

FIT Hon Teng (6088 HK)

Beneficiary of GB200 server ramp in 4Q24E; Assessing the AI server opportunity

We identified FIT Hon Teng as the GB200 server winner in H-share tech space, given FIT is poised to benefit from GB200 server ramp in 2025, with Hon Hai being the first ODM shipping to major CSPs in 4Q24E. As GB200 NVL72/36's key component supplier for compute tray connectors/cables, NVLink copper cables, power busbar, liquid cooling components and GPU sockets, we estimate AI server revenue will reach US\$484mn/823mn, accounting for 11%/16% of FIT's earnings in 2025/26E, in our base case (40k NVL72-eq. racks in FY25E). In our bull case (50k NVL72, US\$80k NVLink cable ASP), we forecast revenue could reach US\$886mn in FY25E. Despite recent design changes and NVDA product roadmap updates, we believe potential delay would only push out demand rather than diminish it, and FIT is on track for robust growth following GB200 mass production in 4Q24E. Reiterate BUY with TP of HK\$ 4.25 based on 13x FY25E P/E. Catalysts include GB200 updates and 3Q24 results in Nov.

■ **Our analysis suggested GB200 server revenue will reach US\$422mn/886mn (base/bull) in FY25E.** Our base case assumes GB200 NVL72-eq. server racks to reach 40k units in 2025, and we estimate FIT's GB200 products will generate revenue of US\$422mn in FY25E. By product, we forecast compute tray connector/cables (e.g. MCIO, sockets, PCIe) and NVLink copper cables will deliver US\$115mn/291mn, while other compute tray/rack components (power busbar, UQD, GPU socket) will generate revenue of US\$11mn/0.6mn/4.6mn in FY25E. Together with HGX/MGX AI servers, we estimate AI server revenue will reach US\$484mn/823mn in FY25E/26E.

■ **Latest development on liquid cooling and CPO solutions.** In HHTD 2024, Hon Hai, along with its subsidiaries (FII/Ingrasys/FIT), showcased its GB200 NVL72 racks and liquid cooling components, including its full UQD coupling solutions (UQD, full-flow coupling valves, rectangular connector). FIT is also developing CPO solution and launched conceptual design of FITConn 800G high-speed connector module for AI connectivity.

■ **GB200 server ramp in 4Q24E as upcoming catalysts; Reiterate BUY.** We reiterate our view that FIT will benefit from GB200 server rack ramp with share gains over the next few years. Trading at 9.5x FY25 P/E, we think valuation remains attractive, vs 42%/63% EPS growth in FY24/25E. Maintain BUY with TP of HK\$ 4.25, based on 13x FY25E P/E

Earnings Summary

(YE 31 Dec)	FY22A	FY23A	FY24E	FY25E	FY26E
Revenue (US\$ mn)	4,531	4,196	4,677	6,117	7,347
YoY growth (%)	0.9	(7.4)	11.5	30.8	20.1
Net profit (US\$ mn)	170.1	129.6	183.5	298.7	384.9
YoY growth (%)	24.5	(23.8)	41.6	62.8	28.9
EPS (Reported) (US\$ cents)	2.42	1.82	2.58	4.20	5.42
Consensus EPS (US\$)	0.00	0.00	2.60	3.94	4.76
P/E (x)	16.4	21.8	15.4	9.5	7.3
P/B (x)	1.1	1.1	1.1	1.0	0.9
Yield (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	7.2	5.4	7.3	10.8	12.4
Net gearing (%)	0.0	0.0	0.0	0.0	0.0

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price HK\$4.25
Up/Downside 37.6%
Current Price HK\$3.09

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Stock Data

Mkt Cap (HK\$ mn)	22,455.0
Avg 3 mths t/o (HK\$ mn)	95.2
52w High/Low (HK\$)	3.73/0.90
Total Issued Shares (mn)	7267.0

Source: FactSet

Shareholding Structure

Foxconn Far East Ltd	71.1%
Lu Sung-Ching	5.5%

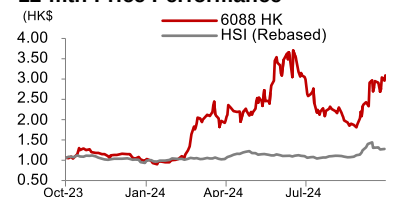
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	64.4%	46.4%
3-mth	1.3%	-12.8%
6-mth	60.9%	29.6%

Source: FactSet

12-mth Price Performance



Source: FactSet

Related Reports:

