

## Memory Market Update

Read-through from MU's 3QFY26 results; granular updates on LTAs bode well for sector valuation re-rating

- Granular updates on LTA.** MU (OW, covered by JPM's Harlan Sur) disclosed 16 SCAs (strategic customer agreements) with granular details including: 1) The floor and ceiling prices are determined based on previous peak level and 2Q26 memory price; 2) LTAs are mostly structured on 5-year terms (CY26-CY30) with a take-or-pay agreements; 3) The minimum value of the 14 LTAs using the floor prices amount to US\$100bn; 4) MU expects to receive cash deposits and financial commitments of \$22bn; 5) The LTAs represent Micron's 20% of DRAM and one-third of NAND volume; 6) If all the LTAs are executed, MU expects LTAs to account for >50% of its total revenue; 7) The counterparty for the LTAs include four very large, three medium-sized customers (JPMc: hyperscalers) and auto/consumable customers; 8) The LTA includes diverse applications including HBM, DRAM and NAND; and 9) the contract terms vary by customers.
- JPM view:** We were surprised by the degree of SCA disclosure from MU's management and the substance covered during the call was constructive to stay bullish on the top-down memory industry's structural development, consistent with our view on LTA paving the path for a valuation re-rating ([report](#)). MU management's view of the floor price (using pre-AI era peak margins and recent quarter margin profiles) is substantially higher than most investor expectations based on our discussions, and we find the SCA terms (e.g. take-or-pay conditions, prepayment mechanisms, and others) are also encouraging. Compared to global peers, MU's SCA coverage volume mix is relatively low, suggesting that there could be additional SCA development underway, similar to Korean memory makers' LTA sign-up trajectory. We expect Asian memory makers to provide specifics on their own LTA contract terms and status as early as the upcoming results season, which will act as a positive share price driver ([report](#)).

### Technology - Semiconductors

#### Jay Kwon <sup>AC</sup>

(82-2) 758-5725

[jay.h.kwon@jpmorgan.com](mailto:jay.h.kwon@jpmorgan.com)

J.P. Morgan Securities (Far East) Limited, Seoul Branch

#### Sangsik Lee

(82-2) 758 5146

[sangsik.lee@jpmorgan.com](mailto:sangsik.lee@jpmorgan.com)

J.P. Morgan Securities (Far East) Limited, Seoul Branch

#### Neelay Y Kamath

(91-22) 6157 3764

[neelay.kamath@jpmchase.com](mailto:neelay.kamath@jpmchase.com)

J.P. Morgan India Private Limited

Table 1: Possible LTA structures

|                               | Scenario 1 (LTA w/ fixed price)                               | Scenario 2 (Prepayment + fixed price)        | Scenario 3 (Prepayment + price flexibility (fixed + floating price)) |
|-------------------------------|---------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------|
| Contract value                | High contract value                                           | Lower contract value from prepayment         | Uncertain - depends on floating price value                          |
| Prepayment                    | No                                                            | Yes                                          | Yes                                                                  |
| Enforceability                | Low given limited enforceability mechanism aside from penalty | High as prepayment signals volume commitment | High as prepayment signals volume commitment                         |
| Volume and pricing visibility | Highest from fixed volume and price negotiation               | High from fixed volume and price negotiation | Lowest due to floating value                                         |
| Contract preference           | Least preferred                                               | Neutral                                      | Most preferred                                                       |
| Visual example                |                                                               |                                              |                                                                      |

Source: J.P. Morgan estimates.

See page 5 for analyst certification and important disclosures, including non-US analyst disclosures.

Table 2: LTA contract variables

|                                     | Variable (1)   | Variable (2)   | Variable (3)   |
|-------------------------------------|----------------|----------------|----------------|
| Contract volume & pricing: fixed    | 50%            | 75%            | 100%           |
| Contract volume & pricing: variable | 50%            | 25%            | 0%             |
| Contract duration                   | 3 years        | 4 years        | 5 years        |
| Contract price (baseline)           | 1Q26 avg       | 2Q26 avg       | 3Q26 avg       |
| Contract price (upside)             | Open / Close   | Open / Close   | Open / Close   |
| Contract price (downside )          | -10% from base | -15% from base | -20% from base |
| Prepayment portion                  | 10%            | 20%            | 30%            |
| Financial instrument covered        | Yes / No       | Yes / No       | Yes / No       |
| Take or Pay penalty                 | Yes / No       | Yes / No       | Yes / No       |
| Capex subsidization                 | Yes / No       | Yes / No       | Yes / No       |

Source: J.P. Morgan estimates.

