

CUSTER CONSULTING GROUP DAILY NEWS

Electronics Manufacturing Daily News May 1, 2025

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Artificial Intelligence

1) China's Xi calls for self sufficiency in AI development amid U.S. rivalry

HONG KONG, April 26 (Reuters) - China's President Xi Jinping pledged "self-reliance and selfstrengthening" to develop AI in China, state media reported on Saturday, as the country vies with the U.S. for supremacy in artificial intelligence, a key strategic area.

Speaking at a Politburo meeting study session on Friday, Xi said China should leverage its "new whole national system" to push forward with the development of AI.

"We must recognise the gaps and redouble our efforts to comprehensively advance technological innovation, industrial development, and AI-empowered applications," said Xi, according to the official Xinhua news agency. Xi noted policy support would be provided in areas such as government procurement, intellectual property rights, research and cultivating talent.

Some experts say China has narrowed the AI development gap with the United States over the past year. The Chinese AI startup DeepSeek drew global attention when it launched an AI reasoning model in January that it said was trained with less advanced chips and was cheaper to develop than its Western rivals. China has also made inroads in infrastructure software engineering.

Illustration shows AI (Artificial Intelligence) letters and computer motherboard

The DeepSeek announcement challenged the assumption that U.S. sanctions were holding back China's AI sector amid a fierce geopolitical tech rivalry, and that China lagged the U.S. after the breakthrough launch of OpenAI's ChatGPT in late 2022.

"We must continue to strengthen basic research, concentrate our efforts on mastering core technologies such as high-end chips and basic software, and build an independent, controllable, and collaborative artificial intelligence basic software and hardware system," Xi said.

He added that AI regulations and laws should be speeded up to build a "risk warning and emergency response system, to ensure that artificial intelligence is safe, reliable, and controllable."

Xi said last year that AI shouldn't be a "game of rich countries and the wealthy," while calling for more international governance and cooperation on AI.

Reporting by James Pomfret and Summer Zhen in Hong Kong; Editing by Kate Mayberry

2) Nvidia CEO Says All Companies Will Need 'Al Factories,' Touts Creation of American Jobs

Artificial Intelligence

Jensen Huang said data-center proliferation is essential for skilled jobs as his company pursues U.S. manufacturing plans

Nvidia CEO Huang envisions all U.S. firms becoming AI factories, producing both goods and AI, creating skilled jobs.

AI factories, one-stop shops for AI, use chips, software, and networking to turn data into intelligence, benefiting Nvidia.

Huang advocates for U.S. AI industry promotion amid export controls, highlighting data-center boom's potential for skilled jobs.

April 30, 2025 Belle Lin WSJ

WASHINGTON-Nvidia CEO Jensen Huang said all American companies will eventually need or become artificial-intelligence factories-or entities that produce both goods and AI-and will create skilled U.S. jobs in the process.

"Just as we make physical cars today, or anything physical in the future, there'll be a digital version of it," Huang told The Wall Street Journal on Wednesday. "So you need an AI factory to create the AI model that runs in the car."

An AI factory-which can also be described as a sort of one-stop shop of chips, software, design and networking infrastructure designed for AI-is a concept that Nvidia has promoted at past events as a facility that takes in data and churns out intelligence.

Nvidia benefits from the development of these AI factories since the chip giant is the "engine" behind the AI infrastructure, Huang said. Electricity goes into the factories and tokens come out, he said, referring to the tiny units of data that AI models spit out.

The Nvidia chief's comments came during the Hill and Valley Forum, a gathering of Silicon Valley elites and policymakers co-founded by Jacob Helberg, President Trump's pick for undersecretary of state for economic growth, energy and the environment.

Helberg is known for his aggressive stance on China, and has warned that companies must ready their supply chains for a possible escalation of hostilities between the U.S. and China.

Nvidia's advanced AI chips, which helped spark the AI boom, remain in Washington's crosshairs for their sale to China. The U.S. government earlier this month said that it would require export licenses for some chips made by Nvidia and rival AMD, causing the chip giant to warn it would take a \$5.5 billion charge.

Huang declined Wednesday to answer specific questions on the government's chip export controls, saying that policymakers "need to recognize that we should be accelerating, supporting, and promoting the American AI industry around the world."

Huang is set to discuss Nvidia's business practices and compliance with U.S. export controls at a closed-door roundtable held by the House of Representatives Foreign Affairs Committee on Thursday, people familiar with the matter said. The roundtable is part of a series of conversations lawmakers are having with experts on export controls.

Building on the idea that AI factories will become commonplace for American companies, Huang also said the American data-center building boom will create skilled jobs in areas including construction, steel working, and information technology and networking.

"Our country needs to acknowledge that trade craft is respectable work, and it's necessary to build a country," he said.

Nvidia this month announced that it would start manufacturing AI supercomputers entirely in the U.S.-marking the first time that such devices will be made completely domestically, the company said.

"I'm delighted that the administration is really encouraging supporting the industry with on-shore manufacturing," Huang said on Wednesday. "If we don't get good at manufacturing, we're going to leave behind a giant industry."

Amrith Ramkumar contributed to this article.

Conferences & Presentations

3) SEMICON Europa 2025 Call for Abstracts Opens for Advanced Packaging Conference and MEMS & Imaging Summit

MUNICH, Germany - May 1, 2025 - SEMI Europe announced the opening of the call for abstracts for SEMICON Europa 2025, to be held November 18-21 at Messe München in Munich, Germany. Selected speakers will share their expertise at the Advanced Packaging Conference (APC), MEMS & Imaging Sensors Summit, and during presentations on the show floor.

SEMICON EuropaEurope's premier event connecting the entire electronics design and manufacturing supply chain, SEMICON Europa 2025 will gather industry experts and innovators to explore how international collaboration is driving technological innovation, economic resilience, and sustainability across Europe's semiconductor ecosystem. The exhibition and conference will be co-located with productronica.

Call for Abstracts

Advanced Packaging Conference (APC) - Key Enabler for System Performance

Advanced packaging technologies—including 2.5D and 3D stacking, chiplet integration, and heterogeneous packaging—are revolutionizing system performance by delivering greater processing power and energy efficiency. Innovations in advanced materials and interconnects are further reducing signal loss and latency, enabling high-performance computing and AI at scale. Abstracts are invited on key topics including advanced materials and processes for packaging, power and thermal management in 2.5D/3D packaging, packaging innovations for silicon photonics, and testing inspection and metrology.

MEMS & Imaging Sensors Summit - Industry Meets Innovative Ideas

Entrepreneurs, startups, graduates, and newcomers will showcase their research and early-stage products. Topics of interest include new applications and use cases for MEMS and sensors, advancements in technology and materials, smart MEMS and AI integration, MEMS-photonics co-integration, alternative imaging sensor architectures, and foundry offers for start-ups.

Pre-recorded Innovation Presentations - Global Collaborations for European Economic Resilience

SEMI Europe will also highlight microelectronics and semiconductors innovations in short prerecorded messages, pitches and product announcements that will be aired on SEMICON Europa 2025 main stages during networking sessions and on the final day of the exhibition. Projects of interest include sustainability and green technologies, diversity and inclusion, semiconductor advancements in aerospace, defense and automotive applications, as well as smart manufacturing, cybersecurity and more.

Presentation abstracts, biographies, and headshots must be submitted in English through the SEMICON Europa 2025 Call for Abstracts portal by Friday, June 20, 2025. Selected presenters will be notified in August 2025.

For more details, please visit the SEMICON Europa 2025 website and connect with SEMI Europe on LinkedIn or YouTube @SEMIEurope (#SEMICONEuropa).

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Economy

4) Tracking Every Trump Tariff and Its Economic Effect

April 22, 2025

US President Donald Trump has ordered investigations into the national-security implications of imports in several key sectors: semiconductors, pharmaceuticals, critical minerals, copper and lumber. Once completed, these investigations will lay the groundwork for tariffs to be imposed on these goods, similar to those already in place on steel and aluminum, and cars and auto parts.

These goods are currently excluded from the "reciprocal" tariffs that were first announced on April 2, which are currently the subject of negotiations between the US and trade partners across the globe. While the reciprocal tariffs are focused on fixing what Trump considers to be unfair trade relationships, the latest threats are targeted toward encouraging domestic production in these critical sectors. Previous tariffs were aimed at stemming fentanyl trafficking and illegal immigration.

The president is hoping that his tariffs will help protect US jobs and encourage companies to invest more in the country. But many economists say the tariffs will hurt growth as higher prices for goods put a squeeze on household budgets. The chaotic, on-again off-again nature of Trump's actions could also discourage businesses from investing and hiring.

Here's a compilation of measures both implemented and planned, accompanied by a Bloomberg Economics view on the effect.



Tariff Details by Targets

| Targets | |
|-------------------------------|-----------------------------------|
| World | |
| Effective Date | 4/3/25 |
| Goods Targeted | Autos |
| Tariff Rate | 25% |
| Tariff Impact on US | |
| Affected Trade | \$323.5B |
| Average Effective Tariff Rate | +2.5% |
| GDP | -0.4% |
| Inflation | +0.2% |
| S for details | Steel, aluminum 3/12/25 |
| Semicono | luctors, electronics |
| | Date Unknown |
| | Pharmaceuticals Date Unknown |
| | Minerals Date Unknown |
| | Copper Date Unknown |
| | Timber and lumber Date Unknown |
| | Foodimports Date Unknown |

| Reciprocal baseline rate | | Targets | |
|--|--------------------------|----------------------|----------------|
| World except C | anada, | China | |
| Mexico | | Effective Date | |
| Effective Date | 4/9/25 | Goods Targeted | All except som |
| Goods Targeted All except | ot some sectors | Tariff Rate | And |
| Tariff Rate | 10% | Tariff Impact on US | 6 |
| Tariff Impact on US | | Affected Trade | |
| Affected Trade | \$9877B | Average Effective Ta | ariff Rate |
| Average Effective Tariff Rate | +3% | GDP | |
| GDP | -0.4% | Inflation | |
| Inflation | +0.3% | G for details | All except son |
| Read more: Trump to Impose 10 on US Imports, WSJ Says → | <u>0% Global Tariffs</u> | | All except son |
| | | | |
| | | | |

4/10/25

some sectors

Another 41%

All 3/4/25 All 2/4/25

\$278.3B +3.5% -0.5% +0.3%

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|------------------|------------|----------|

| Reciprocal higher rates | | | | |
|-------------------------|-------------------------|--|--|--|
| EU | | | | |
| Effective Date | 7/9/25 | | | |
| Goods Targeted | All except some sectors | | | |
| Tariff Rate | 20% | | | |
| Tariff Impact on US | | | | |
| Affected Trade | \$318.7B | | | |
| Average Effective Ta | riff Rate +2% | | | |
| GDP | -0.3% | | | |
| Inflation | +0.2% | | | |
| | | | | |

| largets | | | | |
|--|--|--|--|--|
| Canada, Mexico | | | | |
| Effective Date 3/4/25 | | | | |
| Goods Targeted USMCA noncompliant goods from March 7 (all goods from March 4– 6) | | | | |
| Tariff Rate 25%; 10% for Canadian energy; and potash 10% from March 7 versus 25% before | | | | |
| Tariff Impact on US | | | | |
| Affected Trade \$63.8B | | | | |
| Average Effective Tariff Rate +0.5% | | | | |
| GDP -0.1% | | | | |
| Inflation 0% | | | | |
| Read more: Trump Escalates Global Trade War, Sparking Tit-for-Tat Tariffs → | | | | |
| Gefor details USMCA compliant goods, excluding potash and Canadian energy Date Unknown | | | | |
| USMCA compliant potash, Canadian energy Date Unknown | | | | |

| Reciprocal higher rates | | Reciprocal higher | rates |
|-------------------------------|-------------|---------------------|-------------------------|
| Vietnam | | Japan | |
| Effective Date | 7/9/25 | Effective Date | 7/9/25 |
| Goods Targeted All except so | ome sectors | Goods Targeted | All except some sectors |
| Tariff Rate | 46% | Tariff Rate | 24% |
| Tariff Impact on US | | Tariff Impact on US | 5 |
| Affected Trade | \$86.2B | Affected Trade | \$70.2B |
| Average Effective Tariff Rate | +1.2% | Average Effective T | ariff Rate +0.5% |
| GDP | -0.2% | GDP | -0.1% |
| Inflation | +0.1% | Inflation | 0% |

ч

| Reciprocal higher r | ates | Recipro |
|-----------------------|------------------------|-------------|
| India | | Sou |
| Effective Date | 7/9/2 | 5 Effective |
| Goods Targeted | All except some sector | s Goods |
| Tariff Rate | 269 | % Tariff Ra |
| Tariff Impact on US | | Tariff In |
| Affected Trade | \$52.9 | B Affecte |
| Average Effective Tar | iff Rate +0.49 | Average |
| GDP | -0.19 | 6 GDP |
| Inflation | 09 | 6 Inflation |
| | | |

ocal higher rates uth Korea ve Date 7/9/25 Targeted All except some sectors ate 25% mpact on US ed Trade ge Effective Tariff Rate \$46.3B +0.4% -0.1% 0%



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Sources: US Census Bureau; WTO; Bloomberg Economics

Note: non-USMCA compliant goods for Mexico and Canada are assumed to be all dutiable imports in 2024, excluding Canadian crude oil. Steel and aluminum are per published tariff product lists, and effective 2024 tariffs are used to calculate the impact of removing exemptions; Autos are from pre-publication tariff product list. For threats, we assume a 25% tariff rate and use the exclusions list from the 'reciprocal' tariff executive order: pharmaceuticals are all HS-29 and HS-30; semi-conductors are all HS-85; and other sectors are all HS-74 (Copper) and HS-44 (Lumber and Timber).

5) Euro zone economy expands faster than forecast but faces trade war hit

Economy

GDP grows by 0.4% vs 0.2% expectation

Inflation slows in Germany, holds steady in Italy Trade war already hitting sentiment, investment More ECB rate cuts seen as inflation is largely defeated

FRANKFURT, April 30 (Reuters) - The euro zone economy grew faster than expected in the first quarter while inflation declined, indicating that the bloc started the year on an upbeat note before successive blows from the U.S. trade war, a surging euro and deteriorating sentiment.

The world's second-largest economic bloc has barely grown over the past several years as businesses held back investment and households tried to rebuild wealth lost due to high inflation. That put Europe on the back foot even before the latest escalation in trade tensions under U.S. President Donald Trump, who announced sweeping import tariffs on April 2.

This year had been seen as the beginning of a long recovery and early figures have shown promise. But since Trump's "Liberation Day", policymakers have warned that permanent damage has already been done to the global economy, even if there is an eventual resolution to the tensions.

The 20 nations sharing the euro currency saw their economy expand by 0.4% in the first quarter, beating expectations for 0.2%, driven by quick growth in Spain, Eurostat data showed.

"Well, that was a relief," HSBC economic Fabio Balboni said. "Private consumption is now finally! -- rising broadly in line with real wages. In addition, investment is also showing signs of life, likely on the back of faster Next Generation EU implementation and lower borrowing costs for firms."

Although Europe's promising growth is likely to be temporary, the bloc well outperformed the U.S., which contracted in Q1, weighed down by a deluge of goods imported by businesses eager to avoid higher costs.

The underlying euro zone trend was somewhat weaker than the headline figures suggest, however, as data was distorted by a 3.2% expansion in Ireland, fuelled largely by activity among big foreign companies based there for tax reasons.

Germany, Europe's largest economy, grew by just 0.2% while France expanded by 0.1% and Italy by 0.3%, suggesting that excluding Ireland, the headline figure would be more modest.

Inflation also appears to have slowed, according to national data.

Price growth in Germany dipped to 2.1% from 2.2%, coming within striking distance of the ECB's 2% target, while in Italy it held steady at 2.1%.

The figures are not game-changers but confirm the ECB's message that inflation is largely defeated and figures will now oscillate around target for the remainder of the year.

"For the ECB, today's growth and inflation reports clearly pave the way for some additional, though very gradual and measured, rate cuts, without giving any reasons for panic," ING economist Carsten Brzeski said.

Interest rate cuts are coming mostly because the outlook has darkened significantly.

Some of Europe's largest firms - including Volkswagen and Mercedes-Benz (MBGn.DE)on Wednesday - have issued warnings in recent days that tariffs will weigh on profits, hold back sales and may curtail investment.

Meanwhile, a key sentiment indicator published on Tuesday showed a major dip, erasing any hope of a recovery and putting the indicator on a downward trend after it flatlined for most of 2024.

The ECB has already said that on top of the trade war, the financial market turbulence set off by U.S. policies and the general deterioration in sentiment will all dampen growth.

But the bloc was seen expanding by less than 1% even before Trump's tariff bombshell, suggesting that any other major damage would put it close to a recession.

Most economists and policymakers say that the U.S. is bound to take a bigger hit than other economies, however, creating an incentive for the Trump administration to scale back its tariffs, some of which have already been suspended.

Increased spending by the new German government on defence and infrastructure could help insulate the euro zone, but that will take time to legislate and implement, suggesting little to no fiscal boost is likely this year and Europe will also suffer.

Reporting by Balazs Koranyi; Editing by Hugh Lawson and Catherine Evans

6) China's April resale home prices fall as more properties put up for sale, report says

Economy

BEIJING, May 1 (Reuters) - The average price of resale homes across 100 Chinese cities fell by 0.7% month-on-month in April, a report by a Chinese real estate research institute said, as more residential properties came onto the market boosting competition for buyers.

