

Electrical/Electronic Components (Overweight)

AI adoption to drive growth

Mirae Asset Securities Co., Ltd.

Junseo Park
park.junseo@miraeasset.com



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[Summary] AI to be the key driver of future growth

Device/set demand outlook

- In 2025, IT device/set demand is expected to show moderate YoY growth: +3.2% for smartphones, +1.0% for TVs, +0.8% for PCs, +1.4% for tablets, and +6.7% for true wireless stereo (TWS).
- For smartphones, we believe a replacement cycle is coming, as: 1) devices sold during the pandemic are now in their fifth year; and 2) the launch of AI-enabled smartphones and OS upgrades should boost demand. The current 48-month replacement cycle is unlikely to lengthen further.
- Going forward, AI adoption should be the key factor influencing smartphone/PC prices and sales volume.
- Companies poised to benefit from AI product launches deserve attention.

Component market outlook

- Growing adoption of advanced chipsets to support on-device AI should push up the share of APs in bill of materials (BOM) costs. MLCC capacitance requirements should expand in line with high-performance AP adoption.
- While the pricing environment for general-use MLCCs should remain challenging, high-end MLCCs used in AI and industrial applications are likely to see price increases.
- The increasing market penetration of AI servers and PCs should also support MLCC content growth.
- For PCBs, demand from legacy applications should recover slowly, while demand from server applications should remain strong.

Top pick: Samsung Electro- Mechanics

- Our top pick is Samsung Electro-Mechanics (SEMCO). The stock is undervalued, trading at a 2024F P/B of 1.0x and 2025F P/B of 0.9x. We maintain our target price of W200,000.
- The company is poised to benefit significantly from the adoption of high-performance APs (AI-enabled smartphones likely to require 30% higher MLCC capacitance compared to previous models).
- The revenue mix of server-use MLCCs is likely to grow to over 10% in 2025 (from 3% in 1Q24 and 7% in 3Q24).
- The share of MLCCs used in industrial/automotive applications will likely expand to 45%, supporting margin stability.
- Potential growth drivers: Silicon capacitors, production of oxide-based solid-state batteries, and AI-use substrates

The background is a solid dark blue. In the center, there is a faint, light blue illustration of a smartphone. Surrounding the smartphone are several floating icons: a circuit board, a Wi-Fi symbol, a document with a checkmark, a laptop, a server rack, a gear with a network diagram, and a document with a bar chart.

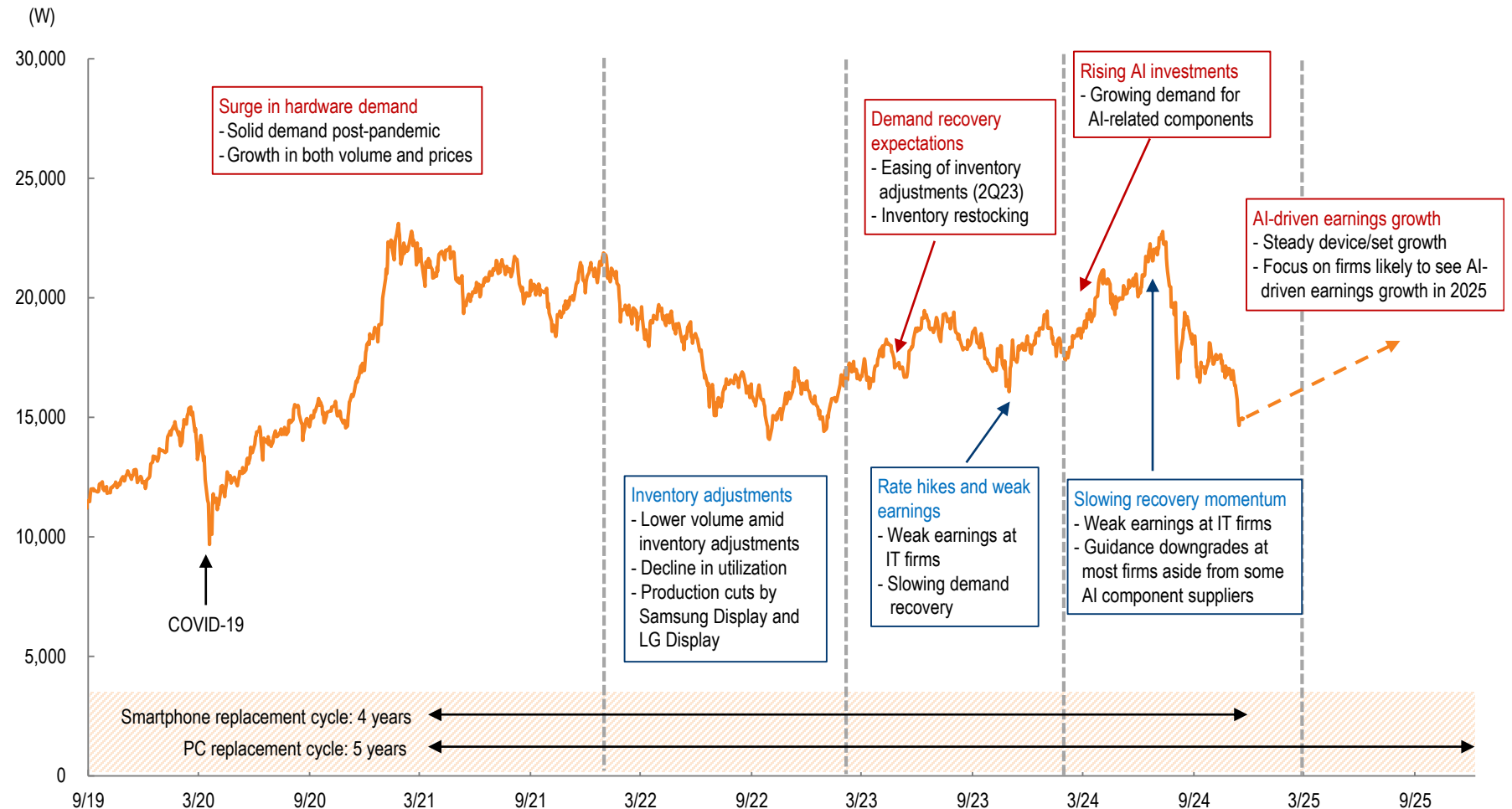
I

Device/set demand outlook

[Summary] IT hardware sector performance

Focus on companies poised to benefit from AI adoption in 2025

KODEX IT Hardware performance



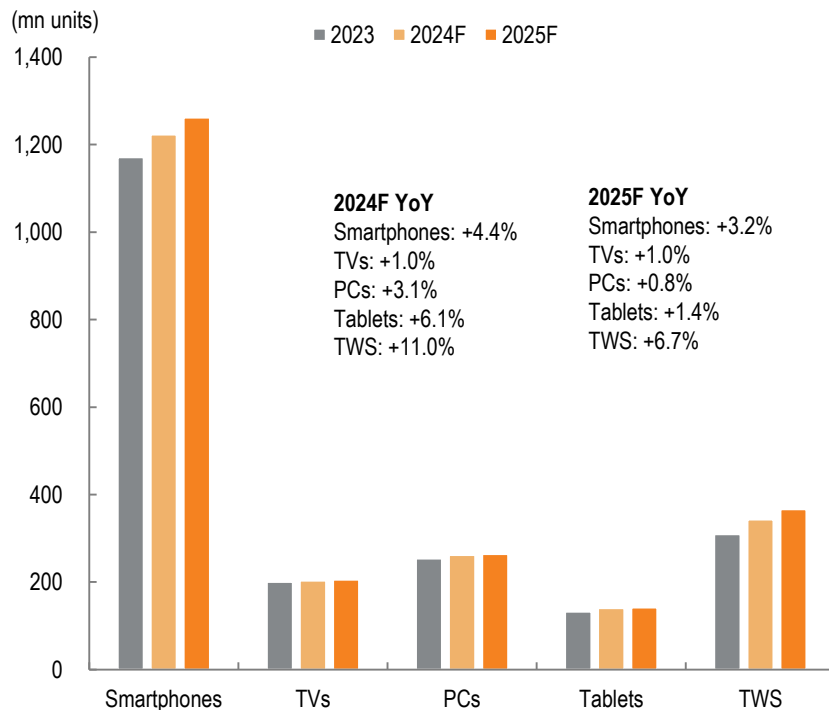
Source: Bloomberg, Mirae Asset Securities Research

I. IT device/set demand to exhibit steady growth in 2025

IT device/set demand to be solid in 2025; investments in AI infrastructure to start bearing fruit

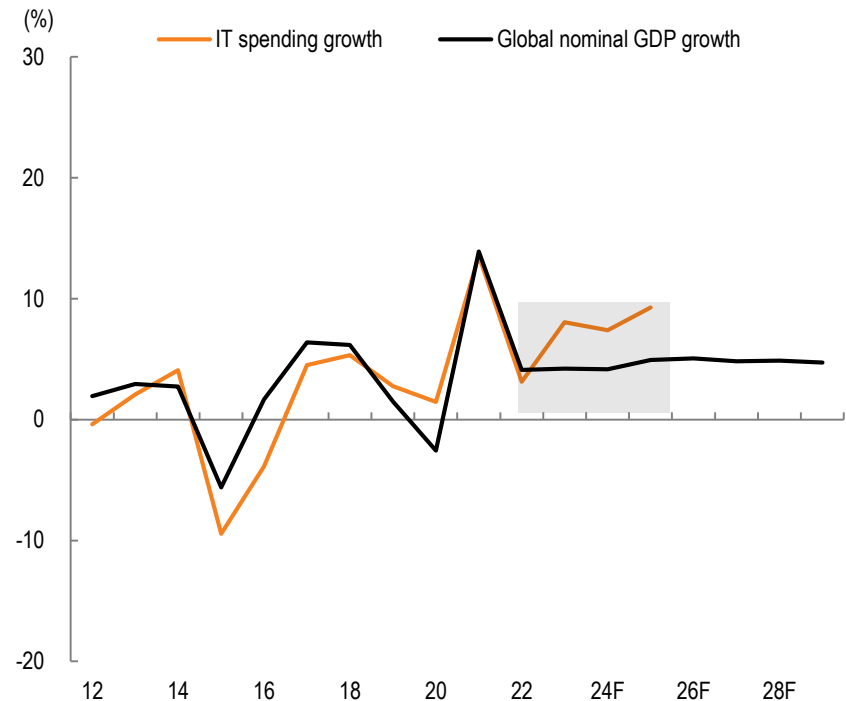
- In 2025, IT device/set demand is expected to show moderate YoY growth: +3.2% for smartphones, +1.0% for TVs, +0.8% for PCs, +1.4% for tablets, and +6.7% for TWS.
- Since 2023, growth in IT spending has diverged from growth in nominal GDP, likely due to increased investments in AI-related R&D and infrastructure. As the development of AI components like APs typically takes two to three years, the benefits of these investments should materialize from 2025.
- Companies poised to benefit from AI product launches deserve attention.

IT device/set demand outlook for 2025



Source: Counterpoint, Stone Partners, Mirae Asset Securities Research

IT spending has picked up since 2023 on increased AI investments



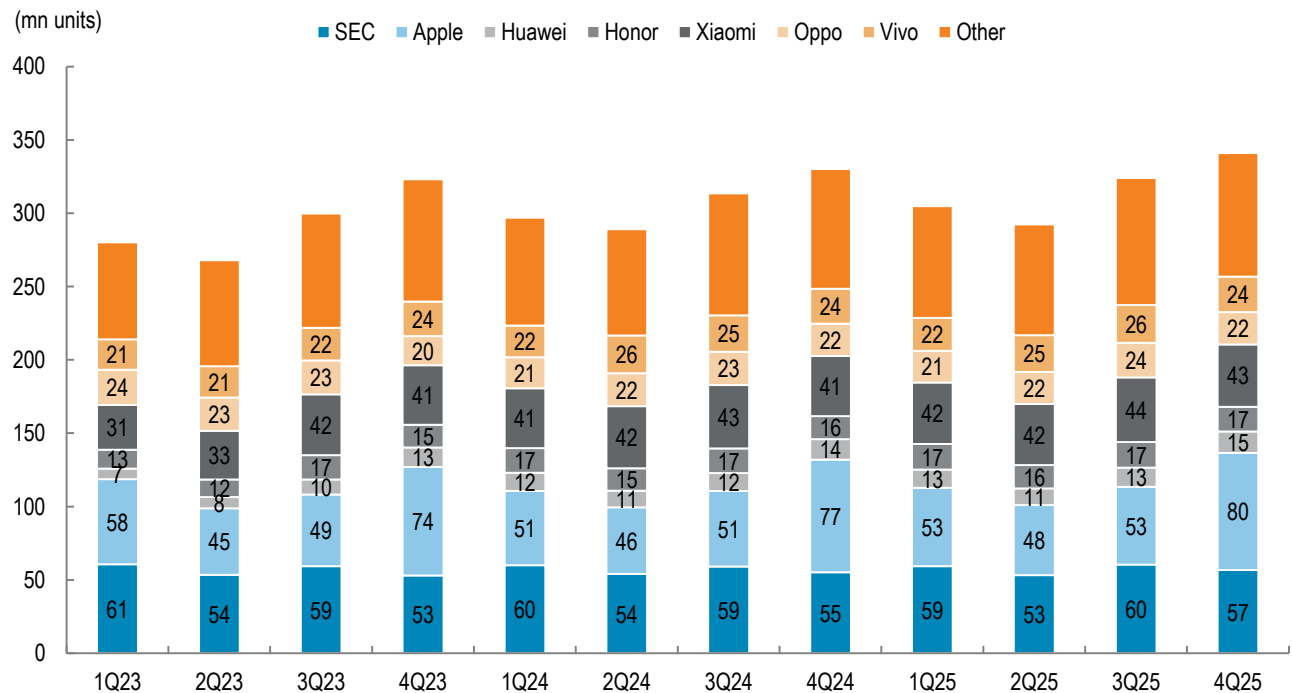
Source: IMF, Gartner, Mirae Asset Securities Research

I. IT device/set demand to exhibit steady growth in 2025

Smartphone shipment outlook by brand

- In 2025, we expect Apple's smartphone shipments to grow 5.4% YoY, outpacing growth at Samsung Electronics (SEC; +0.9% YoY).
- Apple's sales should be supported by the release of the iPhone SE4 in 1Q25 and a rumored "slim" model in 3Q25. Siri's AI upgrades (integration with third-party apps, languages, etc.) in 2H25 should also provide a boost.
- SEC's AI-enabled Galaxy S24 series has performed well this year, but foldable model demand has been underwhelming. Demand for low/mid-end models in emerging markets has also been weaker than expected. In 2025, a market share recovery in the low/mid-end segment should be key to overall shipment growth.
- Amid strong demand in China, shipments by Huawei and Honor are likely to jump 20.3% YoY in 2024 and continue moderate growth in 2025 (+4.1% YoY).

