

# Technology

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## AI Server and AI PC/smartphone supply chain set to continue strong momentum into 1H24E

We reiterate our positive view on AI server and AI PC/Phone supply chain, as highlighted in our 2024 sector outlook ([link](#)). In particular, we see AI server order/backlog/pipeline from major server ODM/brands (DELL/SMCI/Lenovo/HPE) are gaining strong momentum in CY4Q23, well ahead of our expectations. For edge AI (PC/phones), we see more product launches and strong consumer interest of AI smartphones, esp. Samsung Galaxy S24 and new products in MWC (e.g. Honor Magic Pro, Xiaomi 14 Ultra). Overall, we see stronger demand for AI server/PC/smartphone than we expected, as more enterprises are investing into AI applications/models/products and chip supply constraints will start to ease into 1H24E. For AI servers, we believe server ODM/brands will benefit such as FII, SMCI, Lenovo, Dell, Inspur and Huaqin, while edge AI adoption will extend from smartphone, PC/NB to AR/VR devices, benefiting Xiaomi, Apple, Transsion, BYDE and Luxshare.

- **AI Server: DELL/SMCI/Lenovo/HPE strong AI outlook and H20 AI chip ready to ship.** Following strong order/backlog from major AI ODMs in 4Q23, we believe AI strength should continue to drive sector re-rating into 1H24E. **1) DELL:** US\$800mn AI server revenue in FY4Q, up 40% from US\$500mn in 3Q, and US\$2.9bn backlog (H100/H800/H200/ MI300X), up 80% from US\$1.6bn in 3Q. Expect mid-teens ISG sales growth in FY25E and 20% FY23-27E CAGR for AI server revenue. **2) SMCI:** US\$3.7bn revenue in FY2Q, up 77% QoQ/103% YoY, and FY3Q revenue guidance of US\$3.7-4.1bn, up 6% QoQ/ 204% YoY. Revised up FY24E sales guidance to US\$14.3-14.7bn (vs US\$10-11bn prior). **3) Lenovo:** US\$2.5bn ISG revenue, +24% QoQ/ -13% YoY. Won US\$1bn booking from CSP. **4) HPE:** US\$1.2bn HPC/AI revenue in FY4Q, up 26% QoQ, US\$3.6bn AI orders in FY23E (vs \$3bn in mid-Oct), and US\$3.2bn backlog, up modestly QoQ. **5) NVDA H20:** [media](#) reported that AI chip H20 for Chinese market will be available for pre-orders by end of March, benefiting domestic ODM/OEM like Inspur/Huaqin.
- **AI Phone/PC: new products at MWC, Galaxy Ring, Apple AI initiatives.** Major brands (Samsung/Honor/Xiaomi/OPPO/Meizu/Lenovo) announced new products with AI features at MWC 2024. In particular, Xiaomi 14 Ultra is equipped with AI imaging engine and Honor Magic 6 Pro features MagicLM on-device LLM. Samsung also launched a new Galaxy Ring, and we believe Apple's recent shift towards generative AI is a good strategic move, which will accelerate development of edge AI devices.
- **More upside on recovery and AI-driven upcycle in 1H24E.** We believe AI hardware supply chain will continue to benefit from growing investment/CAPEX from CSPs and enterprises, and tech companies are keen to launch new AI products as next growth drivers. We recommend to pay attention to AI supply chain stocks, such as FII, SMCI, Lenovo, Dell, Inspur, Huaqin, Xiaomi, Apple, Transsion, BYDE and Luxshare.

### Valuation Table

Name	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	P/E (x)		P/B (x)		ROE	
					FY23E	FY24E	FY23E	FY24E	FY23E	FY24E
Xiaomi	1810 HK	BUY	42,803	13.34	16.2	15.5	1.9	1.7	11.2	10.9
Apple	AAPL US	NR	2,774,288	179.66	29.6	27.2	47.8	36.8	169	146
Transsion	688036 CH	NR	18,772	167.56	25.5	21.5	6.9	5.7	28.4	27.0
FII	601138 CH	NR	60,756	22.02	18.6	15.5	3.1	2.7	16.6	17.7
SMCI	SMCI US	NR	50,647	905.48	80.0	41.8	24.6	14.8	36.3	43.0
Lenovo	992 HK	NR	15,441	9.74	9.0	16.6	2.4	2.5	30.6	16.2
DELL	DELL US	NR	88,658	124.59	16.7	18.7	-	-	-	-