1. FIT Hon Teng (6088 HK)-2Q24 in-line; Upbeat guidance on power busbar and liquid cooling order wins-14 Aug 2024 ([link](#))
2. FIT Hon Teng (6088 HK)-Positive on acquisition of Auto-kabel Group-12th Jul 2024 ([link](#))
3. FIT Hon Teng (6088 HK)-Share pressure overdone; Raise estimates for stronger AirPods/AI server upside-9th Jul 2024 ([link](#))
4. FIT Hon Teng (6088 HK)-CMBI Corp Day takeaways: Multiple growth drivers in AI server, AI PC/phone and AirPods in FY24/25E- 26 Jun 2024 ([link](#))

Assessing FIT's AI server opportunity:

Figure 1: Scenario analysis of FIT NVDA AI server revenue

FIT NVDA AI server revenue (2025)	Bull	Base	Bear
NVDA AI server units			
GB200/GB300 rack shipment (NVL72-eq.)	50	40	30
NVL36/72 mix	6:1	6:1	6:1
... NVL72 racks ('000)	10	10	10
... NVL36 racks ('000)	80	60	40
# of Compute Trays ('000)	900	720	540
HGX/MGX AI server shipment (H100/H200/B200/B300A/B300)			
# of GPUs (H100/H200/B200/B300A/B300) ('000)	2,800	2,800	2,800
# of AI Servers (H100/H200/B200/B300A/B300) ('000)	350	350	350
GB200/GB300 AI Server revenue			
Compute tray: Connectors/cables (e.g. MCIO, MXIO, memory socket, PCIe)			
FIT content value per compute tray (US\$)	1,000	800	600
FIT share allocation	20%	20%	20%
Total revenue (US\$ '000)	180,000	115,200	64,800
Compute tray: components (e.g. power, thermal)			
FIT content value per compute tray (US\$)	300	300	300
FIT share allocation	5%	5%	5%
Total revenue (US\$ '000)	13,500	10,800	8,100
NVLink copper cables/connector			
... Content value per NVL72 rack (US\$)	80,000	70,000	60,000
... Content value per NVL36 rack (US\$)	56,000	49,000	42,000
TAM - Backplane cables/connectors (US\$ '000)	5,280,000	3,640,000	2,280,000
FIT share allocation	13%	8%	5%
Total revenue (US\$ '000)	686,400	291,200	114,000
Liquid Cooling: Components (e.g. cold plate, UQD, manifold)			
FIT content value per rack (US\$)	300	300	300
FIT share allocation	5%	5%	5%
Total revenue (US\$ '000)	750	600	450
GPU socket (GB300)			
GB300 shipment (2xGPU) ('000)	220	220	220
ASP (US\$)	30	30	30
TAM - GPU sockets (US\$ '000)	6,600	6,600	6,600
FIT share allocation	80%	70%	60%
Total revenue (US\$ '000)	5,280	4,620	3,960
FIT GB200/GB300 AI server revenue (US\$ '000)	885,930	422,420	191,310
HGX/MGX AI server (H100/H200/B200/B300A/B300) revenue			
Server connectors (e.g. MCIO, CPU/memory socket, PCIe)			
FIT's content value per server (US\$)	1,000	800	600
FIT's share allocation	20%	20%	20%
Total revenue (US\$ '000)	70,000	56,000	42,000
GPU sockets			
B300A/B300 shipments ('000)	418	418	418
ASP (US\$)	20	20	20
TAM - GPU sockets (US\$ '000)	8,360	8,360	8,360
FIT share allocation	80%	70%	60%
Total revenue (US\$ '000)	6,688	5,852	5,016
FIT HGX/MGX AI server revenue (US\$ '000)	76,688	61,852	47,016
Total NVDA AI server revenue (US\$ '000)	962,618	484,272	238,326

Source: CMBIGM estimates

GB200 NVL36/72 rack scale design:

The compute power required to train transformer models has exploded, growing by a staggering 20,000x over the last five years. Meta's Llama 3.1 405B model, launched earlier this year, required 38bn petaflops of accelerated compute to train, 50x more than Llama 2 70B model launched a year earlier. Training these large models cannot be managed on a single GPU, and they must be parallelized across massive GPU clusters.

GB200 NVL36/72 rack: GB200 NVL36/72 is a total rack solution and can be non-scalable (single rack) and also scalable (multiple racks expanding into cluster). Compared to eight GPUs on an HGX H200 baseboard with communication speed of 900 GB/s per GPU, the introduction of GB200 NVL36/72 rack design expanded the capabilities of multi-GPU communications, which will support 36/72 Blackwell GPUs with communication speed of 1.8 TB/s per GPU. Each rack hosts 18 compute trays and 9 NVLink switch trays. Each rack also accommodates nine NVLink switch systems to fully connect the 36/72 GPUs.

