Asia Technology

Asian Investor Marketing Feedback on Memory/Korea Tech/Holdco

Technology - Semiconductors

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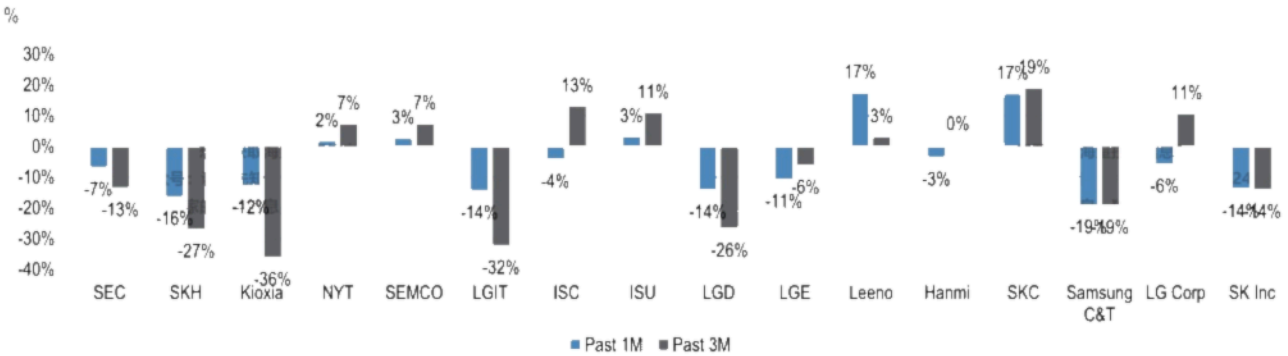
We met with over 100 investors in Asia (SGP, KL and HK) in the last two weeks. In this note, we highlight the key areas of investor interest and feedback and answer FAQs from the meetings. Overall, we saw a wide dispersion in investor sentiment towards memory sector investing (i.e. a big disconnect between top-down AI sustainability vs. bottom-up memory industry S&D fundamentals). We had already noted that 3Q26 could be an expectation-reset quarter and do not rule out the possibility of memory stocks remaining volatile in the near term (memory stocks -6%/-15% in last 1M/3M vs. SOX +10%/-4%) given the lack of imminent catalysts. In our view, the dispersion offers a good entry point on the duration trade ("longer for higher up-cycle") and we view risk-reward as turning favorable on a medium-term horizon. We remain optimistic on the memory up-cycle and recommend investors accumulate on recent weakness. Our **key OW ideas** are: **SEC**/**SKH**/**Kioxia** (Memory), **SEMCO** (MLCC/Substrate), **ISU** (AI PCB), and **ISC** (Testing socket) in the next 6 months horizon.

- **Areas of investor interest: centered around memory, but not all about it.** Our Sept/Oct analyst marketing survey probably captures the most dispersion in sentiment between investors (on stock price and multiples) and fundamentals (S-D and pricing). After discussing all the risks and opportunities over the next 12-18 months, many investors agreed with our even stronger conviction on a longer up-cycle duration; however, this did not translate into strong enough confidence to add back positions on recent weakness. With the valuation trap and major memory stocks not reacting even to a near-term EPS upside momentum environment, almost every investor pointed to the need for immediate corporate action from the large-cap Asian memory players for aggressive shareholder returns to avoid further multiple de-rating. Fundamentally, we sense the agentic CPU memory demand opportunity to be the most under-appreciated factor in understanding the fundamental S-D gap. We have generally detected more optimism on memory stocks from long-only and generalist investors (higher preference for SKH over SEC) than hedge fund and tech-specialist investor groups (higher preference for SEC over SKH). Lastly, during our discussions, investors said they are employing a capital development strategy in SMID caps (e.g. SPE, Substrate, PCB, and others) in the past 4 weeks. MLCC long trade inquiries were also high (especially among hedge-fund investors) and we equally picked up a lot of pushback from long-only investors.

See page 6 for analyst certification and important disclosures, including non-US analyst disclosures.

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Figure 1: Coverage universe past 1M/3M share price performance



Source: Bloomberg Finance L.P.

