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SEMICON West Recap

2027 is a very different setup to 2026

We went into SEMICON West expecting significant positive commentary on broader industry trends, silicon photonics and related testing, and advanced packaging. While the overarching sentiment was one of industry excitement, we came away somewhat ambivalent. Beyond the broad consensus that "everyone is excited," our key takeaways are as follows: **1) 2026 vs. 2027 - A very different supply chain setup:** The industry has grown from a ~$125bn annualized run rate to ~$200bn in just four quarters (4Q25 to 4Q26), largely through suppliers driving higher utilization of existing capacity. However, 2027 will require ramping new capacity simply to deliver the base case (MSe +37%/$223bn), a materially more challenging proposition than what the industry faced in 2026. **2) We're building toward the bull case:** We sensed a meaningful shift in willingness to expand capacity. BU heads highlighted the opportunity cost of not investing in capacity, particularly when competitors are likely to do so. Major sub-suppliers referenced AMAT's plans to double capacity by 2028, with an increasing willingness across the supply chain to invest toward supporting a $280bn WFE by 2028. **3) Real constraints are emerging - on both supply and demand:** For the first time, we heard tangible examples of component shortages and order pushouts at SEMICON West. On the supply side, PCBs appear to be emerging as a bottleneck, reminiscent of the analog/MCU shortages in 2022, as PCB suppliers increasingly prioritize AI customers over subsystem manufacturers. On the demand side, we heard of a DRAM customer pushing out order deliveries from the DecQ to the MarQ due to delays in cleanroom readiness. **Where does this leave us?** We went into SEMICON West thinking, "We'll raise forecasts again," but came away thinking, "Perhaps, but we also need to be aware of the constraints." This creates a tricky setup. Given the magnitude of upside delivered through 2026 (MSe revised up 26%), the market narrative has shifted from "How can companies deliver upside?" to "Why wouldn't companies continue to deliver upside?"

Thoughts on stocks: The market is clearly questioning the durability of WFE strength into 2028, with companies increasingly trading at cycle-trough multiples on CY27 MSe. While execution remains to be seen, SEMICON West reinforced that the supply chain is gearing up for the bull case ($280bn in 2028). ***Will earnings give us greater confidence in the 2028 WFE outlook? Yes, but nothing new from SEMICON West.*** This creates a tricky setup for stocks, as we increasingly believe SPE performance will be driven less by what the equipment companies say, or even what their direct customers say. **Note:** Please see the next section for 3 Debates & 9 Views on "AMAT's Process Control push" " Component Shortages" "Test enabling Advanced Packaging"

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3 Debates & 9 Views

Debate #1: AMAT's Process Control push

The AMAT View: Making a meaningfully stronger push into the process control market as the company sees opportunity in optical wafer inspection and materials metrology in the front end and applications for bringing eBeam leadership into advanced packaging and introduction of new optical products.

The ONTO View: Customers aren't telling us we need to be worried about AMAT's push into optical inspection for advanced packaging and AMAT's AP TAM assumptions are likely to be too large.

The NOVA View: For AMAT to win in material metrology, it will require better cost of ownership and performance given the TAM and tool ASP (NOVA $MSDmn, 1-2 tools per customer for AP). The TAM assumptions make sense for the front end vs KLA but not in the back-end and surprised given the existing # of players.

MS View (neutral): AMAT's push in front-end process control makes sense, but we're confused on the company's back-end aspirations.

AMAT's push into front-end optical inspection makes sense given the existing opportunity and near-monopoly by KLA. AMAT has grown faster than KLA in process control this year (50%+ growth vs KLA MSe 25%), but we would need to see another year of strong growth as 50% growth for AMAT's PC business only takes them slightly above prior highs (2022). Regarding the back-end, we're confused. There may be some unique use cases for eBeam but it will likely be complementary as the most critical aspect of process control in AP is the ability to detect defects at high sensitivity and throughput. Furthermore, KLA only surpassed $1bn of AP revenue in 2026. For AMAT to reach $1bn, it would require meaningful share gain.

Debate #2: Component Shortages

The MKS View: Pockets of component lead times are getting longer but we are winning more because of constraints at peers. We have taken inventory of certain components, especially those that caused us problems in prior cycles.

The AEIS View: We're applying learnings from 2022 and are increasing inventory to stay ahead of any possible shortage.