Figure 2: Hon Hai GB200 NVL72 rack at HHTD 2024



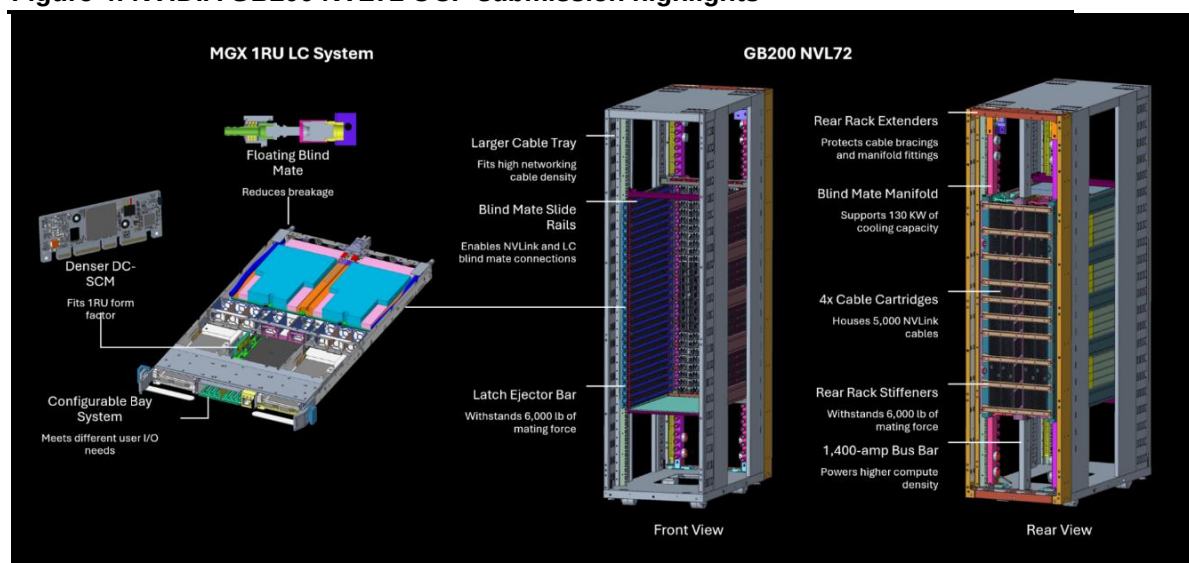
Source: Company data, CMBIGM

Figure 3: GB200 compute tray at HHTD 2024



Source: Company data, CMBIGM

Figure 4: NVIDIA GB200 NVL72 OCP submission highlights



Source: Nvidia, CMBIGM

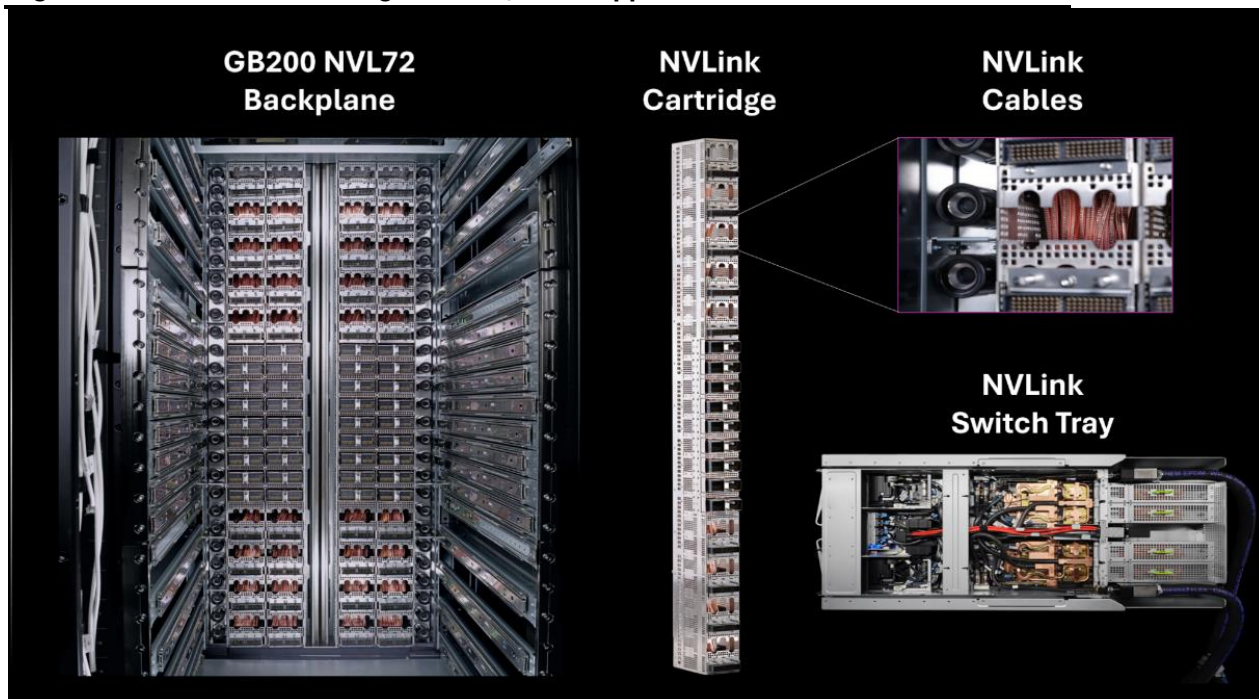
FIT's GB200 server rack-related offerings:

1) NVLink copper cables/connector

To enable high-speed communication between 72 GPUs in NVLink domain, GB200 rack design features four NVLink cartridges mounted at the rear of the rack. These cartridges accommodate 5,000+ copper cables, delivering an aggregate All-to-All bandwidth of 130 TB/s and 260 TB/s AllReduce bandwidth. As each of the GPU supports 18 NVLink ports with four cables connecting each port to NVSwitches, we estimate there are 5,184 cables per GB200 NVL72 rack.

We believe FIT NVLink copper cables will be qualified in the near term and mass production will start in FY25E. In our base case, we assume NVL72 copper cable ASP of US\$70k and FIT's share allocation of 8% in FY25E, and we estimate copper cable revenue will reach US\$291mn in FY25E.

Figure 5: Four NVLink cartridges with 5,000+ copper cables in GB200 server rack



Source: NVIDIA, CMBIGM

2) Compute tray: Connectors/cables

For NVDA AI servers, we believe FIT has long been a major supplier for MCIO connector, MCIO cable, memory socket, PCIe cables and high-speed I/O such as EDSFF and Gen-Z connector. For GB200, mgmt. guided US\$500-1000 content value per compute trays for cables/connectors. In our base case (40k NVL72 racks), we assume FIT content value of US\$800 per compute tray and share allocation of 20% in FY25E, and we estimate related revenue will reach US\$115mn in FY25E.

3) Compute tray: Power busbar

To accommodate high compute density and increased power requirements of the rack, GB200 provides a new design specification for enhanced high-capacity power busbar. The new design supports a substantially higher 1,400 amp current flow, offering a 2x increase in amperage compared to current standards. This enhancement ensures that the busbar can effectively handle the elevated power demands of high-performance computing.

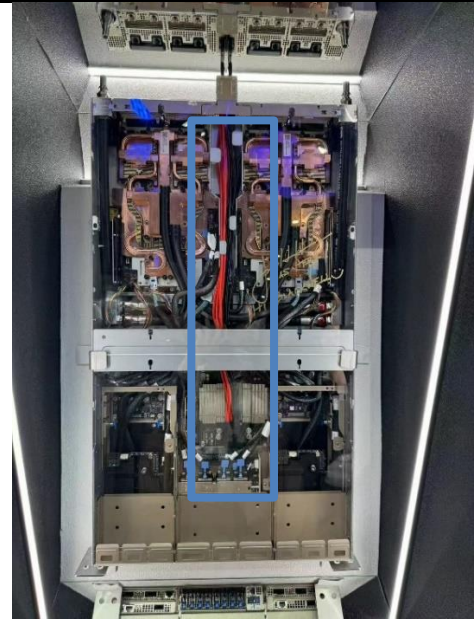
environments, without requiring additional horizontal space within the rack. In our base case, we assume power busbar ASP of US\$300 and FIT's share allocation of 5% in FY25E, and we estimate related revenue will reach US\$10mn in FY25E.

