

Electronics Supply Chain Weekly Digest

Important Disclosures in the Appendix

A weekly collection of news summaries, survey results and channel insights, and report summaries from Edgewater Research

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DATAPOINT OF THE WEEK: According to reports from Asia, TSMC has lowered its foundry quotes for the next few quarters due to lack of order visibility and order momentum from customers. The reports state that TSMC is lowering prices for mature process nodes 65/55/28/22/16/12 nm by as much 10% in return for volume orders while prices for advanced process nodes (7nm and below) have remained unchanged. This is the first time since the pandemic that TSMC has been noted to have lowered foundry prices for mature process nodes.



Auto/Transportation

BYD – According to reports from Asia, BYD has given up on equipping its electric vehicles with Apollo, Baidu's self-driving technology solution, because it is now focusing on developing its own smart car software.

China Auto – China NEV retail sales from Aug 1st to 13th totaled 208k units says the China Passenger Car Association (CPCA). This represents a 38% Y/Y increase, consistent with the mid 30% Y/Y growth seen in July.

EV Batteries – Chinese CATL announced its fast-charging lithium iron phosphate or LFP battery capable of running 400 km (248M) on a 10 minute charge. Mass production of the new battery is expected by the end of the year while EVs equipped with it will hit the market in 1Q24, said Gao Han, CTO of CATL said during an online briefing.

EV Batteries – EV batteries and other car parts are the latest products that are falling under scrutiny related to the forced labor issues in Chinese supply chains, reports Reuters. Until now, enforcement of a year-old U.S. law that bans the import of goods made in Xinjiang, China, has focused mainly on solar panels, tomatoes and cotton apparel. But now, components that may include lithium-ion batteries, tires and major automobile raw materials aluminum and steel are increasingly subject to detentions at the border, says the report.

EV Charging – Texas approved a plan to require companies to include Tesla's technology in EV charging stations to be eligible for federal funds. The decision by Texas - the biggest recipient of a \$5 billion program meant to electrify U.S. highways - is being closely watched by other states and is a step forward for Tesla CEO Elon Musk's plans to make its technology the U.S. charging standard.

EV Sales – 2Q global xEV sales increased 42.8% Y/Y to 3.03M units reflecting a 14.4% penetration of total auto sales according to TrendForce. Within that BEV sales surged 39.3% to 2.151M. TrendForce notes Tesla remains a market

leader with 21.7% market share but BYD is closing in the gap with 16.2% share up from 15% prior quarter.

Fisker – Fisker said on Tuesday it signed a deal with Tesla to adopt its North American Charging Standard (NACS), giving Fisker customers access to the automaker's Supercharger network by 2025.

Nikola – Nikola said late last week it was recalling all the battery-powered electric trucks that it has delivered till date and is suspending sales after an investigation into recent fires found a coolant leak inside a battery pack as the cause.

Tesla – Tesla cut prices in China twice this week. The automaker marked down the Long Range and Performance versions of the Model Y by 14,000 yuan (\$1,900) to 299,900 yuan and 349,900 yuan, according to a post on its Weibo account. Tesla also extended an 8,000-yuan insurance subsidy for the base version of the Model 3, keeping the perk in place through the end of next month. Later in the week the company reduced the price of Model S sedans and Model X sport utility vehicles in inventory by as much as 70,000 yuan (\$9,600) to 754,900 yuan and 836,000 yuan respectively. Tesla's actions follow moves by Geely Automobile Holdings Ltd.'s Zeekr brand, which lowered prices by as much as 37,000 yuan last week, as well as Zhejiang Leapmotor Technologies Ltd., which discounted by as much as 20,000 yuan at the beginning of the month.

Tesla – Tesla on Monday launched cheaper variants of its Model S sedan and Model X SUV with shorter driving ranges in the U.S. The new S and X "standard range" models are priced at \$78,490 and \$88,490, respectively, or approximately \$10,000 below current models. Model S has a driving range of up to 320 miles (515 km), lower than the regular dual motor and tri-motor Plaid variants that offer up to 405 miles and 396 miles, respectively.

Tesla – According to reports from Asia, Tesa's new model 3 has started mass production at the Shanghai Gigafactory and the model may be available for delivery as soon as October. The model is expected to have fewer parts and adopt a die-casting process among other savings which are

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anticipated to amount to 14% lower cost. As result, the new model is anticipated to be priced below the current one.

