



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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DATAPOINTS OF THE WEEK: S&P reported global electronic PMI of 46.9 in October vs 47.7 in Sep, marking the sharpest deterioration in the sector since mid-2020. S&P highlighted a sharper fall in new orders, output, employment, and stocks of purchase by the industry. All subsectors recorded a decline in output led by Computing. Electronic Mfg. shed staff for the 2nd month, added S&P.

S&P reported business outlook for the next 12 months in China slipped to a one-year low in October reflecting concerns over broader economic growth both at home and overseas. In Europe, S&P reported business confidence over the next 12 months remains challenging with first forecasting cuts to both employment and investments. Outlook is gloomiest in Germany where net balance of just +2% of companies surveyed expect to see a rise in business activity. In the US, S&P reports business confidence remains the highest among developed economies with a net of +25% of businesses forecasting growth in business activity.

Reports published this week:

[Analog Semis Insights – November 2023](#)

Key Takeaways:

1. Auto feedback mixing lower with pockets of analog digestion in Europe spilling over to N.A, with impact projected in 1Q/2Q.
2. Auto pushouts in N.A. seen tied to inventory, delays in EVs from Detroit 3 and lower than expected Tesla production.
3. Uptick in China Auto demand seen persisting through YE on new model launches and ramp up in YE production. xEV outlook still favorable, but semi demand sustainability questioned on inventory digestion concern due to forced shipments in '22/'23.
4. Anecdotal feedback suggests semi suppliers turning more flexible on price for +2024. NXP/Microchip seen facilitating notable cost reliefs for customers via moving demand direct and like-for-like cost downs, in return for new designs and higher share allocation.
5. 4Q demand through mid-Nov seen as still soft, projected to persist through 1H24 on lack of consistent recovery in bookings.
6. China demand noted as still weak but now more stable relative to weakening trends in Europe and N.A.
7. China ICs competitive threats seen proliferating from Asia to Europe where tier 2 and below customers are seen exploring multiBOM strategies based on end consumption and increasingly considering Chinese IC due to lower price. Impact still noted mostly in mid and low range analog though anecdotal instances observed in higher end products incl. BYD gaining in BMS (likely Analog Devices).
8. TI still seen as price aggressive for new designs/share gains; pricing even lower for previously lost share via drop-in replacements.
9. onsemi seen pivoting on plans to EOL some high margin products, re-engaging with customers, offering sustained support.
10. Industrial/DC/Comm feedback little changed and still weak. PC/CE demand seen as uneven following pockets of 3Q uplift in Asia.

Auto/Transportation

Amazon – Amazon shoppers will soon be able to buy new cars on the ecommerce giant platform. Hyundai announced it will be one of the first brands that will allow customers to shop and buy through dealers on Amazon in 2024. The partnership, the first of its kind between Amazon and an automaker, is an incremental step but could prompt other car manufacturers to follow suit.

Continental – German car parts manufacturer Continental on Monday said it will cut jobs in its automotive division as part of a plan to save 400 million euros (\$427.96 million) per year from 2025. The number of staff reductions was not immediately clear, but it will amount to the "mid-four-digit range," the company added.

EVs – The US Department of Energy announced on November 15 that it will offer US\$3.5 billion of funding to facilitate domestic battery and battery materials production. The news came as some South Korean battery manufacturers have started to lay off employees at their US plants due to the slower EV demand. According to the agency, the US\$3.5 billion funding will be the second phase of funding provided by the Bipartisan Infrastructure Law, which US president Joe Biden signed into law two years ago.

Fisker – The EV maker slashed its production target for 2023 to 14-17k from 20-23k previously due to challenges with ramping up production.

Lucid – Lucid officially announced its next electric vehicle, the three-row Gravity SUV based on the same platform as Lucid's only other vehicle, the Air sedan. Lucid says the SUV will get up to 440 miles of range, can accelerate 0–60 mph in under 3.5 seconds. It will have a base price of \$80,000 and is expected to go into production in late 2024.

US Auto sales – According to the Census Bureau, US retail sales of motor vehicles and parts declined 1% in October on a seasonally adjusted basis and 3% on a non-adjusted basis.

VW – Volkswagen has not made a decision on producing a 20,000-euro electric car yet, but Chief Executive Oliver Blume is convinced that the company can get there by the second half of the decade, he said at a conference on Wednesday.

