Asia Technology

Key Takeaways from J.P. Morgan Asia Tech Tour (Seoul Part): Memory Semiconductors

Technology - Semiconductors

Jay Kwon [AC]
(82-2) 758-5725
jay.h.kwon@jpmorgan.com
J.P. Morgan Securities (Far East) Limited, Seoul Branch

Sangsik Lee
(82-2) 758 5146
sangsik.lee@jpmorgan.com
J.P. Morgan Securities (Far East) Limited, Seoul Branch

Neelay Y Kamath
(91-22) 6157 3764
neelay.kamath@jpmchase.com
J.P. Morgan India Private Limited

Mio Shikanai
(81-3) 6736 1313
mio.shikanai@jpmorgan.com
JPMorgan Securities Japan Co., Ltd.

We hosted major memory makers (SEC, SKH, Kioxia, and NYT) and memory supply chain players (FADU and EO Technics - both Not Covered) at our JPM Asia Tech Tour (Aug 20-21) with 50+ investors joining our conference. Key FAQs from investors were centered around the shareholder return policy, LTA strategy, memory S-D, HBM pricing negotiations, and new emerging NAND technology. We sense investors remain constructive on mid-to-long term fundamentals, while maintaining a more measured view on memory stock prices amid a cautious stance on LTA and limited visibility on shareholder returns. SEC (*note*) and SKH (*note*) both surprisingly reported new shareholder return programs this week, and notwithstanding the expectations, we believe both memory makers are making a commitment to improving shareholder value (i.e. dividends, share buyback/ cancellation), and we maintain our OW view on the sector.

- **Shareholder return policies have become the center of debate topics.** Key FAQs from investors were the magnitude of the FCF payout and the willingness to make greater return commitments akin to those of US peers (i.e. 100% of excess cash), albeit the definition of excess cash remains opaque, in our view. Following SKH's W40trn share buyback and cancellation announcement (*report*), management reiterated lifting the shareholder return pool from <50% to over 50% of accumulated FCF as a sign of prioritizing shareholder value and suggested further update at its 3Q26 earnings. Kioxia echoed the view by guiding for a progressive dividend starting within this financial year, with potential updates at its Sep-Q earnings conference and higher FCF payout is a feasible policy. After our conference on Friday, Samsung announced to return W90trn-W110trn shareholder return following its 50% FCF payout policy for 24-26E shareholder program (buyback/ dividend mix not finalized) and up to W30trn dividend payout in 3Q26 result, which we found the commentaries encouraging but not promising enough to meet the heightened investor expectation, in our view (*report*). There was limited discussion surrounding shareholder returns in our meeting with NYT, but we expect the company to continue with its previous minimum net profit payout policy. Overall, we walked away with encouraging signals from the memory makers on their commitment to shareholder returns and expect further updates in the next 3-6M.
- **LTA: 50%-70% volume coverage; A pillar for valuation-rerating.** While we believe many investors trust the strong memory fundamentals for an extended period of years, we sense the stance on LTAs is still skewed to the downside. Memory makers reiterated that the LTAs will re-shape the business model allowing better demand foresight and less cyclicality given the ability to adjust capex/supply according to customers' demand outlook. Volume coverage among memory companies was broadly in-line (SEC: maximum of ~70%; Hynix : over 50%; Kioxia: 50% of volume for '27-28; and NYT: 50%+ but less than 70%), while LTA contract duration terms differed by memory makers (SEC/SKH: up to 5 years; Kioxia: until FY28 but indiscussion of FY29/30; and NYT: majority <1 year contracts but aiming to target longer term contracts). Pricing details were not disclosed, but memory makers unaminously guided that the contract terms were favorable to the memory suppliers with sizable prepayment terms and stronger binding to both parties

See page 4 for analyst certification and important disclosures, including non-US analyst disc

with greater order and procurement visibility. One may argue that LTAs cap the near-term ASP upside, but we believe LTAs serve a greater value in reducing the industry's cyclicality and would pave the path to a valuation re-rate supported by stronger shareholder return policies. Finally, it is also worth noting that there has been an increase in LTA discussions between memory suppliers and equipment vendors, which we believe is a healthy business practice across the semi ecosystem.