Smartphone shipments by brand



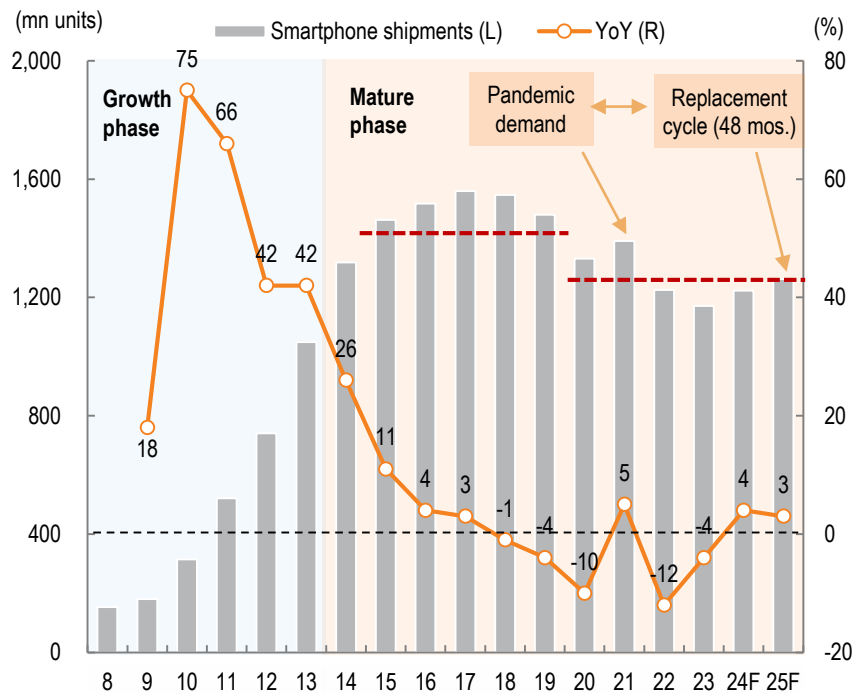
Source: Counterpoint, Mirae Asset Securities Research Estimate

I. IT device/set demand to exhibit steady growth in 2025

Arrival of smartphone replacement cycle

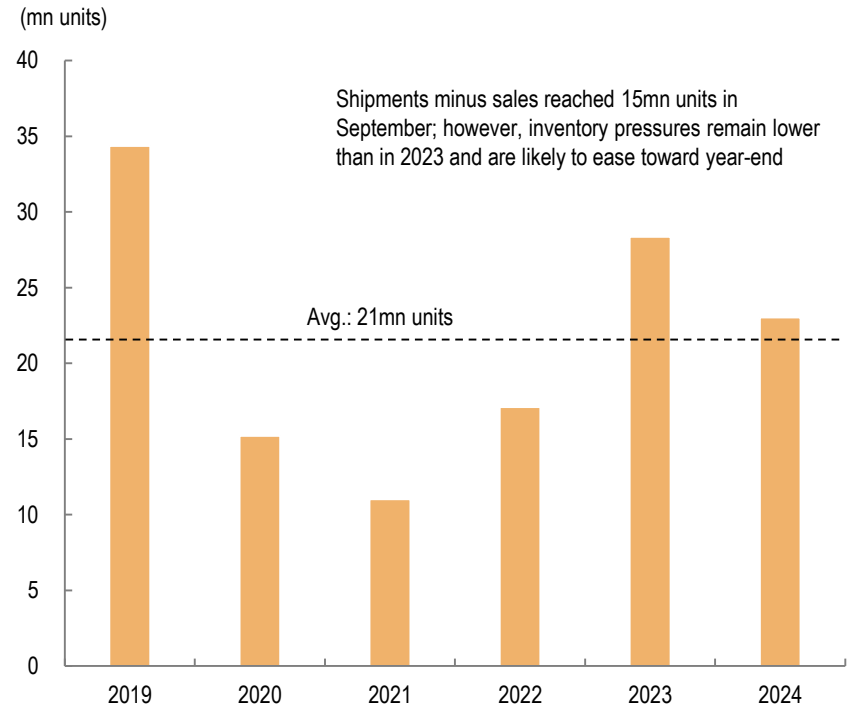
- The smartphone market has been in a mature phase since 2015 (following a growth phase in 2008-14).
- The smartphone replacement cycle has lengthened from around 24 months in the past to 40 months last year and 48 months this year. This is due to factors like improved smartphone performance (leading to longer product lifespans) and a lack of noticeable upgrades aside from camera improvements.
- However, we do not expect the replacement cycle to lengthen any further. Starting in 2025, the launch of AI smartphones and OS improvements should boost demand. Also, devices sold during the pandemic are now in their fifth year, meaning replacement demand should materialize from 2025.
- Smartphone inventory pressures have increased slightly recently, but inventory levels remain lower than in 2023.

Smartphone shipment trends



Source: Counterpoint, Mirae Asset Securities Research

Smartphone shipments minus sales (indicator of inventory pressure)



Note: From Jan. to Sep. of each year

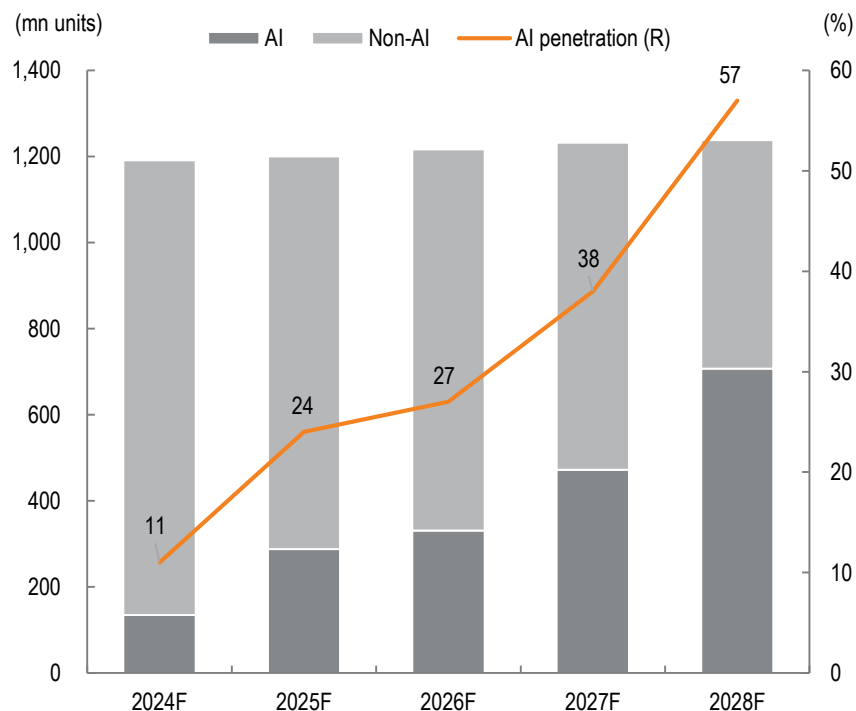
Source: Counterpoint, Mirae Asset Securities Research

I. IT device/set demand to exhibit steady growth in 2025

Smartphone ASP continues to grow; on-device AI penetration rising sharply

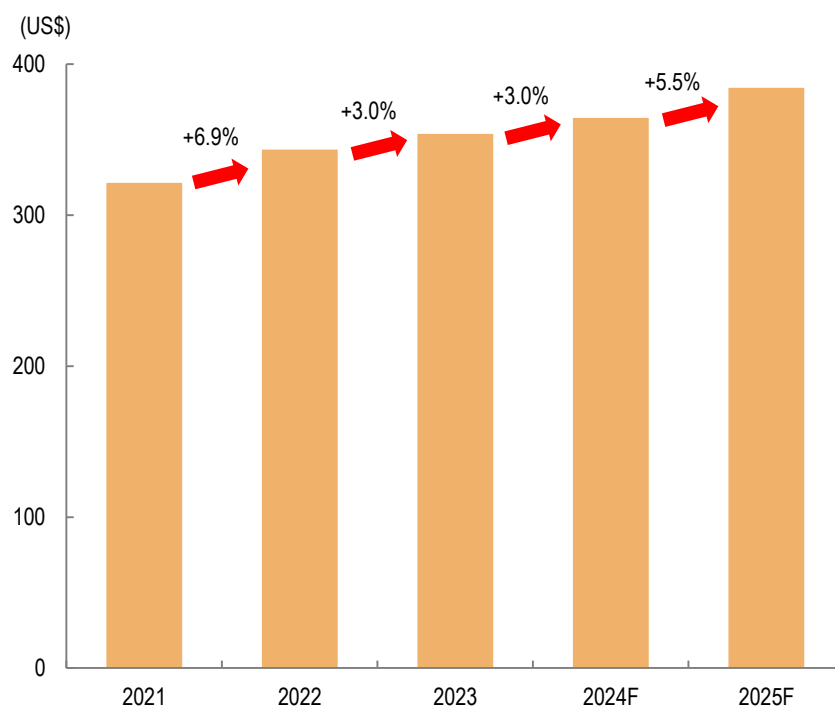
- Going forward, AI adoption should be the key factor influencing smartphone/PC prices and sales volume.
- In 2025, smartphone ASP is projected to rise 5.5% YoY to US\$385, driven by the impact of advanced chipsets (needed to enable on-device AI) on overall BOM costs.
- However, as the current level of on-device AI functionality is insufficient to justify significant price hikes for consumers, device makers will likely attempt to offset higher AP costs by reducing costs elsewhere (e.g., by fostering competition among vendors); as such, cost-cutting pressure on other components is likely inevitable.
- The penetration of AI smartphones is estimated to grow from 11% in 2024 to 24% in 2025 and 27% in 2026.

Smartphones: On-device AI penetration rising sharply



Source: Counterpoint, Mirae Asset Securities Research

Smartphone ASP continues to grow

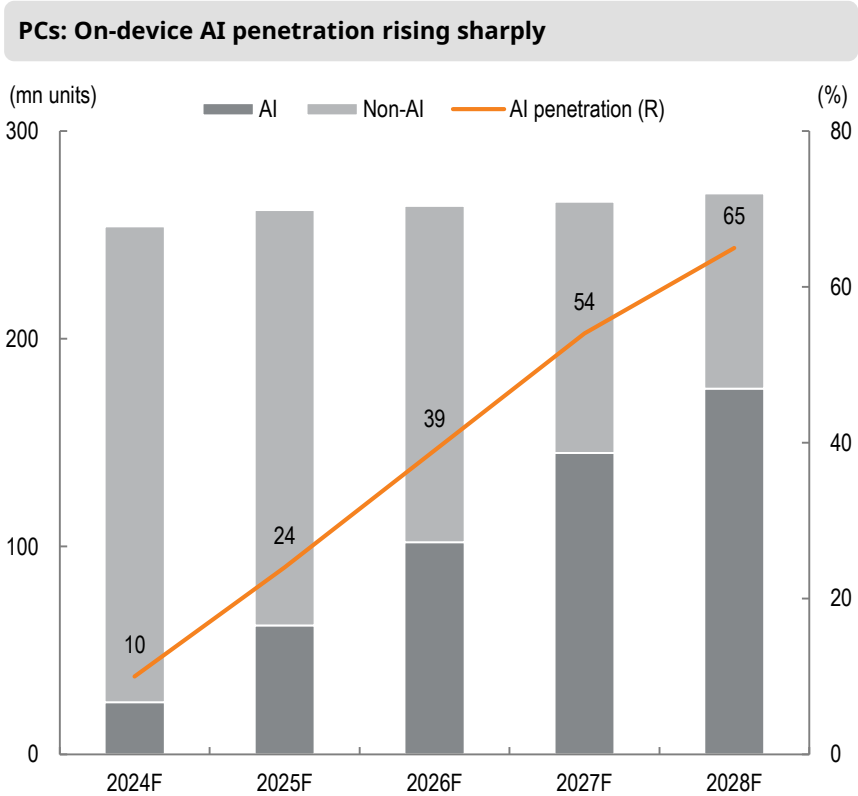


Source: Counterpoint, Mirae Asset Securities Research

I. IT device/set demand to exhibit steady growth in 2025

AI penetration also rising sharply in PCs

- The PC replacement cycle is typically five to seven years. We expect growth in PC demand to become more visible in 2H25, coinciding with the end of support for Windows 10.
- Although China's GDP is projected to grow 5% in 2024, consumer sentiment in the country remains weak, potentially weighing on PC demand in the near term.
- The penetration of AI PCs is projected to grow from 10% in 2024 to 24% in 2025 and 39% in 2026.
- In 2025, Intel, AMD, and Qualcomm are set to release PCs with AI CPUs, defined as having processing power of at least 40 TOPS.