"Price cuts to drive sales remained the market norm," the China Index Academy wrote in the report published on its official WeChat social media account on Thursday.

It said there were a relatively high number of listings in core cities last month following the lifting of resale restrictions in some cities.

As 70% of China's household wealth is held in real estate signs of stabilisation or even a mild rebound in the property market, which accounted for about a quarter of the economy at its peak, could help cushion China's economy from the impact of a renewed trade war with the United States.

Some analysts estimate average home prices have slumped by 20-30% since a peak in August 2021 amid a protracted property crisis.

Resale home prices began falling more steeply in February, the data shows, following a sevenmonth run of narrowing declines.

Prices of existing homes fell 7.2% year-on-year on average in April, the report said, while the average price of new builds in the same 100 cities increased by 2.5% over the same period.

Reporting by Joe Cash; Editing by Kate Mayberry

7) China's official purchasing managers' index (PMI) fell to 49.0 in April versus 50.5 in March, according to the National Bureau of Statistics

Economy

Official manufacturing PMI falls faster than expected Non-manufacturing activity growth slows Trump tariffs call time on producers front-loading shipments

BEIJING, April 30 (Reuters) - China's factory activity contracted at the fastest pace in 16 months in April, a factory survey showed on Wednesday, keeping alive calls for further stimulus as Donald Trump's "Liberation Day" package of tariffs snapped two months of recovery.

The reading contrasts with Chinese officials' conviction that the world's second-largest economy is well placed to absorb the U.S. trade shock and suggests domestic demand remains weak as factory owners struggle to find alternative buyers overseas.

Manufacturers had been front-loading outbound shipments in anticipation of the duties, but the arrival of the levies has called time on that strategy - putting pressure on policymakers to finally address rebalancing the economy.

China's official purchasing managers' index (PMI) fell to 49.0 in April versus 50.5 in March, according to the National Bureau of Statistics (NBS), the lowest reading since December 2023 and missing a median forecast of 49.8 in a Reuters poll.

The non-manufacturing PMI, which includes services and construction, fell to 50.4 from 50.8, but remained above the 50-mark separating growth from contraction.

"The sharp drop in the PMIs likely overstates the impact of tariffs due to negative sentiment effects, but it still suggests that China's economy is coming under pressure as external demand cools," Zichun Huang, China Economist at Capital Economics, said. "Although the government is stepping up fiscal support, this is unlikely to fully offset the drag, and we expect the economy to expand just 3.5% this year."

Huang added that negativity among the survey's respondents "probably exaggerates the impact of the tariffs," noting that "the new export orders index dropped back to its lowest level, COVID-19 disruptions aside, since April 2012."

U.S. President Trump's decision to single Beijing out for import duties of 145% comes at a particularly difficult time for China, which is struggling with deflation due to sluggish income growth and a prolonged property crisis.

Beijing has largely relied on exports to shore up the fragile economic recovery since the end of the pandemic and only began to take steps to boost domestic demand more earnestly late last year.

Zhao Qinghe, an NBS statistician, said the drop was largely down to "sharp changes in (China's) external environment," in a note accompanying the release.

A separate private sector survey also released on Wednesday showed a sharp fall in new export orders and overall factory activity slowing.

China's yuan inched lower against the dollar following the data's release, as the first data since Trump's tariff announcement pointed to early signs of damage to the economy.

BUYING TIME

China has repeatedly denied it is seeking to negotiate with the U.S. a way out of the tariffs, and appears to instead be betting that Washington makes the first move. As such, Beijing has advanced this year's stimulus plans to mitigate the economic pain of losing, at least temporarily, its biggest customer.

"We expect the manufacturing PMI to be in contraction in May, but it is expected to rise to about 49.5, driven by an increase in stable growth policies," said Wang Qing, chief macro analyst at Oriental Jincheng.

He said further cuts to interest rates and the amount commercial banks must hold in reserve may be needed as conditions worsen.

On Monday, the vice head of China's state planner said the National Development and Reform Commission (NDRC) would roll out new policies over the second quarter in line with the prevailing economic conditions of the time.

That followed pledges by the Communist Party's elite decision-making body, the Politburo, on Friday to support firms and workers most affected by the duties.

The general consensus among China observers is a second trade war with the U.S. will significantly weigh on growth, but the NDRC's Zhao Chenxin said he was confident the country would achieve its 2025 economic growth target of around 5%.

The International Monetary Fund, Goldman Sachs and UBS all recently revised down their economic growth forecasts for China over 2025 and into 2026, citing the impact of U.S. tariffs - none of them expect the economy to hit Beijing's official growth target.

Reporting by Joe Cash; Editing by Sam Holmes

8) German economy grew by 0.2% in first quarter, skirting recession Economy

BERLIN, April 30 (Reuters) - The German economy grew in the first quarter of the year thanks to consumption and investment, escaping a recession after contracting in the last quarter of last year, data showed on Wednesday.

Gross domestic product rose in line with forecasts, by 0.2%, compared with the previous threemonth period, preliminary data from the statistics office showed.

Germany had contracted in the final quarter of last year by 0.2%, reigniting recession fears. A recession is defined as two consecutive quarters of negative growth.

Germany was the only member of the Group of Seven advanced economies that failed to grow for the last two years, and the tariffs announced by U.S. President Donald Trump will deal a major

blow - possibly putting it on track for a third year of recession for the first time in post-war German history.

Reporting by Rachel More and Maria Martinez, editing by Kirsti Knolle and Matthias Williams

9) Irish AIB Manufacturing Purchasing Managers' Index rose to 53.0 in April from 51.6 in March

Economy

5/1/2025 4 By RTTNews

Ireland's manufacturing activity expanded at the quickest pace in almost three years in April, driven by robust domestic demand, survey results from S&P Global showed on Thursday.

The headline AIB Manufacturing Purchasing Managers' Index rose to 53.0 in April from 51.6 in March. A score above 50 indicates expansion.

The latest reading was the highest since June 2022, largely reflecting robust and accelerated rates of output and new business growth in April, the survey said.

Both output and new orders grew at the sharpest pace in three years. Domestic demand was the main factor boosting manufacturing workloads as export sales dipped slightly compared to March.

The US tariffs and rising global economic uncertainty remained a headwind for the manufacturers, and this was offset by improved demand from European clients.

Suppliers' delivery times shortened for the first time since August 2024, though the improvement in vendor performance was marginal overall. Manufacturing employment increased for the fifth successive month in April, albeit at a modest rate.

On the price front, input price inflation accelerated to the highest since February 2023 due to higher costs for energy-intensive raw materials and precious metals, alongside efforts by suppliers to pass on higher labor costs. On the other hand, selling price inflation remained closer to the 8-month low seen in March.

Looking ahead, they remained optimistic about their growth prospects for the year ahead, though the overall degree of positive sentiment fell to the lowest since August last year amid concerns about global economic prospects and the impact of US tariffs.

10) Japan's factory output slides as Trump tariffs jolt manufacturers Economy

Japan March factory output -1.1% vs f'cast -0.4% Production environment remains highly uncertain, government says U.S. tariffs rattle Japanese manufacturers, including auto

TOKYO, April 30 (Reuters) - Japan's factory output fell more than expected in March, dragged down by its key motor vehicles industry, as U.S. President Donald Trump's tariff policies rattle manufacturers and a whole host of industries globally.

Japan's trade negotiator Ryosei Akazawa will be heading to the United States on Wednesday to meet his counterparts for a second round of tariff negotiations.

Industrial output fell 1.1% in March from the previous month when it rose 2.3%, worse than a median market forecast for a 0.4% fall, the Ministry of Economy, Trade and Industries (METI) data showed.

While manufacturers surveyed by the ministry expect seasonally adjusted output to increase 1.3% in April and climb 3.9% in May, a METI official cautioned that it is too early for optimism.

"The environment surrounding production remains highly uncertain," the official said.

Motor vehicle production was down 5.9% in March from the previous month, the METI said. Specifically, regular passenger car output fell 4.1% in March because of lower exports, while small vehicle production slumped 23.2% on auto part supply disruption.

Trump introduced a 25% tariff on car and truck imports and announced a 24% tariff on all Japanese goods, though the latter was subsequently slashed to 10% for 90 days. The sweeping U.S. tariffs are rattling Japan's industrial supply chains, particularly for automobiles, the country's biggest export item.

Japan exported 21 trillion yen (\$147.45 billion) worth of goods to the United States last year, with automobiles representing roughly 28% of the total.

The METI official said manufacturers expressed their concerns about U.S. tariffs though the government isn't aware of any changes in their production plans.

Still, Japanese companies are worried Trump's protectionist policies would spark a broader global slowdown.

Top Japanese construction machinery maker Komatsu (6301.T)on Monday forecast a 27% decline in operating profit this financial year due to a stronger yen and new U.S. tariffs which will have an impact of more than \$650 million.

Separate data showed Japanese retail sales rose 3.1% in March from a year earlier, slightly less than the median market forecast for a 3.5% rise.

(\$1 = 142.4200 yen)

Reporting by Satoshi Sugiyama; Editing by Jacqueline Wong and Shri Navaratnam

11) Russia sees 2025 economic growth at 1.8% in 'trade war' scenario Economy

MOSCOW, April 30 (Reuters) - International trade wars, triggered by the United States' protectionist policies, pose a key risk to the Russian economy, according to the country's Economy Ministry, which published its high-risk forecasts for the first time on Wednesday.

In this scenario, the price of Brent crude oil is projected to be \$58.1 per barrel, dropping further to \$50 per barrel in 2026. Economic growth in Russia is expected to be 1.8%, compared to 2.5% in the base scenario, which most economists consider too optimistic.

"The scenario assumes an escalation of trade wars and a more significant slowdown in the global economy, which will reduce global demand and prices for oil and other traditional Russian export commodities," the ministry said.

Previously, the ministry had reduced its forecast for the average price of Brent oil in 2025 in the base scenario by nearly 17% to \$68 per barrel. Russia's oil and gas revenues fell by 10% year-on-year in the first quarter.

The average price of the Urals blend of oil is projected to be \$48.8 per barrel in 2025, compared to \$56 per barrel in the base scenario.

The ministry projected 2025 inflation in the high-risk scenario at 8.2%, compared to 7.6% in the base scenario, and warned that a delayed shift to cutting the central bank's key rate could exacerbate the situation.

"The risk is an untimely transition to the easing of monetary and credit conditions, which will limit the growth of investment activity and the expansion of domestic production," the ministry said.

The rouble, which has rallied by about 38% to 81.7 to the dollar since the start of the year, is expected in the high-risk scenario to weaken to an average rate of 96.6 to the dollar in 2025, compared to 94.3 in the base scenario.

"The volume of goods exports will decrease more than the volume of imports, which will lead to a reduction of the trade balance and, as a result, to a stronger depreciation of the rouble," the ministry said.

Reporting by Darya Korsunskaya, writing by Gleb Bryanski, editing by Ed Osmond

12) South Korea exports beat forecast as chips soar, but outlook uncertain; Exports of semiconductors rose 17.2%, the biggest gain in four months, on a rebound in memory prices and robust demand for high-end chips

Economy

Exports +3.7% y/y in April, vs -2.0% forecast Semiconductors rise on demand for high-end products Automobiles fall on U.S. tariffs; auto parts rise Outlook uncertain, but tariff pause a relief, economists say

SEOUL, May 1 (Reuters) - South Korea's exports were unexpectedly resilient in April, buoyed by strong demand for semiconductors despite the drag from U.S. tariffs, although there are signs that global trade tensions have started to impact its key auto sector.

The country's better-than-expected trade performance, however, indicated the hit was not as bad as some had feared, though analysts remained cautious about the outlook for the quarter.

"April's data was a surprise, but it is unclear if exports will continue to be strong in May, because there might have been some effects of early shipping," said Park Sang-hyun, an economist at iM Securities.

"Still, there is a possibility that the second quarter could be better than expected, thanks to the pause on tariffs," Park said, while noting uncertainty over trade negotiations and ongoing conflict between Washington and Beijing.

South Korea is the first major exporting economy to report trade figures each month, providing an early look at the state of global trade since U.S. President Donald Trump announced his sweeping tariff policies.

South Korea's exports climbed 3.7% from a year earlier to \$58.21 billion in April. That was faster than a rise of 3.0% in March and the biggest percentage gain in four months.

It beat a median 2.0% loss projected in a Reuters poll, in which 19 of 22 economists expected exports to fall as Trump's tariffs start to bite, and even topped the highest forecast of a 0.9% rise.

Trump imposed 25% tariffs on auto imports in early April, after introducing 25% duties on steel imports in early March. He suggested more tariffs on auto parts, semiconductors and biopharmaceutical products, but later offered tariff exemptions on electronic items and measures to soften auto tariffs.

His 10% blanket tariffs also took effect in early April, while higher "reciprocal" tariffs, including 25% duties on South Korea, are currently paused for 90 days.

The pause has been a relief as countries like South Korea work out bilateral deals to avoid the high tariffs.

South Korea agreed last week to craft a trade package with the United States aimed at eliminating new U.S. tariffs before reciprocal tariffs are reinstated in July, following the first round of trade talks.

In April, shipments to the United States fell 6.8%, but those to China rose 3.9% - these countries are South Korea's two biggest export markets with autos and chips comprising the bulk of shipments. Exports to the European Union jumped 18.4% to a record high of \$6.7 billion.

"Global demand for chips, particularly high-end chips, has been stronger than expected," said Kang Min Joo, an economist at ING.

"This is likely to offset some of the negative impact of the U.S. tariffs," said Kang, who still expects exports to decline in the second quarter.

Exports of semiconductors rose 17.2%, the biggest gain in four months, on a rebound in memory prices and robust demand for high-end chips. Wireless communication devices also jumped 26.5%, though computers and display panels fell 15.3% and 7.6%, respectively.

Automobiles fell 3.8%, but auto parts rose 3.5%. Steel products gained 5.4%, after three months of losses, while biopharmaceutical products jumped 21.8%.

Overall imports fell 2.7% to \$53.32 billion, after rising 2.3% in the previous month.

The country posted a trade surplus of \$4.88 billion in April, slightly narrower than \$4.92 billion in March.

Reporting by Jihoon Lee; Editing by Michael Perry and Jacqueline Wong

13) Taiwan's Manufacturing weakens sharply amid tariff threats

Economy

May 01, 2025 Taipei Times

An index gauging Taiwan's manufacturing sector weakened significantly in March, hurt by the economic uncertainty created by US President Donald Trump's tariff threats, the Taiwan Institute of Economic Research (TIER) said yesterday.

The TIER's economic composite index, which gauges the manufacturing sector's health, fell sharply by 4.54 points from a month earlier to 12.12 in March, to enter the a yellow-blue spectrum of their system, indicating sluggish growth.

That compared with a yellow-red indicator seen in February and the yellow-blue shown in January, the institute said.

TIER uses a five-color system to assess economic activity in the sector, with red indicating overheating, yellow-red showing fast growth, green representing stable growth, yellow-blue signaling sluggish growth and blue meaning contraction.

Trump's unpredictability in repeatedly adjusting US tariff policies has driven up risks to global trade, the institute said.

His tariff policies have also sent ripples through stock markets, hurting sentiment among manufacturers, it said.

Among the five factors comprising the March composite index, the subindices on demand, the general business climate, purchases of raw materials, and pricing moved lower by 2.40, 1.15, 0.87 and 0.15 points, respectively from a month earlier, the institute said.

Only the subindex on costs bucked the downtrend, up 0.02 points from a month earlier in March, it said.

By sector, the electronics component and computer/optoelectronics sectors were in green territory in March, retreating from the red in February, as growth slowed down amid tariff uncertainties, the institute said.

The base metal industry felt the pinch of a weak global steel market and a decline in orders from Europe and China to enter blue territory in March, compared with yellow-blue in February, it said.

Although semiconductor suppliers increased their demand for equipment in March, the machinery industry showed signs of slowing down, flashing a green light in March after shining a red light in February as China pushed for domestic products to replace imported items, it added.

The TIER said risks in global trade are expected to increase amid Trump's tariff policies, and the uncertainties that exist would affect business confidence worldwide and influence expansion strategies in global supply chains.

Those trends could negatively affect the strength of the local manufacturing sector, it said.

Also, Trump has threatened to impose tariffs on semiconductors. Those potential tariffs combined with US sanctions on chip exports to China could force Taiwan's high-tech sectors to face new challenges, it said.

14) Taiwan's GDP grows 5.37% in Q1 advance estimate

Economy

Taipei, April 30 (CNA) Taiwan's gross domestic product (GDP) rose a robust 5.37 percent from a year earlier in the first quarter of this year on the back of stronger than expected exports, the Directorate General of Budget, Accounting and Statistics (DGBAS) said Wednesday.

The first quarter GDP growth was 1.91 percentage points higher than the previous forecast of 3.46 percent made in February as local exporters benefited from an increase in shipments, with clients

rushing to place orders ahead of schedule to avoid the Trump administration's tariff policies, the DGBAS added.

The quarterly growth was the highest since the first quarter of 2024, when the country's GDP rose 6.64 percent from a year earlier, according to the DGBAS data.

Speaking with reporters, Wang Tsui-hua, a specialist at the DGBAS, said while Trump's tariffs created economic uncertainties, global demand for artificial intelligence applications and other emerging technologies remained solid, benefitting Taiwan's outbound sales.

During the January-March period, Taiwan's exports of merchandise and services soared 20.11 percent, 10.13 percentage points higher than the previous forecast, at a time when many buyers scrambled to build up inventories amid tariff concerns, the DGBAS data indicated.