Figure 6: GB200 power busbar at HHTD 2024



Source: Company data, CMBIGM

Figure 7: GB200 power busbar at Computex 2024



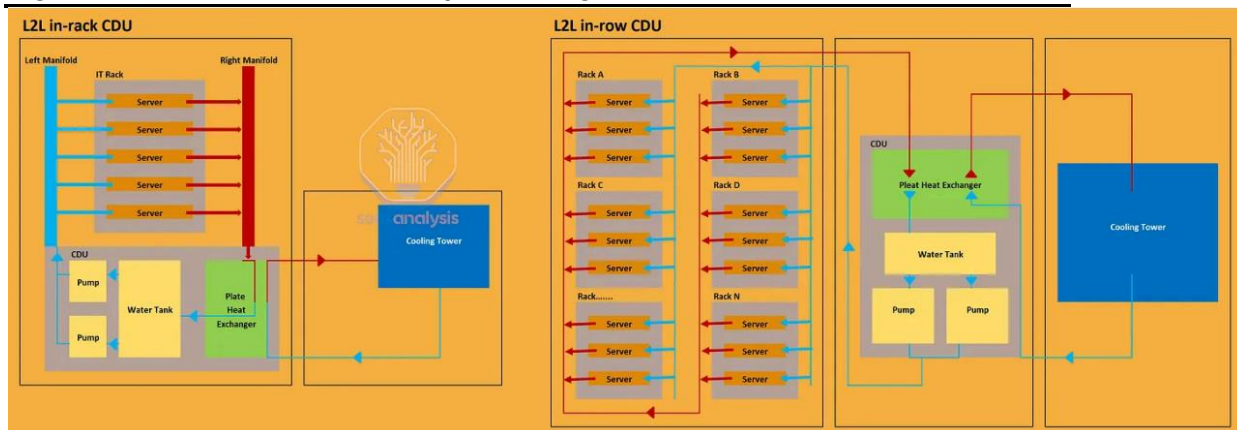
Source: Company data, CMBIGM

4) Liquid cooling components

Liquid cooling components mainly include cold plates, manifold, rear door heat exchanger (RDHx), and cooling distribution units (CDU). CDU is used to regulate the server cooling system and temperature to required standard, and each NVL36/72 in-rack liquid cooling solution requires one CDU, and each CDU comprises four UQD.

In HHTD 2024, Hon Hai showcased its liquid cooling solutions and related components such as cold plate, UQD and manifold. Based on our checks, FIT Hon Teng and Lotes are currently under qualification for its server UQDs. We believe FIT is developing UDQs being used inside the server and on the CDM (Coolant Distribution Manifold). Despite liquid cooling being a crowded area, we are positive on FIT's opportunities to expand its AI server product portfolio and become Hon Hai's in-house component supplier. In our base case, we assume FIT's content value of US\$300 per rack and FIT's share allocation of 5% in FY25E, and we estimate related revenue will reach US\$0.6mn in FY25E.

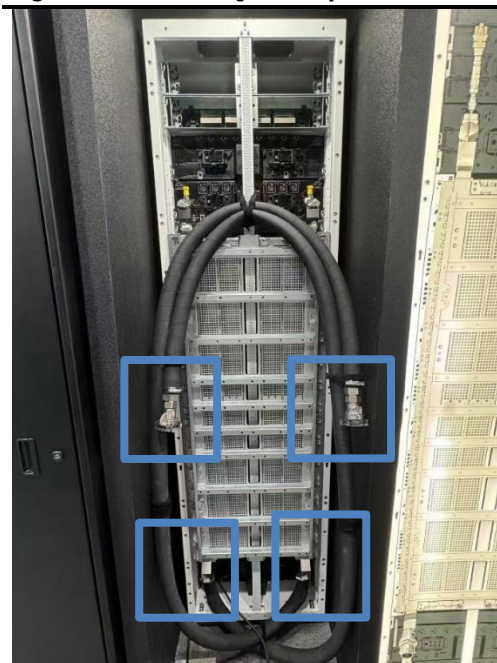
Figure 8: In-rack and in-row L2L liquid cooling solutions



Source: Semi Analysis, CMBIGM

Figure 9: CDU UQD components at HHTD 2024

Source: Company data, CMBIGM

Figure 10: CDU UQD components at Computex

Source: Company data, CMBIGM

5) GPU socket (GB300)

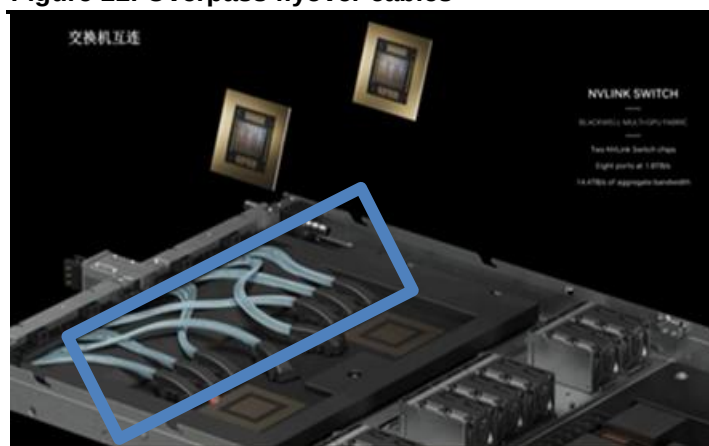
Based on our checks, Nvidia may replace existing on-board solution with an independent GPU socket design, which should benefit AI server interconnect supplier such as FIT Hon Teng and Lotes. We believe the change will start from GB300 product line in 2H25E. Major benefits of GPU socket adoption is to tackle the issue of GPU yield rate, allowing more production flexibility, simplifying after-sales service/failure GPU replacement /server board maintenance and reduce related costs. That said, although the re-design works aimed to resolve over-heating and power issues, we think socket design may take up more space and have more power and thermal constraints than BGA packages.