- **Demystifying the route of investor concerns on memory stocks**. We believe investors are fully aware of the negative narratives: slowing pricing momentum (weakening secondary delta) and HBM *de-spec* discussions. However, reaction to how to trade memory stocks remains extremely divergent among investors (Asian investors generally remain more conservative vs. U.S. investors). As memory stocks are not appealing to momentum chasing investors (even after all the HBM pricing upside that we have been witnessing in the supply chain - media release), memory companies' own share buybacks (SEC W15trn PSU program and SKH W40trn buyback with cancellation program) and "duration bet" (mainly for value-oriented and yield-seeking investors) remain incremental buyers in the market. Yet, investors point out that the shareholder return program announcement was not sufficient (bigger disappointment in SEC vs. SKH who executed earlier with higher payout). We highlight the following three key catalysts that could reverse the negative narrative in memory: a) HBM wafer-to-die penalty continuing albeit with density cuts, b) broad-based memory demand upward revision (related to agentic CPU demand strength), and c) shareholder return update.
- **What is the realistic HBM ASP expectation for 2027? Will HBM S-D tightness continue into 2028?** Based on our discussions, most investors view our HBM ASP expectations to be very conservative (JPMe: +60% blended HBM ASP hike in 2027E) and expect meaningful upside (buyside expectations have moved up from a wide range of 50-100% in the past 3 months to 80-100% recently). Based on our current HBM ASP assumptions (64%/45% y-y increase at SEC/SKH and absolute ASP of US$2.9-3.1/Gb), we forecast Korean Memory's combined 2027E HBM revenue at US$128bn and 67% OPM. Every 10% upside to HBM ASP (or around US$0.3/Gb) would translate into ~ $12.8bn additional revenue and 70% OPM translating into 1.6-2.3% of EPS upside to our FY27E estimates. On the HBM demand side, many investors were curious to understand the potential HBM order upside from AVGO (covered by Harlan Sur). Despite the density de-spec noise, we have seen no changes in HBM procurement order forecasts (density adjustment a coping mechanism to enable higher chip production) and think successful Frontier AI model lab's in-house silicon chips projects could be an upside factor for late-2028/2029E HBM demand. We continue to expect the HBM sector to be in 20% S-D shortage through the next two years.
- **Relatively low interest in LTA vs. 3-6M ago, investors still giving little credit to LTA**. Investors continue to do a lot of work in understanding LTA; however, due to the lack of transparency in the multiple LTA contract details (only a few headlines are out publicly by companies and most details are sealed under NDA), most are opting to wait for more clarity heading into year-end. In 2Q26, there was a spike in discussions among investors about whether to assign a higher multiple given the increase in LTA business mix. During our marketing trip, most investors said they viewed LTA to be neutral for memory

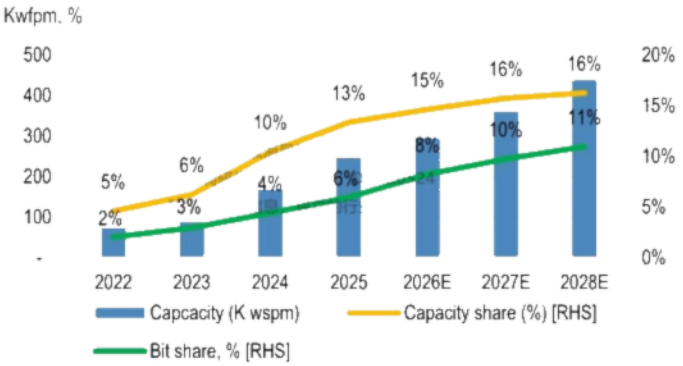
business operations (neither giving a premium nor discount for now) and would wait for more clarity - for example on how memory suppliers and customers will work differently to avoid double/triple ordering and honor the supply agreement. Many investors also shared that memory suppliers' connecting the LTA portion of their business to shareholder returns in the form of higher FCF payouts would increasingly provide confidence in believing the LTA story.

- **How big is the memory TAM opportunity for every new 1GW in power supply?** As investors point to power capacity constraints being the biggest bottleneck for further AI chipset demand upward revision through 2028E (supply debottlenecking mostly happening beyond 2029E), we received multiple questions related to power-equivalent memory TAM opportunity. Using our top-down AI memory TAM calculation (US $700+bn in 27E) and datacenter GW capacity net additions (c.30GW), there appears to be a c.US$23bn revenue opportunity to memory per every 1GW. This is substantially higher than the rule of thumb memory value of US$16-17bn per every 1GW AI datacenter capex of US$60bn based on memory taking 40-50% of value share within 60-70% value share allocation to server rack. Difference comes from: a) replacement demand calculation (memory bit supply would be used for both new power capacity and also a replacement demand for existing datacenter capacity) and b) value share assumption gap between CSP-grade and Enterprise-grade from top-down level. By supplier, we estimate US$6-6.5/4-4.5bn (SEC/SKH) per every 1GW AI (difference based on memory market share from top-down perspective).
- **4Q26/2027 memory pricing outlook**. While pricing Q-Q trends continue to be a point of discussion, investors are paying incrementally less attention, indicating the key share price driver is moving away from "earnings momentum" to "cycle durability". After hitting the 80% OPM mark, we estimate the incremental profit margin impact from a 10% like-for-like ASP hike is less than 75bps. On the other hand, as S-D for both DRAM/NAND will likely worsen next year (vs. 2026), we continue to expect a non-LTA volume contract price to be struck with 5-10% ASP hikes every quarter (higher range for B2B/Server vs. B2C/Mobile). Certain CE customers are willing to pay up for the pricing (30% or higher Q-Q price increase in CY1Q27) to stock the inventory amidst aggressive production plans and we view the HBM re-pricing (for volume under calendar year contracts) could potentially support a better pricing trend in CY1Q27 vs. 4Q26. In terms of the LTA supply portion, we view price increases to be limited under the multi-year supply terms and suppliers with higher LTA coverage could show a rather muted blended ASP trend vs. suppliers with a lower LTA coverage. Nevertheless, we think server mix improvement (server compute memory carrying a ~30% ASP premium over PC/Mobile memory) will support an overall blended ASP improvement trajectory through next year.
- **NAND sentiment improving with eSSD TAM upward revision, excessive concerns in 2027E**. Compared to DRAM industry S-D dynamics, investors have continuously expressed a big concern on NAND S-D in the past 3 months (the most bearish view was expecting an NAND price drop as soon as 4Q26E). We have been advocates of healthier NAND S-D upon eSSD demand strength and investors appear to be more comfortable with NAND sector fundamentals in the medium term horizon. Many investors were focusing on the eSSD demand upward revision data points across the supply chain (higher CSP orders to compensate for rising cache demand) and we have also been picking up on stronger QLC NAND bit demand in the supply chain. This is a surprising development given the higher price point difference between HDD on like-for-like density (depending on the grade of product; 10-14x price difference on QLC and 14-18x price difference on TLC). We believe CSP customers are using HDD as a complimentary technology to support HDD's disadvantage in read/write speed in more intensive AI inference/agents environment and economical benefits (i.e. deploying more GPU compute for power savings). All-in-all, we view eSSD demand strength to be large enough to offset the demand weakness in CE NAND demand next year.