Source: Company data, CMBIGM estimates

### China Technology Sector

**Alex NG**  
 (852) 3900 0881  
[alexng@cmbi.com.hk](mailto:alexng@cmbi.com.hk)

**Hanqing LI**  
[lihanqing@cmbi.com.hk](mailto:lihanqing@cmbi.com.hk)

**Claudia LIU**  
[claudialiu@cmbi.com.hk](mailto:claudialiu@cmbi.com.hk)

## Server/Datacenter Supply Chain:

Figure 1: Global data center supply chain: 4Q23 results and 1Q24E outlook

Company	Revenue	3Q22 A	4Q22 A	1Q23 A	2Q23 A	3Q23 A	4Q23 A	1Q24E Cons.	Outlook/Guidance
<b>Server Brands</b>									
Dell (DELL US)	<b>YoY Growth %</b>								
	Total	-3%	5%	-29%	4%	-18%	22%	-8%	*1Q24: ISG/CSG rev +5% QoQ with ISG mid-high teen
	Client solutions Group (CSG)	-17%	-23%	-23%	-16%	-11%	-12%	-3%	* 2024: ISG mid-teen growth; CSG low single digit growth; Overall 8% YoY growth
	Infrastructure Solutions Group (ISG)	12%	7%	-18%	-11%	-12%	-6%	16%	* Traditional server: recovering with steady growth
	<b>QoQ Growth %</b>								* AI server: grow this year but uncertain competition
	Total	-6%	1%	-16%	10%	-3%	0%	-3%	*Long term AI growth opportunity in network, storage
	Client solutions Group (CSG)	-11%	-3%	-10%	8%	-5%	-5%	-1%	
	Infrastructure Solutions Group (ISG)	1%	3%	-23%	11%	0%	10%	-5%	
Lenovo (992 US)	<b>YoY Growth %</b>								
	Total	-4%	-24%	-24%	-24%	-16%	3%	3%	*AI server growth to double in FY24E
	Intelligent Devices Group (IDG)	-11%	-34%	-33%	-28%	-16%	7%	2%	*AI server is market driver and will drive revenue and NP recovery to reach YoY growth in next quarter
	Infrastructure Solutions Group (ISG)	33%	48%	56%	-8%	-23%	-13%	1%	*AI PC penetration rate to reach 60% in FY24-26E
	Solutions & Services Group (SSG)	26%	23%	18%	18%	11%	10%	7%	*ThinkEdge has the fastest growth rate and expect 75% of data on edge computing
	<b>QoQ Growth %</b>								
	Total	1%	-11%	-17%	2%	12%	9%	-17%	
	Intelligent Devices Group (IDG)	-4%	-16%	-15%	5%	12%	7%	-19%	
HP Enterprise (HPE US)	Infrastructure Solutions Group (ISG)	25%	9%	-23%	-13%	5%	24%	-11%	
	Solutions & Services Group (SSG)	18%	7%	-10%	4%	12%	5%	-12%	
	<b>YoY Growth %</b>								
	Total	7%	12%	4%	1%	-7%	-13%	-1%	* 2H24 is better than 1H24E due to seasonality
	Compute	19%	10%	-10%	-16%	-33%	-23%	-3%	* PC market TAM to recover in FY24E with low single digit growth
	HPC & AI	-37%	46%	10%	-8%	56%	64%	64%	* AI individual computers penetration rate to reach between 40-60% of total sales in the next 3 years
	Hybrid Cloud		12%	9%	7%	-7%	-10%	-7%	* PC demand to recover in 2H24E with better product mix
	Intelligent Edge	24%	23%	47%	48%	39%	3%	-8%	
	Financial Services	0%	4%	4%	7%	2%	0%	1%	
	Corporate Investments & Other	-32%	-11%	-10%	3%	10%	2%	11%	
	<b>QoQ Growth %</b>								
	Total	13%	-1%	-11%	0%	5%	-8%	3%	
	Compute	25%	-9%	-22%	-5%	0%	-	-	
	HPC & AI	1%	30%	-33%	5%	70%	-6%	-	
	Hybrid Cloud	11%	-4%	-1%	2%	-4%	-7%	2%	
	Intelligent Edge	3%	16%	15%	8%	-3%	-15%	3%	
	Financial Services	5%	2%	-2%	2%	0%	0%	-1%	
	Corporate Investments & Other	0%	-3%	3%	2%	7%	-10%	12%	
<b>Server ODMs</b>									
Quanta (2382 TT)	<b>YoY Growth %</b>								
	Total	46%	22%	-12%	-9%	-25%	-8%	4%	*1Q24 demand is low due to seasonality; PC shipment to decline double-digit QoQ
	<b>QoQ Growth %</b>								
	Total	41%	-15%	-18%	-8%	17%	5%	-8%	*FY24E PC shipment stay flattish and due to low visibility, shipment guidance depends on overall
Supermicro (SMCI US)	<b>YoY Growth %</b>								
	Total	79%	54%	-5%	34%	14%	103%	206%	* 1Q24 guidance: revenue to grow 188-219% YoY
	Server & Storage Systems	102%	68%	2%	37%	15%	107%	216%	* FY24E: revenue to grow 101-106%
	Subsystems & Accessories	-24%	-24%	-43%	0%	10%	61%	114%	* Two CSP clients with revenue mix of 26% and 11%
	<b>QoQ Growth %</b>								* Raised FY24E guidance due to volume growth faster than ASP growth in the next few years
	Total	13%	-3%	-29%	70%	-3%	73%	7%	* Liquid cooling is the future trend, but now air cooling is the main method
	Server & Storage Systems	16%	-3%	-30%	75%	-3%	75%	7%	
	Subsystems & Accessories	-9%	2%	-16%	28%	0%	50%	12%	

