41)	162	140	(2)	10	47	(46)	(78)	(78)	(61)	(71)	275
Total	34	19	17	(3)	(8)	21	20	21	10	11	(10)	(17)	(13)	(22)	5	(2)
Sales QoQ (%)																
NB									(11)	(5)	(9)	(3)	(11)	(0)	35	(9)
DT									(27)	9	61	7	15	(13)	10	(15)
Gaming PC & graphics cards									(5)	(25)	(13)	15	13	(50)	47	12
Server									(18)	3	26	8	(16)	(21)	46	(20)
Smartphone									53	(48)	1	15	(43)	58	1	28
Auto/others									22	(13)	(9)	(78)	22	58	(33)	187
Total									(8)	(13)	1	3	(4)	(21)	35	(4)

Source: company data; KGI Research estimates









2021	2023	2024		2025	
		GH200NVL	GB200NVL	GX200NVL	Arm Training & Inference
		GH200	GB200	GX200	Arm Inference
A100 —	→ H100 <	→ H200	B100	X100	X86 Training & Inference
		L40S	₿40	×40	X86 Enterprise & Inference
	Quantum	400G —	→ 800G —	→ 1600G	InfiniBand AI Infrastructure
etworking switch					
	Spectrum-X	400G	→ 800G	→ 1600G	Ethernet-X Enterprise & Hyperscale AI Infrastrucutre

Source: Nvidia, KGI Research

#### Figure 7: Nvidia's key scale up product spec and schedule - upcoming GH200/GB200/B100/B200 AI GPUs the key spotlight

	H200	GH200 NVL32	B100	B200	GB200 NVL72	B200 NVL72
Platform	Vulcan	Oberon	Umbriel	Umbriel	Oberon	Miranda
Form factor	HGX 8-GPU baseboard	GH 2:2 board, NVSwitch tray, NVL backplane	HGX 8-GPU baseboard	HGX 8-GPU baseboard	GH 1:2 board, NVSwitch tray, NVL backplane	GPU board, NVSwitch tray, NVL backplane
CPU	x86	Grace	x86	x86	Grace	x86
TDP	700W	900W	700W	1,000W	1,200W	1,200W
Networking	400Gb/s IB w/ SHARP, SpectrumX ETH	400Gb/s IB w/ SHARP, SpectrumX ETH	400Gb/s IB w/ SHARP, SpectrumX ETH	400Gb/s IB w/ SHARP, SpectrumX ETH	400 or 800Gb/s IB w/ SHARP, SpectrumX ETH	400 or 800Gb/s IB w/ SHARP, SpectrumX ETH
Schedule of launch	2024	2024	2024	2024	2024	2024
Mass Production	Late 2Q24	2Q24	Late 3Q24	Late 3Q24	1Q25	2Q25

Source: Nvidia, KGI Research

Source: Company data, KGI Research



#### Figure 8: Thermal solution upgrades to liquid cooling to create much higher content value for thermal plays



Source: Auras, KGI Research

			GM (%)		C	OPM (%)		E	PS (NT\$)		EP	S YoY(%	)	2022-25F
Company	Ticker	2023	2024F	2025F	2023	2024F	2025F	2023	2024F	2025F	2023	2024F	2025F	CAGR
AVC	3017 TT	21.0	23.8	25.2	12.4	15.7	17.7	14.11	17.90	23.57	19.8	26.9	31.7	26.0
Auras	3324 TT	23.6	26.0	26.7	10.8	14.0	15. <mark>6</mark>	14.28	20.66	27.06	(2.7)	44.7	31.0	22.6
Sunonwealth	2421 TT	27.9	29.1	29.8	11.8	14.7	16.0	5.16	6.58	7.74	18.9	27.5	17.6	21.3
Chenbro	8210 TT	22.8	24.4	24.7	12.3	15.2	15.5	8.55	14.13	18.14	2.8	65.2	28.4	29.7