MS View (+ve MKS/AEIS): We heard the first signs of material component issues, specifically due to PCB shortages. Both MKS and AEIS were mea
hampered in 2022 due to component shortages and are looking
inventory of any area they deem concerning.

MKS made a few interesting points at our meeting with them: 1) Sup
component lead times are getting longer. Not worried about 95% of
there is a 5% that we need to be hands on with. 2) Peers: some of ou



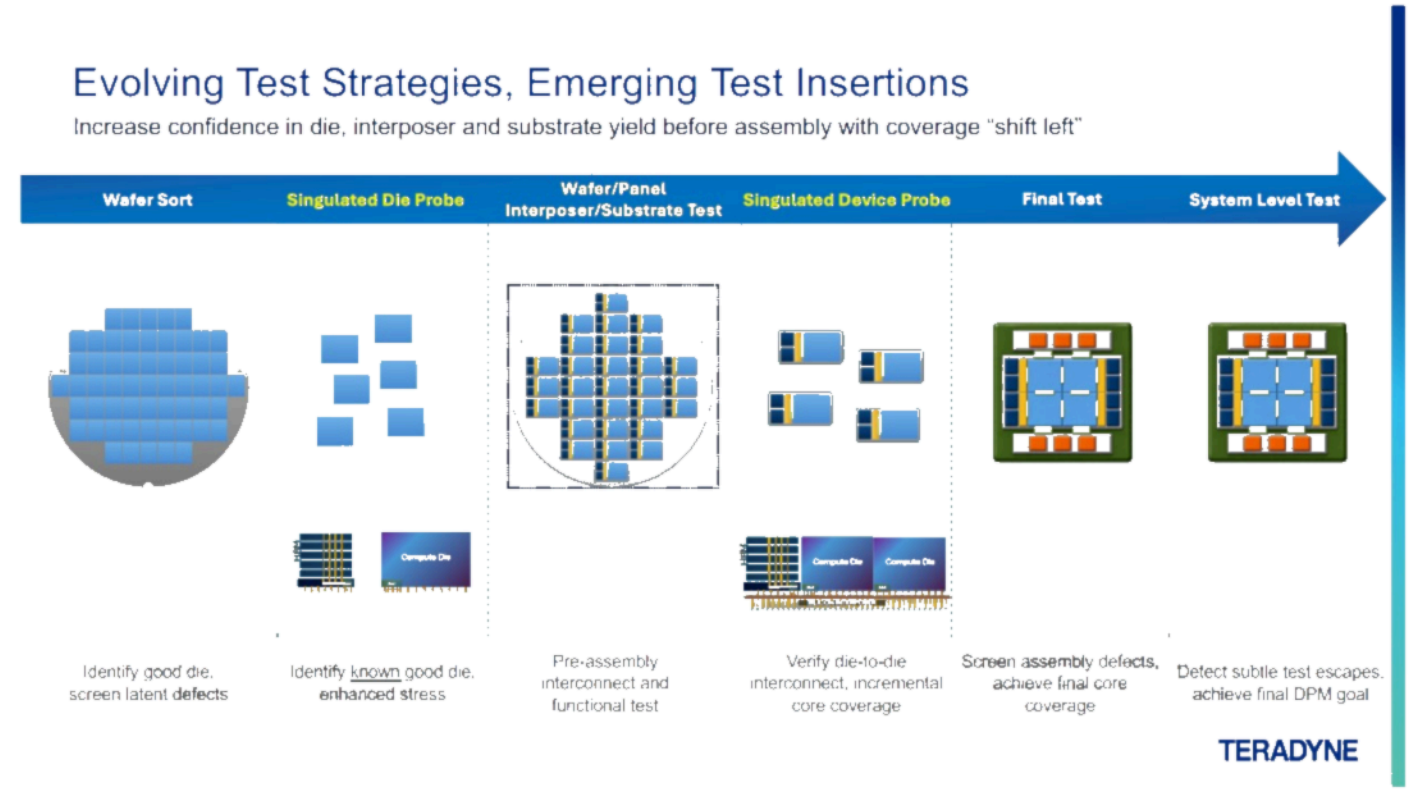
ramping as fast and customers are asking us to increase supply for those dual sourced products. 3) Priority: expanding capacity to meet customer demands is the biggest priority for CEO John Lee.