Source: Company announcement, Bloomberg, CMBIGM

Figure 2: Global data center supply chain: 4Q23 results and 1Q24E outlook

Company	Revenue	3Q22 A	4Q22 A	1Q23 A	2Q23 A	3Q23 A	4Q23 A	1Q24E Cons.	Outlook/Guidance
<b>Switch/Nework</b>									
Cisco (CSCO US)	<b>YoY Growth %</b>								
	Total	6%	7%	14%	16%	8%	-6%	-16%	* 1Q24E revenue miss market expectations (USD 12.1-12.3bn) * FY24E revenue range of USD 51.5-52.5bn and below street expectations * Customers' orders are temporarily suspended as they are busy installing the purchased equipment * Supply dilemma to be resolved in 2H24E * Telecommunication companies' weak spending to last longer than expected
	Product	8%	9%	17%	20%	9%	-9%	-20%	
	Networking	9%	11%	24%	28%	10%	-12%	-27%	
	Security	8%	7%	2%	0%	4%	3%	3%	
	Collaboration	-2%	-10%	-13%	-12%	3%	3%	-1%	
	Obseability	9%	14%	14%	19%	21%	16%	13%	
	Services	0%	2%	3%	4%	4%	4%	2%	
	<b>QoQ Growth %</b>								
	Total	4%	0%	7%	4%	-4%	-13%	-4%	
	Product	6%	-1%	9%	5%	-4%	-17%	-4%	
	Networking	-1%	-3%	2%	3%	2%	-4%	1%	
	Security	-1%	-3%	2%	3%	2%	-4%	1%	
	Collaboration	-7%	-12%	3%	4%	9%	-11%	-2%	
	Obseability	6%	3%	3%	5%	8%	-1%	0%	
	Services	-1%	1%	1%	2%	-1%	1%	-1%	
Arista (ANET US)	<b>YoY Growth %</b>								* Leading position in shipment of 100G/200G/400G data center switches * FY24E: <u>double digit growth of 10-12% YoY</u> ; GPM 62-64%; OPM 42% with capex growth > revenue * Oracles is a top AI cloud customer * Half revenue from Microsoft and half from Meta * FY24E capex > FY23E on AI data center
	Total	57%	55%	54%	39%	28%	21%	14%	
	Product	67%	64%	62%	42%	27%	19%	13%	
	Service	16%	14%	18%	19%	33%	29%	26%	
	<b>QoQ Growth %</b>								
	Total	12%	8%	6%	8%	3%	2%	0%	
Juniper (JNPR US)	<b>YoY Growth %</b>								* Expanding AI data center solutions with faster and more efficient processing over Ethernet * Routers and switches widely used especially in internet service providers and large enterprises
	Total	19%	11%	17%	13%	-1%	-6%	-10%	
	Cloud	24%	14%	-14%	-6%	-28%	-17%	-5%	
	Service provider	17%	-8%	28%	1%	-20%	-15%	-36%	
	Enterprise	17%	32%	29%	38%	37%	8%	15%	
	<b>QoQ Growth %</b>								
Storage	<b>YoY Growth %</b>								* To stimulate demand through new hard drives, providing high-capacity storage space at lower cost than competitors * Expect slow China market recovery; Clients expect boost in Chinese high-capacity local demand in 2H24E * Sustained recovery of PC/cloud will boost data
	Total	-35%	-39%	-34%	-39%	-29%	-18%	-10%	
	HDD	-38%	-41%	-37%	-43%	-27%	-17%	-8%	
	Systems, SSD & Other	5%	-24%	8%	0%	-40%	-24%	-25%	
	<b>QoQ Growth %</b>								
	Total	-23%	-7%	-1%	-14%	-9%	7%	7%	
Seagate (STX US)	<b>YoY Growth %</b>								* To adopt a proactive inventory management strategy, wider range of products, cost control measures, and focusing on research and development * Expect to divest flash memory biz before 2H24E * Negotiations with Japan's Kioxia to merge the business came to a standstill and actively restarting merger negotiation * Expect memory market to grow significantly in the
	Total	-26%	-36%	-36%	-41%	-26%	-2%	18%	
	Cloud	-18%	-36%	-32%	-39%	-52%	-13%	26%	
	Client	-34%	-41%	-44%	-51%	-7%	3%	10%	
	Consumer	-30%	-25%	-29%	-19%	8%	6%	15%	
	<b>QoQ Growth %</b>								
Western Digital (WDC US)	<b>YoY Growth %</b>								* To adopt a proactive inventory management strategy, wider range of products, cost control measures, and focusing on research and development * Expect to divest flash memory biz before 2H24E * Negotiations with Japan's Kioxia to merge the business came to a standstill and actively restarting merger negotiation * Expect memory market to grow significantly in the
	Total	-17%	-17%	-10%	-5%	3%	10%	9%	
	Cloud	12%	-33%	-2%	-18%	-12%	23%	42%	
	Client	-41%	-11%	-10%	6%	11%	-2%	-4%	
	Consumer	-15%	17%	-22%	3%	14%	15%	-15%	
	<b>QoQ Growth %</b>								

