

Taiwan Technology: Marketing feedback: Geopolitical risk, Al demand concerns top of mind; MediaTek's auto story underappreciated

Taiwan Technology

Growth potential from PC market recovery and AI server ramp-up

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On March 13-14th, we met with 40+ investors in Hong Kong. In general, we feel that the overall investor sentiment on the sector remains negative, with concerns around potential downside from AI demand, geopolitical risks, tariff impact, and much discussion around the possibility of TSMC/Intel collaboration. We note that investors are shifting focus away from AI-related plays in the near term, favoring a top-down view based on potential trade shifts from tariffs. Among our Taiwan semiconductor coverage, investor interests mainly focused on TSMC and MediaTek. We summarize our key takeaways below.

TSMC: discussion about Intel is top of mind, potential AI order cut as key concern

The relationship of TSMC/Intel is top concern among investors: During our marketing trip in Hong Kong, the most asked questions from investors was around the relationship of TSMC/Intel, with discussion around our view of any competition change from Intel especially post the new Intel CEO announcement; the possibility of the collaboration between TSMC/Intel as well as US government, etc. We reiterate our view as stated in our report: TSMC (2330.TW): Consideration of media reports of potential strategic developments involving Intel and US tariff proposals (14 Feb 2025), we think the strategic merit for a potential JV seems unclear as TSMC and Intel operate under different business models and different tool sets which would likely require extra investment. Additionally, TSMC's business strategy has been to remain independent and avoid entering into JVs that could compromise its neutral status with other clients. Also, TSMC has historically been very cautious about sharing its intellectual property (IP) with other companies. Therefore, a technology transfer agreement between TSMC and Intel would also seem uncharacteristic of TSMC's strategy.

To note, in the announcement of TSMC's US\$100bn capex investment (see our report), TSMC does not mention any potential JVs. The company's emphasis on expanding advanced semiconductor manufacturing and research in the U.S. suggests a commitment to maintaining its independence and avoiding entering into

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JVs that could compromise its neutral status with other clients, in our view.

Long term profitability guidance unchanged despite the US\$100bn investment: We highlighted again to investors that, despite the further investment in the U.S., TSMC has not changed its long-term GM guidance, which remains at '53% and higher' range. Moreover, the GM dilution guidance - 2-3ppts in the next 5 years from overseas expansion - also remains unchanged. However, we believe the new investment - the accelerated/expanded scope of investment in the US with higher costs - largely explains why management did not raise long-term profitability target during its last analyst meeting, despite higher pricing this year.

Potential further order cuts from Al demand: Most investors have concerns over the sustainability of Al demand and whether we will see another round of Al order cuts in the near term. While we do not rule out the possibility, we believe the potential downside would most likely be due to geopolitical risks, including 1) US government's potential new export control frameworks for advanced Al chips, including towards Chinese Al customers, and 2) concerns over potential delays for the rollout of Nvidia GB200 NVL72 Al server racks due to supply constraints especially from downstream ODMs due to tariffs. To note, in our <u>report</u> published on 16 January, we cut our CoWoS shipment forecast by 6%/2% to 599k/975k wafers in 2025/26E (from 635k/999k wafers) to reflect our concerns.

MediaTek: earnings upside from underappreciated automotive

Automotive story largely underappreciated by investors: MediaTek was one of the most frequently asked-about names by investors, following TSMC. We highlighted our new automotive business investment thesis for the name. In general, we feel that investors are not fully aware of the story and the potential earnings/revenue upside from the new automotive business.