Debate #3: Test enabling Advanced Packaging

The Teradyne View: Teradyne GM of Compute Test Roy Chorev raised 2 points at his Keynote (enabling the Advanced Packaging roadmap through test): **1) Shift Left:** emerging test insertions such as singulated die probe and singulated device probe due to the need to find defects at the earliest economical insertion. **2) Test as a Revenue Enabler:** test shifting from cost control to revenue protection due to capacity limitations and very low defect per million (DPM) tolerance.

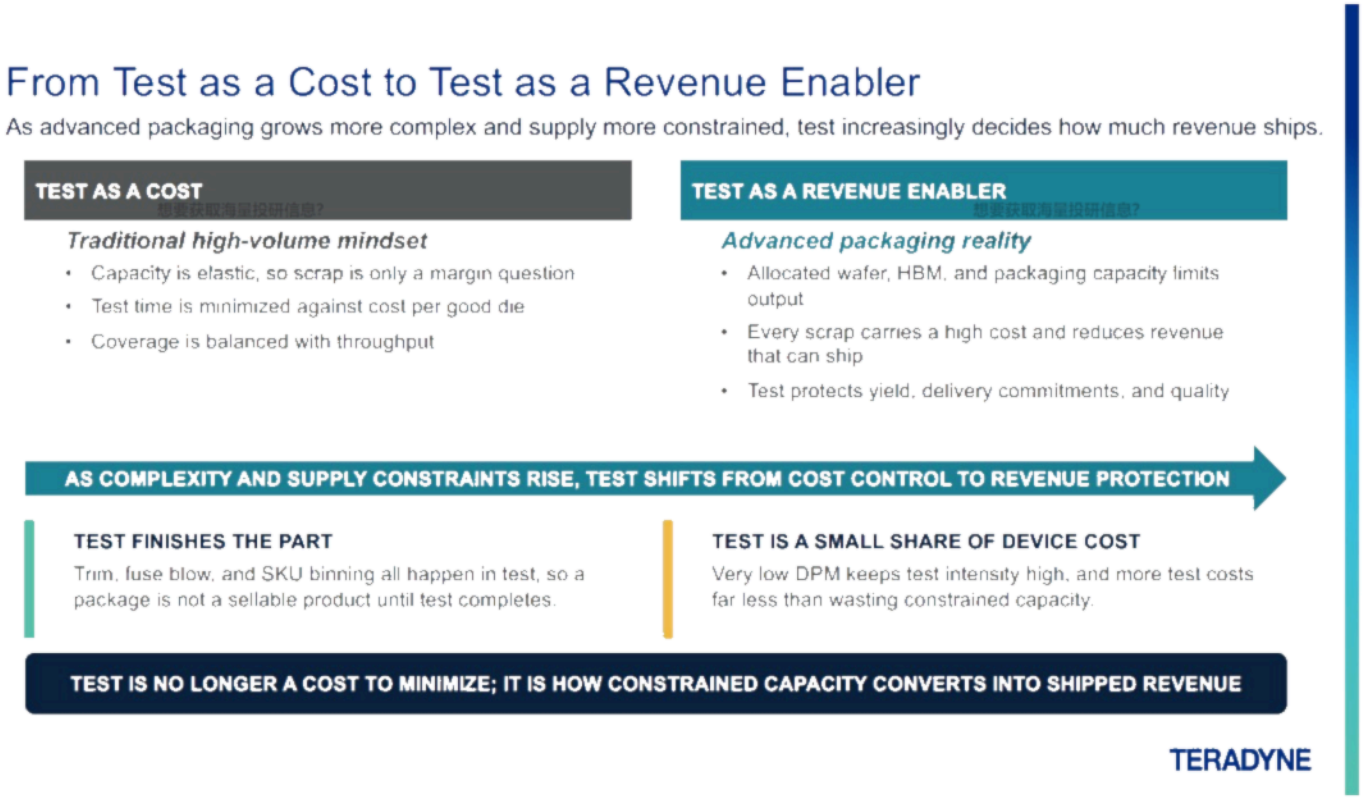
MS View (+/=ve TER): We agree with everything that Roy said, with the only question being how high test intensity (test as a % of WFE) will go given we have already seen a meaningful uptick (2020-24 5.8%, 2026 MSe 8.5%).

Exhibit 1:



Source: Enabling the Advanced Packaging Roadmap Through Test - Roy Chorev (Teradyne)

Exhibit 2:



Source: Enabling the Advanced Packaging Roadmap Through Test - Roy Chorev (Teradyne)