Note: AI PCs are defined as having processing power of 40+ TOPS.
Source: Counterpoint, Mirae Asset Securities Research

AI PC CPU road map						
	4Q23	1Q24	2Q24	3Q24	4Q24	2025
Intel	Meteor Lake (11 TOPS)			Lunar Lake (48 TOPS)	Arrow Lake (50 TOPS)	Panther Lake (80-120 TOPS)
AMD		Hawk Points (16 TOPS)		Strix Point (50 TOPS)		Strix Halo, Kraken Point (50 TOPS)
Qualcomm			X Elite (45 TOPS)			Oryon 3
Apple		M4 (38 TOPS)				

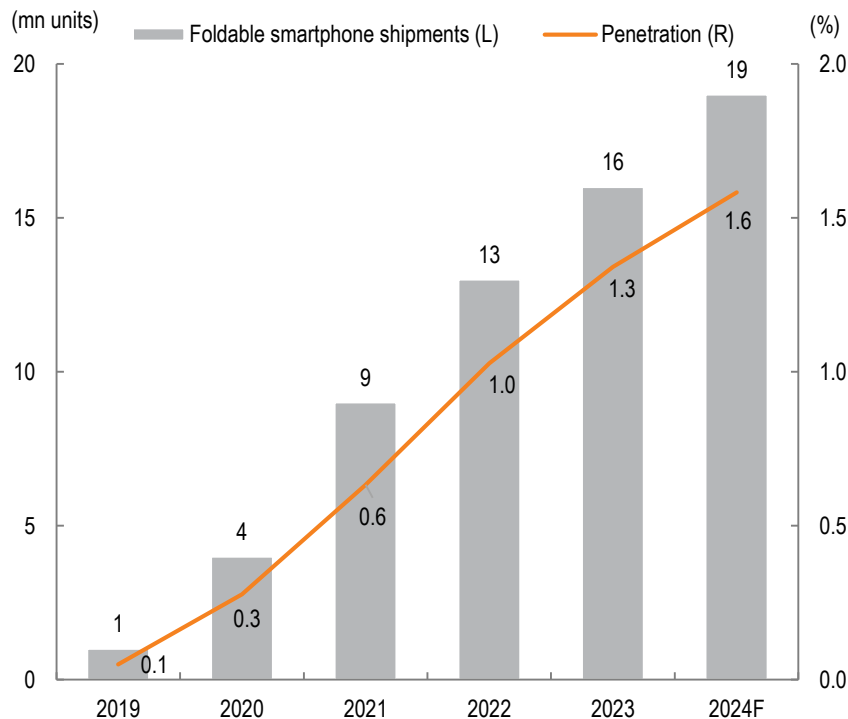
Source: Counterpoint, Mirae Asset Securities Research

I. IT device/set demand to exhibit steady growth in 2025

Foldables market likely to grow in 2026; widespread adoption of XR/VR to hinge on compelling apps/use cases

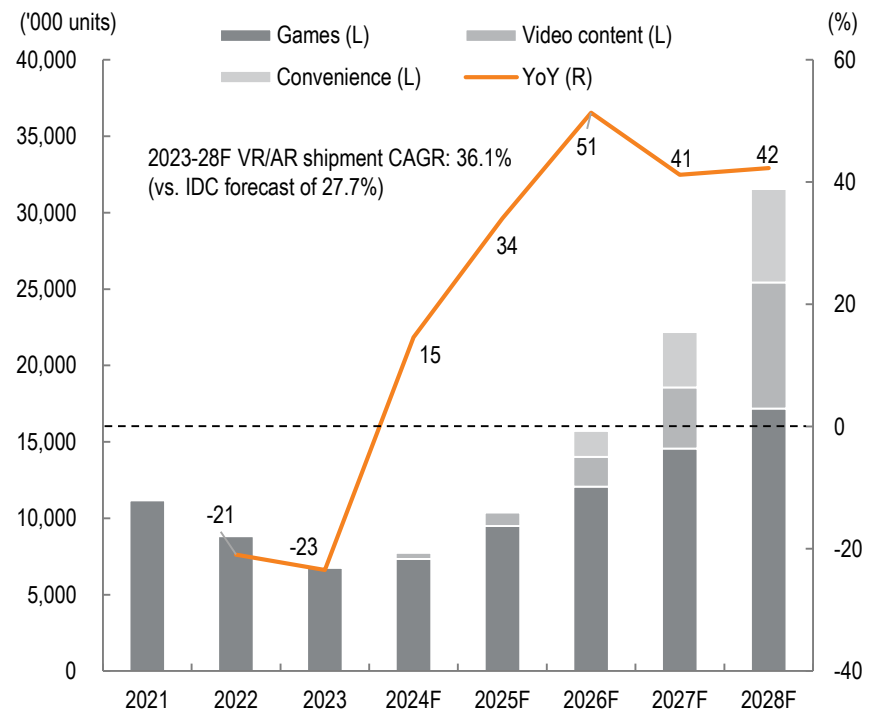
- Foldable device penetration is likely to remain limited in the near term, rising from 1.3% in 2023 to 1.6% in 2024 and 1.9% in 2025. Recent sales of triple-fold models and SEC's foldable products have been underwhelming. However, we expect the market to see structural growth in 2026 with the entry of a North American company.
- We expect the XR/VR market to expand at a CAGR of 36.1% between 2023 and 2028 (vs. IDC forecast of 27.7%). The market is likely to progress through four stages of development based on applications: 1) gaming; 2) video content; 3) convenience-focused applications (e.g., smart glasses); and 4) social media. Key metrics to watch include the rate at which XR/VR gaming replaces or supplements console gaming, Netflix VR app downloads, and the penetration of XR smart glasses.

Foldable shipments to grow at a slow but steady pace; penetration to remain limited in the near term



Source: Counterpoint, Mirae Asset Securities Research

XR/VR shipments to hinge on ability to replace/complement consoles



Source: IDC, Mirae Asset Securities Research

The background is a solid dark blue. In the center, there is a faint, light blue illustration of a smartphone. Surrounding the smartphone are several floating icons: a circuit board, a laptop, a document with a checklist, a gear with a network diagram, and a document with a bar chart. The overall theme is technology and digital components.

II

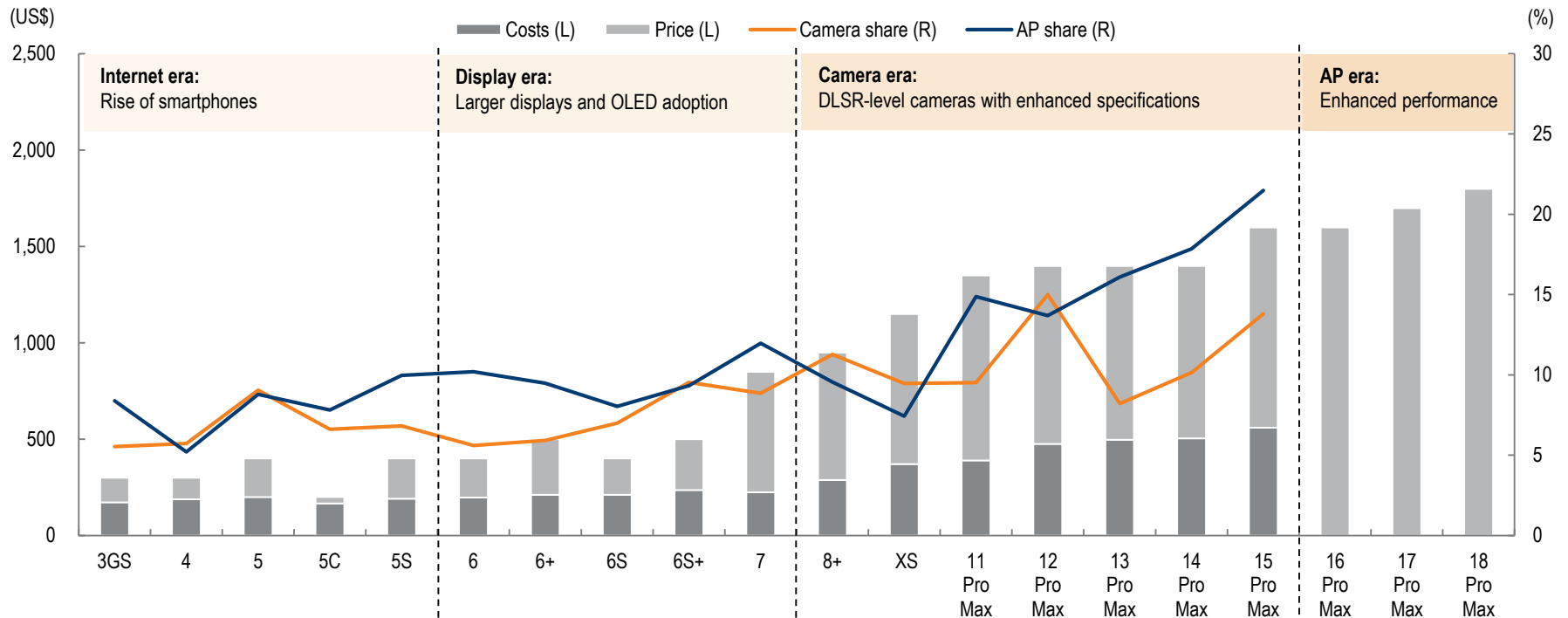
Component market outlook

II. AI to benefit APs and related components

Share of APs in BOM costs to rise amid on-device AI adoption

- Many smartphone models set for release in 2025 will come with AI-enabled APs.
- Increased demand for high-performance APs should directly benefit foundry companies like TSMC and designers like Qualcomm. MLCC makers also deserve attention, as more powerful APs require higher MLCC content.
- We believe the focus of smartphone spec upgrades is evolving, with the past emphasis on larger displays and more sophisticated cameras now giving way to an emphasis on enhanced APs that can power AI functionality. For smartphone makers, AI should become the crucial factor for boosting ASPs.

iPhone BOM cost trends



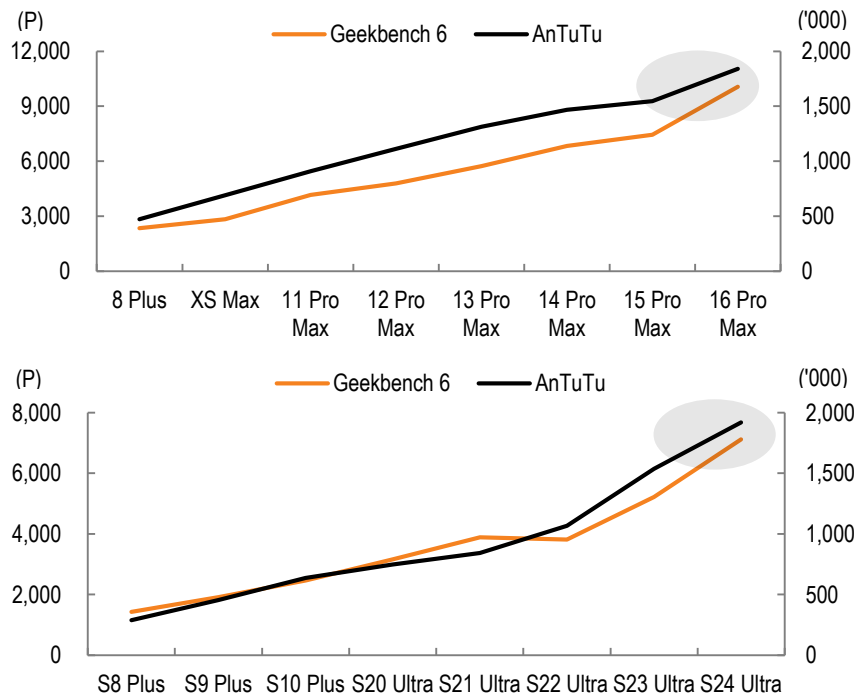
Source: Counterpoint, Mirae Asset Securities Research

II. AI to drive increase in MLCC capacitance requirements

AI-enabled smartphones to require 30% higher MLCC capacitance

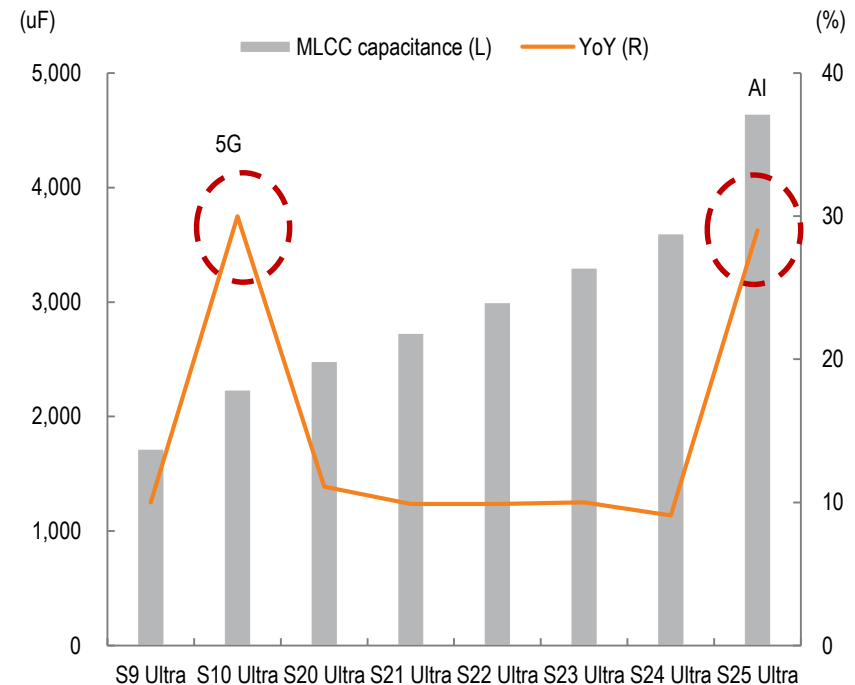
- The emergence of more powerful APs should benefit MLCC players. AI-enabled smartphones will likely require 30% higher MLCC capacitance compared to previous models, as MLCC capacitance scales with AP performance.
- Higher-performance APs should also drive demand for high-end MLCCs (e.g., those with decoupling functions to reduce signal noise).
- AP design takes about two to three years. Given that the on-device AI concept was first revealed in 2023, we expect AI-enabled APs to be widely implemented in smartphones beginning in 2025.
- We think a parallel can be drawn to the 5G rollout period, when smartphone MLCC capacitance requirements increased 30%.