Source: company data, KGI Research estimates

Figure 10	): Peer cor	nparis	on – Va	luatio	ons																		
Sector	Company	Ticker	Market cap.	Share price	Rating	Target Price	I	EPS (LCY)		EP	S YoY (%	<b>)</b>		PE (x)			PB (x)			ROE (%)		Cash yie	ld (%)
			(US\$mn)	(LCY)		(LCY)	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F	2025F	2023F	2024F
	Sunonwealth	2421 TT	1,069	123.0	Outperform	155.0	5.16	6.58	7.74	18.9	27.5	17.6	23.8	18.7	15.9	4.6	4.3	4.0	21.5	24.0	26.2	2.8	3.8
Cooling fan	Nidec Corp*	6594 JP	22,575	5,596.0	Not rated	N.A.	138.97	267.13	325.55	(40.2)	92.2	21.9	40.3	20.9	17.2	2.4	2.1	1.9	7.0	11.4	11.7	1.3	1.3
Cooling ran	Sun Max Tech*	6591 TT	72	63.4	Not rated	N.A.	3.77	4.14	N.M.	(45.4)	9.8	N.A.	16.8	15.3	N.A.	1.2	1.2	N.A.	7.5	7.8	N.M.	3.5	3.8
	Minebea Mitsumi*	6479 JP	9,032	3,126.0	Not rated	N.A.	181.92	129.15	194.79	7.0	(29.0)	50.8	17.2	24.2	16.0	2.2	1.9	1.7	13.2	8.2	10.9	1.3	1.3
	AVC	3017 TT	6,992	574.0	Outperform	660.0	14.11	17.90	23.57	19.8	26.9	31.7	40.7	32.1	24.4	12.1	10.2	8.4	31.5	34.6	38.0	1.2	1.6
Thermal module/	Delta Elec	2308 TT	25,753	312.0	Neutral	297.0	12.86	13.10	15.15	2.2	1.9	15.6	24.3	23.8	20.6	4.2	3.8	3.5	17.5	16.7	17.6	2.1	2.1
Cooling fan	Vertiv	VRT US	27,536	72.1	Not rated	N.A.	1.75	2.33	2.87	776.0	32.7	23.6	41.1	31.0	25.1	14.7	10.8	10.1	40.8	38.3	43.5	0.0	0.1
	Dover Corporation	DOV US	24,048	171.9	Not rated	N.A.	8.77	9.01	9.81	17.3	2.8	8.8	19.6	19.1	17.5	4.9	4.2	3.8	23.5	21.7	20.7	1.2	1.2
	Nidec CCI*	6230 TT	376	137.0	Not rated	N.A.	7.47	6.70	7.67	5.2	(10.3)	14.5	18.3	20.4	17.9	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Auras	3324 TT	1,605	571.0	Outperform	660.0	14.28	20.66	27.06	(2.7)	44.7	31.0	40.0	27.6	21.1	7.6	6.6	5.7	20.2	25.0	28.3	1.1	1.6
Thermal module	Taisol*	3338 TT	198	70.8	Not rated	N.A.	2.74	3.53	N.M.	N.A.	28.8	N.A.	25.8	20.1	N.A.	3.3	3.2	N.A.	13.0	16.2	N.M.	2.7	3.5
mermarmouue	Foxconn Tech*	2354 TT	2,211	49.2	Not rated	N.A.	4.34	5.41	5.71	43.7	24.7	5.5	11.3	9.1	8.6	0.4	0.4	0.4	5.8	7.0	7.1	3.0	4.4
	Fujikura Ltd*	5803 JP	3,944	1,970.5	Not rated	N.A.	159.49	158.88	169.07	12.4	(0.4)	6.4	12.4	12.4	11.7	2.1	1.7	1.6	18.5	15.2	13.5	1.4	2.4
	Furukawa Elect*	5801 JP	1,467	3,068.0	Not rated	N.A.	219.11	58.92	181.88	52.8	(73.1)	208.7	14.0	52.1	16.9	0.7	0.7	0.7	5.4	1.2	4.2	2.0	2.0