Source: Company announcement, Bloomberg, CMBIGM

## AI PC/Smartphone supply chain:

### Samsung: Galaxy S24 and Galaxy Ring/bendable concept smartphone at MWC

Samsung launched its first AI smartphone Galaxy S24 on 18 January, and reached 1mn unit sales by 27 February, becoming the quickest S-Series smartphone to reach 1mn unit sales in the history. Galaxy S24 enables multiple mobile AI functions including circle to search with Google, live translation on the phone call, chat assist with messages and photo assist with AI-enhanced HDR previews. Compared with the last version, Galaxy S24 has its CPU and GPU capacity improved by 20% and 30%. For China version of Galaxy S24, it corporates with Baidu AI and based on the Ernie Bot (Wen Xin Yi Yan).

**Figure 3: Samsung's bendable concept phone**



Source: CNET, CMBIGM

**Figure 4: Samsung's Galaxy Ring**



Source: Peng Pai News, CMBIGM

At MWC 2024, Samsung showcased its bendable smartphone concept with OLED cling band. It features a flexible OLED screen that can serve as both a regular smartphone and a smartwatch. It can track health metrics like a smartwatch while serving other functions as a typical smartphone. Samsung also launched its Galaxy Ring for health tracking. It will track sleep, heart rate, breathing rate, among others. And it is Android OS-compatible.

### Honor: Newly launched Magic OS 8.0

Honor showcased Magic OS 8.0, which brings a MagicLM on-device LLM with 7bn parameters and compressed memory occupancy from 6GB to 3.5GB. Other features came with Magic OS 8.0 is called Magic Portal which leverages Honor's LLM and IUI to offer context-based app and services recommendations. In addition to smartphones, Honor also showcased its first AI PC product MagicBook Pro 16 at the MWC event.

### Xiaomi: AI enabled imaging engine for Xiaomi 14 Ultra

Xiaomi showcased the camera features performance for the latest Xiaomi 14 Ultra model. Xiaomi designed an AI ISP for the Xiaomi Imaging Engine to allow it to use more efficiently computational photography algorithms. The AI ISP is integrated in the phone's Hyper OS to expand its data processing capabilities and AI computational performance.