It is not the first time for Nvidia to consider an independent GPU socket design since the idea can be traced back to 2000s. Nvidia internal research has been researching on multi-socket GPU designs. We estimate penetration of GPU socket design will remain as low single-digit in CY25, and FIT Hon Teng is set to capture majority of share allocation. In our base case, we assume GPU socket ASP of US\$30 for GB300 and FIT's share allocation of 70% in FY25E. We estimate related revenue will reach US\$4.6mn in FY25E.

6) Switch tray: overpass flyer cables

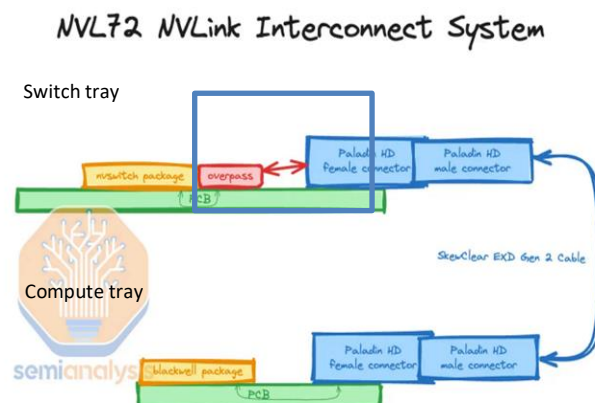
Regarding recent design change on GB200 switch tray to replace overpass flyover cables with PCB solution, we believe the new solution is still in early design stage. Benefits of this design alternation include: 1) PCB solution with enhanced layers is more cost-efficient and matured than overpass cables, although massive number of connectors per switch tray on PCB will cause too much crosstalk in a small area and the loss over PCB is also worse. 2) To reduce supply chain risks by introducing more PCB suppliers with technical maturity and supply track record. 3) To free up more space for other functional components on switch board. Given that FIT has not started sampling the switch board products for GB200, we think there is limited impact on FIT's AI server products and related revenue guidance.

Figure 11: Overpass flyover cables



Source: Nvidia, CMBIGM

Figure 12: GB200 NVL72 NVLink interconnect



Source: Semi Analysis, CMBIGM

Figure 13: CPO solutions at HHTD 2024



Source: Company data, CMBIGM

Figure 14: 800G high-speed connector at HHTD 2024



Source: Company data, CMBIGM

Earnings forecasts

Figure 15: Revenue breakdown

US\$ 000	FY22	FY23	1H24	2H24E	FY24E	FY25E	FY26E
Computing	819,708	773,285	378,226	472,388	850,614	952,687	1,028,902
...YoY	2%	-6%	0%	19%	10%	12%	8%
Smartphones	1,261,047	1,044,335	415,228	524,674	939,902	996,296	1,056,073
...YoY	-3%	-17%	-7%	-12%	-10%	6%	6%
Networking	753,854	424,793	260,729	414,692	675,421	938,453	1,300,147
...YoY	-14%	-44%	19%	101%	59%	39%	39%
Traditional server		382,314			420,545	454,189	476,898
AI server		42,479			254,876	484,264	823,249
EV Mobility	152,814	305,098	227,270	314,564	541,834	662,498	815,112
...YoY	10%	100%	217%	35%	78%	22%	23%
EV business	152,814	137,553	73,793	67,886	141,680	150,180	159,191
Prettl SWH	-	167,545	153,477	246,678	400,155	512,318	655,921
System Products	1,335,580	1,415,280	671,576	718,454	1,390,030	2,245,583	2,809,212
...YoY	20%	6%	16%	-14%	-2%	62%	25%
Others	207,600	232,759	113,731	165,580	279,311	321,207	337,268
...YoY	-17%	12%	24%	17%	20%	15%	5%
Total	4,530,603	4,195,550	2,066,760	2,610,351	4,677,111	6,116,724	7,346,714
...YoY	0.9%	-7.4%	15.8%	8.2%	11.5%	30.8%	20.1%