The DGBAS said Taiwan's imports of merchandise and services also surged 23.66 percent, an upgrade of 12.13 percentage points from the earlier forecast.

Based on the latest import and export data, net foreign demand contributed about 1.03 percentage points to first quarter GDP growth, according to the DGBAS.

The rising popularity of emerging technologies prompted local enterprises to invest more and expand production causing imports of capital equipment to jump 73.51 percent in the first quarter, the DGBAS data showed.

Capital formation, which includes private and public investment, rose 14.72 percent during the first quarter, about 8.31 percentage points higher than the earlier forecast as the business sector continued to increase capital expenditure to meet strong global demand, Wang said.

Private consumption rose 1.22 percent in the first quarter as the Lunar New Year holiday boosted spending on food/beverage, leisure and entertainment among other services, but the growth was 0.88 percentage points lower than the previous forecast, the DGBAS said.

Government consumption rose 0.53 percent in the January-March period, about 1.57 percentage points lower than the previous estimate, the DGBAS added.

As a whole, domestic demand rose 5.03 percent in the first quarter, contributing 4.34 percentage points to GDP growth, according to the DGBAS.

Trump first announced sweeping "reciprocal" tariffs on April 2 on countries that have high trade surpluses with Washington, including a 32 percent import duty on goods from Taiwan, before announcing a 90-day pause a week later.

Wang said the 90-day pause is expected to boost Taiwan's export-oriented economy in the first half of this year, but uncertainties will increase in the second half.

The DGBAS said it will update its 2025 GDP growth forecast at the end of May.

In late February, the DGBAS forecast the local economy will grow 3.14 percent in 2025, while several research institutions have downgraded their forecasts to below the 3 percent mark, citing the impact of Trump's tariffs.

(By Pan Tzu-yu and Frances Huang)

15) U.S. economy shrinks in first quarter as tariffs unleash flood of imports

Economy

First-quarter GDP contracts at 0.3% rate

Front-loading of imports ahead of tariffs weighs on GDP Consumer spending grows at a slow, but still healthy pace Inflation cools in March before tariffs escalation Wages maintain moderate growth pace in first quarter

WASHINGTON, April 30 (Reuters) - The U.S. economy contracted for the first time in three years in the first quarter, swamped by a flood of imports as businesses raced to avoid higher costs from tariffs and underscoring the disruptive nature of President Donald Trump's often chaotic trade policy.

The Commerce Department's advance gross domestic product (GDP) report on Wednesday, however, grossly exaggerated the economy's fading prospects. Though consumer spending slowed considerably from the fourth quarter, the pace of growth remained healthy. Businesses also boosted investment in equipment, mostly information processing and transportation.

Nonetheless, both consumer and business spending likely reflected front-loading before the import duties kicked in. As such, the report reinforced Americans' growing disapproval of Trump's handling of the economy as he marks 100 days in office.

Trump swept to victory last November on voter angst over the economy, especially inflation. Consumer confidence is near five-year lows and business sentiment has tanked, while airlines have pulled their 2025 financial forecasts, citing uncertainty over spending on nonessential travel because of tariffs, which economists said will raise costs for companies and households.

Economists anticipated the economy would rebound in the second quarter as the drag from imports fades, but probably not enough to avoid a recession or a period of tepid growth and high inflation, commonly referred to as stagflation. Resolving the uncertainty caused by the Trump administration's ever-shifting tariffs position was crucial, they said.

"If the blowout on trade was the result of firms pre-buying imported inputs to beat the tariffs, the decay in the trade balance will reverse in second quarter," said Carl Weinberg, chief economist at High Frequency Economics. "That will generate some GDP growth. However, corrosive uncertainty and higher taxes - tariffs are a tax on imports - will drag GDP growth back into the red by the end of this year." Gross domestic product decreased at a 0.3% annualized rate last quarter, the first decline since the first quarter of 2022, the Commerce Department's Bureau of Economic Analysis said in its advance estimate of first-quarter GDP.

US gross domestic product



It was also weighed down by a decline in federal government spending, likely linked to the White House's aggressive funding cuts, marked by mass firings and shuttering of programs.

The report captured activity before Trump's "Liberation Day" tariffs announcement, which ushered in sweeping duties on most imports from the United States' trade partners, including jacking up duties on Chinese goods to 145%, sparking a trade war with Beijing.

Trump and his aides struggled to coalesce around a message about the GDP number. Trump blamed former President Joe Biden for the weak GDP and sought to highlight strong domestic demand, including the rebound in business spending as outlays on equipment surged at a 22.5% rate.

"We had numbers that despite what we were handed, we turned them around," Trump said at the White House.

Final sales to private domestic purchasers, which exclude trade, inventories and government spending, grew at a solid 3.0% rate. But this measure of domestic demand, which Trump also referred to, also was distorted by tariffs. Domestic demand was strong during the last year of the Biden administration, growing at a brisk 2.9% clip in the October-December quarter.

Senate Democratic Leader Chuck Schumer in a statement accused Trump of running the country into the ground.

"Donald Trump must admit his failure and reverse course, and immediately fire his economic team," Schumer said.

Economists polled by Reuters had forecast that GDP increased at a 0.3% pace in the January-March period.

The survey was, however, concluded before data on Tuesday showed the goods trade deficit surged to an all-time high in March amid record imports, which prompted most economists to sharply downgrade their GDP estimates. The economy grew at a 2.4% pace in the fourth quarter.

Stocks on Wall Street were trading lower. The dollar rose against a basket of currencies. U.S. Treasury yields fell.

RECORD IMPORT DRAG

Imports jumped at a 41.3% rate, the largest rise since the third quarter of 2020, when the nation was in the throes of the COVID-19 pandemic, which fractured global supply chains. That obliterated a modest rise in exports, resulting in a large trade gap that chopped off a record 4.83 percentage points from GDP.



Imports were driven by both consumer and capital goods. The BEA said it had identified and removed an increase in imports of silver bars as a form of investment in the first quarter.

Transactions in valuables such as nonmonetary gold and silver are not treated as investments and therefore purchases of these metals are not included in consumer spending, private domestic investment or government spending, it said.

An unusually large amount of non-monetary gold accounted for some of the jump in imports in the past months, leading to a wide disparity in first-quarter GDP estimates.

Some of the imports ended up as inventory in warehouses, partially blunting the hit to GDP. Inventory accumulation surged at a \$140.1 billion pace after rising moderately in the October-December quarter. Inventories added 2.25 percentage points to GDP after being a drag for two straight quarters.

The strong inventory build last quarter could be a headwind to GDP this year, especially as the front-running of purchases ends. A slowing labor market and wage growth as well as worries about the economy could also prompt households to hunker down.

A separate report from the Labor Department's Bureau of Labor Statistics showed wages and salaries climbed 0.8% in the first quarter after rising 1.0% in the October-December quarter.

Inflation heated up last quarter, but cooled in March. The Personal Consumption Expenditures price index excluding the volatile food and energy components was unchanged in March after surging 0.5% in February.

Economists said the reports would encourage the Federal Reserve to keep interest rates unchanged next week.

"Weak GDP ... was still a stagflation warning shot over the bow of the economy," said Ellen Zentner, chief economic strategist at Morgan Stanley Wealth Management. "This type of data won't soothe the markets, and it won't make the Fed's job any easier."

Consumer spending, which accounts for more than two-thirds of the economy, grew at a 1.8% rate after a robust 4.0% pace in the fourth quarter. It was supported by outlays on both services and goods, mostly healthcare, housing and nondurable goods.

Most of the growth was in March, with spending surging 0.7% as households pulled forward purchases of motor vehicles. Economists expected the pre-emptive buying persisted in April.

"At the moment, most stores are still selling inventory that would have entered the country before Liberation Day and thus may not reflect the price hikes that will be coming soon," said Stephen Stanley, chief economist at Santander U.S. Capital Markets.

Reporting by Lucia Mutikani; Editing by Paul Simao, Chizu Nomiyama and Andrea Ricci

16) U.S. ISM manufacturing PMI edged down to 48.7 in April after slipping to 49.0 in March

Economy

5/1/2025 By RTTNews

The Institute for Supply Management released a report on Thursday showing a slight decrease by its reading on U.S. manufacturing activity in the month of April.

The ISM said its manufacturing PMI edged down to 48.7 in April after slipping to 49.0 in March, with a reading below 50 indicating contraction. Economists had expected the index to dip to 48.0.



The modest decline by the headline index came as the production index dropped further into contraction territory, slumping to 44.0 in April from 48.3 in March.

Meanwhile, the new orders index climbed to 47.2 in April from 45.2 in March and the employment index rose to 46.5 in April from 44.7 in March. The readings below 50 still indicate contraction.

The report said the prices index also crept up to 69.8 in April from 69.4 in March, indicating slightly faster growth by raw materials prices.

"Demand and production retreated and destaffing continued, as panelists' companies responded to an unknown economic environment," said Timothy R. Fiore, Chair of the ISM Manufacturing Business Survey Committee.

He added, "Prices growth accelerated slightly due to tariffs, causing new order placement backlogs, supplier delivery slowdowns and manufacturing inventory growth."

Next Monday, the ISM is scheduled to release a separate report on U.S. service sector activity in the month of April.

17) U.S. labor costs rise moderately in first quarter

Economy

WASHINGTON, April 30 (Reuters) - U.S. labor costs increased moderately in the first quarter as economic uncertainty caused by tariffs cools demand for labor.

The Employment Cost Index (ECI), the broadest measure of labor costs, rose 0.9% in the first quarter after a similar increase in the October-December period, the Labor Department's Bureau of Labor Statistics said on Wednesday.

Economists polled by Reuters had forecast the ECI would advance 0.9%. Labor costs increased 3.6% in the 12 months through March after rising 3.8% in the year through December.

The ECI is viewed by policymakers as one of the better measures of labor market slack and a predictor of core inflation because it adjusts for composition and job-quality changes.

Government data on Tuesday showed there were 1.02 job openings for every unemployed person, slightly down from 1.06 in February. President Donald Trump's sweeping tariffs have eroded business sentiment, which some economists worry could soon translate to job losses. Economists expect the Federal Reserve to resume cutting interest rates at some point this year.

Wages and salaries, which account for the bulk of labor costs, climbed 0.8% last quarter after rising 1.0% in the fourth quarter. They advanced 3.5% on an annual basis, slowing from the fourth quarter's 3.8% gain. When adjusted for inflation, overall wages increased 1.1% in the 12 months through March after rising 0.9% in the fourth quarter.

Private-sector wages and salaries rose 0.8%. They increased 3.4% in the 12 months through March after rising 3.7% in the fourth quarter. State and local government wages gained 0.8% last quarter, after increasing 1.1% in the October-December quarter. They gained 4.1% in the 12 months through March.

Benefits for all workers increased 1.2%. That followed a 0.8% rise in the fourth quarter. They increased 3.8% in the 12 months through March after rising 3.6% in the October-December quarter.

Reporting by Lucia Mutikani; Editing by Paul Simao and Chizu Nomiyama

18) UK final manufacturing Purchasing Managers' Index rose slightly to 45.4 in April from a 17-month low of 44.9 in March - S&P Global

Economy 5/1/2025

RTTNews

UK manufacturing activity deteriorated for the seventh successive month in April amid adverse global market conditions along with inflationary pressures, final survey results from S&P Global showed on Thursday.

The final manufacturing Purchasing Managers' Index rose slightly to 45.4 in April from a 17month low of 44.9 in March. However, any reading below 50 indicates contraction in the sector. The reading was also above the flash score of 44.

British manufacturers scaled back production in April in response to reduced intakes of new work from both domestic and overseas markets. The weaker demand was due to rising economic and trade uncertainties, including prospective US tariffs, which had drained confidence from both consumer and business-to-business clients.

New export orders fell at the quickest pace in nearly five years, with demand from the US, Europe, and mainland China all lower.

Manufacturing employment declined for the sixth successive month, and firms also reduced purchasing and stocks in April. The survey respondents revealed that lower workforce numbers were necessary to offset the impact of rising national insurance contributions, increased minimum wages, and other cost rises.

In addition, supply chains remained under pressure despite lower demand for inputs, with average vendor lead times increasing for the sixteenth month in a row amid market uncertainty.

On the price front, input price inflation accelerated to the highest since December 2022, linked to higher energy prices caused by global supply chain uncertainties, including prospective US tariffs. Consequently, selling price inflation rose to a 26-month high.

EMS ODM & Assembly

19) Foxconn reportedly eyes India's new PLI scheme amid soaring local growth as Tata begins iPhone production at new plant

Wednesday 30 April 2025 Jingyue Hsiao, DIGITIMES Asia, Taipei

Foxconn is planning to invest in India through its subsidiary Yuzhan Technology to tap into the newly launched production-linked incentive (PLI) scheme for electronic components, according to The Economic Times, which cites sources familiar with the matter. This move comes amid industry speculation that other major players, such as Dixon Technologies and Tata Electronics, are also preparing to apply for the scheme.

Foxconn(2317.TW) has started trial runs at its new display module assembly unit in Tamil Nadu, according to a source cited by The Economic Times. The company is eager to apply for the PLI scheme, viewing it as a key opportunity to expand its presence in India and replicate its smartphone assembly success in other product categories.

Strategic expansion in display manufacturing

Earlier reports suggested Foxconn is eyeing a US\$1 billion investment to establish a smartphone display module assembly plant near Chennai, underlining its growing commitment to India's electronics manufacturing ecosystem.

In a further sign of its expanding footprint, Foxconn is reported to have more than doubled its India revenue to over US\$20 billion in the financial year 2024-25, largely driven by a sharp increase in iPhone production. The company has also ramped up its workforce in the country by more than 65%, reaching approximately 80,000 employees, according to sources cited by PTI.

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Apple's production shift from China to India

Foxconn, Apple's largest contract manufacturer, is expected to scale up operations significantly in fiscal 2025, as it is reportedly considering producing all iPhones destined for the US market within India. The company is already building its second-largest production facility outside China in Devanahalli near Bangalore, with an estimated investment of US\$2.8 billion.

The ramp-up aligns with Apple's broader strategy to shift a substantial portion of its iPhone production out of China due to rising trade tensions and tariffs. Reuters recently reported that Apple aims to manufacture all US-bound iPhones in India by the end of 2026. Currently, around 80% of the 60 million iPhones sold annually in the US are assembled in China. Apple plans to double iPhone production in India to 80 million units by next year as part of its supply chain diversification efforts.

Tata and Foxconn leading manufacturing expansion

Apple is increasing iPhone production in India as part of its strategy to reduce dependence on China in response to US tariffs. According to Reuters, citing sources with knowledge of the matter, Tata Electronics has commenced operations at a new facility in Hosur, Tamil Nadu. Additionally, Foxconn is in the process of constructing a US\$2.6 billion manufacturing plant in Bengaluru, Karnataka.

| Foxconn's inv | | |
|---------------|--|--------------------------------|
| Announcement | Decision | Investment |
| 2018/1/4 | Invest Rising Star Mobile India through Wonderful Stars Pte. Ltd | US\$99.9 million |
| 2018/10/12 | Invest Rising Star Mobile India through Wonderful Stars Pte. Ltd | US\$49.999 million |
| 2019/1/26 | Invest FOXCONN HON HAI TECHNOLOGY INDIA MEGA DEVELOPMENT PRIVATE LIMITED through Foxconn Singapore Pte. Ltd. | No over than US\$213.5 million |
| 2019/12/2 | Invest Rising Star Mobile India through Wonderful Stars Pte. Ltd | US\$99.9 million |
| 2019/12/19 | Invest TNS Mobile India Private Limited through TNS Mobile Oy | US\$19 million |
| 2021/3/15 | Invest Foxconn Technology (India) Pvivate Limited through Ingrasys (Singapore) Pte. Ltd. | INR1.6 billion |
| 2021/12/24 | Invest Foxconn Hon Hai Technology India Mega Development Private Limited through Foxconn Singapore Pte. Ltd. | US\$350 million |
| 2022/12/8 | Invest Foxconn Hon Hai Technology India Mega Development Private Limited through Foxconn Singapore Pte. Ltd. | US\$500 million |
| 2023/4/6 | Invest Chang Yi Interconnect Technology (India) Private Limited | US\$150 million |

| | through Foxconn Interconnect Technology Singapore Pte. Ltd. | |
|------------|---|--------------------------|
| 2023/5/8 | Acquire land inInformation Technology Investment Region (ITIR), Devanahalli Taluk, Bangalore Rural District, through Foxconn Hon Hai Technology India Mega Development Private Limited | IN\$3 billion |
| 2023/5/11 | Invest FOXCONN HON HAI TECHNOLOGY INDIA MEGA DEVELOPMENT PRIVATE LIMITED through Foxconn Singapore Pte. Ltd. | US\$390 million |
| 2023/8/11 | Invest Chang Yi Interconnect Technology (India) Private Limited through Foxconn Interconnect Technology Singapore Pte. Ltd. | US\$400 million |
| 2023/11/27 | Invest FOXCONN HON HAI TECHNOLOGY INDIA MEGA DEVELOPMENT PRIVATE LIMITED through Foxconn Singapore Pte. Ltd. | US1.541 billion |
| 2023/12/5 | Invest Rising Stars Hi-Tech Private Limited through Bharat FIH Limited | INR4 billion |
| 2024/1/27 | Invest Big Innovation Holdings Limited through Foxconn Hon Hai Technology India Mega Development Private Limited | US\$37.2 milion |
| 2024/2/7 | Invest Yuzhan Technology (India) Private Limited through Cloud Network Technology Singapore | INR19.25 billion |
| 2024/8/21 | Invest FOXCONN HON HAI TECHNOLOGY INDIA MEGA DEVELOPMENT PRIVATE LIMITED through Foxconn Singapore Pte. Ltd. | US\$144 million |
| 2024/9/16 | Sell equipment to FOXCONN HON HAI TECHNOLOGY INDIA MEGA DEVELOPMENT | US\$7.377.490 million |
| 2024/11/12 | Rent land in Sriperumbudur Taluk, Kancheepuram District through Foxconn Hon Hai Technology India Mega Development Private Limited | Rent: INR1.12 billion |

Source: MOPS, April 2025

Government Policies

20) Made in America, sourced from Taiwan? Trump's new tariff math rewrites the rules

Thursday 1 May 2025 Elaine Chen, DIGITIMES Asia, Taipei

US President Donald Trump signed two executive orders on Tuesday (April 29, 2025, PT), easing certain tariffs affecting automakers. The rollback of these trade measures, which companies like Ford and General Motors had warned could hurt US manufacturing by raising production costs and squeezing profit margins, offers short-term relief.