Geekbench6/AnTuTu: Rapid improvement expected in next-gen AP performance



Source: NanoReview, Mirae Asset Securities Research

MLCC capacitance requirements to increase 30%



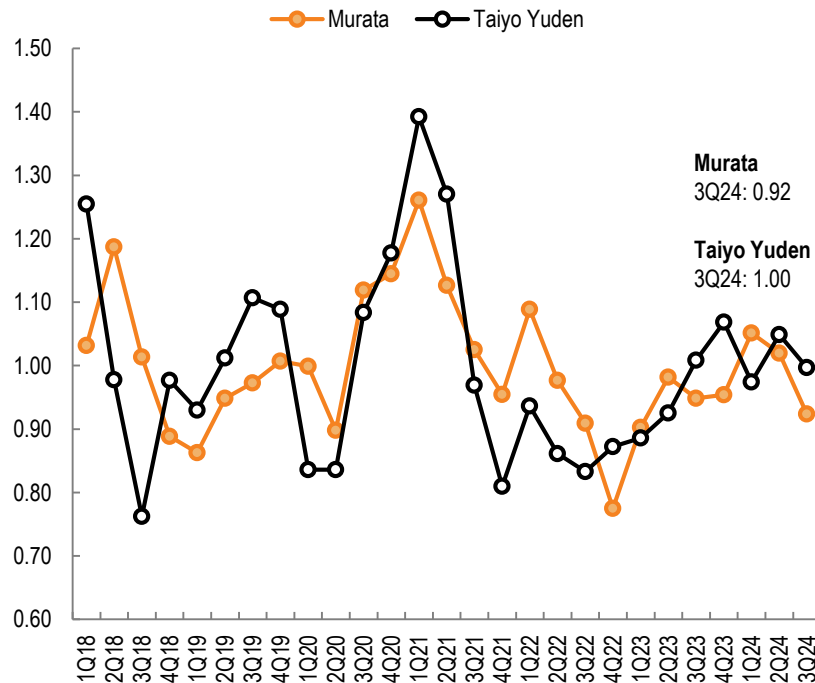
Source: Mirae Asset Securities Research Estimate

II. General-use MLCCs struggling; high-end MLCC demand is key

Margin improvement challenging for general-use MLCCs due to intensifying competition

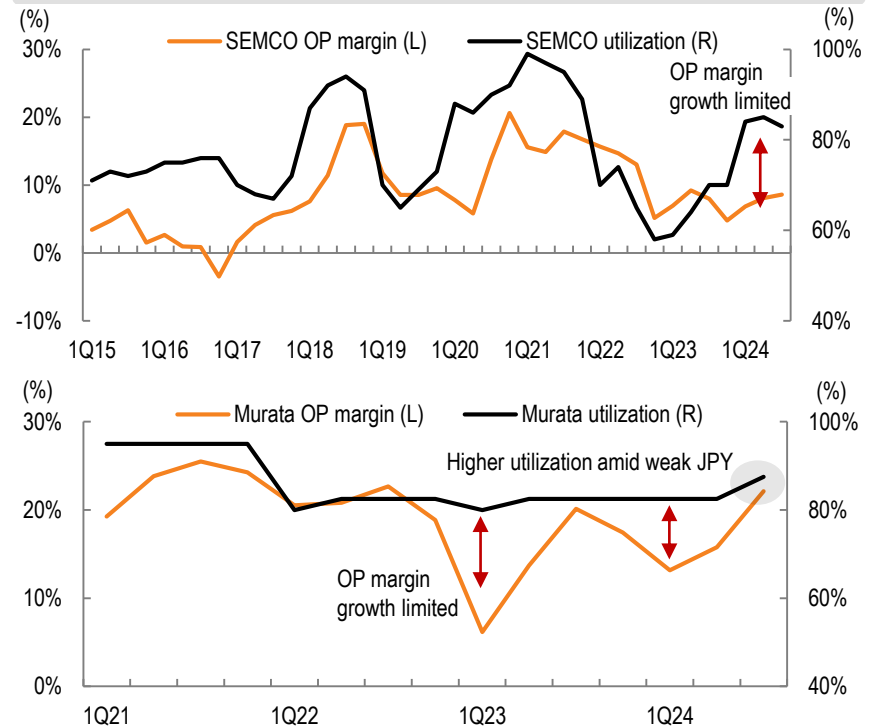
- The pricing environment for general-use MLCCs remains challenging; only high-end MLCCs used in AI and industrial applications are likely to see price increases.
- This year, top-tier companies have seen minimal operating leverage effects despite high MLCC utilization, likely due to: 1) low utilization among second-tier players (limiting the feasibility of ASP hikes for legacy IT MLCCs); and 2) the growing presence of Chinese players in Korea's general-use MLCC market (following their market entry two to three years ago).
- Even with solid orders and high utilization, it is difficult to match the OP margin levels seen in the past. Accordingly, it is crucial for leading firms to expand their portfolios of high-end MLCCs for AI and auto electronics.

Murata, Taiyo Yuden: Book-to-bill ratio trends



Source: Murata, Taiyo Yuden, Mirae Asset Securities Research

SEMCO and Murata: Utilization rates and OP margins



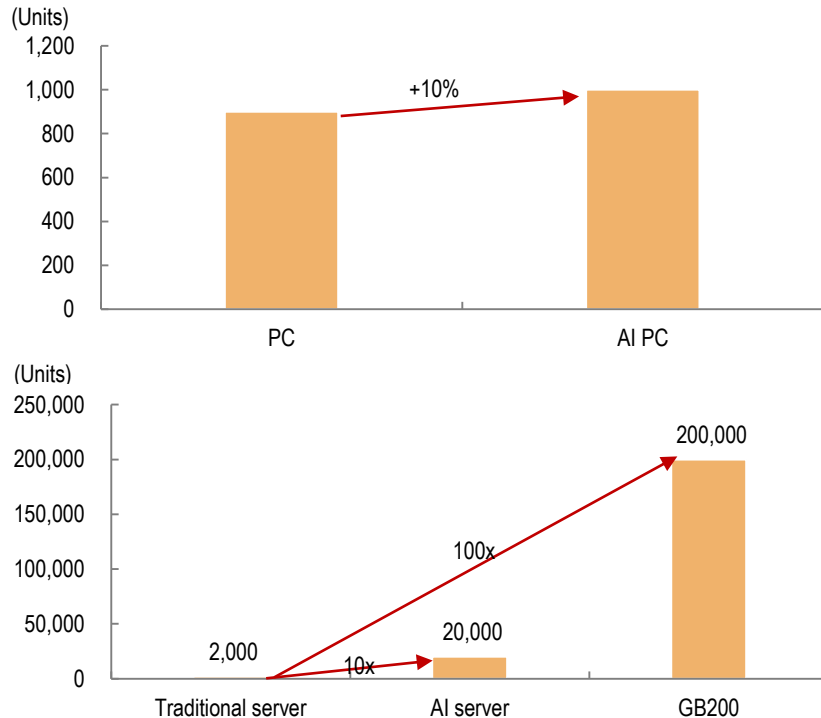
Source: Murata, SEMCO, Mirae Asset Securities Research

II. MLCCs to benefit from AI PCs/servers

High-value AI applications to drive industrial MLCC growth

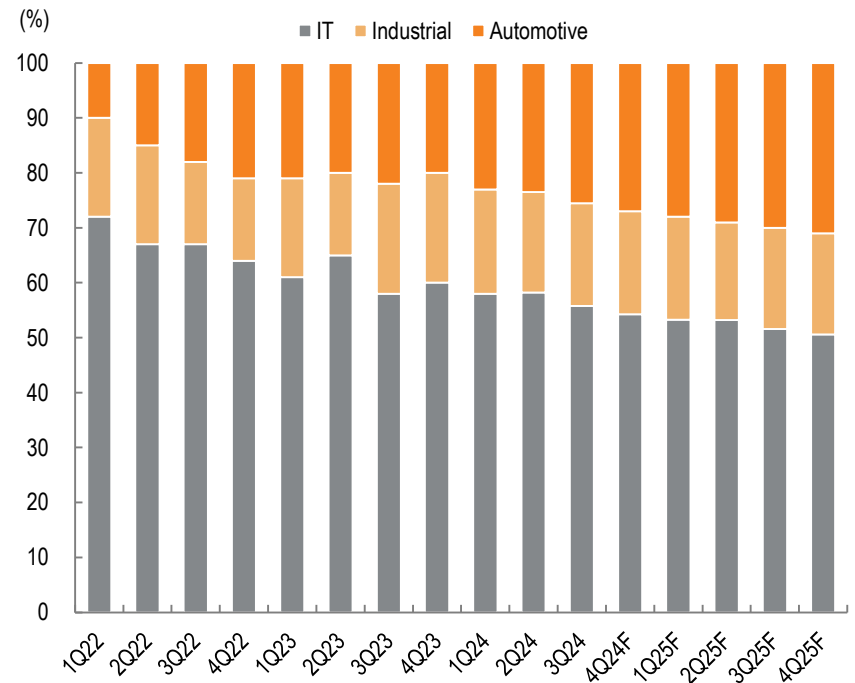
- For SEMCO, we estimate that the share of server-use MLCCs in total MLCC revenue will expand to more than 10% in 2025 (vs. 3% in 1Q24 and 7% in 3Q24), as AI servers require a much larger number of MLCCs.
- AI servers require around 10 times more MLCC content than conventional servers (with the GB200 server requiring 100 times more MLCC content).
- Automotive MLCCs are estimated to have higher margins than IT-use MLCCs. We expect the share of automotive MLCCs in total MLCC revenue to grow to 28% in 2025 (vs. 23% in 1Q24 and 25% in 3Q24).

AI servers have 10 times more MLCC content than traditional servers (100x for GB200 server)



Source: Nichidenbo, Mirae Asset Securities Research

SEMCO's MLCC revenue mix by application: Combined share of industrial and automotive MLCCs to grow to 45% by end-2025



Source: SEMCO, Mirae Asset Securities Research

II. Cost-cutting pressure on camera modules to increase

Camera module suppliers to face cost-cutting pressure

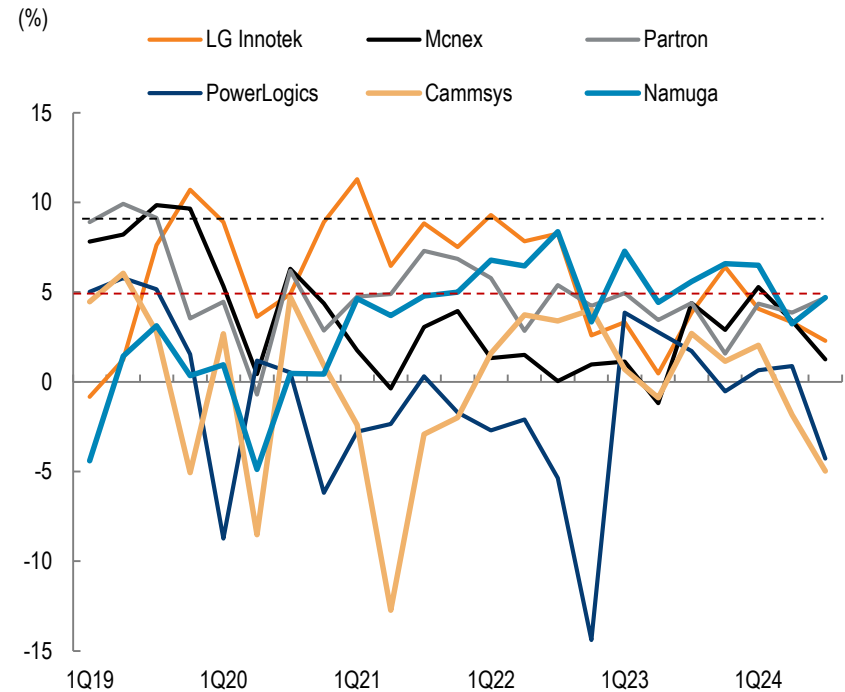
- With camera modules in smartphones ultimately headed toward DSLR-level quality, various spec upgrades should continue to be introduced.
- However, amid the push to introduce on-device AI, smartphone makers are currently prioritizing high-performance APs. As such, we believe cost-cutting pressure on camera modules is inevitable.
- Against this backdrop, we believe LG Innotek needs to focus on improving margins through efficiency and yield improvements. Looking at the case of Mcnex, heightened competition had caused OP margin to fall from 10% to less than 5%, but after three years of efficiency improvements, its margin is back above 5%.

Relative share performances of major domestic camera module suppliers



Source: QuantiWise, Mirae Asset Securities Research

OP margin trends of major domestic camera module suppliers



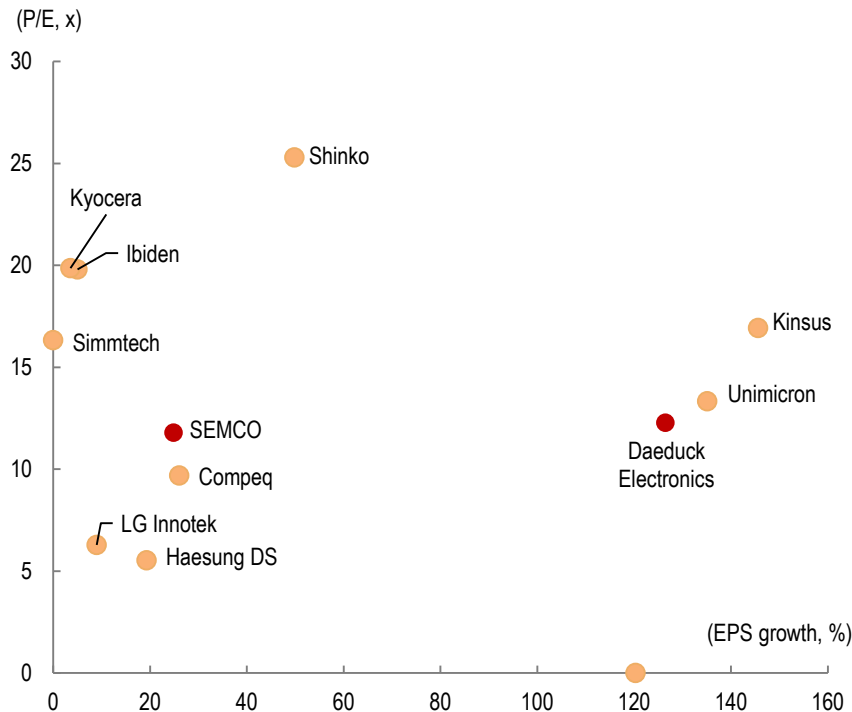
Source: QuantiWise, Mirae Asset Securities Research

II. PCBs: Slow legacy demand recovery vs. solid growth for AI

PCB demand by application: Slow recovery for PC/non-AI servers vs. solid growth for AI servers