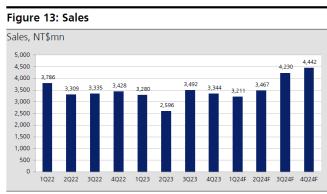
Source: KGI Research; \*Bloomberg consensus



#### Figure 11: Company profile

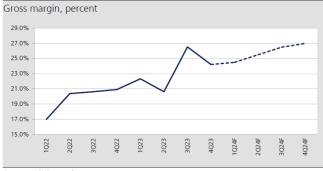
Established in 1998, Auras is a top-three thermal solution maker in Taiwan, serving the NB/DT, graphics card, gaming PC, server, and smartphone industries. Top clients include MSI (2377 TT, NT\$188, N), Dell (US), HP (US), Asustek (2357 TT, NT\$452.5, OP), and Samsung (KR). 2023 application sales mix was NB (36%), DT (10%), graphics cards/ gaming PC (29%), server (23%), smartphone (3%), and others (2%). 2024-25F sales growth will be driven by server sales.

Source: KGI Research



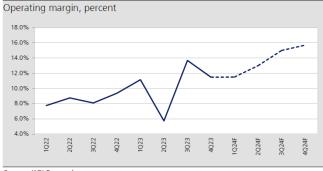
Source: KGI Research

#### Figure 15: Gross Margin



Source: KGI Research

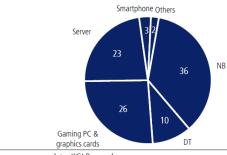
#### Figure 17: Operating Margin



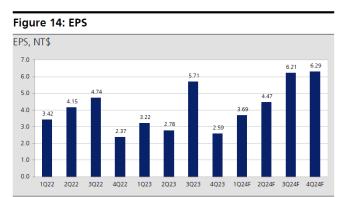
Source: KGI Research

## Figure 12: NB, gaming PC & graphics card, & server solutions contribute bulk of sales

Sales weighting in 2023, percent



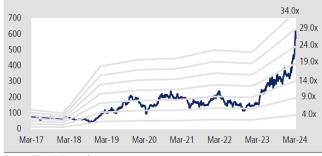
Source: company data; KGI Research



Source: KGI Research

#### Figure 16: 12M forward PE band

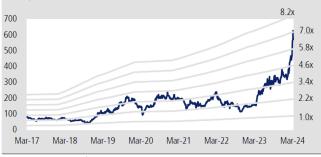
Share price, NT\$ (LHS); PE ratio, x (RHS)



Source: TEJ; KGI Research estimates

#### Figure 18: 12M forward PB band

Share price, NT\$ (LHS); PB ratio, x (RHS)