Automakers will benefit from partial tariff reductions on imported components, but these savings will be phased out over the next two years, putting pressure on companies to localize supply chains and manage long-term production costs.

For the current policies and future tariff implementation, a DIGITIMES analyst highlights potential countermeasures for Taiwanese firms and possible market shifts ahead.

Revised tariff policies strengthen US auto manufacturing and simplify trade compliance

In a move aimed at bolstering domestic auto manufacturing, the White House has revised its tariff policy on cars and car parts, offering targeted relief to companies that assemble vehicles in the US.

Under the new framework, manufacturers will be eligible for partial "offsets" to import tariffs on automobile components, based on the value of their US-assembled vehicles. The program will allow companies to deduct up to 3.75 percent of the Manufacturer's Suggested Retail Price (MSRP) of their US production from tariff costs in the first year (April 3, 2025, to April 30, 2026). That benefit will decrease to 2.5 percent in the following year (May 1, 2026, to April 30, 2027), before being eliminated.

These percentages represent the tariff liability when a 25% duty is applied to 15% of the value of a US-assembled vehicle in the first year, and to 10% in the second year.

However, all other automobile imports will still be subject to the 25% tariff.

For instance, if a manufacturer assembles a vehicle in the US with 85% domestic content, the tariff credit effectively reduces the tariff burden for the first year.

The administration said the revised tariff structure is intended to reduce reliance on foreign-made cars and parts, while encouraging companies to expand their production footprints within the US.

End to "stacking" simplifies tariff application

To avoid cumulative tariffs, the new executive order sets guidelines for determining which tariff applies when a product faces multiple duties, balancing national interests and fair trade enforcement.

President Trump has issued an order stating that automobiles and auto parts affected by his new 25% Section 232 tariffs on autos will no longer be subject to additional 25% tariffs imposed on steel, aluminum, or goods from Canada and Mexico related to the US fentanyl crisis. However, the directive clarifies that other tariffs, including the 145% duties on Chinese goods, will remain in place. Additionally, the standard 2.5% "Most Favored Nation" tariff rate for automotive imports will continue to apply.

Analyst insights on market impacts

Mark Yee, an analyst at DIGITIMES, highlighted the potential impacts of recent US executive orders on the automobile supply chain, particularly for Taiwanese companies. Taiwan has been exporting car components and parts to the US worth over NT\$102.6 billion (US\$3.2 billion) in 2024. The new tariffs could significantly affect Taiwanese manufacturers, especially those without investments in the US or Mexico. However, companies already invested in the US, such as Tong Yang Group and Excellence Opto (EOI), are expected to face less disruption.

Mark also observed that Taiwanese auto part companies continue to adopt a cautious, wait-and-see approach before committing to further investments in North America. As rising prices for new cars

may slow down market demand, the second-hand car market is likely to gain popularity due to its price advantage, and the aftermarket sector could experience a boost. This could enhance earnings for Taiwanese manufacturers exporting to the US, with expectations for increased demand in the second half of 2025.

21) China creates list of US-made goods exempt from 125% tariffs, sources say

Government Policies

China quietly notifies firms of tariff exemption list Goods included on so-called whitelist remain unclear Select pharmaceuticals, microchips, aircraft engines had previously been exempted China surveys firms to assess tariff war impact

SHANGHAI, April 30 (Reuters) - China has created a list of U.S.-made products that would be exempted from its 125% tariffs and is quietly notifying companies about the policy, two people familiar with the matter said, as Beijing seeks to ease the impact of its trade war with Washington.

China has already granted tariff exemptions on select products including select pharmaceuticals, microchips and aircraft engines and was asking firms to identify critical goods they need levy-free, Reuters reported on Friday. However, the existence of a so-called 'whitelist' had not been previously reported.

The quiet approach allows Beijing, which has repeatedly said it is willing to fight till the end unless the U.S. lifts its 145% tariffs, to maintain its public messaging while privately taking practical steps to provide concessions.

It was not immediately clear how many and which products have been included on the list, which authorities have not shared publicly, the two sources said, declining to be named as the information was not public.

Companies instead are being privately contacted by authorities and notified of the existence of a list of product classifications that would be exempted from the tariffs, according to one of the sources who works at a drug company selling U.S.-made medicines in China.

The company was contacted by the Shanghai Pudong government on Monday about the list, the source said, adding the firm had previously lobbied for tariff exemptions as it relies on U.S. technologies for some of its products.

"We still have many technologies we need from the U.S.," the person said.

Another source said some companies have been asked to privately contact authorities to inquire if their own imported products qualify for the exemption.

The list of exempted products also appears to be growing: China has waived tariffs on ethane imports from the U.S., Reuters reported on Tuesday.

Major ethane processors had already sought tariff waivers from Beijing because the U.S. is the only supplier.

U.S. President Donald Trump said on Tuesday he thought a trade deal with China was on the horizon. "But it's going to be a fair deal," he said.

China's commerce and customs ministries did not immediately respond to requests for comment.

GAUGING IMPACT

Two other sources said China is also surveying companies to gauge the impact of the tariff war.

In a recent meeting, authorities in Eastern China asked a foreign business lobby group to "communicate all critical situations caused by tariff tensions to evaluate specific cases," a person with direct knowledge of the matter told Reuters.

The person declined to name the city where the authorities held the meeting as the gathering was not public.

Government officials in Xiamen, a city in southeastern Fujian province that is home to a major port and a manufacturing base for electronics, also sent out a survey on Sunday to companies to assess tariff impacts, said a source with direct knowledge of the matter.

The survey was sent to textiles firms and semiconductor companies and included questions on products they trade with the U.S., and the estimated impact of the U.S. and Chinese tariffs on their business, the source said.

Reporting by Andrew Silver; Additional reporting Che Pan; Editing by Miyoung Kim and Saad Sayeed

GPS

22) Garmin announces first quarter 2025 results

Company reports record first quarter operating results and maintains full year EPS guidance

SCHAFFHAUSEN, Switzerland, April 30, 2025 /PRNewswire/ -- Garmin® Ltd. (NYSE: GRMN), today announced results for the first quarter ended March 29, 2025.

Highlights for first quarter 2025 include:

Record consolidated revenue of \$1.54 billion, an 11% increase compared to the prior year quarter

Gross margin of 57.6% compared to 58.1%, in the prior year quarter

Operating margin expanded to 21.7% from 21.6%, in the prior year quarter

Record operating income of \$333 million, a 12% increase compared to the prior year quarter

GAAP EPS of \$1.72 and pro forma EPS(1) of \$1.61, representing 13% growth in pro forma EPS over the prior year quarter

Named one of the Top 10 Most Trustworthy Companies in America, within our industry, by Newsweek

Recognized as an exceptional aviation OEM and marine supplier, winning multiple awards during the quarter

Announced the G3000[®] PRIME integrated flight deck was selected by Pilatus for its new PC-12 PRO aircraft and PC-7 MKX military training aircraft

Published our 2024 Garmin inReach® SOS Report, highlighting the important role served by inReach devices in remote communications and emergency response coordination around the globe

(In thousands, except per ______13-Weeks Ended

| share information) | | | | | | | | |
|-------------------------------------|-------------------|----------|---|-------------------|----------|---|---------------|---|
| | March 29, 2025 | | | March 30, 2024 | | | YoY Change | |
| Net sales | \$ 1 | ,535,099 | | \$ 1 | ,381,649 | | 11 % | - |
| Fitness | | 384,722 | | | 342,892 | | 12 % | |
| Outdoor | | 438,496 | | | 366,193 | | 20 % | |
| Aviation | | 223,114 | | | 216,855 | | 3 % | |
| Marine Auto | | 319,438 | | | 326,736 | | (2) % | |
| OEM | | 169.329 | | | 128.973 | | 31 % | |
| Gross profit Gross | | 884,545 | | | 802,139 | | 10 | % |
| margin % Operating | | 57.6 | % | | 58.1 | % | | |
| Income Operating | | 332,824 | | | 298,410 | | 12 | % |
| income % GAAP | | 21.7 | % | | 21.6 | % | | |
| diluted EPS Pro forma diluted | \$ | 1.72 | | \$ | 1.43 | | 20 | % |
| EPS | \$ | 1.61 | | \$ | 1.42 | | 13 | % |

(1)See attached Non-GAAP Financial Information for discussion and reconciliation of non-GAAP financial measures, including pro forma diluted EPS

Executive Overview from Cliff Pemble, President and Chief Executive Officer:

"We delivered another quarter of outstanding financial results which we attribute to our strong lineup of highly differentiated products that customers desire. While recent developments in global trade have created an atmosphere of uncertainty for many companies, we remain optimistic because of the resilience and flexibility our vertically integrated and highly diversified business model offers. We are very pleased with our results so far, and we look forward to the opportunities ahead as the year continues to unfold." - Cliff Pemble, President and Chief Executive Officer of Garmin Ltd.

Fitness:

Revenue from the fitness segment increased 12% in the first quarter with growth led by strong demand for advanced wearables. Gross and operating margins were 57% and 20%, respectively, resulting in \$78 million of operating income. During the quarter, we announced Garmin Connect+, a premium plan offering personalized insights driven by artificial intelligence, enhanced live tracking, and exclusive achievement badges. Garmin Connect+ will elevate users' health and fitness knowledge with personalized Active Intelligence insights powered by AI. Also during the quarter, we were recognized as one of the Most Innovative Fitness and Wellness Companies of 2025 by Athletech News. We also recently announced the vívoactive® 6, our newest health and fitness smartwatch with an even brighter AMOLED display that includes more than 80 preloaded sports apps and provides access to Garmin Coach running and strength training plans.

Outdoor:

Revenue from the outdoor segment increased 20% in the first quarter primarily due to growth in adventure watches. Gross and operating margins were 64% and 29%, respectively, resulting in \$129 million of operating income. During the quarter, we launched several wearables, including Instinct® 3, Descent[™] G2, tactix® 8 and Approach® S44 and Approach S50. Each wearable is purpose built to allow our customers to participate in the activities that further their passions. Also during the quarter, we launched the new Montana® handheld GPS series with optional SOS

satellite communication capabilities, and the new Approach G20, the first GPS golf handheld with unlimited battery life in sunny conditions.

Aviation:

Revenue from the aviation segment increased 3% in the first quarter with growth primarily driven by the OEM product categories. Gross and operating margins were 75% and 22%, respectively, resulting in \$48 million of operating income. During the quarter, we announced that the G3000 PRIME integrated flight deck was selected by Pilatus for its new PC-12 PRO aircraft, with deliveries anticipated to begin in the second half of 2025, and PC-7 MKX military training aircraft. Also during the quarter, we introduced GCO[™] 14, our first carbon monoxide detector for aircraft. This remote-mount sensor allows pilots to monitor CO levels and receive alerts, adding a layer of situational awareness in the cockpit. We were also named Supplier of the Year by Cirrus Aircraft, reflecting our commitment to create the best products and provide outstanding service to our customers.

Marine:

Revenue from the marine segment decreased 2% in the first quarter primarily due to the timing of promotions, which contributed to lower revenue from multiple product categories in the quarter. Gross and operating margins were 58% and 27%, respectively, resulting in \$87 million of operating income. During the quarter, we launched the Force® Pro trolling motor, with multi-band GPS for improved control, reverse thrust capabilities and a built-in sonar transducer. Also during the quarter, we were named 2025 Supplier of the Year for the second consecutive year by Independent Boat Builders, Inc. (IBBI), for providing outstanding service, support and dedication to its owner network.

Auto OEM:

Revenue from the auto OEM segment increased 31% during the first quarter primarily driven by growth in domain controllers. Gross margin was 18% and we recorded an operating loss of \$9 million in the quarter. During the quarter, Honda introduced the 2025 Gold Wing motorcycle which includes a Garmin infotainment system.

Additional Financial Information:

Total operating expenses in the first quarter were \$552 million, a 10% increase over the prior year. Research and development and selling, general and administrative expenses increased 11% and 9%, respectively, driven primarily by personnel related costs.

The effective tax rate in the first quarter was 14.5% compared to the effective tax rate of 15.6% in the prior year quarter. The decrease in the current quarter is primarily due to increased tax benefits from stock-based compensation.

In the first quarter of 2025, we generated operating cash flows of \$421 million and free cash flow(1) of \$381 million. We paid a quarterly dividend of approximately \$145 million and repurchased \$27 million of the Company's shares within the quarter, leaving approximately \$210 million remaining as of March 29, 2025 in the share repurchase program authorized through December 2026. We ended the quarter with cash and marketable securities of approximately \$3.9 billion.

(1)

See attached Non-GAAP Financial Information for discussion and reconciliation of non-GAAP financial measures, including pro forma effective tax rate and free cash flow.

2025 Fiscal Year Guidance:

Based upon our first quarter results and our assessment of the current global trade environment, we are updating our full year 2025 expectations for revenue to approximately \$6.85 billion and maintaining our pro forma EPS of \$7.80 based on gross margin of 58.5%, operating margin of 24.8% and a full year tax rate of 16.5% (see attached discussion on Forward-looking Financial Measures).

Dividend Recommendation:

As announced in February, the Board will recommend to the shareholders for approval at the annual meeting to be held on June 6, 2025, a cash dividend in the total amount of \$3.60 per share payable in four equal quarterly installments.

Webcast Information/Forward-Looking Statements:

The information for Garmin Ltd.'s earnings call is as follows:

When:

Wednesday, April 30, 2025, 10:30 a.m. Eastern

Where:

Join a live stream of the call at the following link https://www.garmin.com/en-US/investors/events/

An archive of the live webcast will be available until April 29, 2026 on the Garmin website at <u>www.garmin.com</u>. To access the replay, click on the Investors link and click over to the Events Calendar page.

Market & Business Conditions

23) These Are the Industries Most at Risk to China Tariffs Electronics, furniture, and clothing companies are likely to suffer.

APR 28, 2025 BY JENNIFER CONRAD inc.com

Tariffs on imported goods from China currently sit at an eye-popping 145 percent-and up to 245 percent for some products. While reports also suggest President Donald Trump may dial back the tariff levels any day now, companies that manufacture or source goods from China are monitoring the situation with increasing alarm.

But which industries stand to be the most affected? Inc. asked Altana, a New York City-based company that uses AI to map global supply chains, to run the numbers. Altana looked at 2023 data from its network and found the top categories for imports from China, based on their HS4 code, which is their category within the government's Harmonized Tariff Schedule.

"Electronics and technology equipment are all hugely dependent on Chinese manufacturing directly exported to the U.S., exposing American enterprises to hundreds of billions of tariff exposure," says Peter Swartz, chief science officer and co-founder at Altana.

Right now, products that contain semiconductors, such as smartphones and computers, are exempt from the latest round of tariffs, but Trump has suggested the reprieve won't last. That means anyone investing in new office equipment may face sticker shock in the coming months.

Specifically, Chinese imports accounted for 53 percent of all "electric accumulator" (rechargeable batteries) imports, 47 percent of telecommunications equipment imports, and 38 percent of imports of "data processing machines," as in computers. Furniture importers could also take a hit; 24 percent of furniture imports are made in China.



Top industries by Chinese import dependency (HS4 level)

Source: Altana

Inc.

For now, the "China plus one" strategy many textile companies have employed-meaning they work with suppliers in China and at least one other country-seems to be mitigating some of the impacts of the tariffs, Swartz says. Altana's data shows that goods from China represent just 21 percent of American textile imports. Vietnam makes up 18 percent of our textile imports.

But the advantage may not last: Although goods from Vietnam are currently subject to a 10 percent blanket tariff (on top of existing tariffs, which range between 10 and 20 percent for textiles), that number could skyrocket to 46 percent in July.

Here are the top seven industries by Chinese import dependency (HS4 level):

Electric accumulators: 53 percent of \$30B total U.S. imports Telecommunications equipment: 47 percent of \$118B total U.S. imports Data processing machines: 38 percent of \$104B total U.S. imports Seats: 28 percent of \$26B total U.S. imports Other furniture: 24 percent of \$27B total U.S. imports Electrical transformers: 16 percent of \$27B total U.S. imports Motor vehicle parts: 11 percent of \$87B total U.S. imports

Materials

24) MacDermid Enthone Invests in the Future of Surface Finishing with RM Plating

IRAPUATO, Mexico, April 30, 2025 /PRNewswire/ -- MacDermid Enthone Industrial Solutions, an Element Solutions Inc ("ESI") company and a global leader in surface finishing technology, is reinforcing its long-term commitment to innovation and excellence through a strategic investment in RM Plating. This newly established partnership between MacDermid Enthone and Recubrimientos Metalicos de Mexico, a premier electroplating and surface finishing company in Mexico, builds on a trusted relationship of more than 50 years and reflects a shared dedication to advancing the future of metal finishing.