VW – Volkswagen has cut the number of shifts at its all-electric plant in Zwickau, Germany to keep the site viable as it reacts to subdued demand for electric cars, according to reports from Autonews, Germany. As of this week, VW has cut production in Hall 5 to two shifts, down from a previous three-shift operation.

UAW – Union workers at GM, F, and STLA have approved the deal after weeks of contentious negotiations.

Xpeng – China's Xpeng posted a wider-than-expected quarterly operating loss on Wednesday due to costs stemming from a production ramp-up. Operating loss for the third quarter stood at 3.16 billion yuan (\$436.33 million), compared with the estimates of 3.79 billion yuan. Revenue for the quarter came in at 8.53 billion yuan, missing analysts' estimates of 8.55 billion yuan. The company, however, provided an upbeat forecast to at least double deliveries Y/Y to between 59,500 and 63,500.

Aerospace

Boeing – China is considering resuming purchases of Boeing's 737 Max aircraft when the U.S. and Chinese presidents meet this week at the APEC summit, Bloomberg News reported on Sunday. Chinese President Xi Jinping is not expected to unveil a formal order for the 737 Max; aircraft commitments that are not a firm sale often take the form of a memorandum of understanding or letter of intent, the report said, adding that the terms of any potential agreement were under discussion and could change or fall apart before the heads of state meet on Wednesday. Boeing is still waiting to resume deliveries of its bestselling 737 MAX to Chinese airlines more than four years after they were halted following two deadly crashes.

Boeing – Boeing announced it has booked 295 aircraft orders over the four days at the 2023 Dubai Air Show,

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underlining strong demand for wide-body jets in particular and making a strong comeback after several years of underperformance as Airbus reportedly booked only 86 orders.

Datacenter

Alibaba – Alibaba Group has scrapped plans to spin-off its cloud business, citing uncertainties created by U.S. export curbs on chips used in artificial intelligence applications. The U.S. decision last month to ban the export to China of more chips used in artificial intelligence (AI) has created major uncertainties for the country's big tech companies. Tencent Holdings said on Wednesday it saw the curbs impacting its cloud services.

Cisco – Cisco gave a disappointing outlook for the 4Q23 saying new product orders have slowed down because customers are busy digesting the strong deliveries of products over the last three quarters. Cisco projects such digestion to last one to two quarters. During the quarter Cisco announced plans to acquire Splunk for \$28B.

Tencent – Tencent President Martin Lau says the most recent US restrictions on AI chip exports has prompted Tencent to use available chips more efficiently and to see domestic AI chip alternatives. Mr Lau. Added however that Tencent has stockpiled enough AI chips from Nvidia to continued the development of its AI model at least for a few more generations.

IP&E

MLCCs – TrendForce projects global demand for MLCCs to experience a period of slow growth from 2023 to 2024. With limited opportunities for industry growth, the demand for MLCCs in 2023 is estimated to be around 4.193 trillion units, with a modest annual growth rate of about 3%. This growth is primarily attributed to applications in smartphones, automotive electronics, and PCs. Given the uncertain political and economic climate, OEMs and ODMs have adopted a conservative outlook, with a slight increase of 3%

in MLCC demand expected in 2024, reaching approximately 4.331 trillion pieces.

Industrials

Siemens – Industrial conglomerate Siemens said sales growth in 2024 would slow vs 2023 but exceed expectations at +4-8% over the next 12 months. The company said the outlook factors continued destocking by customers in key markets including in China and Germany.

Semiconductors

Applied Materials – Better than expected 3Q results by the semi equipment maker were overshadowed by a report from Reuters that the company is under investigation from the Justice Department over allegations of selling hundreds of millions of semiconductor equipment to Chinese customers like SMIC without a proper license. Applied provided a Jan-Q outlook for revenue of \$6.47B, ahead of analysts' estimates of \$6.37B.

Consumer ICs – The landscape of the IC design industry presents a mixed picture regarding the recent upturn in the mobile phone and PC markets. While some IC design companies have delivered promising revenue growth amid positive forecasts from major mobile SoC vendors firms note consumer IC demand momentum is still transient and may not fully recover until 2H24, according to DigiTimes.