Source: Company data, CMBIGM estimates

Figure 16: P&L forecast

US\$ mn	FY22	FY23	1H24	2H24E	FY24E	FY25E	FY26E
Revenue	4,531	4,196	2,067	2,610	4,677	6,117	7,347
...YoY	0.9%	-7.4%	15.8%	8.2%	11.5%	30.8%	20.1%
Cost of sales	-3,763	-3,388	-1,646	-2,066	-3,712	-4,848	-5,800
Gross profit	768	807	421	544	965	1,268	1,546
GPM (%)	17%	19%	20%	21%	21%	21%	21%
...YoY	14.1%	5.1%	48.8%	3.9%	19.6%	31.4%	21.9%
SG&A	-223	-295	-180	-166	-346	-422	-500
...% of rev	-4.9%	-7.0%	-8.7%	-6.3%	-7.4%	-6.9%	-6.8%
R&D	-296	-308	-172	-191	-362	-447	-536
...% of rev	-6.5%	-7.3%	-8.3%	-7.3%	-7.8%	-7.3%	-7.3%
Operating profit	307	263	93	235	328	473	584
OPM (%)	6.8%	6.3%	4.5%	9.0%	7.0%	7.7%	7.9%
...YoY	74.0%	-14.4%	97.5%	8.8%	24.8%	44.2%	23.4%
Net profit	169	129	33	150	183	298	384
NPM (%)	3.7%	3.1%	1.6%	5.8%	3.9%	4.9%	5.2%
...YoY	23.2%	-23.9%	263.3%	9.0%	41.8%	62.8%	28.9%

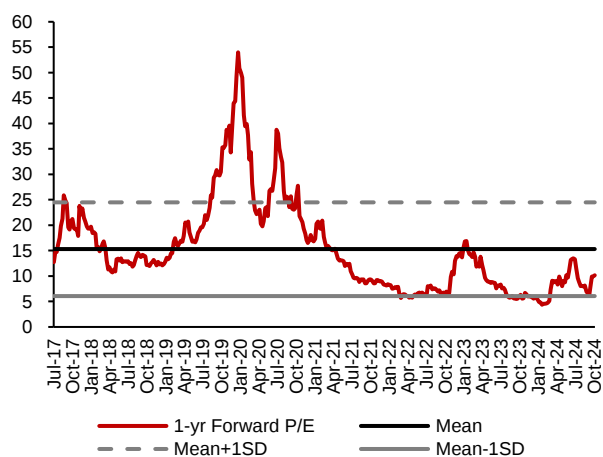
Source: Company data, CMBIGM estimate

Valuation

Maintain BUY with TP of HK\$4.25

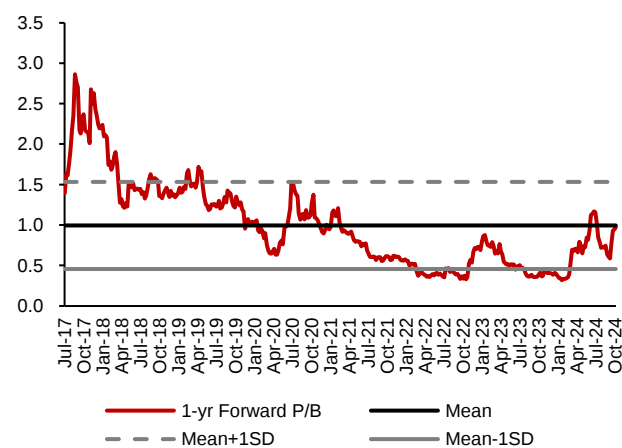
Our 12m TP of HK\$ 4.25 is based on 13x FY25E P/E, given accelerated growth on “3+3 Strategy” and profitability recovery. Trading at 9.5x FY25E P/E, we think risk-reward is attractive. Upcoming catalysts include Nvidia supply chain updates and 3Q24 results in Nov.

Figure 17: 12M forward P/E band



Source: Company data, CMBIGM

Figure 18: 12M forward P/B band



Source: Company data, CMBIGM

Financial Summary

INCOME STATEMENT	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Revenue	4,490	4,531	4,196	4,677	6,117	7,347
Cost of goods sold	(3,817)	(3,763)	(3,388)	(3,712)	(4,848)	(5,800)
Gross profit	673	768	807	965	1,268	1,546
Selling expense	(105)	(93)	(105)	(131)	(153)	(184)
Admin expense	(161)	(130)	(191)	(215)	(269)	(316)
R&D expense	(301)	(296)	(308)	(362)	(447)	(536)
Others	70	58	61	71	73	73
Operating profit	177	307	263	328	473	584
Share of (losses)/profits of associates/JV	(8)	(46)	(50)	(45)	(45)	(45)
Interest expense	(2)	(14)	(33)	(33)	(30)	(26)
Pre-tax profit	167	248	179	250	398	513
Income tax	(31)	(78)	(50)	(66)	(100)	(128)
Minority interest	(1)	1	1	1	1	1
Net profit	137	170	130	184	299	385