Located in Irapuato, Guanajuato, the RM Plating facility provides high-performance plating solutions to a diverse range of clients spanning automotive, power distribution, construction, and general industrial applications. Its comprehensive range of plating solutions consists of zinc plating, zinc-nickel coatings, zinc flake coatings, and nickel-tin plating on busbars. Production began in February 2025, with four state-of-the-art production lines set to be fully operational in the coming months.

MacDermid Enthone's investment in RM Plating extends beyond chemistry supply. By providing advanced plating equipment and hands-on technical expertise, the company is helping RM Plating drive greater efficiency, enhance quality, and accelerate innovation. This initiative reinforces MacDermid Enthone's dedication to supporting the surface finishing industry with cutting-edge solutions.

"Our investment in RM Plating underscores our commitment to driving the advancement of surface finishing technology," said Glen Breault, Vice President of North America at MacDermid Enthone Industrial Solutions. "By integrating our chemistry and process expertise with state-of-the-art equipment, we are helping shape the future of metal finishing. This collaboration highlights our dedication to supporting both multinational and family-owned plating businesses as they grow and innovate."

For Recubrimientos Metálicos de México, a family-owned business established in 1954, RM Plating marks a new era of growth and technological advancement. Led by General Director Carlos Cielak, the company remains at the forefront of innovation in metal finishing.

"Surface finishing has been our family's passion for more than seven decades and four generations," said Ricardo Cielak, Director at RM Plating. "With the launch of RM Plating, in partnership with MacDermid Enthone, we're raising the bar for quality, efficiency, and innovation. Together, we are providing customers with solutions that meet the evolving demands of modern manufacturing."

About MacDermid Enthone Industrial Solutions:
Established in 1922, MacDermid Enthone Inc., operating as MacDermid Enthone Industrial Solutions, stands as a global leader, specializing in the manufacture of chemical compounds catering to all facets of surface finishing applications. Their product portfolio includes innovative solutions designed to meet the evolving demands of the dynamic surface finishing industry and ever-changing customer requirements, with a strong focus on sustainable technologies and enhanced technical support. MacDermid Enthone Industrial Solutions operates as a business unit of Element Solutions Inc (NYSE: ESI), a diversified specialty chemicals company serving a broad spectrum of industries with innovative solutions that enhance everyday products. For more information, please visit MacDermidEnthone.com.

About Recubrimientos Metalicos de Mexico and RM Plating:

Since 1954, Recubrimientos Metálicos de Mexico has been Mexico's leading and most recognized plating supplier. As the first plant in its field to automate the zinc plating process in Latin America in 1957, the company, led by Carlos Cielak, has been at the forefront of surface finishing innovation. Now, with Ricardo Cielak at the helm of RM Plating, they represent the fourth generation of leadership in the electroplating industry. Recubrimientos Metalicos de Mexico continues to grow significantly while upholding its legacy of excellence. The company was also the first surface finishing business in Mexico to achieve ISO-9001 certification and remains committed to advancing the industry with state-of-the-art technology. For more information, please visit www.recubrimientosmetalicos.com.

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SOURCE MacDermid Enthone Industrial Solutions

OLED

25) LG Display Becomes World's First to Verify Commercialization of Blue Phosphorescent OLED Panels

Final Step to Achieving "Dream OLED"

SEOUL, South Korea, April 30, 2025 /PRNewswire/ -- LG Display, the world's leading innovator of display technologies, announced today that it has become the world's first company to successfully verify the commercialization-level performance of blue phosphorescent OLED panels on a mass production line. The achievement comes about eight months after the company partnered with UDC to develop blue phosphorescence, and is considered a significant step closer to realizing a "dream OLED" display.

In the display industry, "dream OLED" refers to an OLED panel that achieves phosphorescence for all three primary colors of light (red, green, and blue). OLED panel light emission methods are broadly categorized into fluorescence and phosphorescence. Fluorescence is a simpler process in which materials emit light immediately upon receiving electrical energy, but its luminous efficiency is only 25%. In contrast, phosphorescence briefly stores received electrical energy before emitting light. Although it is technically more complex, this method offers luminous efficiency of 100% and uses a quarter as much power as fluorescence.

However, achieving blue phosphorescence has remained a major challenge even more than 20 years after the commercialization of red and green phosphorescence. This is due to blue, among the three primary colors, having the shortest wavelength and demanding the greatest energy.

LG Display has solved this issue by using a hybrid two-stack Tandem OLED structure, with blue fluorescence in the lower stack and blue phosphorescence in the upper stack. By combining the stability of fluorescence with the lower power consumption of phosphorescence, it consumes about 15% less power while maintaining a similar level of stability to existing OLED panels.

In particular, LG Display is the first to succeed in reaching the commercialization stage of blue phosphorescent OLED panels, where performance evaluation, optical characteristics, and processability on actual mass production lines should all be confirmed. The company has already completed commercialization verification with UDC.

LG Display has independently filed patents for its hybrid blue phosphorescent OLED technology in both South Korea and the United States.

The company will showcase a blue phosphorescent OLED panel featuring two-stack Tandem technology at SID Display Week 2025, the world's largest display event, in San Jose, California from May 11th (local time).

At the show, LG Display will be unveiling a blue phosphorescent OLED panel featuring two-stack Tandem technology applied to a small and medium-sized panel that can be applied to IT devices such as smartphones and tablets. As more and more products require high definition and high efficiency such as AI PCs and AR/VR devices, the application of blue phosphorescence technology is expected to expand rapidly.

"The successful commercialization of blue phosphorescence technology, which has been called the final piece of the 'dream OLED' puzzle, will become an innovative milestone towards the next generation of OLED," said Soo-young Yoon, CTO and Executive Vice President of LG Display. "We expect to secure a leading position in the future display market through blue phosphorescence technology."

About LG Display

LG Display Co., Ltd. [NYSE: LPL, KRX: 034220] is the world's leading innovator of display technologies, including thin-film transistor liquid crystal and OLED displays. The company manufactures display panels in a broad range of sizes and specifications primarily for use in TVs, notebook computers, desktop monitors, automobiles, and various other applications, including tablets and mobile devices. LG Display currently operates manufacturing facilities in Korea and China, and back-end assembly facilities in Korea, China, and Vietnam. The company has approximately 70,707 employees operating worldwide. For more news and information about LG Display, please visit <u>www.lgdisplay.com</u>.

Media Contact:

Joo Yeon Jennifer Ha, Manager, Communication Team Email: <u>hjy05@lgdisplay.com</u>

SOURCE LG Display

Optoelectronics

26) ams OSRAM Delivers 16.4% adj. EBITDA at Revenues of EUR 820m in Q1 Above Guidance Mid-point, Confirms 2025 FCF Outlook Above

EUR 100m and considers strategic options for accelerated deleveraging

Q1/25: revenues of EUR 820m, 16.4% adj. EBITDA margin, above mid-point of guidance

Q1/25: realized run-rate savings of approx. EUR 135m from 'Re-establish the Base' (RtB) program

Q1/25: order entry has been constantly improving with book-to-bill >1 across the board

Q2/25: revenues of EUR 725m - 825m and 18.5% +/-1.5% adj. EBITDA expected

FY25: free cash flow outlook of above EUR 100m and improved profitability re-confirmed

Impact of new US tariff regime: successfully mitigating most of the primary cost impact

The company considers strategic options for certain assets (in addition to Kulim-2) generating proceeds well above EUR 500m as part of its accelerated, comprehensive deleveraging plan

Apr 30, 2025

PREMSTAETTEN, Austria & MUNICH--(BUSINESS WIRE)--ams OSRAM delivers 16.4% adj. EBITDA at revenues of EUR 820m in Q1 above guidance mid-point, confirms 2025 FCF outlook above EUR 100m and considers strategic options for certain assets for deleveraging

"Even though economic uncertainties are increasing, our structural profitability is continuously improving thanks to the seamless implementation of our 'Re-establish the Base' (RtB) strategic efficiency program, which is ahead of plan. Our global footprint and customer base enables us to deal with the volatilities of the new tariff regime." said Aldo Kamper, CEO of ams OSRAM.

"We plan to accelerate our balance sheet deleveraging. To this end, we are considering strategic options for some of our assets for reaching the target leverage ratio below 2 faster and thereby reducing our mid-term interest cost significantly." said Rainer Irle, CFO of ams OSRAM.

Balance sheet improvement plan

In view of current uncertainties in the economic boundary conditions, the company has formulated a comprehensive plan to reach its target leverage ratio of net-debt / adj. EBITDA below 2 in an accelerated manner. The plan consists of various, complementary elements:

Further improving the free-cash-flow performance on the back of a seamless execution of its strategic efficiency program 'Re-establish the Base' and structural growth in its core semiconductor business

the disposal of its 8"-Kulim facility thereby eliminating the SLB

the extension of the RCF

the consideration of strategic options for various additional assets with the goal to generate proceeds well above EUR 500 million.

The plan will reduce the leverage ratio below 2, minimize the amount to be refinanced, reduce the interest expense to below EUR 100 million annually and thereby strengthen the operating cash flow further.

Q1/25 financial update

The Group recorded revenues of EUR 820 million in Q1/25, above the midpoint of the guided range of EUR 750 - 850 million. The revenues declined by 7% quarter-over-quarter, a typical seasonal decline by magnitude despite the cyclical weakness in automotive and industrial semiconductor business. Automotive lamps aftermarket business declined seasonally. In the semiconductor business the quarter-over-quarter decline had different dynamics per industry. In automotive, the ramp up of new sensor products partially balanced seasonal decline whilst the auto LED business was still in an inventory correction cycle, industrial & medical (I&M) hit its cyclical low point and consumer was nearly flat due to strength in old and new products. The temporarily stronger USD FX-Rate during the quarter and the currently recurring non-refundable engineering payments (so called 'NRE') for the development of LED technologies from certain customers also contributed to revenues landing above the midpoint of the guided range.

Key reported figures

| EUR millions (except per share data) | Q1 2025 | Q4 2024 | QoQ | Q1 2024 | YoY |
|--|------------|------------|------|------------|-------|
| Revenues | 820 | 882 | -7% | 847 | -3% |
| Opto | | | | | |
| Semiconductors | | | | | |
| (OS) | 336 | 350 | -4% | 345 | -3% |
| CMOS Sensors & ASICs | | | | | |
| (CSA) | 236 | 258 | -9% | 233 | +1% |
| Lamps & | | | | | |
| Systems (L&S) | 249 | 275 | -9% | 268 | -7% |
| Gross profit | | | | | |
| adj. | 233 | 239 | -3% | 241 | -3% |
| Gross margin | | | +130 | | |
| adj. % | 28.4% | 27.1% | bps | 28.4% | 0 bps |
| Operating | | | | | |
| income (EBIT) | 58 | 60 | -3% | 44 | +32% |

| adj. | | | | | |
|---------------------|-------|-------|------|-------|-------|
| Operating | | | | | |
| margin (EBIT) | | | +30 | | +190 |
| adj. %® | 7.1% | 6.8% | bps | 5.2% | bps |
| | | | - | | |
| EBITDA adj. | 135 | 150 | 10% | 124 | +9% |
| EBITDA | | | -60 | | +180 |
| margin adj. % | 16.4% | 17% | bps | 14.6% | bps |
| Net result adj. | -23 | 3 | n/a | -35 | -34% |
| Diluted & | | | | | |
| undiluted EPS | | | | | |
| adi. (in EUR) | -0.23 | 0.03 | n/a | -0.35 | -34% |
| Net result | | | | 0.000 | 0.170 |
| (IFRS) | -82 | -58 | 41% | -710 | -88% |
| Diluted & | | 20 | 1170 | /10 | 0070 |
| undiluted EDS | | | | | |
| (IEPS in | | | | | |
| (II KS, III FUR) | -0.83 | -0 59 | 11% | -7 10 | -88% |
| | -0.05 | -0.57 | 4170 | -7.19 | -0070 |
| Operating cash | 10 | 70 | - | ~ ~ | 000 |
| flow | 10 | 79 | 87% | 55 | -82% |
| Cash flow from | | | - | | |
| CAPEX 2 | -52 | -104 | 50% | -120 | -57% |
| FCF (incl. net | | | | | |
| interest paid). | -28 | 2 | n/a | -60 | -53% |
| Net debt | 1,484 | 1,413 | 5% | 1,399 | 6% |
| Net debt (incl. | | | | | |
| SLB) • | 1,914 | 1,854 | 3% | 1,793 | 7% |

1) Adjusted for microLED strategy adaption expenses, M&A-related, other transformation and share-based compensation costs, results from investments in associates and sale of businesses.

2) Basic and diluted earnings per share for the comparative period were adjusted following the reverse share split on 30 September 2024.

3) Cash flow from investments in property, plant, and equipment and intangibles (such as capitalized R&D), incl. investment grants.

4) Excl. financial investments.

5) Incl. EUR 429 m equivalent as of end of March 2025 from SLB Malaysia transaction.

Year-over-year, group revenues declined by 3% due to cyclical weakness in automotive and I&M semiconductor businesses, the discontinued non-core semiconductor business, and some end-of-life of OEM modules business in Lamps & Systems. At a constant USD/EUR exchange rate and excluding business divestments, revenues would have declined by 4%.

Adjusted EBITDA (adjusted earnings before interest, taxes, depreciation, and amortization) came in at EUR 135 million, i.e. at 16.4% adj. EBITDA margin, slightly above the midpoint of the guided range of 16% +/-1.5%.

Adjusted EBIT (adjusted earnings before interest and taxes) margin for the group improved slightly to 7.1% compared to the previous quarter. Adjusted EBIT came in at EUR 58 million.

Semiconductor business update

Opto Semiconductors segment (OS)

Revenues for opto-electronic semiconductors decreased by EUR 14 million to EUR 336 million in Q1/25 compared to EUR 350 million in Q4/24. Main contributor to this development was automotive with a seasonal decline and no further reduction of backlog orders that contributed in Q4/24. On top, the company continues to receive non-refundable engineering payments (so called 'NRE') for the development of LED technologies from certain customers on a currently recurring basis, exemplifying its leading technology position. Adjusted EBITDA stayed essentially flat at EUR 49 million, representing an adjusted EBITDA margin of 14.7%.

CMOS sensors and ASICs segment (CSA)

Revenues for CMOS sensors and ASICs decreased by EUR 22 million to EUR 236 million in Q1/25 compared to EUR 258 million in Q4/24 in line with its typical seasonal decline in demand for components for consumer handheld devices.

Adjusted EBITDA dropped to EUR 32 million in Q1/25 from an elevated figure in Q4/24 of EUR 55 million that was partially driven by positive one-off effects. The adjusted EBITDA Margin stood at 13.8%, more than 5 times higher than a year ago thanks to the structural savings from the 'Re-establish the Base' program.

Semiconductors industry dynamics

Revenues from the two semiconductor business units represented approx. 70% of Q1/25 revenues, or EUR 571 million, compared to EUR 578 million a year ago, essentially flat with a small cyclical decline of 1% driven by automotive and I&M. Like in the previous quarter, end-markets continued to show different cyclicality in the first quarter. Growth in the core portfolio compensated the phased-out non-core portfolio that still contributed meaningfully a year ago.

Automotive:

The automotive business came in slightly better than expected against the backdrop of an inventory correction in the opto-electronic semiconductor supply chain and the revenue tailwind in Q4 from order backlog. Customers continue to order on very short notice, reflecting a high level of

uncertainty at the carmakers. The company benefited from ramping up of new sensor products and some tailwinds from the stronger US dollar resulting in a 6% quarter-over-quarter decline. The year-over-year decline comes in more pronounced with 11%, clearly showing the inventory adjustments in opto-electronic products due to demand uncertainties seen by Tier-1 and OEM customers.

Industrial & Medical (I&M):

The business showed again a mixed performance across verticals, e.g. horticulture with a seasonal decline, industrial automation stabilized on a low level, mass market with a regionally differing performance showing some signs of improvement. The cyclical trough seems to be reached with a 9% decline compared to a year ago. Quarter-over-quarter, revenues came in 11% lower than in Q4/24 due to end-of-life of certain legacy products.

Consumer:

Demand for new products and for consumer portable devices in general remained healthy following broadly its typical seasonal pattern. Revenues came in just 2% lower than in the previous quarter, supported by order from legacy products, representing a very small seasonal decline. Year-over-year, revenues increased by 21% due to a strong contribution of new products, despite meaningful contribution from non-core products a year ago that were mostly phased-out by December 2024.

Lamps & Systems segment (L&S)

The Lamps & Systems segment represented approx. 30% of Q1/25 revenues, equaling EUR 249 million. The business development followed its typical seasonal pattern with a quarter-over-quarter decline of 9%. The year-over-year reduction of 7% comes mainly from discontinued OEM products and the gradual structural decline in the OEM halogen lamps business for new cars.

Adjusted EBITDA in Q1/25 came in even higher than in Q4/24 at EUR 61 million or 24.5% adjusted EBITDA margin on the back of a favorable product mix, a one-time effect and good plant utilization.

Automotive:

The automotive aftermarket business followed its typical seasonal demand pattern in Q1/25. The OEM business performed as expected.

Specialty Lamps:

Revenues stayed flat quarter-over-quarter. Overall, the inventory corrections in industrial and professional entertainment markets are continuing, whilst some customers pulled in orders ahead of expected tariffs.