- **Selecting the right valuation methodology - rotating back to P/B over using P/E, current share prices imply a memory cycle going back to the pre-AI era in our DCF valuation exercise**. Having switched our memory sector valuation methodology to price-to-earnings under the "longer and higher up-cycle thesis", we sensed around one-third of investors agreed with our new valuation framework in 2Q26. Given that memory stocks are trading at a massive valuation discount to earnings and P/B-ROE vs. historical cycles (and Asia at an even higher discount vs. US peers), whether P/E valuation metrics are a fair approach was not a FAQ. While investors agree with the concept of connecting LTA to P/E valuation, many continue to believe that P/B-ROE approach is a better metric due to the cyclical nature of the memory industry. Valuation methodology selection debate indicates growing pessimism among investors on the duration trade and multi-year up-cycle thesis view (i.e. Korean Memory stocks are trading near 1x FY28E P/B implying a down-cycle valuation). From a DCF valuation standpoint (report), current share prices also imply a bear or extreme bear scenario where prices could fall back to pre-AI cycle levels after 2028E.
- **While memory stock sentiment was muted, overall conviction in the AI hardware trade remained high for 2027 - investors showed high interest in MLCC.** We have conveyed our bullish APAC MLCC sector buy idea across the region and our belief that the MLCC sector could return a higher performance in the short term over memory from: a) stronger EPS upgrade momentum driven by price hikes (MLCC sector stage of development is very similar to memory sector in 4Q25), b) clear value share gain thesis upon higher power requirements per server rack, and c) new value-added products order acceleration with high ASP/margin (similar to HBM concept from 2024). Many investors agreed with our thesis and FAQ related to MLCC S-D dynamics and key data points, and underlying assumptions about supply constraints (vs. historical average output) due to side-gap/forming MLCC supply. Lack of publicly available data points on UTR, shipment and pricing were pointed out as reasons for hesitance in investing in the sector (mainly the pushback from long-only investors alongside stretched valuations). We continue to remain bullish on the sector's cyclical development and JPM EPS estimates remain 20-30% ahead of FY27-28E consensus across our Japan/Korea MLCC coverage.
- **China competition risk amplified by CXMT 4F² progress news, headline noise rather than a real business risk in our assessment.** According to the media (link), CXMT announced progress in developing the 4F² structure for server DRAM slated for adoption by year-end. In layman's terms, 4F² circumvents the use of EUV to improve cell density by 30%+ (vs. current 6F²) through vertically stacking the transistors and buried wordlines (see detailed explanation in our LT DRAM market report). CXMT's progress in 4F² is difficult to verify, but we remain skeptical about China competitors' access to advanced deposition and etching tools that are both critical in order to commercialize 4F² technology with stable yield. We retain our view that incremental capacity coming online from Chinese competitors is manageable (~16%/11% DRAM capacity/bit share in FY28E). We believe the most important risk factors in the next 12-18M should be demand equations including AI capex, funding issues, and memory specifications rather than supply equations especially coming from the Chinese peers.

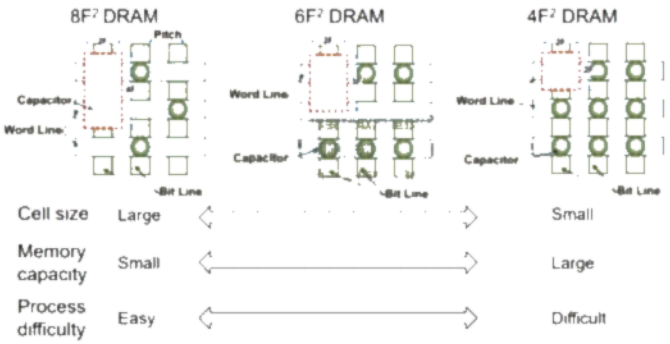
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Figure 2: China DRAM - bit and capacity mix



Source: Company data. J.P. Morgan estimates.

Figure 3: DRAM chip array comparison



Source: Samsung Electronics.

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