**Figure 5: Honor's MagicLM on device**



Source: Honor website, CMBIGM

**Figure 6: Xiaomi's 14 Ultra with AI imaging engine**



Source: Xiaomi website, CMBIGM



## OPPO: Find X7 Ultra AI smartphone with enhanced photography, AI smart glasses

OPPO released AI smart glasses at MWC 2024, which can connect to OPPO phones to access the company's AndesGPT LLM. OPPO also collaborated with Qualcomm and startup AlpsenTek to introduce a new AI Motion algorithm based on Hybrid Vision Sensing (HVS) technology, for photography and videography of high-speed moving objects.

OPPO's latest Find X7 Ultra was showcased at MWC 2024, featuring the new AI Eraser and other AI features. Furthermore, OPPO announced its smartphone users will soon be able to connect their phones to Microsoft Copilot. Ahead of MWC 2024, OPPO announced the establishment of APPO AI Center and released the OPPO AI Smartphone White Paper.

**Figure 7: OPPO's AI smart glasses Air Glass 3**



Source: VR Tuo Luo, CMBIGM

**Figure 8: Meizu 21 Pro model**



Source: Mei Zu website, CMBIGM

## Meizu: Latest smartphone with AI features, full commitment to AI

Meizu has unveiled its latest smartphone, the Meizu 21 Pro, at the MWC 2024. The device is powered by the Qualcomm Snapdragon 8 Gen 3 processor and runs on Flyme 10.5 OS, incorporating AI features. The company has announced a strategic adjustment to cease its traditional smartphone business and transform into AI terminals prior to the MWC event.

## Transsion/Tecno: showcased multiple innovative products

Transsion's subsidiary Tecno showcased its robot dog "Dynamic 1" to aid with smart home entertainment, training and education. It also unveiled the Pova 6 Pro 5G smartphone and the Pocket Go AR gaming glasses at the MWC. For the concept smartphone model, Tecno showed off a rollable phone which features a display neatly tucked inside the device's frame unlike other normal foldable phone feature.

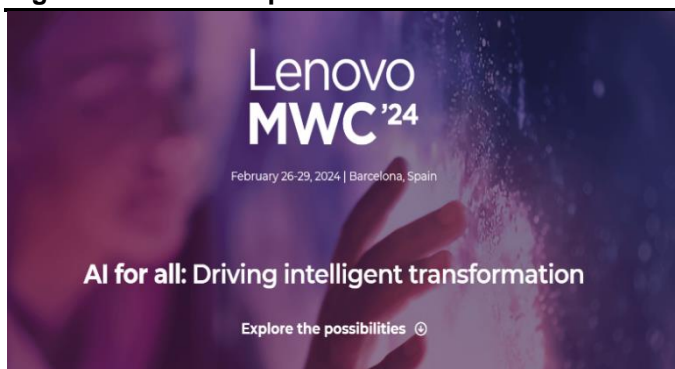
## AI PC:

### Lenovo-AI PCs for business and concept transparent PCs

Lenovo showcased its transparent conceptual laptop with transparent Micro-LED display and keyboard. Its subsidiary smartphone brand Motorola also showcased a bendable smartphone which had been unveiled earlier at Lenovo Tech World 2023. AI PC was Lenovo's key theme for this year's MWC with its latest enterprise laptop lineup of ThinkPad T14, T14s, T16, X12 and variants. The devices are powered by Intel's Core Ultra Processors and run on Windows 11 facilitating AI features on the device.

**Figure 9: Lenovo's transparent PC**

Source: Lenovo, CMBIGM

**Figure 10: Lenovo's presence at MWC 2024**

Source: Lenovo, CMBIGM

## Apple: Generative AI to all devices

In the latest earnings call, Tim Cook mentioned that the company is working on generative AI software features that will present to customers later this year, and market expected an update for iOS 18. From advanced photo manipulation to word processing enhancements, AI software features have been the major key selling points of Android's latest smartphones.

Apple's current AI chief, John Giannandrea, is leading LLM development. There has not been clear strategy reported regarding the generative AI product development for Apple, but we expect Apple to focus on Siri enhancements, software that generates videos and images and multimodal AI technology that works with images, videos and text. According to media, Apple aims for a smarter version of Siri that is deeply integrated with AI, which will have better natural conversation capabilities and improved user personalization.

**Figure 11: Latest AI enabled functions on iPhone**

Function	Details
Photos	Use machine learning to enhance photo that are taken with iPhone. This includes Deep Fusion for cutting down on noise in images and iPhone 15 portrait mode tools.
Spotlight search	The feature that searches for spotlight throughout the iOS operating system that is powered by AI.
Visual lookup	The feature that lets the iPhone detect the content in photos.
Crash detection and fall detection	Use machine learning to determine whether someone has been in a crash or had a fall based on the information collected by various sensors.
Auto correct	Autocorrect system and word suggestion options are powered by machine learning.