Q1/25 key financial figures

Gross margin

The adjusted gross margin increased by 130 basis points quarter-over-quarter due to an overall better product mix. Year-over-year, adj. gross margin remained unchanged.

Net result & earnings per share

The adjusted net result came in at EUR -23 million in Q1/25 better than EUR -35 million a year ago and down from EUR 3 million in the fourth quarter. Both Q1/25 adjusted basic and diluted earnings per share came in at EUR -0.23, down compared to EUR 0.03 EUR in Q4/24.

The IFRS net result came in at EUR -82 million in Q1/25 after EUR -58 million in Q4/24. Both basic and diluted IFRS earnings per share came in at EUR -0.83 in Q1/25, after EUR -0.59 in Q4/24.

Cash flows

Operating cash flow (including net interest paid) came in at EUR 10 million in Q1/25.

Cash flow from investments into PPE and intangibles, or CAPEX, ended up below the target 8% CAPEX/sales ratio at EUR -52 million compared to EUR -104 million in the previous quarter and significantly down compared to a year ago, where the figure stood at EUR -120 million. Free cash flow - defined as operating cash flow including net interest paid minus cash flow from CAPEX plus proceeds from divestments - came in at EUR -28 million in Q1/25.

Net-debt related financial figures

On 7 March 2025, the company paid back the outstanding 2025 convertible note at maturity with EUR 447 million in cash. The gross cash position reduced to EUR 573 million end of Q1/25 after EUR 1,098 million at the end of December 2024. Consequently, the net debt position slightly increased to EUR 1,484 million quarter-over-quarter after EUR 1,413 million in Q4/24.

The equivalent value of the Sale-and-Lease Back (SLB) Malaysia transaction reduced to EUR 429 million in Q1/25 from EUR 441 million end of Q4/24. Despite the quarterly accrual of lease payments, the liability decreased due to a weaker exchange rate development of MYR / EUR. Including EUR 429 million equivalent from the SLB (booked under other financial liabilities), the net debt position increased to

EUR 1,914 million in Q1/25 compared to EUR 1,854 million in Q4/24.

Status of outstanding OSRAM minority shares

On 31 March 2025, the Group held approx. 87% of OSRAM Licht AG shares. The total liability for minority shareholders' put options reduced to EUR 570 million at the end of Q1/25 compared to EUR 585 million at the end of the previous quarter.

The company has a Revolving Credit Facility (RCF) in place. The RCF is primarily in place to cover any further significant exercises under the 'domination and profit and loss transfer agreement (DPLTA)' put option and would be sufficient to fully cover all outstanding minority shareholders' put options. It could also be drawn for general corporate and working capital purposes.

Second quarter 2025 Outlook

On the back of an improving order entry during the first quarter, the company expects an improved demand for its automotive semiconductor products in Q2/25.

The demand from industrial and medical markets might slightly increase despite persisting macroeconomic uncertainties.

The business with its semiconductor products for consumer handheld devices will follow its normal seasonal pattern and reach its seasonal low in the second quarter.

Combined, the semiconductor business is expected to follow a normal pattern, but with a slight reduction due to the weaker USD in contrast to a year ago.

The automotive aftermarket halogen lamps business will enter its typical spring & summer weakness, following its traditional seasonal demand pattern.

In total, the sequential development is in line with normal seasonal patterns, although from a lower base due to the cyclical bottom in industrial and the inventory correction in automotive in Q1. Approximately EUR 35 million revenue decline is due to the assumed appreciation of the EUR in Q2 by 8 cents, compared to the first quarter when the EUR/USD exchange rate stood at 1.05.

As a result, the Group expects second quarter revenues to land in a range of EUR 725 - 825 million assuming a EUR/USD exchange rate of 1.13.

The company expects adj. EBITDA to come in at 18.5% + 1.5% on the back of seamless execution ahead of plan of its Re-establish the Base strategic efficiency program.

FY 2025 commentary

The company continues to expect a stronger second half mainly due to product ramp-ups and seasonality. A market normalization can still materialize but is subject to potential impacts to global car production, smartphone sales, or other impact to GDP, following the recent introduction or announcement of elevated tariffs in the US.

The company expects improving profitability driven by its 'Re-establish the Base' program even in case of lower predictability of its topline, CAPEX spendings of less than 8% of sales (including capitalized R&D and expected investment grants, e.g. from the European Chips Act).

The company continues to expect positive free cash flow (incl. net interest paid) exceeding EUR 100 million due to improved earnings, lower capex and reduced NWC in FY25.

Additional Information

Additional financial information for the first quarter 2025 is available on the company website. The first quarter 2025 investor presentation incl. detailed information is also available on the company website.

ams OSRAM will host a press call as well as a conference call for analysts and investors on the first quarter 2025 results on Wednesday, 30 April 2025. The conference call for analysts and investors will start at 9.45 am CEST and can be joined via webcast. The conference call for journalists will take place at 11.00 am CEST.

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Power Electronics

27) Delta Electronics expects higher Q2 revenue before tariff hit

May 01, 2025 By Meryl Kao Taipei Times Power supply and electronic components maker Delta Electronics Inc yesterday said secondquarter revenue is expected to surpass the first quarter, which rose 30 percent year-on-year to NT\$118.92 billion (US\$3.71 billion).

Revenue this quarter is likely to grow, as US clients have front-loaded orders ahead of US President Donald Trump's planned tariffs on Taiwanese goods, Delta chairman Ping Cheng said at an earnings conference in Taipei, referring to the 90-day pause in tariff implementation Trump announced on April 9.

While situations in the third and fourth quarters remain unclear, "We will not halt our long-term deployments and do not plan to change our budget this year," Cheng said.

Asked whether Delta would build a new factory in the US, Cheng said the company has sufficient production sites around the world and would assess total costs, not just tariffs, before making a decision.

Delta has about 50 percent of its production capacity in China, while it continues to build new factories in Thailand, and maintains sufficient capacity at sites in Taiwan and India, he said.

"We are now building around five new factories in Thailand, and are considering designating it as our second headquarters," Cheng said. "Our data center in Thailand has been well established, and can retrieve data from our headquarters in Taiwan with only two days of information loss."

The company also operates small-scale production facilities in the US, Slovakia and Brazil, he added.

Asked about the company's recent design progress on the new heat dissipation components made for Nvidia Corp's GB300 server, Delta vice president for corporate investment Lanford Liu (???) said the design is still under discussion.

If power consumption continues to rise, some high-end products might require immersion cooling technology, leaving room for further thermal design adjustments, he added.

While traditional data centers can still support graphics processing units (GPUs) such as the H100 and H200 with air-cooling systems, newer models like the GB200 and GB300 require water cooling, and are incompatible with existing layouts and power infrastructure, Cheng said at a separate forum yesterday.

To address this, Delta created a new artificial intelligence (AI) containerized data center that integrates computer racks, cooling systems and power supply units.

The modules are preassembled at factories and can be deployed quickly on-site by simply connecting the cables, he said.

In the first quarter, Delta's net profit reached NT\$10.23 billion, or earnings per share of NT\$3.94 - the second-highest ever - driven by growing demand for AI power supply products and heat dissipation components.

Gross margin rose 2.3 percentage points year-on-year to 31.8 percent, while gross profit reached NT\$37.8 billion, up 40 percent from a year earlier due to a lower base effect, Delta chief financial officer Yu Po-wen said.

Operating expenses rose 21 percent in the first quarter due to higher machinery purchases, but are expected to decline in the following quarters, Yu said.

Sales of power electronics products rose 39 percent year-on-year to NT\$59.77 billion in the first quarter, accounting for 50 percent of Delta's total sales, followed by infrastructure at 29 percent, automation at 12 percent and mobility at 9 percent.

Printed Circuit

28) ICAPE Group Appoints Nathan Martin as Chief Operating Officer to Drive Global Operational Excellence

30 April, 2025 PCB Directory

ICAPE Group announces the promotion of Nathan Martin to the role of Chief Operating Officer (COO). This strategic appointment reflects the Group's commitment to operational excellence and long-term growth.

Since joining ICAPE Group in 2015 as a Sales Engineer for Northern Europe, Nathan has consistently demonstrated strong leadership and in-depth industry knowledge. He advanced to Purchasing Manager in 2016, then to Purchasing Director for PCBs and Technical Parts in 2018, also joining the Executive Committee. His appointment as COO in 2025 crowns a decade of dedication and success within the company.

Nathan Martin, COO of ICAPE Group: "This new role is both a great honor and a responsibility. My focus will be on strengthening our operational processes and continuing to deliver the highest level of service to our customers around the world."

Yann Duigou, CEO of ICAPE Group: "Nathan's adaptability, relationship skills, and deep expertise in supply chain and supplier management make him the ideal leader to support our next phase of growth. His appointment ensures continuity and operational excellence across all levels."

With extensive experience in supply chain management and global operations, Nathan Martin has been a key player in ensuring supplier performance and seamless collaboration between our customers and sales teams. Having spent 7 years in Asia, he brings a deep understanding of international markets, and his fluency in Mandarin, English, and French enhances our global operations.

29) Nandian is actively entering the field of IC substrates for cloud Al servers, AI PCs, edge AI, and other applications, and is also focusing on multi-layer boards and high-density connection boards for drones and low-orbit satellites

Printed Circuit

2025/04/30 TPCA

Wu Jiazhao, chairman of IC substrate giant Nandian, said that with the increase in tariffs and geopolitical risks, semiconductor manufacturers need to diversify their production bases, and Taiwan's circuit board manufacturers are facing challenges. This year, Nandian is actively entering the field of IC substrates for cloud AI servers, AI PCs, edge AI, and other applications, and is also focusing on multi-layer boards and high-density connection boards for drones and low-orbit satellites.

Nanfang Electric will hold a shareholders' meeting on May 27 to observe the global political and economic situation. Wu Jiazhao pointed out in the business report to shareholders that the US-China technology war is heating up. The United States has imposed comprehensive controls on semiconductor equipment, technology and products exported to China, affecting supply chain sales. Tariffs and geopolitical risks have increased. Semiconductor manufacturers need to diversify their production bases, increase operating costs, and Taiwan's circuit board manufacturers face challenges.

Analyzing Taiwan's semiconductor industry, Wu Jiazhao believes that Taiwanese manufacturers have leading technology, strong clustering effects, and a complete upstream and downstream supply chain. International giants continue to strengthen cooperation with Taiwanese semiconductor manufacturers, and cloud service providers are actively developing application-specific integrated circuits (ASICs) for artificial intelligence (AI) applications on their own, so potential business opportunities are expected.

Looking ahead to Nanfang Electric's operations this year, regarding cloud computing applications for IC substrates, Wu Jiazhao pointed out that Nanfang Electric and its customers are developing large-size, multi-layer IC substrates such as cloud AI server processors and high-speed switches. In the application of artificial intelligence computers (AIPC), Nandian is preparing to mass-produce high-end PC central processing unit (CPU) and graphics processing unit (GPU) application IC substrates to meet the business opportunities in the AI ??PC market.

Regarding mobile devices and edge AI applications, Wu Jiazhao stated that Nandian continues to develop system-in-package (SiP) substrates with customers. In addition to being used in high-end AI mobile phones, it can also be expanded to head-mounted devices to seize edge AI products such as virtual reality and augmented reality (VR/AR).

Regarding general circuit boards, Wu Jiazhao pointed out that Nanfang Digital focuses on interposers for new-generation mobile devices, as well as multi-layer boards and high-density connection boards for high-end laptops, drones, and low-orbit satellite applications, and is expanding server applications. Nanfang Digital will also mass-produce circuit boards for high-end graphics chip display cards and network communication cards.

Looking ahead to the consumer electronics industry, Wu Jiazhao said that inventory levels are gradually returning to normal, and monetary policy is expected to begin to ease and manufacturers will replenish inventory. The demand for consumer electronics will grow moderately. Coupled with the continued development of cloud and edge computing, the operating performance of related manufacturers this year will be better than in 2023.

Wu Jiazhao pointed out that this year, Nandian will hire more professional talents in research and development, process improvement, and AI, and promote digital optimization projects to implement intelligent operations.

(News source: United News Network)

30) Schweizer Electronic Publishes Group Figures for 2024 and Provides Outlook for 2025

Printed Circuit

Schweizer Electronic AG confirms Group figures and outlook for 2024 Turnover increases to EUR 139.4 million EBITDA at EUR 47.4 million - high income from deconsolidation Outlook for the year 2024 remains positive

Schramberg, April 29, 2024 - SCHWEIZER today announces the publication of the annual report for 2023 and confirms the preliminary figures. The SCHWEIZER-Group (according to IFRS) generated sales of EUR 139.4 million in 2023 (previous year: EUR 131.0 million). This corresponds to an increase of 6.4% compared to the previous year. This growth was made possible by a strong fourth quarter.

Sales from own production increased slightly compared to the previous year to EUR 93.8 million (2022: EUR 92.4 million). Sales of products from our strategic partners increased by 18% to EUR 45.6 million (2022: EUR 38.6 million). The share of sales generated by trading goods thus amounts to 32.7% (2022: 29.5%).

Sales of EUR 98.9 million were generated with automotive customers, which corresponds to an increase of +12.6% compared to the previous year. The share of sales with automotive customers is 71.0% (2022: 67.1%). This development reflects the increasing momentum in the automotive sector, after the industry was still severely impacted by supply bottlenecks for electronic components in the previous year.

The order backlog totalled EUR 251.3 million at the end of the reporting year. Of this, an order backlog totalling EUR 152.0 million is due for delivery in 2024.

The gains from the deconsolidation of Schweizer Electronic (Jiangsu) Co., Ltd., China and an operational turnaround in business results led to earnings before interest, taxes, depreciation and amortisation (EBITDA) of EUR 47.4 million or 34.0%. Adjusted for the result in China and the positive deconsolidation result of the investment in Schweizer Electronic (Jiangsu) Co. Ltd, China, EBITDA of EUR +8.9 million was achieved (2022: EUR +5.0 million). This corresponds to an EBITDA ratio of 6.4%.

The sale of the majority stake in Schweizer Electronic (Jiangsu) Co., Ltd., China, significantly improved the Group's equity ratio to 24.3% (31.12.2022: -5.5%) and the net gearing ratio fell to 64.2%.

Compared to the previous year, total assets decreased by EUR -54.2 million to EUR 106.1 million. This change is mainly due to the fact that the sale of the majority stake in the Chinese subsidiary had not yet been completed as at 31 December 2022 and the resulting balance sheet item 'Assets held for sale' totalling the resulting balance sheet item 'Assets held for sale' totalling EUR 78.8 million.

Nicolas-Fabian Schweizer, CEO of Schweizer Electronic AG: 'The successful realisation of the sale of shares in Schweizer Electronic (Jiangsu) and the operational handover of the plant to our partner WUS Printed Circuit (Kunshan) Co., Ltd. has been completed. The production ramp-up of our embedding products in Jintan, which was planned from the outset, has been successfully completed. At the same time, our strategy was adapted in 2023 in line with the new company structure and changing market conditions. The increased focus on technology, diversification of customer groups and addressing new market regions - in particular North America - are in full swing and already showed the first signs of success in 2023.'

Marc Bunz, CFO, added on the outlook: 'After 2023 was strongly characterised by the sale of the majority stake in Schweizer Electronic (Jiangsu) Co, Ltd, China, 2024 will only be slightly influenced by special effects from this transaction. Thanks to the strategic realignment, we

achieved a remarkable turnaround in earnings and in the cash and balance sheet ratios in 2023. The adjusted strategy can be consistently pursued and realised from 2024. The fab-light strategy will lead to a reduced use of financial resources for capacity investments. Investments will be focussed on the Schramberg site, while the partnerships in Asia will enable broad-based growth to be achieved without the company having to invest in its own facilities.'

Forecast / Outlook:

Sales forecast - another record year expected

Based on current information, we expect sales of between EUR 140 million and EUR 150 million for 2024 (2023: EUR 139.4 million). We therefore expect to exceed the record year of 2023 once again. Growth will be driven by the ramp-up of major projects in the automotive sector. Of particular note here is embedding technology, which is currently being used for hybrid drive technologies in the 48-volt range but will later also be used in high-voltage applications to improve the energy yield of BEVs. Despite promising projects with industrial customers, these will not be able to achieve the growth rates of the automotive sector due to the ongoing challenges in the mechanical engineering and construction sectors.

Earnings forecast - EBITDA expected to exceed EUR 10 million again

The expectation for EBITDA is between EUR +10 and +11 million. We therefore consider it realistic to increase EBITDA by around 10% on an adjusted basis compared to 2023.

Balance sheet figures continue to stabilise

We expect to close the year 2024 with an equity ratio of 25 to 28% and a stable net gearing ratio of between 50 and 80%.

31) Summit Interconnect Hollister Elevates PCB Prototyping with New TiTAN Direct Imaging System

Printed Circuit

04/24/25

Summit Interconnect's Hollister facility has recently enhanced its quick-turn PCB prototyping capabilities by installing the TiTAN PSR-H Direct Imaging (DI) system. This advanced equipment, developed by CBT and supplied by Technica USA, is renowned for its high-speed, high-resolution imaging capabilities, particularly for photoimageable solder masks.

The TiTAN PSR-H model offers several key features:?

High-Speed Imaging: Recognized as the fastest in its class for all photoimageable solder masks, including standard, black, and white variants.?

Versatility: Capable of handling both dry film and solder mask printing with exceptional front-toback registration accuracy.

Precision: Delivers print resolutions down to 10 microns, powered by CBT's patented technology.