As stated in our report: <u>MediaTek (2454.TW): Automotive as new driving force into 2026/2027; TP raised to NT\$1,780 (from NT\$1,700); reiterate Buy (10 March 2025</u>), we are seeing further earnings upside coming from automotive TAM (total addressable market) expansion. We believe MediaTek has been securing design wins from major mainland China customers, thanks to its better cost performance, superior R&D support and customer services; we are expecting to see a more significant revenue ramp starting 2026. Looking ahead, we expect the ramp from mainland China's auto market should position the company well to further expand into non-mainland China OEM customers, with stronger demand for advanced cockpit solutions in 2027 and beyond. By 2026E/2027E, we are now expecting MediaTek's automotive business to contribute 3.6%/6.8% of its total revenue, up from 1.8% in 2025E. This will be largely driven by 1) market share gain within automotive cockpit SoC (system on chip) solutions over key global peers, and 2) product segment upgrade into mid to high end and high end segments with higher ASPs.

The US CSP ASIC project remains key monitoring point: The US CSP ASIC (application specific IC) project remains one of the key focus points for investors given the further expansion into the significant US\$45bn TAM in the AI ASIC market. We are

still expecting to see the project to tape-out in 2Q25. We believe once we see the successful project tape-out, it should become a strong share price catalyst. To us, this should represent a key milestone for MediaTek in showcasing their strong capability to enter into the Training AI segment, and potentially win over more projects beyond the current US CSP project.

Other focus areas including ASE and second tier foundry

OSAT (outsourced semiconductor assembly and test) industry was another focus point from invetors, with ASE being the most asked-about name by investors. Within the OSAT industry, we prefer ASE over KYEC as we remain positive toward ASE's advanced packaging business, especially CoWoS (chip on wafer on substrate), which should continue to benefit from the overflow business from TSMC. We are positive over ASE's competitiveness on AI chip testing, and expect to see potential market share gain over KYEC in 2026. While some investors are worried about the downside from potential AI order cuts, we see limited impact on ASE for 2025 as of now, as the WoS side expansion from TSMC's overflow business should still mostly benefit ASE, with the current order cuts mostly in NSD (non-supporting demand), so the total shipment change from TSMC is likely limited.

We maintain our conservative view towards the mature foundry industry given the unfavorable supply demand outlook, with the ongoing aggressiveness on capacity build from mainland China. We believe pricing pressure will continue in the coming years.

Investment Thesis, Price Target Risks and Methodology

TSMC is a leading global foundry company specializing in cutting-edge nodes. Its leading technology stance enables it to enjoy more than 60% of revenue share in the global foundry market. We like TSMC as we believe its solid technology leadership and execution better positions it vs. peers to capture the industry's long-term structural growth opportunities, particularly in areas such as AI/5G/HPC/EV. In addition, valuation looks attractive in our view, with the shares trading at the mid-end of their 10-year trading history (P/E: 10-29x). Furthermore, we view TSMC as the key AI enabler among our Taiwan Semis coverage, thanks to its leadership stance in leading edge nodes and advanced packaging technology - CoWoS (chip on wafer on substrate). We believe TSMC will achieve its 20% revenue CAGR target for the next several years, driven primarily by increasing silicon content growth and AI/HPC demand, with LT GM to remain at 53%+. We are Buy-rated on the stock.

Price Target Risks and Methodology - TSMC (2330.TW/TSM)

Valuation methodology: We are Buy rated on the stock. We have a 12m TP of NT\$1,400, which is derived by applying a target P/E multiple of 20x to our 2026E EPS. Our 20x target P/E is benchmarked to its trading average during its last earnings upcycle where its 4-year earnings CAGR in 2018-2021 was 19.3% vs. our 3-year EPS CAGR at 24.4% during 2024-26E. For the ADR (TSM), we have a 12m TP of US\$259, based on a USD/TWD rate of 32.4 and ADR premium of 20% to reflect the stronger performance of SOX over Taiex especially starting 2024.

Key downside risks to our views: (1) further deterioration in end-demand recovery impacting capacity utilization; (2) slower customer node migrations; (3) further delays in 5G penetration resulting in slower long-term semiconductor content growth; (4) poor yields/execution resulting in worse-than-expected profitability; (5) stronger competition resulting in ASP/profitability erosion; and (6) unfavorable FX trend or higher-than-expected cost increase weighing on the margin outlook.