China IC capacity – According to TrendForce, China's mature IC process technology capacity is forecasted to increase from 29% globally in 2023 to 33% in 2027 led by capacity buildouts from SMIC and HuaHong. The firms adds that China currently has 44 wafer fabs, of which 25 are 12-inch, 15 are 8-inch and 4 are 6-inch. Looking forward, 22 wafer fabs are under construction including 15 12-inch fabs and 8 8-inch fabs. The report adds that 10 12-inch fabs are in the planning phase.

Infineon – Infineon reported strong Sep-Q results and provided guidance that was better than feared by the market, sending the shares of the stock higher. Infineon

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reported 17% Y/Y growth in Auto sale in the Sep-Q and the company forecasts Auto sales to grow double digits again in 2024, despite an outlook for flattish global production by IHS. For its Industrial and Green Segment Infineon reported 12% Y/Y increase in Sept. The company expects the segment to be relatively flat in 2024 as industrial customers go through a period of inventory digestion.

Nvidia – Nvidia unveiled its upgraded graphics processing units for AI applications called H200. The new chip can generate twice the input of Nvidia's existing flagship H100 chip, according to the company, and it comes with upgraded memory storage of 141GB HBM3. Nvidia says the H200 is expected to ship in 2Q24.

Microsoft – Microsoft announced a duo of custom-designed chips for AI applications, joining the trend of bringing key technologies in-house. Microsoft said it does not plan to sell the chips but instead will use them to power its own subscription software offerings and as part of its Azure cloud computing service. News reports suggest Microsoft has placed orders for its chips with TSMC.

onsemi – According to reports, a power outage occurred at onsemi's Bucheon wafer fab in South Korea on November 5, resulting in a temporary shutdown. The power outage lasted approximately 20 minutes. However, because only a few equipment in the fab were equipped with uninterruptible power supplies, many equipment stopped operating during the power outage. "Starting from last Monday, we successfully restored the normal operation of the production line through two days of work. The economic losses caused by the power outage were not very large," onsemi Korea executives said. The report also mentioned that onsemi is considering closing its Bucheon factory for about two weeks starting around mid-December. "If industry conditions continue to decline, as far as we know, they will reduce production or temporarily close as early as December," a raw material supply chain source revealed.

Samsung – Samsung has reportedly received orders from AMD for 4m chips for server applications, according to DigiTimes.

Silergy – Inventory correction for power management ICs (PMIC) may take three more quarters to complete, according to PMIC specialist Silergy, cited by DigiTimes.

Semi sales – IDC raised its 2023 and 2024 global sales forecast. The firm sees 2023 semi sales of \$527B vs \$519B previously while the forecast for 2024 was raised to \$633B from 626B prior. The 2024 forecast implies more than 20% growth in semi sales driven by expectations for the China market to recover in the 2H24 with growth returning in PC and Smartphones.

Tower Semiconductor – Israeli foundry 3Q revenue declined 16% Y/Y and the company forecast sales to remain in downtrend in 4Q, projecting a 13% Y/Y decline due to continued inventory digestion of analog mixed-signal semis.

Consumer/EMS/Distribution

Apple – Apple has fallen further behind in its multibillion-dollar effort to make a modem chip for the iPhone, stymied by the complexity of replacing an intricate Qualcomm component, according to a Bloomberg report which adds that Apple is likely to miss the goal to switch over to internally developed chip by the spring of 2025.

China – Datapoint on consumer spending in China during the Single Day shopping period were mixed this week. Syntun estimated cumulative gross merchandise volume sales across major e-commerce platforms increased 2% vs. 2022 when sales grew 3% Y/Y. The slowdown came despite hefty discounts offered by major retailers. That points to shoppers' fatigue after the rebound in consumption following the post-pandemic reopening. Alibaba reported that sales increased compared to last year but for the second year in a row the company didn't disclose actual numbers. JD.com also didn't disclose numbers but noted sales volume reached record levels.

Smartphones – Strong sales growth at Huawei helped power an 11% rise in China's total smartphone shipments in October, data from research firm Counterpoint showed, indicating signs of recovery in its lagging mobile market. Huawei was a major contributor to the average year-on-year

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growth in the first four weeks of October, with its sales surging 83%, a note from the firm showed. According to the Counterpoint data, Xiaomi also saw a 33% increase in smartphone sales in October. It did not provide specifics around Apple's performance in the period.

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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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