This installation aligns with Summit Interconnect's commitment to integrating cutting-edge technology across its facilities to meet the evolving demands of the PCB industry. The Hollister site, known for specializing in 24-hour quick-turn PCB prototyping, will benefit from the TiTAN system's capabilities, ensuring faster turnaround times and enhanced quality for complex PCB designs.?

By investing in such advanced imaging technology, Summit Interconnect reinforces its position as a leading provider of high-reliability, advanced technology printed circuit boards in North America. This move not only boosts the Hollister facility's operational efficiency but also enhances its ability to serve industries requiring rapid prototyping and precision manufacturing.

32) TTM Technologies, Inc. Reports First Quarter 2025 Results

Printed Circuit

SANTA ANA, Calif., April 30, 2025 (GLOBE NEWSWIRE) -- TTM Technologies, Inc. (NASDAQ: TTMI) ("TTM"), a leading global manufacturer of technology solutions, including mission systems, radio frequency ("RF") components, RF microwave/microelectronic assemblies, and quick-turn and technologically advanced printed circuit boards ("PCB"s) today reported results for the first quarter 2025, which ended on March 31, 2025.

First Quarter 2025 Highlights

Net sales were \$648.7 million, up 14% year on year

GAAP net income of \$32.2 million, or \$0.31 per diluted share

Non-GAAP net income of \$52.4 million, or \$0.50 per diluted share, a record high for a first quarter

Cash usage from operations of \$10.7 million due to an increase in working capital

Book to bill of 1.10 for the first quarter A&D program backlog \$1.55 billion

First Quarter 2025 GAAP Financial Results

Net sales for the first quarter of 2025 were \$648.7 million, compared to \$570.1 million in the first quarter of 2024.

GAAP operating income for the first quarter of 2025 was \$50.3 million compared to GAAP operating income for the first quarter of 2024 of \$17.1 million.

GAAP net income for the first quarter of 2025 was \$32.2 million, or \$0.31 per diluted share, compared to GAAP net income for the first quarter of 2024 of \$10.5 million, or \$0.10 per diluted share.

First Quarter 2025 Non-GAAP Financial Results

On a non-GAAP basis, net income for the first quarter of 2025 was \$52.4 million, or \$0.50 per diluted share. This compares to non-GAAP net income of \$29.1 million, or \$0.28 per diluted share, for the first quarter of 2024.

Adjusted EBITDA in the first quarter of 2025 was \$99.5 million, or 15.3% of sales compared to adjusted EBITDA of \$70.5 million, or 12.4% of sales for the first quarter of 2024.

"We delivered a strong quarter with revenues and non-GAAP EPS above the high end of the guided range. Revenues grew 14% year on year due to demand strength in our Aerospace and Defense, Data Center Computing and Networking end markets, the latter two being driven by generative AI," said Tom Edman, CEO of TTM. "Non-GAAP operating margins were 10.5%, up 340 basis points year on year, and were double digit for the third consecutive quarter, reflecting continued solid execution, particularly in a normally challenging first quarter. Finally, non-GAAP EPS was a record high for a first quarter at \$0.50 per diluted share," concluded Mr. Edman.

Business Outlook

For the second quarter of 2025, TTM estimates that revenues will be in the range of \$650 million to \$690 million, and non-GAAP net income will be in the range of \$0.49 to \$0.55 per diluted share.

With respect to the Company's outlook for non-GAAP net income per diluted share, we are unable to predict with reasonable certainty or without unreasonable effort certain items that may affect a comparable measure calculated and presented in accordance with GAAP. Our expected non-GAAP net income per diluted share excludes primarily the future impact of restructuring actions, impairment charges, unusual gains and losses including but not limited to unrealized foreign exchange translation, and tax adjustments. These reconciling items are highly variable and difficult to predict due to various factors outside of management's control and could have a material impact on our future period net income per diluted share calculated and presented in accordance with GAAP. Accordingly, a reconciliation of non-GAAP net income per diluted share to a comparable measure calculated and presented in accordance with GAAP has not been provided because the Company is unable to provide such reconciliation without unreasonable effort. For the same reasons, TTM is unable to address the probable significance of the information.

Live Webcast/Conference Call

TTM will host a conference call and webcast to discuss first quarter 2025 results and the second quarter 2025 outlook on Wednesday, April 30, 2025, at 4:30 p.m. Eastern Time (1:30 p.m. Pacific Time). The conference call will include forward-looking statements.

Access to the conference call is available by clicking on the registration link TTM Technologies, Inc. first quarter 2025 conference call. Registering participants will receive dial in information and a unique PIN to join the call. Participants can register at any time up to the start of the conference call. The conference call will also be simulcast on the company's website, and can be accessed by clicking on the link TTM Technologies Inc. first quarter 2025 webcast. The webcast will remain accessible for one week following the live event.

To Access a Replay of the Webcast

The replay of the webcast will remain accessible for one week following the live event on TTM's website at TTM Technologies Inc. first quarter 2025 webcast.

About TTM

TTM Technologies, Inc. is a leading global manufacturer of technology solutions, including mission systems, RF components, RF microwave/microelectronic assemblies, and quick-turn and technologically advanced PCBs. TTM stands for time-to-market, representing how TTM's time-critical, one-stop design, engineering and manufacturing services enable customers to reduce the time required to develop new products and bring them to market. Additional information can be found at <u>www.ttm.com</u>.

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Process Equipment

33) Inspec Lands AI-Driven Equipment Orders and Boosts Starting Salaries Amid Growth Push

Apr 30,2025 HuNan Printed Circuit Association of China

Japanese equipment manufacturer Inspec (TSE: 6656) announced a series of strategic developments this month, including large-scale inspection equipment orders tied to the AI boom and a company-wide starting salary increase aimed at strengthening talent acquisition.

On April 28, Inspec reported it had received multiple major orders from domestic clients for roll-toroll inspection systems and visual inspection equipment, with a total contract value of approximately \370 million. The systems are designed to meet demand fueled by the rise of generative AI smartphones, and will be used to inspect flexible printed circuits (FPCs) and precision parts used in advanced AI semiconductor devices and production lines.

Delivery is scheduled for the fiscal year ending April 2026 (FY2026), meaning the orders will not impact FY2025 earnings. Inspec said it discloses any single order exceeding 10% of its full-year revenue forecast as a major contract. Following the announcement, the company's shares saw strong buying interest after the market closed on April 28.

Earlier this month, on April 9, Inspec revealed another large order from an overseas customer, involving multiple semiconductor packaging substrate inspection systems and related equipment. The contract is valued at over \780 million, including \230 million that was already booked in February 2025. Delivery is also expected to take place in or after FY2026. Inspec noted that the deal reflects growing infrastructure demand from the rapid expansion of AI data centers, driven by breakthroughs in generative AI and large-scale data processing needs.

In addition to the strong business momentum, Inspec also announced a starting salary increase effective May 1, 2025, for new employees joining from that date onward. The revised monthly salaries are as follows:

Master's graduates: \260,000 (up from \238,300, +9.1%) University graduates: \240,000 (up from \218,300, +9.9%) Junior college graduates: \210,000 (up from \188,300, +11.5%) High school graduates: \190,000 (up from \168,300, +12.9%)

Inspec stated the move is part of a broader effort to invest in human capital, improve employee engagement, and strengthen its organizational capacity to support sustainable long-term growth.

34) KLA Corporation Reports Fiscal 2025 Third Quarter Results; Announces an Increase in the Dividend Level to \$1.90 Per Share and a \$5 billion Increase in Share Repurchase Authorization

Process Equipment

Total revenues were \$3.06 billion, above the midpoint of the guidance range of \$3.0 billion +/-\$150 million;

GAAP diluted EPS was \$8.16 and non-GAAP diluted EPS was \$8.41, both above the midpoints of the respective guidance ranges;

Cash flow from operating activities for the quarter and last nine months were \$1.07 billion and \$2.92 billion, respectively, and free cash flow was \$990.0 million and \$2.68 billion, respectively;

Capital returns for the quarter and last nine months were \$732.5 million and \$2.37 billion, respectively; and

The Board of Directors approved an increase to the quarterly dividend level to \$1.90 per share beginning with the dividend expected to be declared in May 2025 and an additional \$5 billion for repurchases of our common stock.

MILPITAS, Calif., April 30, 2025 /PRNewswire/ -- KLA Corporation (NASDAQ: KLAC) today announced financial and operating results for its third quarter of fiscal year 2025, which ended on March 31, 2025, and reported GAAP net income of \$1.09 billion and GAAP net income per diluted share of \$8.16 on revenues of \$3.06 billion.

"KLA's March quarter results were above the midpoint of our guidance ranges and established a strong start to the calendar year. Though global trade dynamics are driving uncertainty across the global economy, to date, we have received no indications of demand changes from our customers for calendar year 2025," said Rick Wallace, president and CEO, KLA Corporation. "We remain encouraged by KLA's growing relevancy in semiconductor manufacturing. Our leadership in process control is a key enabler of today's leading-edge AI investments by our customers and continues to be affirmed through recently published market share results. Our capital return announcements today reflect this confidence in the long-term value of KLA. As always, the KLA Operating Model continues to be fundamental as we make critical investments to drive differentiation across our product portfolio, and it guides our execution against long-term strategic objectives."

| GAAP Results | | | | | | | |
|------------------|---------|---------|---------|--|--|--|--|
| | Q3 FY | Q2 FY | Q3 FY | | | | |
| | 2025 | 2025 | 2024 | | | | |
| Total | \$3,063 | \$3,077 | \$2,360 | | | | |
| Revenues | million | million | million | | | | |
| Net | \$1,088 | \$825 | \$602 | | | | |
| Income | million | million | million | | | | |
| Net | | | | | | | |
| Income | | | | | | | |
| per | | | | | | | |
| Diluted | | | | | | | |
| Share | \$8.16 | \$6.16 | \$4.43 | | | | |
| Non-GAAP Results | | | | | | | |
| | Q3 FY | Q2 FY | Q3 FY | | | | |
| | 2025 | 2025 | 2024 | | | | |
| Net | \$1,121 | \$1,098 | \$715 | | | | |
| Income | million | million | million | | | | |
| Net | | | | | | | |
| Income | | | | | | | |
| per | | | | | | | |
| Diluted | | | | | | | |
| Share | \$8.41 | \$8.20 | \$5.26 | | | | |

A reconciliation between GAAP operating results and non-GAAP operating results is provided following the financial statements included in this release. KLA will discuss the results for its fiscal year 2025 third quarter, along with its outlook, on a conference call today beginning at 2 p.m. PT. A webcast of the call will be available at: <u>www.kla.com</u>.

Fourth Quarter Fiscal 2025 Guidance

The following details our guidance for the fourth quarter of fiscal 2025 ending in June:

Total revenues is expected to be in a range of \$3.075 billion +/- \$150 million GAAP gross margin is expected to be in a range of 61.7% +/- 1.0% Non-GAAP gross margin is expected to be in a range of 63.0% +/- 1.0% GAAP diluted EPS is expected to be in a range of \$8.28 +/- \$0.78 Non-GAAP diluted EPS is expected to be in a range of \$8.53 +/- \$0.78

For additional details and assumptions underlying our guidance metrics, please see the company's published Letter to Shareholders, Earnings Slide Presentation and Earnings Infographic on the KLA investor relations website (ir.kla.com). Such Letter to Shareholders, Earnings Slide Presentation and Earnings Infographic are not incorporated by reference into this earnings release.

Dividend Level Increase and Additional Share Repurchase Authorization

KLA Corporation is also announcing an increase in the quarterly dividend level to \$1.90 per share from \$1.70 per share, the sixteenth consecutive annual increase in the quarterly dividend level for KLA beginning with the dividend anticipated to be declared in May 2025. The declaration and payment of future dividends is subject to the Board's discretion and will depend on financial and legal requirements and other considerations. The Company is also announcing authorization from the Board of Directors to repurchase up to \$5 billion of the Company's common stock. This is in addition to the existing share repurchase authorization, which had approximately \$457 million remaining as of March 31, 2025.

Repurchases can be made using a variety of methods, which may include open market purchases, privately negotiated transactions, accelerated share repurchase programs, or otherwise, all in accordance with the requirements of the Securities and Exchange Commission and other applicable legal requirements. The specific timing, price and size of purchases will depend on prevailing stock prices, general economic and market conditions, and other considerations. The repurchase programs do not obligate the Company to acquire any particular amount of its common stock, and the repurchase programs may be suspended or discontinued at any time at the Company's discretion.

"Today's announcement is consistent with KLA's long-standing confidence in our business model focused on KLA market relevance, product differentiation, free cash flow generation and assertive capital allocation," commented Wallace.

About KLA:

KLA Corporation ("KLA") develops industry-leading equipment and services that enable innovation throughout the electronics industry. We provide advanced process control and processenabling solutions for manufacturing wafers and reticles, integrated circuits, packaging and printed circuit boards. In close collaboration with leading customers across the globe, our expert teams of physicists, engineers, data scientists and problem-solvers design solutions that move the world forward. Investors and others should note that KLA announces material financial information including SEC filings, press releases, public earnings calls and conference webcasts using an investor relations website (ir.kla.com). Additional information may be found at: <u>www.kla.com</u>.

Quantum Computing

35) Spain launches €800m quantum strategy

April 29, 2025 By Nick Flaherty EENewsEurope

The Government of Spain has launched its first Quantum Technologies Strategy with an investment of €800 million.

The funding aims to boost the Spanish quantum ecosystem, both in research and in the market, and prepare society for the change that these technologies represent.

The strategy runs until 2030 with funding from Europe's ERDF funds and the Recovery, Transformation and Resilience Plan. Both lines of funding also have the potential to attract public and private investments that could raise the total investment to an estimated $\in 1.5$ billion. This builds on a $\in 300$ m investment last year.

This aims to encourage funding for infrastructure and industrial application use cases in quantum computing, networking and sensors. One of the biggest potential beneficiaries is Multiverse Computing, a leading quantum firm based in Barcelona.

The funding will boost scaling up of Spanish quantum companies, with algorithmic and technology convergence between quantum and AI.

A €10m quantum communications hub, similar to the one launched in the UK, aims to boost the development of use cases in this field; the promotion of research and development in quantum photonics, and the implementation of training and dissemination initiatives. However this also risks falling behind the US.

"The digital transformation we are undergoing is driving disruptive technologies that will change the world as we know it. One of these is quantum, where competition for global leadership is starting to intensify. The quantum race will not be easy, but Spain can and needs to specialise in specific sectors such as quantum communications. This is a sector that will be transcendental to protect critical environments such as financial transactions and energy distribution networks," said Óscar López, Minister for Digital Transformation and Public Function, Óscar López.

"The Quantum Technologies Strategy we are presenting today is a giant step towards making Spain a leading country in this field", said Diana Morant, Minister for Science, Innovation and Universities. "Investing in quantum research and transferring this knowledge to industry is a commitment to our ability to lead the disruptive innovations that will define the 21st century."

Raw Materials

36) Ukraine, U.S. Sign Economic Deal for Minerals

The agreement, reached after several false starts, could set the stage for more U.S. military assistance

April 30, 2025 Alan Cullison Jane Lytvynenko WSJ

The U.S. and Ukraine struck a deal granting the U.S. access to Ukraine's mineral wealth.

The deal establishes a fund for Ukraine's reconstruction, with both nations contributing.

Ukraine retains control over its minerals, using new licenses to pay into the fund.

The Trump administration reached a deal Wednesday with Ukraine giving the U.S. access to its mineral wealth, overcoming last-minute haggling that had held up an agreement President Trump had sought to compensate the U.S. for helping Ukraine fight off Russia's invasion.

Treasury Secretary Scott Bessent hailed the deal as a step toward a negotiated end to the war in Ukraine and a beginning of the country's reconstruction. In tightly controlled negotiations, the Trump administration dropped its insistence that the agreement allow Washington to recoup billions of dollars of past military aid.

"As the President has said, the United States is committed to helping facilitate the end of this cruel and senseless war," Bessent said in a press release. "This agreement signals clearly to Russia that the Trump Administration is committed to a peace process centered on a free, sovereign, and prosperous Ukraine over the long term."

The agreement marks an improvement in relations between Kyiv and Washington, which have soured in recent months, not least over the deal for Ukraine's minerals. A one-on-one meeting between Trump and Ukrainian President Volodymyr Zelensky, at the Vatican ahead of Pope Francis' funeral last weekend, appears to have eased tensions between the two leaders.

A signed agreement will provide a morale boost for Ukraine as its people face daily bombardment from Russia. The attacks have killed and wounded dozens of civilians across the country in recent weeks as negotiations for a cease-fire continue without success.

Central to the agreement is an investment fund that both Ukraine and the U.S. will contribute to and oversee: the United States-Ukraine Reconstruction Investment Fund. The signing of the deal insures that the U.S. and its allies will take the lead in any reconstruction. "To be clear, no state or person who financed or supplied the Russian war machine will be allowed to benefit from the reconstruction of Ukraine," Bessent said.

Ukrainian Deputy Prime Minister Yulia Svyrydenko was in Washington on Wednesday to complete the deal. "Together with the United States, we are creating the Fund that will attract global investment into our country," she said in a post on X.

Trump has portrayed the deal as a way for the U.S. to recoup tens of billions of dollars in military aid to Ukraine. While the two sides were quiet about the details during talks in the past few weeks, officials in Kyiv on Wednesday said the deal contained a major concession to Ukraine. They said the latest draft doesn't require Kyiv to repay past military aid, which was a nonstarter for Zelensky.

The U.S. would be able to count new military aid as a contribution to the fund, according to the Ukrainian side.