Source: Company data, CMBIGM

**Figure 12: Progress made by key software application providers on integrating AI functions into existing products**

Company	Key AI application progress
Google	Developed Gemini (previously named Bard), a chat-based AI tool. Google has integrated generative AI into the search products and apps. Recently launched Gemini Android version.
Microsoft	Partnered with OpenAI for a version of ChatGPT that is integrated with its Bing search engine, enabled on PC and smartphone devices.
Amazon	Currently working on enhance its Alexa voice assistant with generative AI.
Meta	Has already incorporated generative AI into several of its apps, such as WhatsApp and Messenger.

Source: Company data, CMBIGM

Figure 13: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	P/E (x)		P/B (x)		ROE (%)		Perf. YTD
Brand											
Apple	AAPL US	NR	2,774,288	179.66	29.6	27.2	47.8	36.8	169.4	146.0	(6.7)
Xiaomi	1810 HK	BUY	42,803	13.34	16.2	15.5	1.9	1.7	11.5	10.9	(14.5)
Transsion	688036 CH	NR	18,772	167.56	25.5	21.5	6.9	5.7	28.4	27.0	21.1
Samsung	005930 KS	NR	335,729	74,900	45.1	16.6	1.4	1.3	3.1	8.0	(4.6)
LG	066570 KS	NR	11,538	93,900	11.4	7.8	0.8	0.7	7.1	9.7	(7.8)
Average					25.6	17.7	11.8	9.2	43.9	40.3	(2.5)
ODM/EMS											
BYDE	285 HK	BUY	8,927	31.00	15.9	11.6	2.1	1.8	13.4	15.7	(15.3)
Luxshare	002475 CH	BUY	27,859	28.01	18.1	14.3	2.0	1.8	10.9	12.3	(18.7)
Hon Hai Precision	2317 TT	NR	46,831	106.50	11.1	9.9	1.0	0.9	8.9	9.4	1.9
Average					15.0	11.9	1.7	1.5	11.1	12.5	(10.7)
Optics											
Sunny Optical	2382 HK	HOLD	7,275	51.90	44.3	24.5	2.2	2.1	5.0	8.6	(26.7)
Q Tech	1478 HK	BUY	478	3.16	11.3	5.9	0.7	0.6	5.9	10.3	(28.8)
Truly	732 HK	NR	299	0.74	-	-	-	-	-	-	(7.5)
Cowell	1415 HK	NR	2,069	18.98	32.3	18.7	4.8	3.9	14.9	22.3	(17.7)
Largan	3008 TT	NR	10,859	2,565	18.5	16.1	2.1	1.9	11.5	12.5	(10.6)
Genius	3406 TT	NR	1,504	420.50	16.2	15.5	2.2	2.0	14.0	13.7	-
O-Film	002456 CH	NR	4,023	8.89	-	57.0	10.0	9.4	(8.1)	8.8	2.1