BALANCE SHEET	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Current assets	3,034	2,764	3,112	2,853	3,843	4,298
Cash & equivalents	769	914	1,316	877	1,156	1,364
Account receivables	1,033	720	807	895	1,331	1,343
Inventories	982	967	802	894	1,169	1,404
ST bank deposits	98	66	4	4	4	4
Non-current assets	1,973	1,783	1,982	2,498	2,426	2,317
PP&E	823	753	900	1,416	1,344	1,235
Deferred income tax	133	131	126	126	126	126
Investment in JVs & assos	172	123	73	73	73	73
Intangibles	634	601	700	700	700	700
Other non-current assets	211	175	182	182	182	182
Total assets	5,007	4,547	5,094	5,351	6,269	6,615
Current liabilities	1,937	1,539	2,563	2,637	3,257	3,217
Short-term borrowings	690	453	1,383	1,383	1,383	1,383
Account payables	1,138	971	1,095	1,168	1,788	1,748
Tax payable	94	98	70	70	70	70
Other current liabilities	15	18	17	17	17	17
Non-current liabilities	674	661	93	93	93	93
Long-term borrowings	576	575	0	0	0	0
Obligations under finance leases	46	43	41	41	41	41
Other non-current liabilities	52	43	52	52	52	52
Total liabilities	2,611	2,200	2,656	2,730	3,349	3,310
Share capital	139	142	142	142	142	142
Other reserves	2,348	2,295	2,384	2,568	2,867	3,251
Total shareholders equity	2,396	2,347	2,437	2,621	2,920	3,305
Minority interest	1	2	3	3	3	3
Total equity and liabilities	5,007	4,547	5,094	5,351	6,269	6,615

CASH FLOW	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Operating						
Profit before taxation	167	248	179	250	398	513
Depreciation & amortization	251	232	220	434	472	509
Tax paid	(91)	(79)	(75)	(66)	(100)	(128)
Change in working capital	(257)	93	146	(107)	(92)	(286)
Others	15	63	103	0	0	0
Net cash from operations	85	556	574	511	679	608
Investing						
Capital expenditure	(216)	(113)	(243)	(950)	(400)	(400)
Acquisition of subsidiaries/ investments	0	0	0	0	0	0
Others	(4)	47	(167)	0	0	0
Net cash from investing	(220)	(66)	(410)	(950)	(400)	(400)
Financing						
Dividend paid	0	0	0	0	0	0
Net borrowings	0	0	0	0	0	0
Proceeds from share issues	0	0	0	0	0	0
Share repurchases	(1)	(2)	(1)	0	0	0
Others	121	(268)	250	0	0	0
Net cash from financing	120	(270)	249	0	0	0
Net change in cash						
Cash at the beginning of the year	766	769	914	1,316	877	1,156
Exchange difference	19	(75)	(10)	0	0	0
Cash at the end of the year	769	914	1,316	877	1,156	1,364
GROWTH	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec						
Revenue	4.1%	0.9%	(7.4%)	11.5%	30.8%	20.1%
Gross profit	16.1%	14.1%	5.1%	19.6%	31.4%	21.9%
Operating profit	41.2%	74.0%	(14.4%)	24.8%	44.2%	23.4%
Net profit	219.3%	24.5%	(23.8%)	41.6%	62.8%	28.9%
PROFITABILITY	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec						
Gross profit margin	15.0%	16.9%	19.2%	20.6%	20.7%	21.0%
Operating margin	3.9%	6.8%	6.3%	7.0%	7.7%	7.9%
Return on equity (ROE)	6.0%	7.2%	5.4%	7.3%	10.8%	12.4%
GEARING/LIQUIDITY/ACTIVITIES	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec						
Net debt to equity (x)	na	na	0.0	0.0	0.0	0.0
Current ratio (x)	1.6	1.8	1.2	1.1	1.2	1.3
Receivable turnover days	84.0	58.0	70.2	69.9	79.4	66.7
Inventory turnover days	93.9	93.8	86.4	87.9	88.0	88.3
Payable turnover days	108.8	94.2	117.9	114.9	134.6	110.0
VALUATION	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec						
P/E	19.5	16.4	21.8	15.4	9.5	7.3
P/B	1.1	1.1	1.1	1.1	1.0	0.9
Div yield (%)	112.7	0.0	0.0	0.0	0.0	0.0

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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