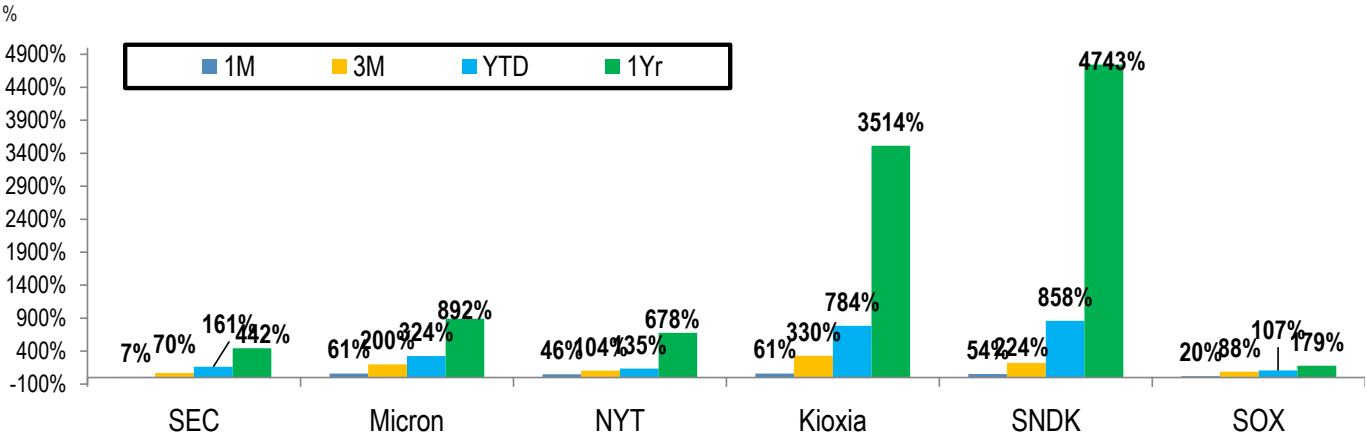
- Confirmation of memory S-D tightness beyond 2027.** MU announced memory S-D remains tight beyond CY27 (first official memory supplier commentary beyond CY27 cycle; previously, Asian memory makers highlighted worsening S-D shortage in CY27 vs. CY26 during April result call season) and emphasized limited line of sight to when the memory supply will catch-up with demand as customers' demand is largely in excess of its current supply capacity. In the near-term, MU raised the industry DRAM B/G to low-to-mid 20% vs. previously low-20% (JPMe: 23%) and guided NAND B/G at 20% (JPMe: 20%) for year 2026. Given the persistent memory shortage expectation, MU's management guided that the function of memory demand is more driven by supply factors rather than demand factors. We believe this implies mid-to-long term memory TAM drivers are transitioning from ASP to the pace of supply growth, justifying the enormous memory capex and capacity expansion plans. Despite the efforts to increase capacity, MU highlighted the complex technology node and HBM trade ratio that limits the incremental bit output, in-line with JPMe. We expect memory shortage driven (supply driven) content optimization to be the major narrative in 2H26E.
- Capex upward revision: supply debottlenecking initiatives have begun.** With higher confidence in long-term demand visibility, MU management raised capex guidance to US\$10bn in 4QFY26 and US\$27bn in FY26 (broadly in-line with JPMe). In FY27E, MU raised capex to a minimum of US\$mid-40bn and guided more than half of the y-y capex increase is dedicated to cleanroom construction, indicating limited bit production output in 27E. On the greenfield fabs, MU reinstated its plans of: 1) Idaho-1 wafer output in mid-27E; 2) ID2 in late-CY28; 3) Tongluo site in TW to support wafer shipment in mid-27 (ramp up timeline pulled-forward by 3M); 4) Construction of a similar-sized fab (300K sqf) in adjacent to the Tongluo fab without a specific timeline; 5) Singapore backend fab to ramp in 1H27; and 6) Multi-year EUV supply agreement with ASML to support increased adoption in 1nm. Despite multiple capacity expansion plans, MU indicated severe supply tightness and reiterated supply discipline (19-22% capex intensity compared to BBG sales estimates of US\$123/233bn in FY26/27E). Amid the acute memory supply shortage, we view the capex and capacity expansions as warranted and expect the upcoming supply capacities to drive memory TAM growth.
- HBM4 ramping 2x faster than HBM3E, demand to outpace supply well into CY28.** MU's HBM4 12-Hi volume ramp is tracking twice as fast as HBM3E 12-Hi, with the company having already shipped over \$1bn in HBM4 revenue (broadly comparable to SEC according to [media headlines](#)), and management expects to reach mature yields on HBM4 12-Hi significantly faster than HBM3E 12-Hi. Strategically, MU is targeting HBM share close to its overall DRAM share (JPMe ~20-25%) given HBM's higher trade ratio (more silicon per bit versus traditional DRAM), which we view as a deliberate move to continue servicing diversified non-HBM demand across data center, consumer, auto, and industrial end-markets. Interestingly, given the strong demand backdrop for GPUs/