Source: TEJ; KGI Research estimates



#### Income statement

	Quarterly								Annually		
	Mar-23A	Jun-23A	Sep-23A	Dec-23A	Mar-24F	Jun-24F	Sep-24F	Dec-24F	Dec-23A	Dec-24F	Dec-25F
Income statement (NT\$mn)											
Revenue	3,280	2,596	3,492	3,344	3,211	3,467	4,230	4,442	12,713	15,350	18,530
Cost of goods sold	(2,548)	(2,061)	(2,565)	(2,534)	(2,424)	(2,583)	(3,109)	(3,242)	(9,708)	(11,359)	(13,579)
Gross profit	733	535	927	810	787	884	1,121	1,199	3,005	3,991	4,951
Operating expenses	(367)	(387)	(449)	(426)	(417)	(433)	(486)	(502)	(1,629)	(1,839)	(2,068)
Operating profit	366	149	478	384	369	451	635	697	1,376	2,152	2,883
Depreciation of fixed assets	(115)	(111)	(108)	(105)	(98)	(98)	(98)	(98)	(439)	(394)	(476)
Amortisation of intangible assets	(7)	(8)	(8)	(9)	(8)	(8)	(8)	(8)	(32)	(34)	(34)
EBITDA	487	268	594	498	476	558	741	804	1,847	2,579	3,393
Interest income	2	6	4	10	3	3	3	3	23	12	9
Investment income	0	-	-	-	3	3	3	3	0	10	10
Other non-op income	32	148	125	41	45	45	45	45	345	180	140
Non-operating income	34	154	128	51	50	50	50	50	368	202	159
Interest expense	(10)	(3)	(7)	(8)	(4)	(4)	(4)	(4)	(28)	(16)	(14)
Investment loss	-	(1)	(0)	(1)	(1)	(1)	(1)	(1)	(2)	(5)	(5)
Other non-op expenses	(37)	0	0	(109)	(20)	(20)	(20)	(20)	(146)	(80)	(80)
Non-operating expenses	(47)	(4)	(8)	(118)	(25)	(25)	(25)	(25)	(177)	(101)	(99)
Pre-tax profit	353	300	599	317	394	476	660	723	1,568	2,253	2,943
Current taxation	(76)	(58)	(101)	(93)	(71)	(86)	(119)	(175)	(329)	(451)	(589)
Minorities	0	(2)	(6)	0	(5)	(5)	(5)	(5)	(7)	(20)	(20)
Normalised net profit	277	239	492	224	318	385	536	542	1,232	1,782	2,335
Extraordinary items	(0)	(0)	(0)	(0)	-	-	-	-	-	-	-
Net profit	277	239	492	224	318	385	536	542	1,232	1,782	2,335
EPS (NT\$)	3.22	2.78	5.71	2.59	3.69	4.47	6.21	6.29	14.28	20.66	27.06
Margins (%)											
Gross profit margin	22.3	20.6	26.5	24.2	24.5	25.5	26.5	27.0	23.6	26.0	26.7
Operating margin	11.1	5.7	13.7	11.5	11.5	13.0	15.0	15.7	10.8	14.0	15.6
EBITDA margin	14.9	10.3	17.0	14.9	14.8	16.1	17.5	18.1	14.5	16.8	18.3
Pretax profit margin	10.7	11.5	17.1	9.5	12.3	13.7	15.6	16.3	12.3	14.7	15.9
Net profit margin	8.5	9.2	14.1	6.7	9.9	11.1	12.7	12.2	9.7	11.6	12.6
Sequential growth (%)											
Revenue growth	(4.3)	(20.9)	34.5	(4.2)	(4.0)	8.0	22.0	5.0			
Gross profit growth	2.2	(26.9)	73.1	(12.6)	(2.9)	12.4	26.8	7.0			
Operating profit growth	13.9	(59.3)	221.4	(19.6)	(3.9)	22.1	40.8	9.9			
EBITDA growth	7.7	(45.1)		(16.1)		17.1	33.0	8.5			
Pretax profit growth	34.8	(15.0)		(47.1)		20.7	38.6	9.5			
Net profit growth	35.8	(13.7)	105.6	(54.5)	42.5	21.0	39.1	1.2			
YoY growth (%)		(		()							
Revenue growth	(13.4)	(21.5)	4.7	(2.4)	(2.1)	33.6	21.1	32.8	(8.3)	20.7	20.7
Gross profit growth	14.0	(20.6)	34.7	13.0	7.4	65.1	21.0	48.0	10.4	32.8	24.1
Operating profit growth	24.7	(48.6)	77.3	19.6	1.0	203.1	32.8	81.6	17.3	56.4	34.0
		(.0.0)				200.1					
		(36.8)	49.2	10.0	(2.3)	108.4	24.9	61.5	8.0	39.7	31.5
EBITDA growth Pretax profit growth	11.9 (5.4)	(36.8) (33.8)	49.2 10.7	10.0 21.1	(2.3) 11.9	108.4 58.9	24.9 10.2	61.5 128.1	8.0 (3.7)	39.7 43.7	31.5 30.6