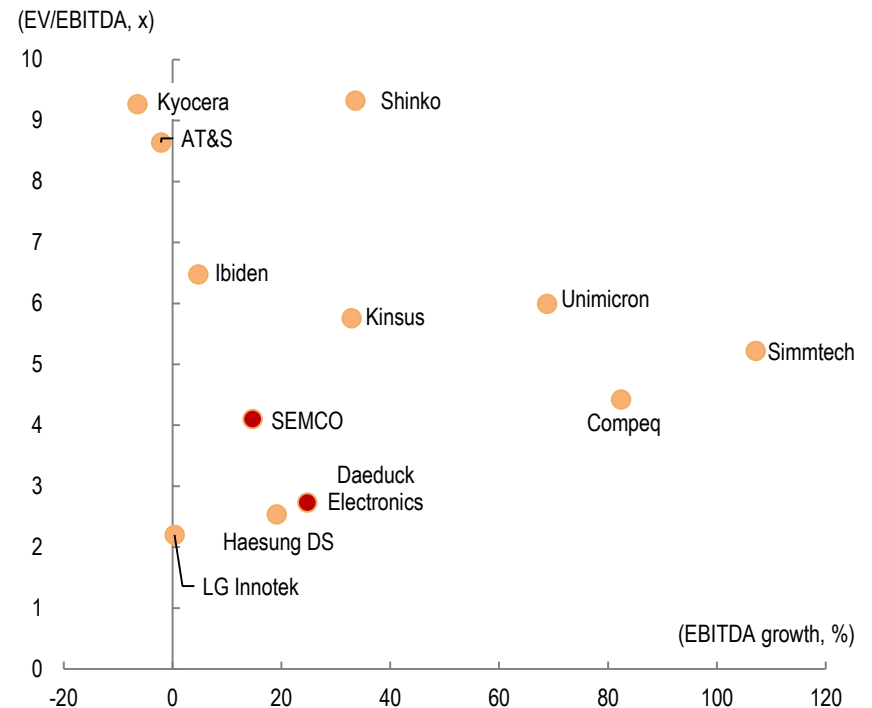
- While PCB demand from PCs and traditional servers has been recovering more slowly than expected due to weak sales at customers (e.g., AMD and Intel), demand for AI server applications has continued growing.
- SEMCO has been expanding the mix of AI-use PCBs; it secured a new customer for AI-related applications in 4Q24 and is set to supply PCBs for AI accelerators from 2025.
- We expect Daeduck Electronics to deliver an earnings turnaround in 4Q24 on recovering demand for FC-BGA boards. Additionally, the firm appears close to acquiring a new customer for high-layer-count PCBs. As such, we believe the factors that contributed to the stock's valuation discount (vs. other AI PCB suppliers) have been removed.

Major PCB suppliers' 2025F P/E vs. EPS growth



Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

Major PCB suppliers' 2025F EV/EBITDA vs. EBITDA growth



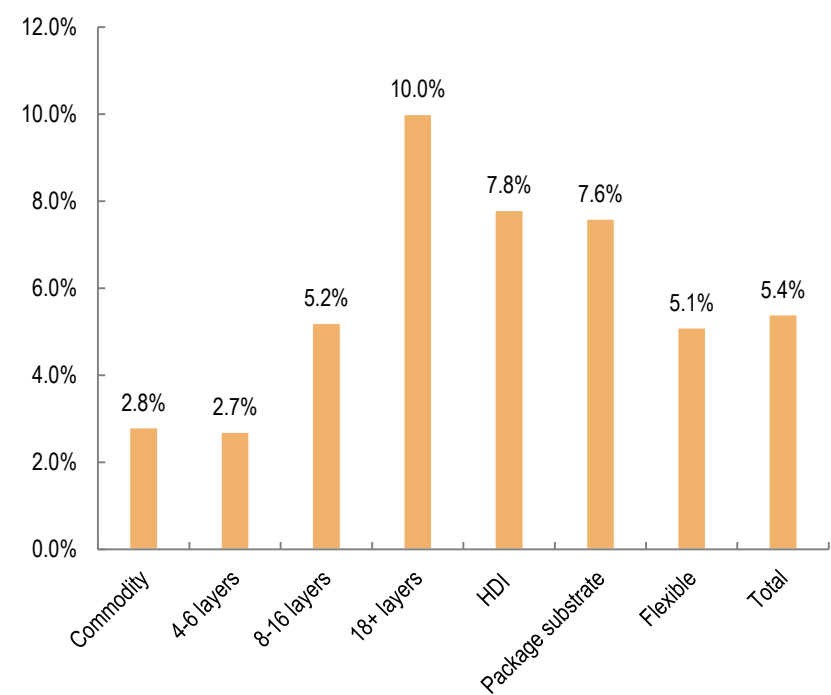
Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

II. Demand growth to continue for ultra-high-layer-count PCBs

PCB demand by application: Slow recovery for PC/non-AI servers vs. solid growth for AI servers

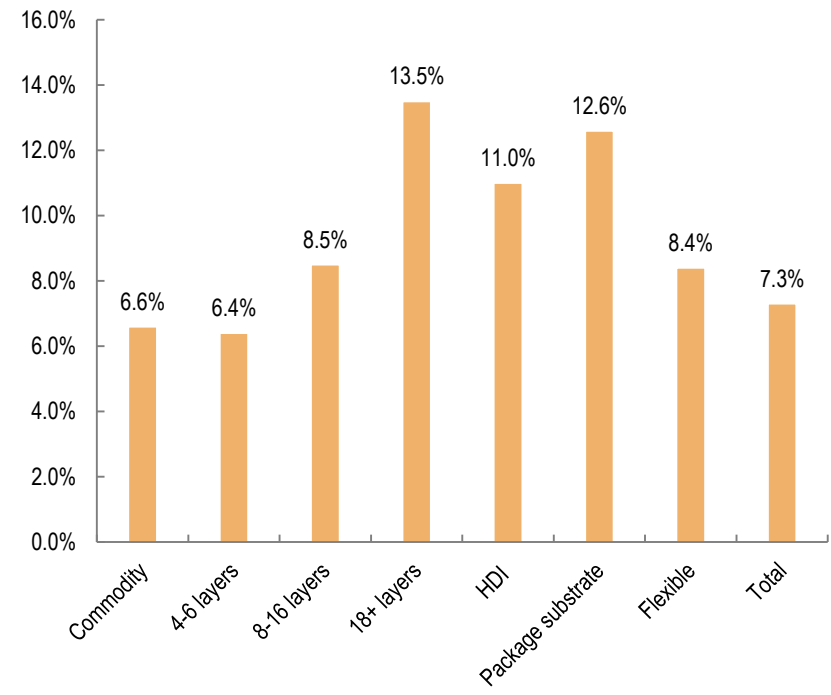
- From 2024 to 2028, we forecast the global ultra-high-layer-count PCB (18+ layers) market to expand at 10% CAGR in terms of revenue and 13.5% CAGR in terms of shipment area.
- Over the same period, we expect China's ultra-high-layer-count PCB market to grow at only 10.8% CAGR by shipment area, considering potential Trump tariffs. We forecast the ultra-high-layer-count PCB market in Southeast Asia (e.g., Vietnam and Malaysia) to expand at a faster CAGR of 21.8%.
- Demand for ultra-high-layer-count PCBs, high-density interconnect (HDI) PCBs, and large-sized advanced substrates (for AI, HPC, and telecom infrastructure system-related applications) has been growing. That said, some high-speed networking systems may switch certain components from high-layer-count PCBs to HDI PCBs; thus, HDI boards could cannibalize AI infrastructure-related sales of high-layer-count PCBs to some degree.

PCB market CAGR projection by category (2024-28F; by revenue)



Source: Prismark, Mirae Asset Securities Research

PCB market CAGR projection by category (2024-28F; by shipment area)



Source: Prismark, Mirae Asset Securities Research

III

Global peer valuations



III. Global peer valuations

Mobile device makers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	SEC	330,129	303,170	327,782	35,956	44,267	34,962	39,229	9.2	9.6	11.3	10.1	1.0	0.9	3.8	3.2
Global	Apple	4,840,352	525,830	578,813	165,692	184,278	126,050	154,343	156.0	182.0	34.2	31.1	55.3	44.2	27.8	25.9
	Xiaomi	125,579	67,403	80,869	3,929	5,467	3,678	4,713	11.7	13.3	29.7	25.1	3.6	3.2	22.4	17.6
Avg.		-	-	-	-	-	-	-	59	68.3	25.1	22.1	19.9	116.1	18.0	15.6

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

PC makers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	Dell	132,556	116,254	135,512	6,851	11,589	4,222	6,175	-	-183.7	22.8	17.0	-	-	12.1	10.5
Global	HP	38,462	41,792	44,921	4,367	4,748	2,845	3,062	11.9	11.7	10.8	10.0	1.2	1.1	6.4	6.1
	Lenovo	20,103	75,069	89,942	2,746	3,234	1,334	1,797	18.1	20.2	14.9	11.4	2.6	2.2	5.3	5.3
Avg.		-	-	-	-	-	-	-	15.0	-50.6	16.2	12.8	1.9	1.7	7.9	7.3

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

III. Global peer valuations

TV/appliance makers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	LGE	15,219	87,642	91,459	3,779	4,241	1,776	2,551	7.3	9.6	11.8	7.7	0.8	0.7	3.1	2.7
Global	Daikin	48,329	37,876	40,344	3,121	3,492	1,692	2,948	9.7	10.0	20.5	18.4	1.9	1.8	8.3	7.4
	Haier	49,547	53,273	56,744	4,360	4,879	3,710	4,136	16.8	16.9	14.1	12.6	2.4	1.9	9.6	8.7
	Sony	169,717	119,031	114,085	10,955	11,906	8,873	9,216	13.7	13.2	20.5	17.9	2.4	2.2	9.1	9.6
	Hisense	7,248	18,175	19,755	1,113	1,224	662	749	22.4	22.2	12.2	10.7	2.7	2.3	6.7	6.0
	Skyworth	1,193	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Panasonic	33,704	77,671	77,375	3,261	3,436	4,059	2,809	10.9	7.3	8.0	11.4	0.8	0.8	5.9	5.4
	Whirlpool	8,466	23,453	22,862	1,346	1,605	250	911	12.2	20.1	9.2	9.5	2.0	2.0	10.3	8.9
	Electrolux	2,938	17,110	17,485	197	639	-131	297	-7.0	20.1	-	9.3	2.1	1.7	6.7	4.5
Avg.		-	-	-	-	-	-	-	10.7	14.9	13.8	12.2	1.9	1.7	7.5	6.7

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

Automotive electronics suppliers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	LGE	15,219	87,642	91,459	3,779	4,241	1,776	2,551	7.3	9.6	11.8	7.7	0.8	0.7	3.1	2.7
	HL Mando	2,007	8,712	9,461	351	429	184	294	7.6	11.2	11.9	7.1	0.8	0.8	5.1	4.4
	Hyundai Mobis	23,714	57,321	60,919	2,852	3,280	3,778	4,170	8.9	9.1	6.2	5.6	0.5	0.5	4.8	3.9
Global	Nidec	31,329	21,457	23,296	1,488	2,215	1,144	1,623	8.4	11.1	16.3	18.3	2.1	1.9	10.2	10.4
	Valeo	2,934	31,684	32,966	1,176	1,496	384	581	7.0	8.8	6.9	4.7	0.5	0.5	2.5	2.3
	Continental	17,956	59,210	60,972	3,629	4,300	1,889	2,593	9.0	10.8	8.4	6.6	0.8	0.8	4.2	3.8
	Denso	65,126	65,315	65,238	3,479	5,715	2,859	4,332	6.3	9.1	21.4	14.0	1.2	1.2	9.2	7.0
	Magna	17,137	59,406	59,792	3,165	3,386	1,848	2,283	11.8	12.6	8.1	7.2	1.0	0.9	5.0	4.8
	BorgWarner	10,187	19,748	20,701	1,942	2,056	1,335	1,416	15.4	15.3	7.9	7.4	1.2	1.0	5.0	4.8
Avg.		-	-	-	-	-	-	-	9.1	10.8	11.0	8.7	1.0	0.9	5.5	4.9

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

III. Global peer valuations

Camera module suppliers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	LG Innotek	3,922	20,831	21,388	797	886	572	624	11.5	11.3	6.9	6.3	0.8	0.7	2.5	2.2
	SEMCO	8,298	10,213	11,091	779	973	616	769	7.4	8.6	14.7	11.8	1.0	0.9	4.9	4.1
	Mc nex	368	1,024	1,096	37	44	41	38	12.0	11.8	9.0	9.7	1.0	1.2	4.6	4.1
	Partron	418	1,472	1,529	59	63	49	51	9.5	9.2	8.8	8.9	0.7	0.7	3.7	3.2
	PowerLogics	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cammsys	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Namuga	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	Sunny Optical	11,271	7,516	8,385	487	626	470	583	10.0	11.4	23.9	19.3	2.4	2.2	11.1	9.5
	Sharp	5,929	21,226	21,081	-186	199	-1,371	198	-85.2	7.3	-	31.7	4.6	2.7	21.9	12.7
	O-Film	9,907	4,168	4,622	86	146	36	88	6.0	12.2	218.5	100.1	12.3	11.8	47.7	39.1
Avg.		-	-	-	-	-	-	-	-4.1	10.2	46.9	26.8	3.2	2.9	13.8	10.7

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

Camera component suppliers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	Jahwa	290	706	776	43	52	21	38	5.4	9.1	13.8	7.4	0.7	0.6	3.7	3.1
	Sekonix	80	464	490	15	19	12	16	8.9	11.1	7.0	5.1	0.6	0.5	3.3	2.7
	Hyvision System	241	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Optrontec	60	219	244	7	13	-	2	-	6.5	-	28.3	1.9	1.8	11.0	8.9
	Dongwoon Anatech	363	137	169	25	30	25	27	35.0	28.0	15.0	14.2	4.5	3.4	12.6	10.3
Global	Largan	13,440	2,503	2,732	968	1,081	1,011	1,021	13.4	13.2	13.3	13.1	1.7	1.6	7.2	6.6
Avg.		-	-	-	-	-	-	-	15.7	13.6	12.2	13.6	1.9	1.6	7.6	6.3