US Auto Retail Sales - According to US Census Bureau, July Auto Retail sales declined 3% M/M in July on a non-adjusted basis, a were flat M/M on a seasonally adjusted basis.

US New Vehicle Affordability – Continuing a trend that has persisted for most of this year, new-vehicle affordability improved in July, according to Cox Automotive. Strong income growth was assisted by lower prices and higher incentives that more than offset slightly higher rates. The number of median weeks of income needed to purchase the average new vehicle in July declined to 42.3 weeks from a downwardly revised 42.8 weeks in June. At 42.3, it was just slightly higher than the 42.2 weeks recorded last July.

UAW - United Auto Workers members have until Aug. 24 to vote to authorize strikes at the Detroit Three automakers if they don't have a new contract deal in hand by the time the current agreement expires in about 30 days, the union said on Tuesday. The move comes as the union and General Motors, Ford, and Stellantis have made little headway with their negotiations.

US Used Vehicle Prices – Wholesale used-vehicle prices (on a mix-, mileage-, and seasonally adjusted basis) increased 0.1% from July in the first 15 days of August says Cox Automotive. The non-adjusted price change in the first half of August increased 0.7% compared to July. Using estimates based on vAuto data as of Aug. 14, used retail days' supply was 44 days, which was down three days from a revised end of July estimate.

Xpeng - Chinese electric carmaker Xpeng Inc. reported a wider-than-expected quarterly loss as it struggles to ramp up deliveries amid intense competition in the world's biggest EV market. Guangzhou-based Xpeng posted a net loss of 2.80 billion yuan (\$380 million) in the three months ended Jun. 30, according to a company statement Friday, more than the 2.1 billion yuan deficit estimated by analysts. It had a 1.77 billion yuan loss in the same guarter a year earlier. The carmaker delivered 23,205 vehicles in the

quarter, beating its original guidance of 21,000-22,000 units. While recording a guarter-over-guarter increase of 27%, the company's deliveries dropped 33% from the same period a year ago. Revenue declined 32% to 5.06 billion yuan, which beat analysts' forecast of 4.91 billion yuan. Xpeng has worried financial markets with its sluggish sales and weak gross margins, which fell to as low as 1.7%. The company was forced to delay its profitability target to 2025, and overhaul its internal management and product platforms as sales and shares plunged.

Datacenter

Dell – Dell recently confirmed that it will lay off employees in its sales department, and that its future sales of storage devices will rely more on channel partners. According to CRN, this is the second confirmation of layoffs after Dell announced in February 2023 that it would lay off 6,650 employees.

IBM – IBM will close its factory in Vaci, Hungary and transfer its production capacity to Guadalajara, Mexico, according to reports from Asia.

IP&E

TE Connectivity – TE announced plans to acquire all publicly traded shares of the Swiss electromagnetic specialist Schaffner. The transactions will entail purchasing all 635k outstanding shares at a price of CHF 505 per share for a total transaction price of CHF 321 million (\$365M). The acquisition of Schaffner will add a market-leading EMC (electromagnetic compatibility) filter product offering to TE's broad connectivity and sensing portfolio. In 2022 Schaffner generated CHF 158M in sales (\$180M) primarily in the industrial and automotive end markets, and EBIT margin of ~10%, which compares to TE's consolidated EBIT margin of high teens.

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Semiconductors

Arrow – Arrow announced the promotion of Rick Marano to President of Global Components effective immediately. Previously Mr. Marano has spent more than 30 years at Arrow at various sales roles. Most recently he served as president of N.A Components. Mr. Marano replaces Kirk Schell who was recruited from Dell in May, 2022.

Avnet – Avnet reported better than expected June-Q results and Sept-Q guidance. June-Q sales increased 1% Q/Q and 3% Y/Y, exceeding expectations and results by ARW who reported a decline of 2.5% Q/Q and 5.4% Y/Y.

Japan – Japan is planning to implement tax breaks for EV battery and semiconductor production in 2024, in an effort to emulate the industrial policies of the US and Europe.

Foundry – South Korean foundry suppliers have recently lowered prices for 8-inch wafer services by 10%, according to reports from South Korea.

Infineon – Infineon and Chicony Power announced an expansion of its partnership for the use of Infineon's GaN power solutions in Chicony's notebook power adapters which is expected to deliver up to 240W of power compared to the current high-end industry standard of 100W, allowing for faster charging of notebooks, workstations and multiple electronic devices.