Source: Company data, KGI Research estimates



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Balance sheet					
NT\$mn	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
Total assets	11,895	11,743	12,612	14,334	16,551
Current assets	8,978	8,420	8,653	9,964	11,826
Cash & ST securities	1,494	1,492	1,450	1,473	1,681
Inventory	2,292	2,072	2,307	2,692	3,227
Accounts receivable	4,745	4,490	4,419	5,321	6,441
Other current assets	448	365	477	477	477
Non-current assets	2,917	3,323	3,959	4,370	4,724
LT investments	109	128	215	270	350
Net fixed assets	2,442	2,715	3,126	3,482	3,756
Other assets	366	480	618	618	618
Total liabilities	6,986	5,933	5,745	6,477	7,402
Current liabilities	5,670	5,620	4,787	5,753	6,658
Accounts payable	4,091	2,848	3,157	3,683	4,415
Interest bearing ST liabilities	416	1,498	232	431	353
Other current liabilities	1,162	1,273	1,398	1,638	1,890
Non-current liabilities	1,317	313	959	724	744
Long-term debt	1,299	255	916	681	701
Other L-T liabilities	9	0	(0)	(0)	(0)
Total equity	4,909	5,810	6,866	7,857	9,149
Share capital	884	884	884	884	884
Retained earnings reserve	2,722	3,304	3,926	4,897	6,169
Minority interests	166	244	231	251	271
Preferred shareholders funds	-	-	-	-	-

#### Key ratios

	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
Growth					
Revenue growth	16.7%	(2.8%)	(8.3%)	20.7%	20.7%
Operating profit growth	(11.7%)	(14.9%)	17.3%	56.4%	34.0%
EBITDA growth	(3.9%)	(10.0%)	8.0%	39.7%	31.5%
Net profit growth	1.9%	11.6%	(2.5%)	44.7%	31.0%
EPS growth	1.9%	11.9%	(2.7%)	44.7%	31.0%
Profitability					
Gross profit margin	18.7%	19.6%	23.6%	26.0%	26.7%
Operating margin	9.7%	8.5%	10.8%	14.0%	15.6%
EBITDA margin	13.3%	12.3%	14.5%	16.8%	18.3%
Net profit margin	7.9%	9.1%	9.7%	11.6%	12.6%
Return on average assets	10.3%	10.7%	10.1%	13.2%	15.1%
Return on average equity	24.3%	24.5%	20.2%	25.0%	28.3%
Stability					
Gross debt to equity	34.9%	30.2%	16.7%	14.2%	11.5%
Net debt to equity	4.5%	4.6%	Net cash	Net cash	Net cash
Interest coverage (x)	62.2	43.4	57.2	144.1	212.3
Interest & ST debt coverage (x)	0.8	0.5	0.9	0.8	0.9
Cash flow interest coverage(x)	62.1	32.3	70.6	91.7	137.6
Cash flow/int. & ST debt (x)	3.3	0.8	7.6	3.2	5.2
Current ratio (x)	1.6	1.5	1.8	1.7	1.8
Quick ratio (x)	1.2	1.1	1.3	1.3	1.3
Net debt (NT\$mn)	221	269	(218)	(277)	(543)
Per share data					
EPS (NT\$)	13.12	14.68	14.28	20.66	27.06
CFPS (NT\$)	16.72	14.41	22.85	16.74	22.22
BVPS (NT\$)	53.65	62.97	75.04	86.02	100.40
Adj BVPS (NT\$)	54.94	64.67	76.92	88.18	102.92
SPS (NT\$)	165.15	160.99	147.37	177.94	214.81
EBITDA/share (NT\$)	21.99	19.86	21.41	29.90	39.33
Cash DPS (NT\$)	6.00	6.50	6.50	9.17	12.02
Activity					
Sales / avg assets	1.29	1.17	1.04	1.14	1.20
Days receivable	121.5	118.3	126.9	126.9	126.9
Days inventory	72.1	67.9	86.7	86.7	86.7
Days payable	128.8	93.4	118.7	118.7	118.7
Cash cycle	64.8	92.8	94.9	94.9	94.9