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

III. Global peer valuations

MLCC suppliers

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	SEMCO	8,298	10,213	11,091	779	973	616	769	7.4	8.6	14.7	11.8	1.0	0.9	4.9	4.1
	Sanwha	278	308	354	31	40	29	36	11.3	12.3	9.9	8.1	1.1	0.9	3.8	3.2
	Amotech	47	230	284	-	5	-	4	-	2.5	-	11.4	0.3	0.3	9.7	2.6
Global	Murata	45,920	15,872	17,010	2,940	3,421	2,337	2,659	10.0	11.1	18.5	15.9	1.8	1.7	8.9	7.5
	TDK	33,592	19,793	21,073	2,104	2,424	1,582	1,814	9.4	10.6	21.1	18.3	2.0	1.9	9.1	8.1
	Yageo	11,505	5,243	5,697	1,032	1,266	893	195	14.8	15.9	12.4	10.9	1.8	1.6	12.6	9.8
	Taiyo Yuden	2,526	3,098	3,317	158	268	126	139	4.3	6.1	21.3	13.0	0.8	0.8	19.2	11.7
	Walsin	1,965	7,726	8,144	143	263	178	226	-	-	14.7	11.4	-	-	-	-
Avg.		-	-	-	-	-	-	-	9.6	9.6	16.1	12.6	1.2	1.2	9.7	6.7

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

Substrate/packaging-related companies

(Wbn, %, x)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	SEMCO	8,298	10,213	11,091	779	973	616	769	7.4	8.6	14.7	11.8	1.0	0.9	4.9	4.1
	LG Innotek	3,922	20,831	21,388	797	886	572	624	11.5	11.3	6.9	6.3	0.8	0.7	2.5	2.2
	Simmtech	379	1,218	1,283	-	26	-	24	-	5.2	-	16.3	0.9	0.8	11.9	5.2
	Daeduck	757	912	1,025	27	70	29	65	3.3	7.1	27.8	12.3	0.9	0.9	3.8	2.7
	Haesung DS	377	616	678	68	85	58	69	10.8	11.8	6.6	5.5	0.7	0.6	3.3	2.5
	Young Poong	729	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Korea Circuit	193	1,468	1,555	-	54	-	45	-	6.0	-	4.1	0.5	0.5	5.3	3.5
Global	DAP	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nanya PCB	4,834	1,610	2,082	-390	20	-161	208	-2.8	1.3	-	25.1	0.7	0.7	10.1	4.8
	Unimicron	10,336	5,078	6,395	288	855	332	778	7.9	19.3	31.3	13.3	2.6	2.2	10.1	6.0
	Ibiden	5,935	3,387	3,499	435	438	288	303	6.9	7.0	19.5	19.8	1.3	1.3	6.8	6.5
	Shinko	6,356	1,919	2,072	227	354	170	254	7.2	11.5	37.8	25.3	2.7	2.5	12.5	9.3
	Kyocera	20,041	18,322	18,527	849	848	924	938	3.2	3.4	20.5	19.9	0.6	0.6	8.7	9.3
	AT&S	840	2,219	2,356	45	22	-78	-169	-7.6	-10.9	-	-	0.9	0.6	8.5	8.6
	Compeq	3,139	3,174	3,455	294	405	247	327	13.9	16.1	12.3	9.7	1.7	1.6	8.1	4.4
Avg.	Kinsus	1,877	1,347	1,596	80	179	34	104	2.3	9.8	46.8	16.9	1.3	1.5	7.6	5.8
		-	-	-	-	-	-	-	5.3	7.7	22.4	14.3	1.2	1.1	7.4	5.4

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

III. Global peer valuations

FPCB/materials suppliers

(Wbn, x, %)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	BH	535	1,786	1,905	126	140	114	121	16.2	14.9	4.8	4.4	0.7	0.6	2.9	2.3
	Interflex	204	527	566	37	39	40	40	16.8	14.3	5.1	5.1	0.8	0.7	2.5	1.6
Global	Zhen Ding	4,817	7,453	8,307	558	727	401	472	8.3	8.9	12.5	10.5	1.1	1.0	5.0	4.3
	Elite Material	6,648	2,678	2,994	498	581	397	453	30.9	30.0	16.7	14.7	4.9	4.2	12.2	10.3
	Flexium	933	1,195	1,202	-55	-7	1	39	-1.7	0.2	-	138.9	0.9	1.0	3.9	3.4
Avg.		-	-	-	-	-	-	-	14.1	13.7	9.8	34.7	1.7	1.5	5.3	4.4

Source: Quantwise, Bloomberg, Mirae Asset Securities Research

PI/UTG companies

(Wbn, x, %)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	Innox Advanced Materials	441	426	493	78	85	60	63	13.8	12.8	7.5	7.0	0.9	0.8	4.4	3.9
	PIAM	502	255	277	38	47	27	36	8.3	10.0	19.4	13.8	1.5	1.3	8.8	7.2
	YMT	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	JNTC	1,138	366	448	19	89	27	79	7.6	20.4	41.6	14.7	3.3	2.7	17.6	8.4
	UTI	399	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chemtronics	251	628	682	54	65	-	-	-	-	-	-	-	-	-	-
	SG Hitech	231	333	358	40	43	-	38	-	20.0	-	7.7	1.7	1.4	2.3	1.6
Global	Corning	56,690	19,995	21,343	3,507	3,833	810	2,229	12.1	16.5	24.2	20.5	3.6	3.6	12.5	11.7
Avg.		-	-	-	-	-	-	-	10.5	15.9	23.2	12.7	2.2	2.0	9.1	6.6

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

OEM/ODM companies

(Wbn, x, %)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Global	Foxconn	441	293,525	367,064	8,512	11,070	6,792	9,153	9.5	11.4	18.0	13.7	1.7	1.5	10.1	8.2
	Quanta	502	60,452	101,810	2,744	3,849	2,490	3,136	28.4	32.6	19.7	15.6	5.6	4.8	15.7	11.5
	Pegatron	146	48,800	54,159	637	907	798	837	8.6	8.7	14.1	13.1	1.3	1.3	7.1	5.9
	Luxshare	1,138	51,036	59,245	2,890	3,688	2,642	3,317	19.7	20.4	20.4	16.2	4.0	3.2	12.6	10.6
	Wiwynn	399	14,989	19,704	1,190	1,412	926	1,124	41.0	37.0	17.3	14.8	5.9	4.9	12.7	10.7
	Compal	251	39,890	42,486	684	766	481	552	8.6	9.6	14.6	12.9	1.2	1.2	8.5	7.8
	Inventec	231	26,697	29,841	495	591	322	413	11.8	14.8	23.5	17.5	2.7	2.5	14.1	12.2
	Wistron	56,690	44,567	55,635	1,704	2,295	780	1,041	15.6	19.5	18.0	13.2	2.7	2.4	8.5	6.5
Avg.		-	-	-	-	-	-	-	17.9	19.2	18.2	14.6	3.1	2.7	11.1	9.2

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

III. Global peer valuations

Other component suppliers

(Wbn, x, %)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	KH Vatec	201	341	437	25	38	24	33	9.5	12.2	8.3	6.1	0.7	0.7	3.3	2.2
	S-Connect	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global	Mitsumi	9,654	12,818	13,893	671	901	494	650	8.1	9.7	19.7	13.7	1.4	1.3	10.5	8.1
	Rohm	5,268	4,276	4,302	396	38	493	83	5.7	1.4	11.0	57.9	0.6	0.6	6.2	7.4
	JSR	N.A	3,699	4,115	32	412	-51	288	-1.5	12.4	-	-	-	-	-	-
	Hirose	5,696	1,513	1,657	311	360	242	279	7.4	8.4	22.5	19.3	1.6	1.6	10.5	9.6
	Alps	3,030	8,813	8,566	180	226	-273	284	-7.6	8.2	-	10.1	0.8	0.8	5.7	6.0
Avg.		-	-	-	-	-	-	-	3.6	8.7	15.4	21.4	1.0	1.0	7.3	6.6

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

ESL companies

(Wbn, x, %)

	Company	Market cap	Revenue		OP		NP		ROE		P/E		P/B		EV/EVITDA	
			24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Korea	SoluM	977	1,616	1,959	87	135	60	100	14.0	20.0	15.4	9.2	2.0	1.6	8.0	5.5
Global	VusionGroup	3,266	1,497	1,979	107	196	72	123	13.4	20.5	45.0	23.8	6.9	5.4	27.0	15.2
	Pricer	234	390	547	25	28	18	20	13.6	13.0	13.2	12.1	1.7	1.5	9.3	7.5
	E Ink	14,189	1,392	1,862	331	574	349	546	15.6	22.6	40.6	26.0	6.2	5.6	43.1	24.2
Avg.		-	-	-	-	-	-	-	14.2	19.0	28.6	17.8	4.2	3.5	21.9	13.1

Source: QuantiWise, Bloomberg, Mirae Asset Securities Research

Company analysis

An isometric illustration on a dark blue background featuring various business and technology icons. These include a smartphone, a laptop, a tablet, a server tower, a gear, a lightbulb, a bar chart, a pie chart, a document with a checkmark, and a network diagram. The icons are rendered in a lighter blue color and are arranged in a scattered, overlapping manner, suggesting a digital or corporate environment.

Growing AI adoption to benefit MLCC business

(Maintain)	Buy
Target price	₩200,000
Current price (11/21/24)	₩111,600
Upside	79.2%

OP (24F, Wbn)	786
Consensus OP (24F, Wbn)	779
EPS growth (24F, %)	27.7
Market EPS growth (24F, %)	72.5
P/E (24F, x)	16.0
Market P/E (24F, x)	10.0
KOSPI	2,480.63

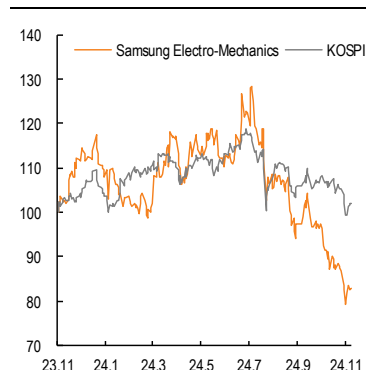
Market cap (Wbn)	8,336		
Shares (mn)	75		
Free float (%)	73.5		
Foreign ownership (%)	33.2		
Beta (12M)	0.76		
52-week low (₩)	106,400		
52-week high (₩)	172,700		
(%)	1M	6M	12M
Absolute	-9.3	-29.5	-19.0
Relative	-4.7	-22.6	-18.0

Investment points

- SEMCO is poised to benefit significantly from the adoption of high-performance APs to support on-device AI (AI-enabled smartphones likely to require 30% greater MLCC capacitance compared to conventional models).
- Higher-performance APs should also boost demand for high-end MLCCs with decoupling functions to reduce signal noise.
- The proportion of server MLCCs is likely to grow to over 10% in 2025 (from 3% in 1Q24 and 7% in 3Q24).
- The share of MLCCs used in industrial and automotive applications will likely expand to 45% by end-2025, supporting OP margin stability.
- Potential growth drivers include silicon capacitors, the production of oxide-based solid-state batteries, and AI-use substrates.
- SEMCO is our top pick in the electrical/electronic components sector. The stock is undervalued, trading at a 2024F P/B of 1.0x and 2025F P/B of 0.9x. We maintain our target price of ₩200,000.

Risk factors

- Potential slowdown in China's recovery (Trump's trade policies, etc.)
- Margin pressure stemming from aggressive efforts by Chinese MLCC players to gain market share



(Dec.)	2022	2023	2024F	2025F	2026F
Revenue (Wbn)	9,425	8,909	10,192	11,045	12,036
OP (Wbn)	1,183	639	786	1,012	1,155
OP margin (%)	12.6	7.2	7.7	9.2	9.6
NP (Wbn)	981	423	540	755	885
EPS (₩)	12,636	5,450	6,958	9,724	11,408
ROE (%)	13.8	5.5	6.6	8.5	9.3
P/E (x)	10.3	28.1	16.0	11.5	9.8
P/B (x)	1.3	1.5	1.0	0.9	0.9
Dividend yield (%)	1.6	0.8	1.3	1.7	1.7

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent

Source: Company data, Mirae Asset Securities Research estimates

Income statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Revenue	8,909	10,192	11,045	12,036
Cost of revenue	7,189	8,297	9,041	9,807
GP	1,720	1,895	2,004	2,229
SG&A expenses	1,081	1,109	992	1,074
OP (adj.)	639	786	1,012	1,155
OP	639	786	1,012	1,155
Non-operating profit	-96	-104	-66	-50
Net financial income	-15	-15	-19	-10
Net income from associates	-5	-11	4	3
Pretax profit	543	682	946	1,105
Income tax	85	115	159	182
Profit from continuing operations	458	567	787	923
Profit from discontinued operations	-8	-2	0	0
NP	450	565	787	923
Attributable to owners	423	540	755	885
Attributable to minority interests	28	25	32	38
Total comprehensive income	497	739	787	923
Attributable to owners	468	708	747	876
Attributable to minority interests	29	31	40	47
EBITDA	1,476	1,596	1,836	1,971
FCF	-29	761	543	850
EBITDA margin (%)	16.6	15.7	16.6	16.4
OP margin (%)	7.2	7.7	9.2	9.6
Net margin (%)	4.7	5.3	6.8	7.4

Source: Company data, Mirae Asset Securities Research estimates

Balance sheet (summarized)

(Wbn)	2023	2024F	2025F	2026F
Current assets	5,208	6,439	7,857	8,575
Cash & equivalents	1,669	2,799	3,561	3,904
AR & other receivables	1,235	1,270	1,499	1,623
Inventory	2,120	2,180	2,573	2,804
Other current assets	184	190	224	244
Non-current assets	6,449	6,608	6,710	6,716
Investments in associates	66	68	81	88
PP&E	5,603	5,754	5,842	5,874
Intangible assets	151	150	147	112
Total assets	11,658	13,047	14,567	15,291
Current liabilities	2,900	3,528	3,970	3,864
AP & other payables	984	1,012	1,194	1,301
Short-term financial liabilities	1,330	1,913	2,063	1,787
Other current liabilities	586	603	713	776
Non-current liabilities	727	765	1,171	1,221
Long-term financial liabilities	267	292	612	612
Other non-current liabilities	460	473	559	609
Total liabilities	3,628	4,294	5,140	5,085
Equity attributable to owners	7,847	8,538	9,180	9,921
Capital stock	388	388	388	388
Capital surplus	1,054	1,054	1,054	1,054
Retained earnings	5,873	6,326	6,967	7,709
Minority interests	183	215	247	285
Shareholders' equity	8,030	8,753	9,427	10,206

