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Hardware

Daily Views on Tech Headlines

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NVDA, AMD, INTC, ARM, TSM: NVDA and AMD working on Arm based CPUs for PCs

View: Reuters yesterday reported that NVDA is working on Arm based CPUs that would power Windows based PCs. The new parts could be available for sale as soon as 2025. In addition, Reuters reported AMD has a similar effort underway, in-line with a SemiAccurate report from earlier this year.

QCOM has been working on Arm based parts with MSFT support for some time (it's likely we get an update on this effort this week during QCOM's Snapdragon Summit, which starts today) albeit with limited success. Having said this, AAPL with its M-Series processors has proven Arm processors are more than capable of providing robust PC performance, illustrating the potential Arm could have in a Windows based environment.

Net, we see this news as a potential concern for INTC, though we continue to believe that INTC's forward results will be predominantly dictated by the company's ability to execute to its manufacturing roadmap (which will determine the future competitiveness of its product portfolio). We see modest positive implications for NVDA (the PC opportunity is relatively modest compared with revenue and margin tied to AI) from this new opportunity and limited impact for AMD (it continues to maintain a more modest share in PCs that could be bolstered by a successful Arm initiative). Rather, the larger/more likely positive implications might be for Arm (given the potential TAM expansion should Arm compute further penetrate the PC market) and TSMC (which would likely fab any INTC alternatives, should QCOM, NVDA, or AMD prove successful with their initiatives). [Reuters](#)

YMTC, NAND: YMTC develops 120 layer NAND; NAND conditions improve

View: DigiTimes suggests that YMTC has developed a 120 layer NAND part that both skirts US restrictions (geared towards 128 layer parts) and improves I/O performance. The new parts are expected to ship in 2024. While we see this advance as offering YMTC a near to intermediate term means of remaining competitive with foreign parts. However, we also believe YMTC will struggle to keep innovating without access to more advanced tools moving forward, limiting its ability to impact the broader market.

And shifting to the broader market, DigiTimes notes that a focus by fabs on profitability is continuing to bolster pricing with 512 Gb parts not available in China below \$2.20. We'd note this commentary fits with data from China Flash Market suggesting that spot pricing continues to lift, with the Chinese price tracker now indicating 512 Gb chips are being priced at \$2.10, up 10 cents this week and 50% above the midyear lows of ~\$1.40. [DigiTimes](#), [DigiTimes](#), [China Flash Market](#)**AAPL, NVDA:** Apple AI investment

View: Bloomberg this weekend suggests that Apple was caught flatfooted by the sudden emergence of generative AI and will invest \$1B in 2024 to try and catch up to peers. Numerous articles are out today quoting a competitor suggesting Apple's spend will be nearly 5X this amount (likely purchasing NVDA based servers) and

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that even that amount will leave Apple lagging its peers.

We don't have insight into Apple's spending plans, but would note that spending levels will very much depend on whether Apple is planning to use internal compute resources as well as an internally trained generative AI model. And regardless of the capex intensity involved in Apple's plans, we see reports around its need to lift spending as generally positive for the AI complex (and likely NVDA) given any increase in spend will necessarily eventually flow through into increased hardware requirements. [Bloomberg](#), [wccftch](#)

Smartphones: Demand for high-end handsets recovering?

View: High-end phone lenses manufacturers Largan Precision and GSEO are seeing better demand for premium smartphones that are exceeding expectations. According to DigiTimes, Largan is seeing an increase in orders through November (driven by a US client), while GSEO has seen substantial revenue growth in the 2H'23 and expects double-digit Y/Y revenue growth for 2023.

We have seen some indications of modest improvement in consumer related hardware builds/spend. This report fits with those recent checks. While we see any pickup as somewhat limited in scale and potentially threatened by macro events, we still see momentum as positive for the broader semiconductor complex (with soft demand and inventory reductions in this space having weighed heavily on industry dynamics for some time). [DigiTimes](#)

Risks to the Attainment of Our Price Targets and Ratings: Hardware

Shifts in competition, pricing, technology, and macroeconomic conditions.
 Changes in hyperscale spending tied to shifts in growth or increased optimization.
 Unforeseen events affecting production capacity (power outages, fires, storms, etc.)
 Shifts in worldwide trade conditions that lead to macro instability and or close certain markets.
 Increased competition from China based manufacturers entering new markets.

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Mentioned Companies

Company	Rating	Price	Target
Apple	OUTPERFORM	\$173.93	\$240.00
Advanced Micro Devices Inc	OUTPERFORM	\$117.60	\$155.00
Intel Corp	NEUTRAL	\$35.69	\$35.00
Microsoft	OUTPERFORM	\$320.77	\$400.00
Nvidia	OUTPERFORM	\$471.16	\$600.00
Taiwan Semiconductor	OUTPERFORM	TWD547.00	TWD700.00

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NEUTRAL: 37.38%	NEUTRAL: 1.25%
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