Investment Thesis - MediaTek (2454.TW)

MediaTek is a leading global IC design house specializing in smartphone AP (application processor). We are positive on MediaTek, with the global smartphone market and its revenue to resume growth momentum from 2025E onwards. We think MediaTek is in a good position to transition to an AI play from a traditional smartphone AP provider, starting from AI smartphones, to enterprise ASICs and smart auto (partnering with Nvidia) solutions, etc., in 2025E-26E. We expect MediaTek to deliver decent multi-year growth, with revenue/earnings to grow by 16%/17% CAGR from 24-27E driven largely by 1) market share gains, especially in the premium segment (in particular, high-end 5G flagship SoCs), 2) smartphone upgrade cycle driven by GenAI demand, 3) new TAM (total addressable market) into enterprise ASIC and auto/computing markets. We are

Buy-rated on the stock.

Price Target Risks and Methodology - MediaTek (2454.TW)

Valuation: We have a 12m TP of NT\$1,780. Our TP is based on a target P/E multiple of 20x (1stdv above its 5-year trading average) applied to our FY26E EPS.

Key downside risks to our views: (1) weaker-than-expected end demand, (2) slower TAM expansion for high-end 5G smartphones, (3) higher-than-expected foundry costs, (4) intensifying competition landscape, and (5) slower growth of its non-smartphone business.

Investment Thesis - ASE (3711.TW, ASX)

ASE is the leading provider of semiconductor manufacturing services in assembly and test. We like ASE's leadership position within the OSAT sector and believe it will outperform peers via continued market share gains despite a volatile market dynamic. Furthermore, we now see a more attractive risk reward given 1) gradual demand recovery as inventory correction cycle comes to an end, 2) structural profitability improvement, and 3) new AI business opportunity as an incremental positive.

While its share is now trading at the high end of its 10-year trading history (P/E: 5-18x), we believe a valuation premium over through cycle average for ASE is justified given our positive outlook towards its margin-accretive new AI business. We thus see risk-reward skewed to the upside and have a Buy rating on ASE.

Price Target Risks and Methodology - ASE (3711.TW)

Valuation: We are Buy rated on ASE with a 12m TP of NT\$205, which is derived by applying a target P/E multiple of 18x to our 2H25-1H26 EPS. For its ADR, our 12-month TP is US\$13.90 (based on FX conversion of 32.5 and a 10% ADR premium).

Key downside risks to our views: (1) weaker-than-expected end demand; (2) stronger competition and pricing pressure; (3) poor execution/yields; (4) slower-than-expected progress in advance packaging; and (5) worse geopolitical/FX movements.

Disclosure Appendix

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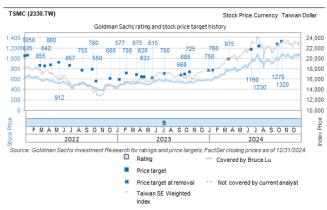
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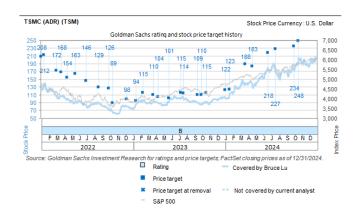
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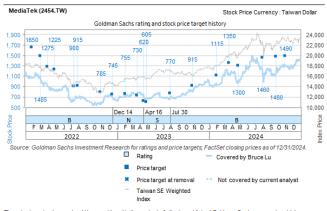
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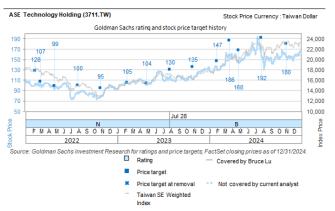
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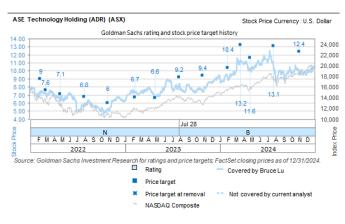
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