Key valuation metrics/ratios

	2023	2024F	2025F	2026F
P/E (x)	28.1	16.0	11.5	9.8
P/CF (x)	7.4	5.5	4.9	4.5
P/B (x)	1.5	1.0	0.9	0.9
EV/EBITDA (x)	7.9	5.0	4.2	3.6
EPS (W)	5,450	6,958	9,724	11,408
CFPS (W)	20,819	20,364	22,738	24,564
BPS (W)	103,020	111,923	120,185	129,742
DPS (W)	1,150	1,500	1,900	1,900
Dividend payout ratio (%)	18.6	19.3	17.6	15.0
Dividend yield (%)	0.8	1.2	1.5	1.5
Revenue growth (%)	-5.5	14.4	8.4	9.0
EBITDA growth (%)	-28.4	8.1	15.1	7.4
OP growth (%)	-45.9	22.9	28.8	14.1
EPS growth (%)	-56.9	27.7	39.8	17.3
AR turnover (x)	8.4	8.9	8.7	8.4
Inventory turnover (x)	4.4	4.7	4.6	4.5
AP turnover (x)	14.7	13.7	13.5	13.0
ROA (%)	4.0	4.6	5.7	6.2
ROE (%)	5.5	6.6	8.5	9.3
ROIC (%)	7.0	8.1	10.1	11.1
Debt-to-equity ratio (%)	45.2	49.1	54.5	49.8
Current ratio (%)	179.6	182.5	197.9	221.9
Net debt-to-equity ratio (%)	-1.6	-7.5	-10.2	-15.5
Interest coverage ratio (x)	9.4	11.2	11.1	12.2

LG Electronics (066570 KS)

“Value-up” plan unveiled

(Maintain)	Buy
Target price	W150,000
Current price (11/21/24)	W92,600
Upside	62.0%

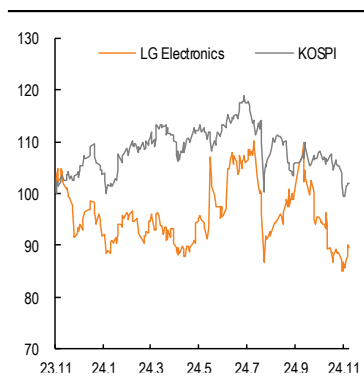
OP (24F, Wbn)	3,592		
Consensus OP (24F, Wbn)	3,777		
EPS growth (24F, %)	60.6		
Market EPS growth (24F, %)	72.5		
P/E (24F, x)	14.6		
Market P/E (24F, x)	10.0		
KOSPI	2,480.63		
Market cap (Wbn)	15,154		
Shares (mn)	164		
Free float (%)	65.4		
Foreign ownership (%)	33.3		
Beta (12M)	0.48		
52-week low (W)	87,700		
52-week high (W)	113,900		
(%)	1M	6M	12M
Absolute	-4.7	-4.0	-14.6
Relative	0.0	5.4	-13.5

Investment points

- Under its “value-up” plan announced in October, LG Electronics (LGE) aims to achieve an ROE of 10% by 2027 and will consider additional share repurchases/cancellations and quarterly dividend payouts.
- We estimate dividend yield will grow from 0.8% in 2023 to 2.8% in 2024 and 3.3% in 2025.
- We highlight LGE's growth potential in Europe, where chiller and air conditioner adoption is on the rise due to the impact of global warming. As of 2022, air conditioner penetration in Europe stood at 19% on average (up from 3% in Germany, 5% in France, and 5% in the UK in 2010).
- The Indian unit's robust growth deserves attention; in 1H24, the subsidiary's revenue and net profit expanded 15% and 28% YoY, respectively. LGE's market share in India has continued to expand amid rising home appliance penetration in the country.
- We maintain our Buy rating and target price of W150,000 on LGE. We see solid downside supports to shares (current 2024F P/B of 0.8x).

Risk factors

- Potential omission from Korea Value-Up Index (rebalancing/reconstitution scheduled for Dec. 20)
- Potential US tariff hikes for premium products produced in Korea



(Dec.)	2022	2023	2024F	2025F	2026F
Revenue (Wbn)	83,467	84,228	87,849	90,960	95,507
OP (Wbn)	3,551	3,549	3,592	4,224	4,492
OP margin (%)	4.3	4.2	4.1	4.6	4.7
NP (Wbn)	1,196	713	1,145	2,456	2,902
EPS (W)	6,616	3,942	6,333	13,579	16,047
ROE (%)	6.6	3.7	5.6	11.1	12.2
P/E (x)	13.1	25.8	14.6	6.8	5.8
P/B (x)	0.8	0.9	0.8	0.7	0.7
Dividend yield (%)	0.8	0.8	2.8	3.3	5.4

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent

Source: Company data, Mirae Asset Securities Research estimates

LG Electronics (066570 KS)

Income statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Revenue	84,228	87,849	90,960	95,507
Cost of revenue	64,425	68,079	69,763	73,251
GP	19,803	19,770	21,197	22,256
SG&A expenses	16,254	16,178	16,973	17,764
OP (adj.)	3,549	3,592	4,224	4,492
OP	3,549	3,592	4,224	4,492
Non-operating profit	-1,679	-1,556	-96	320
Net financial income	-132	-48	27	97
Net income from associates	-1,045	-969	217	180
Pretax profit	1,870	2,036	4,128	4,812
Income tax	720	709	1,481	1,684
Profit from continuing operations	1,150	1,327	2,647	3,128
Profit from discontinued operations	1	0	0	0
NP	1,151	1,327	2,647	3,128
Attributable to owners	713	1,145	2,456	2,902
Attributable to minority interests	438	182	191	226
Total comprehensive income	1,245	2,083	2,647	3,128
Attributable to owners	818	1,795	2,311	2,731
Attributable to minority interests	427	289	336	397
EBITDA	6,767	6,961	7,520	7,968
FCF	2,644	3,818	3,564	2,058
EBITDA margin (%)	8.0	7.9	8.3	8.3
OP margin (%)	4.2	4.1	4.6	4.7
Net margin (%)	0.8	1.3	2.7	3.0

Source: Company data, Mirae Asset Securities Research estimates

Balance sheet (summarized)

(Wbn)	2023	2024F	2025F	2026F
Current assets	30,341	32,645	36,957	37,099
Cash & equivalents	8,488	11,075	13,808	12,806
AR & other receivables	9,599	9,507	10,203	10,701
Inventory	9,125	9,038	9,699	10,184
Other current assets	3,129	3,025	3,247	3,408
Non-current assets	29,900	30,520	30,211	31,646
Investments in associates	3,004	2,976	3,193	3,353
PP&E	16,819	16,831	16,272	17,320
Intangible assets	2,868	3,043	2,965	3,112
Total assets	60,241	63,164	67,167	68,746
Current liabilities	24,160	24,062	25,962	25,192
AP & other payables	13,151	13,284	14,204	14,915
Short-term financial liabilities	2,948	2,793	3,189	1,280
Other current liabilities	8,061	7,985	8,569	8,997
Non-current liabilities	12,582	13,827	14,167	14,218
Long-term financial liabilities	11,628	12,882	13,153	13,153
Other non-current liabilities	954	945	1,014	1,065
Total liabilities	36,742	37,888	40,129	39,409
Equity attributable to owners	19,665	21,247	22,819	24,890
Capital stock	904	904	904	904
Capital surplus	3,025	3,100	3,100	3,100
Retained earnings	16,201	17,019	18,591	20,663
Minority interests	3,834	4,029	4,220	4,446
Shareholders' equity	23,499	25,276	27,039	29,336

Key valuation metrics/ratios

	2023	2024F	2025F	2026F
P/E (x)	25.8	14.7	6.9	5.8
P/CF (x)	2.2	2.4	2.2	2.3
P/B (x)	0.9	0.8	0.7	0.7
EV/EBITDA (x)	4.0	3.5	3.0	2.8
EPS (W)	3,942	6,333	13,579	16,047
CFPS (W)	45,731	39,566	41,909	41,319
BPS (W)	108,993	117,741	126,432	137,889
DPS (W)	800	2,600	3,100	5,000
Dividend payout ratio (%)	11.3	35.6	28.3	26.0
Dividend yield (%)	0.8	2.6	3.1	5.0
Revenue growth (%)	0.9	4.3	3.5	5.0
EBITDA growth (%)	3.5	2.9	8.0	6.0
OP growth (%)	-0.1	1.2	17.6	6.3
EPS growth (%)	-40.4	60.6	114.4	18.2
AR turnover (x)	9.6	9.5	9.6	9.5
Inventory turnover (x)	9.1	9.7	9.7	9.6
AP turnover (x)	7.3	7.3	7.2	7.1
ROA (%)	2.0	2.2	4.1	4.6
ROE (%)	3.7	5.6	11.1	12.2
ROIC (%)	9.4	10.0	11.2	11.9
Debt-to-equity ratio (%)	156.4	149.9	148.4	134.3
Current ratio (%)	125.6	135.7	142.4	147.3
Net debt-to-equity ratio (%)	25.6	17.9	9.1	5.3
Interest coverage ratio (x)	6.2	5.8	6.7	7.4

LG Innotek (011070 KS)

Time to focus on fundamentals

(Maintain)	Buy
Target price	₩280,000
Current price (11/21/24)	₩165,000
Upside	69.7%

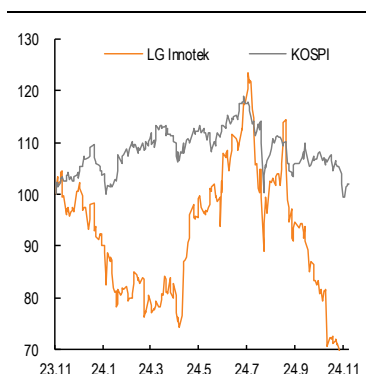
OP (24F, Wbn)	755		
Consensus OP (24F, Wbn)	797		
EPS growth (24F, %)	-6.0		
Market EPS growth (24F, %)	72.5		
P/E (24F, x)	7.4		
Market P/E (24F, x)	10.0		
KOSPI	2,480.63		
Market cap (Wbn)	3,905		
Shares (mn)	24		
Free float (%)	59.2		
Foreign ownership (%)	26.6		
Beta (12M)	1.15		
52-week low (W)	162,100		
52-week high (W)	302,000		
(%)	1M	6M	12M
Absolute	-17.2	-30.1	-35.3
Relative	-13.0	-23.2	-34.5

Investment points

- In 2025, we estimate sales by LG Innotek's North American customer will rise 5.4% YoY, backed by new model releases (including the iPhone SE4 in 1Q25 and a rumored "slim" model in 3Q25).
- The customer's device sales should also receive a boost from AI voice assistant upgrades set for 2Q25 (integration with third-party apps, increase in the number of languages supported, etc.).
- With the prices of chipsets supporting on-device AI rising, cost-cutting pressure on other components is inevitable.
- Currently trading at 0.7x 2024F/2025F P/B, the stock appears undervalued.

Risk factors

- Potential cost increases if Trump's tariff hikes materialize and are passed on to component suppliers
- Aggressive efforts by Chinese rivals to gain market share



(Dec.)	2022	2023	2024F	2025F	2026F
Revenue (Wbn)	19,589	20,605	20,854	21,698	22,631
OP (Wbn)	1,272	831	755	807	913
OP margin (%)	6.5	4.0	3.6	3.7	4.0
NP (Wbn)	980	565	531	594	709
EPS (W)	41,401	23,881	22,443	25,116	29,975
ROE (%)	25.9	12.6	10.7	10.7	11.6
P/E (x)	6.1	10.0	7.4	6.6	5.5
P/B (x)	1.4	1.2	0.7	0.7	0.6
Dividend yield (%)	1.6	1.1	2.0	2.3	2.3

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent

Source: Company data, Mirae Asset Securities Research estimates

LG Innotek (011070 KS)

Income statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Revenue	20,605	20,854	21,698	22,631
Cost of revenue	18,742	18,788	19,522	20,293
GP	1,863	2,066	2,176	2,338
SG&A expenses	1,032	1,310	1,369	1,425
OP (adj.)	831	755	807	913
OP	831	755	807	913
Non-operating profit	-192	-101	-73	-64
Net financial income	-68	-67	-46	-36
Net income from associates	0	0	0	0
Pretax profit	639	654	734	849
Income tax	74	123	139	140
Profit from continuing operations	565	531	594	709
Profit from discontinued operations	0	0	0	0
NP	565	531	594	709
Attributable to owners	565	531	594	709
Attributable to minority interests	0	0	0	0
Total comprehensive income	547	597	654	709
Attributable to owners	547	597	654	709
Attributable to minority interests	0	0	0	0
EBITDA	1,877	2,019	1,987	2,162
FCF	305	654	423	154
EBITDA margin (%)	9.1	9.7	9.2	9.6
OP margin (%)	4.0	3.6	3.7	4.0
Net margin (%)	2.7	2.5	2.7	3.1

Balance sheet (summarized)

(Wbn)	2023	2024F	2025F	2026F
Current assets	5,349	5,928	7,106	6,835
Cash & equivalents	1,390	2,174	2,562	2,098
AR & other receivables	2,292	2,397	2,993	3,119
Inventory	1,572	1,306	1,493	1,557
Other current assets	95	51	58	61
Non-current assets	5,855	5,459	5,298	5,751
Investments in associates	0	0	0	0
PP&E	4,856	4,510	4,375	4,855
Intangible assets	222	219	180	147
Total assets	11,204	11,387	12,404	12,586
Current liabilities	4,219	3,678	4,114	3,673
AP & other payables	3,163	2,628	3,004	3,133
Short-term financial liabilities	557	635	636	45
Other current liabilities	499	415	474	495
Non-current liabilities	2,271	2,459	2,466	2,468
Long-term financial liabilities	2,206	2,411	2,411	2,411
Other non-current liabilities	65	48	55	57
Total liabilities	6,490	6,137	6,580	6,141
Equity attributable to owners	4,715	5,250	5,824	6,445
Capital stock	118	118	118	118
Capital surplus	1,134	1,134	1,134	1,134
Retained earnings	3,414	3,872	4,387	5,008
Minority interests	0	0	0	0
Shareholders' equity	4,715	5,250	5,824	6,445