Lg Innotek	011070 KS	NR	3,643	205,000	8.5	7.3	1.0	0.9	12.5	13.1	(14.4)
Average					21.9	20.7	3.3	3.0	8.0	12.7	(13.0)
Acoustics/Haptics											
AAC Tech	2018 HK	HOLD	3,109	20.30	35.7	20.5	1.0	0.9	2.7	4.6	(12.5)
Goertek	002241 CH	BUY	8,183	17.24	40.1	22.4	1.9	1.7	4.6	7.8	(17.9)
Luxshare	002475 CH	BUY	27,859	28.01	18.1	14.3	2.0	1.8	10.9	12.3	(18.7)
Merry	2439 TT	NR	800	115.00	18.4	16.7	1.9	1.8	10.0	11.0	5.0
Knowles	KN US	NR	1,489	16.61	18.6	14.9	-	-	-	-	(7.3)
Nidec	6594 JP	NR	22,861	5,767	41.5	21.3	2.5	2.2	7.0	11.4	1.3
Average					28.7	18.3	1.8	1.7	7.0	9.4	(8.4)
Connector											
FIT Hon Teng	6088 HK	BUY	1,025	1.10	7.6	6.0	0.4	0.4	5.3	6.2	(6.8)
Luxshare	002475 CH	BUY	27,859	28.01	18.1	14.3	2.0	1.8	10.9	12.3	(18.7)
TE	TEL US	NR	44,387	143.74	21.4	19.0	4.0	3.3	19.1	18.5	2.3
Amphenol	APH US	NR	66,470	110.81	37.4	33.6	8.3	7.0	24.4	22.8	11.8
Average					21.1	18.2	3.7	3.1	14.9	14.9	(2.8)
Casing											
BYDE	285 HK	BUY	8,927	31.00	15.9	11.6	2.1	1.8	13.4	15.7	(15.3)
Tongda	698 HK	BUY	114	0.09	5.1	3.2	0.1	0.1	2.3	3.5	(10.7)
TK Group	2283 HK	BUY	144	1.35	4.8	3.6	0.6	0.6	13.3	16.3	(4.3)
Ju Teng	3336 HK	NR	181	1.18	-	-	-	-	-	-	0.9
Everwin	300115 CH	NR	1,697	10.15	71.0	19.0	2.1	1.9	2.2	9.4	(23.4)
Lens Tech	300433 CH	NR	8,659	12.51	20.1	15.4	1.4	1.3	6.8	8.4	(5.2)
Catcher	2474 TT	NR	4,284	198.50	11.2	16.0	0.8	0.8	7.2	4.7	2.3
Jabil	JBL US	NR	18,772	147.18	17.3	16.3	6.9	15.5	43.5	51.0	15.5
Average					20.8	12.2	2.0	3.1	12.7	15.6	(5.0)
Hinge											
AAC Tech	2018 HK	HOLD	3,109	20.30	35.7	20.5	1.0	0.9	2.7	4.6	(12.5)
Jiangsu Gian	300709 CH	NR	815	31.55	28.2	20.8	2.8	2.5	11.1	13.2	1.2
KH Vatec	060720 KS	NR	236	13,250	7.7	8.4	1.2	1.1	15.6	13.1	(9.8)
Foseltek	6805 TT	NR	1,733	797.00	77.0	35.1	12.5	9.6	15.5	28.7	108.4
Jarlytec	3548 TT	NR	540	257.50	30.7	17.8	-	-	11.9	19.9	35.9
NBTM	600114 CH	NR	1,223	14.28	42.9	23.3	3.4	3.2	7.9	13.8	(7.8)
Dongguan Eontec	300328 CH	NR	498	5.19	-	-	-	-	-	-	(25.4)
Average					37.0	21.0	4.2	3.4	10.8	15.5	12.8