Intel – Intel has scrapped its planned acquisition of Tower Semiconductor which as valued at \$5.4B due to inability to get timely regulatory approval, particularly from China. Intel will have to pay \$353M of termination fee to Tower semi.

Taiwan – The Taiwan Semi Industry Association has lowered its forecast for 2023 semi output in Taiwan from -12% to -13% due to continued inventory adjustments and an uncertain economic outlook.

Nvidia – Saudi Arabia and the United Arab Emirates have placed orders for thousands of Nvidia's AI GPUs, joining the global AI arms race, according to FT citing sources. The report adds that Saudi Arabia has placed orders for at least 3000 H100 GPUs and UAE has put orders for a few thousands as well. The two nations have publicly stated their goal of becoming leaders in AI.

Semi Sales – According to SEMI, the decline in global semis is beginning to moderate and the industry is expected to begin to recover in 2024. In 3Q memory IC sales are expected to post double digit growth Q/Q while logic IC sales are predicted to remain stable. The report notes that headwinds to the industry are expected to persist in the 2H23 due do ongoing drawdowns of high inventory at suppliers which will continue to suppress fab utilizations to levels below the 1H. The weakness is projected to extend declines in capital equipment billings and silicon shipments for the rest of the year despite stable results in the first half of 2023.

SMIC – SMIC reported 18% Y/Y drop in 2Q revenue and 22% drop in profit Y/Y. The company noted demand for electronics products is still below expectations and inventories remain high. SMIC utilization fell from 97.1% last year to 78.3% in 2Q23. Mgmt. noted while there are signs of market bottom, the industry is still dealing with slower than expected inventory reductions, lack of demand growth and implications of geopolitical uncertainty. SMIC sees 3Q revenue growing 3-5% Q/Q.

Vishay – Vishay announced the opening of a resistor production facility in Chihuahua, Mexico. The facility will focus on Vishay's WSLx family of Power Metal Strip resistors and allow the company to reduce the lead times for devices in core case sizes to just eight weeks.

Qualcomm – According to reports from Asia, Qualcomm is planning to continue laying off employees with the latest plans including 200 of headcount reduction in Taiwan.

Taiwan Semiconductors – Taiwan is planning to launch an initiative next year that will include NT\$12 billion (~\$370M) of government subsidies for 2024 aiming to make Taiwan the international center for IC designs within ten years. The plan spells out the goal to have Taiwan design houses having 40% of global market share, up from 20% today and the global market share of advanced manufacturing processes to grow to 80%, reports Asian media.

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SIMO – Silicon Motion Technology has vowed to take MaxLinear to court over a collapsed merger deal, saying it will seek damages well over the termination fee as stated in their agreement.

Wafers – Reports from Asia suggest that larger tier 1 foundries have asked Japanese silicon wafer suppliers to revisit long-term supply contracts and negotiate a lower wafer price for 2024. Reports suggest that wafer suppliers have been reluctant to cut prices, but that is likely to change given the increased pressure from customers.

Consumer

China Smartphone – China smartphone shipments declined 15% M/M in June according to China MIIT data. 5G shipments declined 14% M/M and 25% Y/Y and accounted for 78% of mix, consistent with last month. On y/y total shipments declined 21%, a slump compared to the positive Y/Y trend from Feb to May 2023.

Smartphones – Counterpoint cuts its 2023 smartphone shipment forecast to down 6% or 1.15B units from down 5% or 1.20B prior citing weaker end demand globally.

Foxconn – Foxconn cuts its full-year revenue forecast to down slightly vs flat blaming global macro uncertainty and sluggish recovery in China. Foxconn added it is seeing strong growth in AI demand but no pick-up in other products.

PCs – PC shipments are forecasted to remain flat Q/Q in 3Q and dip single digit Q/Q in 4Q, after growing 20% Q/Q in 2Q according to Digitimes Research. The firm states the better-than-expected 2Q performance was in big part driven by orders for education PCs and price-cut promotions launched by brand vendors with the assistance of CPU makers, which is not expected to repeat in the 2H.

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APPENDIX

We Nik Todorov, Dennis Reed, and Sean Muir hereby certify that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities referred to in this research report. We certify that no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report. The analyst(s) responsible for the preparation of this report have no ownership stake in this company. Edgewater Research Company provides no investment banking services on this or any company

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