ASICs, MU raised its HBM TAM for CY27 to "easily crossing \$100B" (vs. JPMe of US\$129bn for CY27), essentially pulling forward the guidance by one year. As highlighted in our recent report ([link](#)), we continue to expect HBM supply-demand shortages to worsen next year, and we forecast HBM capacity as a % of total capacity to continue its upward trend (from 20% in 4Q25 to over 30% throughout 2028E), despite conventional DRAM commanding a higher margin than HBM in the near-to-mid term.

- **Demand outlook by end-application.** Driven by AI tailwinds, MU's management raised server unit shipment guidance to high-teens% in 2026E driven by mid-teens% growth in GP server and even stronger growth in AI server vs. previously low-10% (vs. JPMe: +20% server unit growth). Management hinted that the upward revision in the server unit was partially enabled by a modest reduction in the average server DRAM content to maximize the unit shipment, echoing our view of SOCAMM content cut due to the supply shortage ([report](#)). In the smartphone/PC market, management guided TAM to grow despite unit volume declines (JPMe: -11%/-15% smartphone/PC unit in 26E) due to the resilient high-end devices. In the mid-to-long term, the company projects ADAS and humanoid robotics as drivers of content growth, with each humanoid carrying 10x more memory vs. the average L2+ vehicle (<L2 ADAS vehicles carry less than 16GB of DRAM - [link](#)).
- **Micron's 3QFY26 results flash and 4QFY26 outlook.** Micron (OW, covered by JPM's Harlan Sur) reported a strong May-Q print: sales of US\$41.5bn (consensus: \$36.4bn) and EPS of US\$25.1 (consensus: US\$20.9) - see results [report](#). DRAM bit shipment rose LSD % Q/Q tracking slightly lower than SEC (JPM May projection: 2Q26E DRAM B/G: +5%) and DRAM ASP rose low-60% Q/Q (vs. JPMe: SEC blended ASP rising 57% +/- in 2Q26E). NAND bit shipments increased MSD% Q/Q but ASP increase was greater at mid-80% Q/Q driven by tight NAND industry conditions and a favorable mix (vs. JPMe: SEC NAND ASP rising by 52+% Q/Q in 2Q26E). MU's Aug-quarter guidance stood at sales of ~US\$50.0bn (consensus: US \$46.9bn) and EPS of ~US\$30.7 (consensus: \$27.8) helped by GPM of 86% (vs. consensus: 84.8%).
- **Stock implications.** After MU's strong earnings print and multiple LTA announcements, Asian memory stocks rose +9% (SEC: +6%/ Kioxia: +12%/ NYT: +8% vs. SOX: ~flat) likely attributable to the favorable contract terms for the memory suppliers and likely expectations of follow-on LTA announcements from other memory makers. We reiterate our view that the LTA will pave the path for a valuation rerating and reiterate our multi-year bullish view on the memory cycle. We remain constructive on the major Asian memory makers (SEC [OW] and Kioxia [OW]) and recommend investors accumulate.



Figure 1: Global memory makers' share price performance including SOX (Philadelphia Semiconductor index)



Source: Bloomberg Finance L.P.