Source: Bloomberg, CMBIGM

Figure 14: Peers' valuation

			Market Cap	Price	P/E (x)		P/B (x)		ROE (%)		Perf
Company	Ticker	Rating	(US\$ mn)	(LC)	FY23E	FY24E	FY23E	FY24E	FY23E	FY24E	YTD
PC/Server											
Lenovo	992 HK	NR	15,441	9.74	9.0	16.6	2.4	2.5	30.6	16.2	(10.8)
Dell	DELL US	NR	88,658	124.59	16.7	18.7	-	-	(179.3)	(156.9)	62.9
HP Enterprise	HPE US	NR	20,225	15.56	7.3	8.2	1.0	0.9	13.7	11.2	(8.4)
HP Inc	HPQ US	NR	28,777	29.41	8.9	8.6	-	-	(139.1)	(247.6)	(2.3)
ASUSTeK	2357 TT	NR	10,767	457.00	20.1	14.1	1.5	1.5	7.1	9.7	(6.6)
Inspur	000977 CH	NR	8,832	43.19	38.5	28.7	3.4	3.1	8.6	10.6	30.1
Dawning	603019 CH	NR	10,961	53.92	41.5	32.9	4.2	3.8	10.3	11.8	36.5
Average					20.3	18.3	2.5	2.3	(35.4)	(49.3)	14.5
ODM/OEM											
Foxconn Industrial	601138 CH	NR	60,756	22.02	18.6	15.5	3.1	2.7	16.6	17.7	45.6
Super Micro	SMCI US	NR	50,647	905.48	80.0	41.8	24.6	14.8	36.3	43.0	218.5
Huaqing	603296 CH	NR	7,933	78.69	21.4	19.2	2.7	2.5	14.7	13.6	(1.5)
Quanta	2382 TT	NR	29,283	239.00	23.5	18.5	5.1	4.5	21.9	25.4	6.5
Wistron	3231 TT	NR	10,716	116.50	28.1	17.5	3.1	2.6	11.4	15.7	18.2
Wiwynn	6669 TT	NR	13,560	2,445.00	37.0	22.9	10.1	7.9	28.7	38.0	34.0
Inventec	2356 TT	NR	6,327	55.60	34.6	25.2	3.4	3.2	9.6	12.7	5.3
GigaByte	2376 TT	NR	7,148	354.50	43.0	23.6	6.1	5.3	14.2	22.2	33.3
Average					35.8	23.0	7.3	5.4	19.2	23.5	45.0
Switch/Storage											
Cisco	CSCO US	NR	195,981	48.40	12.7	13.0	4.5	4.1	35.1	31.3	(4.2)
Arista	ANET US	NR	89,957	287.74	43.9	38.7	13.0	9.9	33.0	27.4	22.2
Juniper	JNPR US	NR	12,122	37.37	16.3	16.8	2.8	2.6	16.8	15.4	26.8
Keysight	KEYS US	NR	27,472	157.07	19.1	24.9	5.5	5.5	30.6	20.5	(1.3)
Seagate	STX US	NR	20,356	97.16	859.8	134.6	-	-	(2.6)	(1.4)	13.8
Western Digital	WDC US	NR	20,953	64.30	-	-	1.8	2.0	(11.2)	(6.0)	22.8
Average					141.6	37.7	5.0	4.4	17.8	15.9	15.2
EMS/Distributor											
Flextronics	FLEX US	NR	12,214	29.00	12.6	11.5	3.3	2.1	26.3	18.1	30.9
Jabil	JBL US	NR	18,772	147.18	17.3	16.3	6.9	15.5	43.5	51.0	15.5
Arrow	ARW US	NR	6,468	120.19	7.1	10.0	1.2	1.1	16.1	12.8	(1.7)
Avnet	AVT US	NR	4,299	47.57	6.2	9.1	0.9	0.8	14.8	9.1	(5.6)
Average					10.8	11.7	3.1	4.9	25.2	22.8	9.8
Substrate											
Unimicron	3037 TT	NR	8,732	180.50	23.9	20.8	3.0	2.7	12.8	14.7	2.6
Ibiden	4062 JP	NR	6,557	7,002.00	20.3	27.7	2.4	2.2	12.2	8.3	(10.4)
NYPCCB	8046 TT	NR	4,284	209.00	23.4	21.4	2.6	2.5	11.4	12.0	(16.9)
Average					22.5	23.3	2.7	2.5	12.1	11.7	(8.2)
PCB											
WUS Printed	002463 CH	NR	7,512	28.34	36.8	27.1	5.6	4.7	15.9	18.1	28.1
Victory Giant	300476 CH	NR	3,017	25.18	25.3	18.4	2.9	2.5	11.1	14.2	36.5
Gold Circuit	2368 TT	NR	4,041	259.00	35.1	20.0	7.8	6.1	23.8	33.1	18.8
Average					31.1	22.0	4.8	4.0	15.3	19.1	21.9
Transceiver											
Innolight	300308 CH	NR	18,473	165.66	63.9	31.1	9.5	7.4	15.4	25.0	46.7
TFC Optical	300394 CH	NR	7,772	141.70	80.6	47.6	17.8	13.8	22.6	29.8	54.8
Eoptolink	300502 CH	NR	6,848	69.45	73.3	38.7	9.1	7.5	12.2	19.3	40.8
Lumentum	LITE US	NR	3,403	50.49	11.2	46.4	2.3	2.7	18.0	5.9	(3.7)
Average					56.0	40.8	8.5	7.0	15.3	18.0	33.2
Power Supply											
Delta	2308 TT	NR	24,183	293.50	22.8	21.1	4.0	3.6	16.6	16.3	(6.4)
Lite-on	2301 TT	NR	8,509	114.00	17.3	16.4	3.0	2.9	18.3	18.0	(2.6)
Average					20.0	18.8	3.5	3.2	17.4	17.1	(4.5)
Thermal											
Foxconn Industrial	601138 CH	NR	60,756	22.02	18.6	15.5	3.1	2.7	16.6	17.7	45.6
Sunwealth	2412 TT	NR	29,897	121.50	25.2	24.8	2.4	2.4	9.8	9.9	1.3
AVC	3017 TT	NR	6,736	554.00	40.3	30.8	10.1	8.3	28.4	30.9	64.6
Average					28.0	23.7	5.2	4.5	18.3	19.5	37.2

Source: Bloomberg, CMBIGM



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