Source: Company data, KGI Research estimates

Profit & loss					
NT\$mn	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
Revenue	14,258	13,857	12,713	15,350	18,530
Cost of goods sold	(11,595)	(11,135)	(9,708)	(11,359)	(13,579)
Gross profit	2,663	2,722	3,005	3,991	4,951
Operating expenses	(1,284)	(1,549)	(1,629)	(1,839)	(2,068)
Operating profit	1,379	1,173	1,376	2,152	2,883
Non-operating income	139	550	368	202	159
Interest income	2	10	23	12	9
Investment income	-	10	0	10	10
Other non-op income	138	529	345	180	140
Non-operating expenses	(97)	(95)	(177)	(101)	(99)
Interest expense	(23)	(38)	(28)	(16)	(14)
Investment loss	(3)	(1)	(2)	(5)	(5)
Other non-op expenses	(71)	(55)	(146)	(80)	(80)
Pre-tax profit	1,421	1,628	1,568	2,253	2,943
Current taxation	(268)	(341)	(329)	(451)	(589)
Minorities	(21)	(23)	(7)	(20)	(20)
Extraordinary items	-	(0)	(0)	-	-
Net profit	1,133	1,264	1,232	1,782	2,335
EBITDA	1,899	1,709	1,847	2,579	3,393
EPS (NT\$)	13.12	14.68	14.28	20.66	27.06

### Cash flow

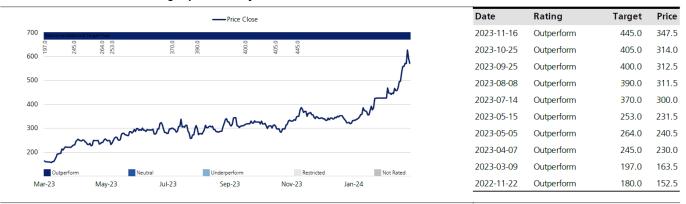
NT\$mn	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
Operations cash flow	1,444	1,241	1,971	1,444	1,916
Net profit	1,133	1,264	1,232	1,782	2,335
Depreciation & amortisation	520	536	470	427	510
Decrease in working capital	(202)	(758)	151	(760)	(923)
Other operating cash flow	(6)	199	117	(5)	(5)
Investing cash flow	(1,038)	(633)	(1,053)	(834)	(859)
Sale of ST investment	-	-	(89)	-	-
New investments	(84)	-	(100)	(50)	(75)
Capital expenditure	(1,030)	(615)	(835)	(750)	(750)
Others investing cashflow	75	(18)	(30)	(34)	(34)
Free cash flow	373	61	843	605	1,109
Financing cash flow	(303)	(629)	(1,007)	(587)	(850)
Increase in short term debt	327	(71)	(305)		
Increase in long term loans	350	10	(81)	(36)	(58)
New ordinary shares issued	-	-	-		
Ordinary dividends paid	(482)	(517)	(577)	(571)	(811)
Other financing cashflow	(51)	(52)	(43)	20	20
Forex effects	(14)	12	(29)		
Total cash generated	88	(10)	(118)	23	208

ROIC					
	Dec-21A	Dec-22A	Dec-23A	Dec-24F	Dec-25F
1 - COGS/revenue					
- Operating exp./revenue	9.0%	11.2%	12.8%	12.0%	11.2%
= Operating margin	9.7%	8.5%	10.8%	14.0%	15.6%
1 / (Working capital/revenue	0.2	0.2	0.2	0.2	0.2
+ Net PPE/revenue	0.2	0.2	0.2	0.2	0.2
+ Other assets/revenue)	0.0	0.0	0.0	0.0	0.0
= Capital turnover	3.0	2.5	2.1	2.2	2.4
Operating margin	9.7%	8.5%	10.8%	14.0%	15.6%
x Capital turnover	3.0	2.5	2.1	2.2	2.4
x (1 - tax rate)	81.2%	79.0%	79.0%	80.0%	80.0%
= After-tax ROIC	23.4%	16.5%	18.2%	25.1%	29.5%

Source: Company data, KGI Research estimates



#### Auras – Recommendation & target price history



Source: TEJ, KGI Research

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