- **Thoughts on content optimization and S-D outlook.** The dominant message from DRAM makers was that the 12-Hi to 8-Hi HBM spec adjustment or SOCAMM content downgrade was driven by insufficient supply (availability issue) rather than the intent to de-spec (willingness to take performance degradation). Memory makers guided to limited changes to the total bit demand TAM and stayed constructive on agent-AI led CPU demand, driving faster server DRAM content growth to 30%+ vs. historical 15-20%, largely echoing our view (*GMM report*). On the NAND side, memory suppliers shared ongoing industry initiatives to utilize eSSD for KV-cache offloading demand amidst rising BOM cost burdens from higher HBM/DRAM costs. TLC NAND was viewed to be the primary solution during our discussion, but we have also witnessed emerging solutions for inference applications such as SLC NAND, super high IOPS, and Z-NAND (initial target likely for edge AI applications) which could add to the supply tightness. There was little discussion on specific fulfillment or sufficiency ratio figures; however, memory makers all conveyed positive messages about elongated S-D shortage cycles vs. the past. Of note, MU CEO (covered by Harlan Sur) reported that Micron is able to meet the demand of its key customers for about 50% to about two-thirds relative to its supply in many cases (*link*).
- **HBM price negotiation status quo and strategies: upside risk to our HBM ASP assumptions.** Investors were interested in understanding memory suppliers' price bargaining power via their approaches towards HBM price negotiation and we sensed a strategic stance difference among suppliers. Investors found SEC's HBM pricing and wallet share commentary more aggressive vs. SKH prioritizing strategic partnerships and presenting a rather balanced approach. Both companies commented that the 2027E HBM ASP negotiations are under review (at the later part of the process) and will consider mulitple variables for final pricing; a) market conditions (e.g. S-D shortage in the industry and margin gap between non-HBM DRAM); b) next-gen HBM cost structure (advanced core DRAM and logic die process vs. previous generation); and c) HBM performance. Overall, we believe there is an upside risk to our industry HBM ASP growth assumption of +43% y-y and better HBM price negotiation could be a source for potential EPS upward revision. Interestingly, NYT also highlighted its new AI application memory opportunity for the next year (starting from single digit % sales mix in 27E and rising to as high as DD% in 28E) with a similar profitability profile to that of current mainstream DRAM offerings.
- **Commercialization of HBF is still distant.** Post multiple HBF product and roadmap announcements at FMS (Future of Memory and Storage) event three weeks ago, there was high interest from investors in the NAND business discussion. With respect to HBF, we sensed a relative conservatism citing the lack of interest from customers and a clear value proposition. Memory makers commented that the interest in HBF remains lean from the customers and many view that the customers are mainly viewing the TLC-based solution to be the primary option in the foreseeable future. High cost structure (TSV processing and system level upgrade) was pointed out as one of the challenge points despite the bandwidth advantages. We continue to view the commercialization of HBF as likely to remain distant. However, given the fast technology cadence in the memory industry, we believe it is worth monitoring HBF development. Kioxia's Super High IOPS SLC-based solution could be one of the alternative solutions in the future (meaningful revenue ramp likely from 2028).
- **Little discussion on the memory pricing: investor focus moves onto durability of**

earnings. Given the existence of the LTA and its large volume coverage, we sensed that the memory pricing discussions were not the crux of discussion points among investors. Near-term pricing outlook commentary (Kioxia maintaining ~20% Q/Q blended ASP increase view in CY3Q26 or NYT expecting July revenue spike to be sustained into the rest of the quarter) was a comforting data point to investors alongside the turnaround in memory spot market pricing data points (e.g. price rebound since the July bottom for both DRAM/NAND is 9%/15% respectively). While agreeing to a continued favorable ASP environment next year upon worsening S-D shortage, investors expressed concerns on sustainability amidst growing memory cost burden to AI hardware capex. We would like to note that many AI users/customers of memory suppliers indeed make strong margins today and memory makers highlighted the key difference between the previous cycle is the customer profile (less price sensitive, longer investment duration, and heavier focus on B2B over B2C). Moving into 4Q26/1Q27 when the majority of LTA discussions are finalized, we expect investor focus to move onto blended ASP implications from LTA mix increase and price hike contract clauses. Memory makers' majority of LTA contracts are centered around AI and datacenter server applications and we would like to highlight that server-grade application memory (for both DRAM/NAND) carry 30-40% ASP premium over consumer memory.

- **Despite higher infrastructure capex spending headlines, capex discipline stance unchanged.** The message on capital spending was uniformly one of restraint across companies. Between DRAM and NAND, investors expressed greater concerns on NAND and were curious to understand suppliers' investment plans. Korean memory players reiterated their process migration driven B/G expansion strategy over capacity expansion in the next 12-18 months. We believe new NAND cleanroom space for both suppliers will come online in the earliest in 2029E (one or two phases of Pyungtaek Fab 5 at Samsung vs. M17 at SK Hynix). Kioxia also echoed the view of production B/G via technology migration (BiCS 9/10). NAND manufacturers' S-D dynamics view (demand outstripping supply) was far more bullish vs. investors who are turning conservative on 2027 S-D citing YMTC capacity expansion and consumer NAND degradation. In our view, the key difference lies between the two in the eSSD demand projection, which will be strong enough to fully offset the consumer NAND weakness. In DRAM, due to the prevailing shortage in the market, investors gave little pushback to capex acceleration. Higher wafer capacity allocation towards HBM was a common message from Korean memory suppliers and this is likely to act as a strong source for supply constraints given wafer-to-die penalty.
- **Thoughts on China competition.** We believe memory makers broadly acknowledge the potential share loss to Chinese suppliers due mainly to their aggressive capacity expansion, but view the application exposure to be constrained to local-usage/consumer-applications more so than server applications. Nanya Tech adds that CXMT has now been present in the market for well over a decade without materially disrupting global S/D, in large part because AI has been absorbing the very supply that would otherwise serve consumer end-markets. We believe the Chinese competitors are now a structural part of the memory supply, but view multiple geopolitical risks, equipment restrictions, and production yield issues to limit their access to the advanced AI-grade memory. Long story shorty, we do not view China competition as a major risk poitn to the current AI hardware capex led memory cycle.