Key valuation metrics/ratios

	2023	2024F	2025F	2026F
P/E (x)	10.0	7.4	6.6	5.5
P/CF (x)	3.0	2.0	2.0	1.9
P/B (x)	1.2	0.7	0.7	0.6
EV/EBITDA (x)	3.7	2.4	2.2	2.0
EPS (W)	23,881	22,443	25,116	29,975
CFPS (W)	80,647	83,949	82,827	87,339
BPS (W)	199,217	221,845	246,093	272,333
DPS (W)	2,610	3,380	3,740	3,736
Dividend payout ratio (%)	10.9	15.1	14.9	12.5
Dividend yield (%)	1.1	1.7	1.8	1.8
Revenue growth (%)	5.2	1.2	4.1	4.3
EBITDA growth (%)	-13.0	7.6	-1.6	8.8
OP growth (%)	-34.7	-9.1	6.9	13.1
EPS growth (%)	-42.3	-6.0	11.9	19.3
AR turnover (x)	10.2	9.0	8.2	7.5
Inventory turnover (x)	11.6	14.5	15.5	14.8
AP turnover (x)	8.4	8.2	8.8	8.4
ROA (%)	5.4	4.7	5.0	5.7
ROE (%)	12.6	10.7	10.7	11.6
ROIC (%)	13.1	10.5	11.1	12.3
Debt-to-equity ratio (%)	137.7	116.9	113.0	95.3
Current ratio (%)	126.8	161.2	172.7	186.1
Net debt-to-equity ratio (%)	28.9	16.5	8.2	5.4
Interest coverage ratio (x)	8.2	6.3	6.6	8.3

Source: Company data, Mirae Asset Securities Research estimates

Earnings to rebound in 2025

(Maintain)	Buy
Target price	W29,000
Current price (11/21/24)	W19,460
Upside	49.0%

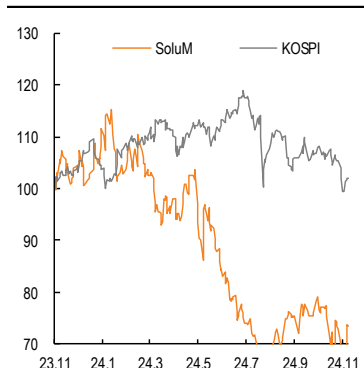
OP (24F, Wbn)	79		
Consensus OP (24F, Wbn)	87		
EPS growth (24F, %)	-54.4		
Market EPS growth (24F, %)	72.5		
P/E (24F, x)	17.7		
Market P/E (24F, x)	10.0		
KOSPI	2,480.63		
Market cap (Wbn)	973		
Shares (mn)	50		
Free float (%)	80.4		
Foreign ownership (%)	19.1		
Beta (12M)	0.09		
52-week low (W)	15,650		
52-week high (W)	30,600		
(%)	1M	6M	12M
Absolute	-5.1	-23.7	-30.1
Relative	-0.3	-16.2	-29.3

Investment points

- Margins in the electronic shelf label (ESL) business have improved (12.4% in 1Q24, 11% in 2Q24, and 14.3% in 3Q24), supported by a limited rise in logistics costs and an increase in the mix of four-color products (to 40%).
- Orders are growing; as of end-3Q24, the company's 12-month rolling order intake stood at W1.95tr (+5% QoQ, +9.1% YoY), compared with W1.75tr at end-1Q24 and W1.85tr at end-2Q24.
- We expect order intake to continue growing, with the results of five to six large-scale bids set to be announced starting in 4Q24.
- This year, SoluM's stock has significantly underperformed global peers (YTD returns: +34% for VusionGroup, +67% for E Ink, and +67% for Pricer vs. -35% for SoluM). We recommend accumulating shares, as the stock is likely to catch up with peers once market conditions rebound.
- We note that VusionGroup is part of BOE Technology Group and thus may be negatively affected by Trump's policies.

Risk factors

- Order intake could potentially be concentrated in small-volume contracts.



(Dec.)	2022	2023	2024F	2025F	2026F
Revenue (Wbn)	1,695	1,951	1,546	1,866	2,165
OP (Wbn)	76	155	79	125	159
OP margin (%)	4.5	7.9	5.1	6.7	7.3
NP (Wbn)	47	120	55	104	135
EPS (W)	946	2,407	1,098	2,077	2,699
ROE (%)	16.9	34.8	12.7	20.2	21.3
P/E (x)	18.4	11.3	17.7	9.4	7.2
P/B (x)	2.8	3.2	2.0	1.7	1.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent

Source: Company data, Mirae Asset Securities Research estimates

Income statement (summarized)

(Wbn)	2023	2024F	2025F	2026F
Revenue	1,951	1,546	1,866	2,165
Cost of revenue	1,637	1,302	1,592	1,834
GP	314	244	274	331
SG&A expenses	160	165	150	172
OP (adj.)	155	79	125	159
OP	155	79	125	159
Non-operating profit	-12	0	2	5
Net financial income	-19	-7	-7	-5
Net income from associates	0	-1	0	0
Pretax profit	143	79	127	164
Income tax	24	25	25	32
Profit from continuing operations	119	54	101	132
Profit from discontinued operations	0	0	0	0
NP	119	54	101	132
Attributable to owners	120	55	104	135
Attributable to minority interests	-1	-1	-2	-3
Total comprehensive income	108	60	101	132
Attributable to owners	109	62	104	135
Attributable to minority interests	-1	-2	-3	-3
EBITDA	193	122	162	205
FCF	213	-29	57	101
EBITDA margin (%)	9.9	7.9	8.7	9.5
OP margin (%)	7.9	5.1	6.7	7.3
Net margin (%)	6.2	3.6	5.6	6.2

Balance sheet (summarized)

(Wbn)	2023	2024F	2025F	2026F
Current assets	653	721	912	1,123
Cash & equivalents	132	66	124	209
AR & other receivables	125	167	201	233
Inventory	268	322	388	450
Other current assets	128	166	199	231
Non-current assets	286	306	299	278
Investments in associates	13	12	14	17
PP&E	227	246	237	214
Intangible assets	13	13	12	12
Total assets	939	1,026	1,211	1,402
Current liabilities	505	509	587	635
AP & other payables	141	158	191	221
Short-term financial liabilities	320	302	337	348
Other current liabilities	44	49	59	66
Non-current liabilities	34	57	63	73
Long-term financial liabilities	30	54	59	69
Other non-current liabilities	4	3	4	4
Total liabilities	539	566	650	708
Equity attributable to owners	400	462	566	701
Capital stock	25	25	25	25
Capital surplus	76	76	76	76
Retained earnings	337	392	496	631
Minority interests	0	-2	-4	-7
Shareholders' equity	400	460	562	694

Key valuation metrics/ratios

	2023	2024F	2025F	2026F
P/E (x)	11.3	17.7	9.4	7.2
P/CF (x)	5.9	8.2	6.1	4.8
P/B (x)	3.2	2.0	1.7	1.3
EV/EBITDA (x)	7.6	9.0	6.5	4.6
EPS (W)	2,407	1,098	2,077	2,699
CFPS (W)	4,660	2,382	3,208	4,050
BPS (W)	8,457	9,695	11,772	14,471
DPS (W)	0	0	0	0
Dividend payout ratio (%)	0.0	0.0	0.0	0.0
Dividend yield (%)	0.0	0.0	0.0	0.0
Revenue growth (%)	15.1	-20.8	20.7	16.0
EBITDA growth (%)	71.4	-36.7	32.8	26.1
OP growth (%)	104.4	-49.0	58.3	27.7
EPS growth (%)	154.4	-54.4	89.1	29.9
AR turnover (x)	16.5	12.9	12.1	11.9
Inventory turnover (x)	4.7	5.2	5.3	5.2
AP turnover (x)	8.5	9.4	9.9	9.7
ROA (%)	12.1	5.5	9.1	10.1
ROE (%)	34.8	12.7	20.2	21.3
ROIC (%)	25.8	10.9	17.0	20.4
Debt-to-equity ratio (%)	134.7	122.9	115.6	102.1
Current ratio (%)	129.3	141.5	155.4	176.9
Net debt-to-equity ratio (%)	24.0	28.4	14.3	-2.0
Interest coverage ratio (x)	6.8	5.7	8.5	10.0

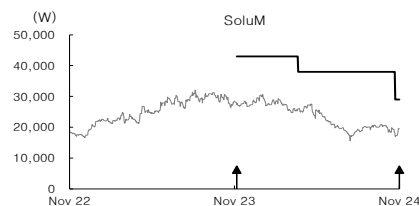
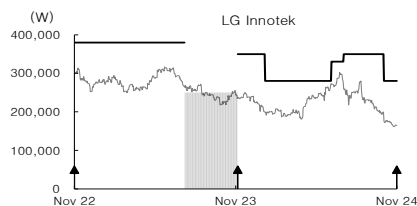
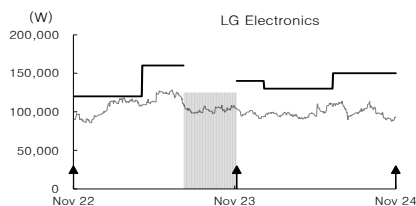
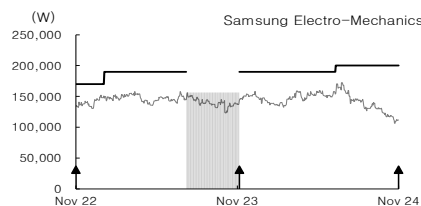
Source: Company data, Mirae Asset Securities Research estimates

Appendix 1

Important disclosures and disclaimers

Two-year rating and TP history

Company	Date	Rating	TP (W)	Company	Date	Rating	TP (W)
Samsung Electro-Mechanics (009150)	07/03/24	Buy	200,000		10/24/24	Buy	280,000
	11/28/23	Buy	190,000		07/25/24	Buy	350,000
	07/31/23	No Coverage			06/27/24	Buy	330,000
	01/26/23	Buy	190,000		01/29/24	Buy	280,000
	10/17/22	Buy	170,000		11/28/23	Buy	350,000
					07/31/23	No Coverage	
LG Electronics (066570)	07/03/24	Buy	150,000	SoluM (248070)	10/27/22	Buy	380,000
	01/29/24	Buy	130,000		11/13/24	Buy	29,000
	11/28/23	Buy	140,000		04/12/24	Buy	38,000
	07/31/23	No Coverage			11/28/23	Buy	43,000
	04/28/23	Buy	160,000				
	10/31/22	Buy	120,000				
LG Innotek (011070)							



Stock ratings

Buy	Expected 12-month performance: +20% or greater
Trading Buy	Expected 12-month performance: +10% to +20%
Hold	Expected 12-month performance: -10% to +10%
Sell	Expected 12-month performance: -10% or worse

Sector ratings

Overweight	Expected to outperform the market over 12 months
Neutral	Expected to perform in line with the market over 12 months
Underweight	Expected to underperform the market over 12 months

Rating and TP history: Share price (—), TP (—), Not Rated (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆)

* Our investment rating is a guide to the expected return of the stock over the next 12 months.

* Outside of the official ratings of Mirae Asset Securities Co., Ltd., analysts may call trading opportunities should technical or short-term material developments arise.

* The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.

* TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Appendix 1

Ratings distribution and investment banking services

	Buy	Trading Buy	Hold	Sell
Ratings distribution	82.38%	10.23%	7.39%	0%
Investment banking services	84.21%	5.26%	10.53%	0%

* Based on recommendations in the last 12-months (as of September 30, 2024)

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Appendix 1

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Mirae Asset Securities International Network

Mirae Asset Securities International Network

Mirae Asset Securities Co., Ltd. (Seoul)

One-Asia Equity Sales Team
Mirae Asset Center 1 Building
26 Eulji-ro 5-gil, Jung-gu, Seoul 04539
Korea

Tel: 82-2-3774-2124

Mirae Asset Securities (USA) Inc.

810 Seventh Avenue, 37th Floor
New York, NY 10019
USA

Tel: 1-212-407-1000

Mirae Asset Securities (Singapore) Pte. Ltd.

6 Battery Road, #11-01
Singapore 049909
Republic of Singapore

Tel: 65-6671-9845

Mirae Asset Investment Advisory (Beijing) Co., Ltd

2401B, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699

Ho Chi Minh Representative Office

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3910-7715

Mirae Asset Securities (HK) Ltd.

Units 8501, 8507-8508, 85/F
International Commerce Centre
1 Austin Road West
Kowloon
Hong Kong
Tel: 852-2845-6332

Mirae Asset Wealth Management (Brazil) CCTVM

Rua Funchal, 418, 18th Floor, E-Tower Building
Vila Olimpia
Sao Paulo - SP
04551-060
Brazil
Tel: 55-11-2789-2100

Mirae Asset Securities (Vietnam) LLC

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3911-0633 (ext.110)

Beijing Representative Office

2401A, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699 (ext. 3300)

Mirae Asset Capital Markets (India) Pvt Ltd

1st Floor, Tower 4, Equinox Business Park,
LBS Marg, Off BKC, Kurla (West), Mumbai - 400 070
India

Tel: 91-22-62661300 / 48821300

Mirae Asset Securities (UK) Ltd.

41st Floor, Tower 42
25 Old Broad Street,
London EC2N 1HQ
United Kingdom

Tel: 44-20-7982-8000

PT. Mirae Asset Sekuritas Indonesia

District 8, Treasury Tower Building Lt. 50
Sudirman Central Business District
Jl. Jend. Sudirman, Kav. 52-54
Jakarta Selatan 12190
Indonesia
Tel: 62-21-5088-7000

Mirae Asset Securities Mongolia UTsK LLC

#406, Blue Sky Tower, Peace Avenue 17
1 Khoroo, Sukhbaatar District
Ulaanbaatar 14240
Mongolia

Tel: 976-7011-0806

Shanghai Representative Office

38T31, 38F, Shanghai World Financial Center
100 Century Avenue, Pudong New Area
Shanghai 200120
China

Tel: 86-21-5013-6392