One person familiar with negotiations in Washington said that the U.S. and Ukrainian teams stayed up all night Friday and into Saturday morning completing documents of the deal. They continued work until 1:30 a.m. Wednesday as well, this person said. But earlier on Wednesday, the two sides were still battling over how much of the agreement was supposed to be signed after Svyrydenko arrived in the U.S.

Heidi Crebo-Rediker, a senior fellow at the Council on Foreign Relations, said that after round-theclock negotiations between Washington and Kyiv there appeared to be "some miscommunication about what they would be signing" when Svyrydenko arrived in the U.S. She called the agreement a "win-win" deal for the U.S. and Ukraine, setting the stage for more U.S. military aid for Kyiv, which will then be counted as contribution to Ukraine's mineral development.

"The U.S. will have a vested interest in the geology that the Ukrainians will be fighting for," she said.

The deal is envisaged by the White House as a kind of security guarantee for Ukraine in the event of a cease-fire with Russia. Trump officials argue that U.S. business presence in Ukraine will deter Moscow from attacking the country again.

The fund will focus on rebuilding Ukraine and renewing the country's economy. Ukraine will retain control over its minerals, paying into the fund with new licenses it issues. The deal will be tax- and tariff-free for both countries, Ukrainian Prime Minister Denys Shmyhal said earlier Wednesday.

"This is a good achievement," Shmyhal said. "We understand how we will use this instrument in the future in working with our partner, with the United States of America."

The deal still needs to be ratified by the Ukrainian Parliament, Shmyhal said.

Zelensky initially proposed a mineral deal in summer 2024, before Trump's election, to woo Republican support. Ukraine has reserves of lithium, titanium and other rare-earth metals essential for everything from cellphones to the defense industry.

Kyiv saw the initial agreement presented by Bessent during a trip to Ukraine as a starting point for negotiations, while Washington hoped for the document to be signed on the spot.

Zelensky's refusal to sign a deal his administration only had a few hours to study sparked a war of words between the two leaders, culminating in a blowup at the White House between the Ukrainian president, Trump and Vice President JD Vance.

A critical disagreement was whether Ukraine was responsible for repaying costs of past assistance provided under the Biden administration. Trump, putting the cost of the aid at \$350 billion, said Ukraine must pay. Zelensky, who put the price tag at \$100 billion, said it was a nonstarter because the military assistance came in the form of grants.

Yet even as diplomatic relations between Kyiv and Washington deteriorated, hope for reviving the deal endured.

When the Trump administration sent another, different, proposal in late March, it spelled out sweeping demands Ukraine couldn't accept. That version of the agreement put repayment of debt back on the table and asked for broad control over the country's economy, conflicting with Ukraine's obligations to the European Union, the World Bank and the International Monetary Fund.

Rather than balking at the March proposal, Ukrainians continued negotiating. Weeks later, a memorandum of understanding was signed virtually by Bessent and Svyrydenko, who had been instrumental in the negotiations.

The memorandum spelt out a path toward a more comprehensive agreement that would establish a fund for the reconstruction and economic investment of Ukraine. The latest draft explicitly respects Ukraine's international obligations, Shmyhal said.

Last week Trump scolded Zelensky in a post on Truth Social for not having signed the expanded mineral agreement.

"Hopefully, it will be signed IMMEDIATELY," Trump wrote Friday.

His tone appeared to soften by the time of an interview with ABC News that aired Tuesday, in which he was asked about meeting Zelensky at the Vatican.

"The moment was a moment of solace, in a sense," said Trump. "Because tremendous amounts of people are dying, a lot of people are dying and being killed."

Satellites

37) SES in talks with EU over long-term option to complement Starlink

April 30 (Reuters) - European satellite company SES (SESFg.LU) is in talks with EU and other governments about complementing services provided by Elon Musk's Starlink, its CEO told Reuters, as the region looks for home-grown options for its space-based communications.

As tensions with the U.S. over Ukraine escalated, the European Union in March contacted the bloc's satellite operators - including SES and France's Eutelsat (ETL.PA)- to see how they might contribute if Washington cut Kyiv's access to Starlink.

The European Commission also suggested last month that the EU should fund access to EU-based satellite operators for Kyiv.

SES CEO Adel Al-Saleh told Reuters that discussions had branched out to consider wider options.

"Now the discussions are much more strategic in nature They're much more mid-term, long-term. And what we're seeing is all of the European governments are serious about increasing their defence spending," he said in an interview.

"There are alternatives, not to completely replace Starlink, that's not possible, but to augment and complement Starlink," he added.

SES, which operates a multi-orbit fleet of about 70 satellites, has contracts with NATO and the Pentagon for secure government and military satellite communications.

Besides geostationary satellites, the Luxembourg-based company has more than 20 medium Earth orbit (MEO) satellites, with more planned for launch over the coming years, and a goal of reaching 100 at some point, according to Al-Saleh.

These satellites sit 8,000 km (4,970 miles) above Earth, sending data faster than traditional ones and providing high-speed internet for government communications and consumers in underserved areas.

But stiff competition from players such as Starlink, Amazon's Kuiper and China's SpaceSail, which plan to have thousands of satellites in low-Earth orbit, is raising concerns in Europe over its reliance on foreign solutions.

"The most significant demand (for us) is European nations investing in space, much more than what they did before," Al-Saleh said.

Still, nations building their own satellite constellations are not enough to create a global network with global resilience capability, he said.

"It is not right to say they just want to avoid Starlink or the Chinese. They want to avoid being dependent on one or two providers. They want to have flexibility."

Reporting by Gianluca Lo Nostro and Alessandro Parodi. Editing by Mark Potter

Semiconductor

38) Europe will miss its target of a 20% share of the global market for semiconductors by 2030 says a report by the European Court of Auditors

April 29, 2025 By Nick Flaherty EENewsEurope

Europe will miss its target of a 20% share of the global market for semiconductors by 2030 says a report by the European Court of Auditors.

The investments from the 2022 EU Chips Act has brought momentum to the European chip sector, but are unlikely to significantly enhance the EU's position say the auditors who are calling for a 'reality check'.

The EU urgently needs a reality check in its strategy for the microchips sector", said Annemie Turtelboom, the ECA Member in charge of the audit. "This is a fast-moving field, with intense geopolitical competition, and we are currently far off the pace needed to meet our ambitions. The 20 % target was essentially aspirational – meeting it would require us to approximately quadruple our production capacity by 2030, but we are nowhere close to that with our current rate of progress. Europe needs to compete – and the European Commission should reassess its long-term strategy to match the reality on the ground".

The Commission is responsible for only €4.5bn of the €86 billion in estimated funding for the Chips Act up to 2030. The remainder is expected to come from member states and industry.

For comparison, the top global manufacturers budgeted €405 billion in investment over just three years, which dwarves the financial firepower of the Chips Act. This is expected to increase the region's share to just 11.7 % by 2030, up from 8% in 2024.

This may not strengthen calls for a second version of the EU CHIPS Act to speed up funding.

Dependency on imports of raw materials, high energy costs, environmental concerns, geopolitical tensions and export controls, and a shortage of skilled workers will also hold back the region, says the report.

It urges urgently carry out a reality check on the Chips Act to assess whether the ambitions and targets that it contributes to remain realistic in view of the resources available to achieve them, global competition, as well as other crucial factors, such as energy cost and dependence on raw materials. This would need appropriate short-term corrective action to help achieve the strategic objectives.

A new semiconductor strategy with clearer targets needs to include a coordinated approach at EU level, including interactions with competing economies on a global scale by 2026, as well as more complete data.

The report is here: ECA Semiconductor report https://ee.cdnartwhere.eu/wp-content/uploads/2025/04/ECA-Semiconductor-report.pdf

39) CR Micro semiconductor upcycle soars on SiC, GaN breakthroughs amid strong 2024 results

Semiconductor

Wednesday 30 April 2025 Levi Li, DIGITIMES Asia, Taipei

China Resources Microelectronics Ltd. (CR Micro) reported steady gains in its 2024 annual and 2025 first-quarter results, underscoring resilience in a volatile chip market. Full-year revenue rose 2.2% to CNY10.119 billion (US\$1.39 billion), with net profit reaching CNY762 million. In the fourth quarter of 2024, revenue grew 11.65% year-over-year to CNY2.647 billion, while net profit jumped 20.18% quarter-over-quarter to CNY263 million.

In the first quarter of 2025, CR Micro's revenue increased 11.29% year-over-year to CNY2.355 billion, while net profit soared 150.68% to CNY83 million.

CR Micro recently inked a strategic partnership with Midea Group at its Global Innovation Center in Foshan, Guangdong, to collaborate on smart power modules, power ICs, microcontrollers, and sensors.

The alliance will focus on integrating semiconductor technologies into next-generation home appliances, with plans to set up joint labs for faster R&D and commercialization, supporting Midea's digital transformation and expanding CR Micro's IDM ecosystem into new verticals.

Major projects progress steadily as IDM supply chain gains traction

In 2024, CR Micro advanced major projects aimed at expanding production capacity and accelerating innovation, laying the groundwork for long-term growth amid intensifying industry competition.

Its 12-inch power semiconductor fab in Chongqing was central to the company's upgrade of its power device offerings. CR Micro ramped up development and mass production of mid- and high-voltage MOSFETs and IGBTs using the fab's process advantages.

These chips are now in volume deployment across EV onboard chargers, domain controllers, servers, and battery management systems, helping raise the new energy segment's revenue contribution to 41%.

By the end of 2024, CR Micro's 12-inch fab in Shenzhen will enter pilot production. The facility specializes in 40nm and above analog processes, targeting power and RF components for consumer electronics, industrial automation, and electric vehicles.

The company also expanded its advanced packaging operations, covering module-level power packaging, mid-end wafer processing, panel-level packaging, and third-generation semiconductor packaging.

In 2024, CR Micro's panel-level packaging (PLP) revenue rose 44% year-over-year, while SiP module packaging entered mass production. Power packaging revenue at its Run'an site surged 237%, with IPM modules also scaling up.

Market momentum drives future growth opportunities

Analysts expect the global semiconductor market to top US\$690 billion in 2025, with forecasted growth between 11% and 15%. WSTS sees the market reaching US\$697.2 billion, driven by gains of 16.8% in logic, 13.4% in memory, and 7.0% in sensors. Automotive and industrial demand is projected to lift microcontroller and discrete device sales by 5.6% and 5.8%, while analog chips are set for a 4.7% rebound.

Gartner projects the market will reach US\$705 billion, up 12.6% from 2024. IDC forecasts 15% growth, powered by AI and high-performance computing, with memory sales expected to jump over 24% and non-memory categories to grow 13%.

Against this backdrop, CR Micro is accelerating its push into automotive electronics and industrial control, deepening supply chain integration, and upgrading its offerings across end markets.

Next-gen semiconductor leadership emerges

In third-generation semiconductors, CR Micro has fast-tracked its development of SiC and GaN technologies. Its Gen-2 SiC MOS devices now match global benchmarks, while its Gen-3 SiC JBS chips lead in power density. Automotive-grade SiC modules have been certified by major EV makers and entered mass production, with deployments in EVs and solar-storage inverters.

GaN devices gained traction as well, with full-scale Gen-3 production and a rapid ramp-up of highpower Gen-4 products. R&D for Gen-5 is already underway. These gains helped CR Micro secure rankings among China's top 10 SiC IDM firms and top 10 GaN device suppliers.

Looking forward, CR Micro plans to scale and refine its SiC and GaN platforms, leveraging IDM strengths to offer cost-effective solutions for markets such as automotive electronics, data centers, EV charging, solar-storage systems, and premium consumer devices.

CR Micro will also step up its sensor strategy by expanding manufacturing and diversifying process capabilities. It's enhancing its CMOS+MEMS portfolio with new pressure sensors, silicon microphones, inertial sensors, and optical sensors, including a new line of health-monitoring photonic sensors.

With surging demand for AI and data-driven compute power, growth in areas like AI, EVs, and advanced packaging is expected to remain robust. Positioned at the heart of these trends, CR Micro is well-placed to activate new capacity from major projects and pursue innovation-led expansion across today's and tomorrow's chip markets.

40) Intel CEO's four turnaround strategies unveiled

Semiconductor

Wednesday 30 April 2025 Monica Chen, San Jose; Charlene Chen, DIGITIMES Asia

Facing the biggest crisis in Intel's history, CEO Lip-Bu Tan brings his extensive semiconductor supply chain and competitive landscape expertise to bear. Since taking office, he has swiftly implemented a comprehensive organizational overhaul while pinpointing the critical issues hampering Intel Foundry's progress.

Made in America

Supply chain insiders noted that Intel's release of its roadmap signals readiness. US President Donald Trump's strong promotion of "Made in America" is bolstering Intel's government contracts and significantly increasing corporate client orders and testing activities.

Advocating trust

Tan champions the principle of "trust," prioritizing listening to and fulfilling customer needs. This stance has dispelled rumors about Intel requiring external rescue efforts. Under his guidance, Intel aims to become self-reliant, with a leaner and more efficient structure.

Pragmatic roadmap

According to Intel's latest disclosed process roadmap, the globally watched Intel 18A node has entered risk production stages, with volume production expected by the end of 2025. Ecosystem partners are prepared to support production designs with electronic design automation (EDA) tools, reference flows, and silicon intellectual property (IP).

The new derivative process, Intel 18A-P, will offer enhanced performance, with early wafers already available. Building upon 18A-P's performance and power efficiency, Intel 18A-PT employs Foveros Direct 3D hybrid bonding technology to connect top chips, achieving interconnect pitches smaller than $5\mu m$.

Intel has begun collaborating with key customers on Intel 14A, with several clients expressing intent to produce test chips at this new node. Intel 14A will adopt PowerDirect, an evolution of Intel 18A's PowerVia power delivery technology.

Coexistence with TSMC

Industry sources revealed that Tan maintains friendly relations with multiple senior executives at TSMC(2330.TW), rapidly warming ties between the two companies. Under geopolitical pressures, TSMC also hopes for Intel to strengthen its independence. Intel's revenue contribution from TSMC is reportedly peaking in 2025, with cooperation expected to continue thereafter.

The first processors adopting Intel 18A will be Panther Lake, set to succeed Arrow Lake by the end of 2025. Models include Panther Lake-HX 12Xe/H484/H404, targeting fierce competitors such as AMD, Qualcomm, and AI PCs developed through collaboration between Nvidia and MediaTek.

Notably, all compute tiles in Panther Lake utilize Intel 18A, base tiles employ 14nm processes, GFX tiles use TSMC N3E and Intel 3 processes, SoC tiles rely on TSMC 6nm technology, and the next-generation Nova Lake platform in 2026 will feature parallel use of Intel 18A and TSMC 2nm nodes.

Unaffected by organizational restructuring, Intel Foundry Direct Connect 2025 proceeded as scheduled. Besides UMC and MediaTek, executives from Taiwanese suppliers, including eMemory, Faraday, and M31, also participated personally, demonstrating strong support for Intel Foundry.

41) Queen Mary University of London, University of Nottingham and University of Glasgow Scientists have been granted £6 million to develop single-atomic layer semiconductors under a program called NEED2D

Semiconductor

April 29, 2025 By Peter Clarke EENewsEurope The materials to be developed include graphene and related compounds, in which electrons travel with greater efficiency than in silicon. This reduces energy wasted as heat and aids miniaturization and 3D stacking.

Part of the money is being provided by the Engineering and Physical Sciences Research Council (EPSRC) and has been granted to a team of scientists from Queen Mary University of London, University of Nottingham and University of Glasgow. Some £2 million will be provided by more than 20 manufacturers and research institutions with which NEED2D is expected to work.

No partners were named and the announcement did not mention how long NEED2D is expected to run or any pathway from research to development and into commercialization.

IMEC (Leuven, Belgium) works with most of the leading semiconductor manufacturers and is proposing the introduction of transition metal dichalcogenides (MX2) into the semiconductor channel of silicon transistors (see IMEC adds 2D semiconductor channels to logic scaling roadmap).

Sir Colin Humphreys, Professor of Materials Science at Queen Mary University of London, who leads the NEED2D project, said that two-dimensional materials have can save 90 percent of the energy required by data centers and thereby help UK meet Net Zero goals.

The UK's National Grid for electrical supply predicts that 30 percent of its supply will be used for data centers by 2034

Professor Sir Colin Humphreys, was a co-founder of graphene electronics startup Paragraf Ltd. (Somersham, England) in 2015 and served the company as chairman in its early years.

www.qmul.ac.uk

42) Samsung says trade turmoil raises chip business volatilities, may hit phone demand

Semiconductor

Samsung's Q1 operating profit rises 1.2% to 6.7 trillion won

Stockpiling of chips and phones ahead of U.S. tariffs helps lift earnings - analysts

Samsung's mobile business profit 4.3 trillion won, highest in 4 years

Chip profit down 42% to 1.1 trillion won

SEOUL, April 30 (Reuters) - South Korean technology giant Samsung Electronics (005930.KS)warned on Wednesday U.S. tariffs could cut demand for products such as smartphones, making it difficult to predict future performance.

Samsung said it expected its semiconductor business to encounter greater uncertainties throughout the year, while its smartphone shipments faced downward pressure in the second quarter.

The cautious outlook from one of the world's biggest electronics manufacturers reflects the uncertainties roiling global trade due to U.S. President Donald Trump's tariff war, and comes a day after General Motors (GM.N)pulled its annual forecast.

The world's largest memory chipmaker reported a small rise in first-quarter operating profit as customers concerned about U.S. tariffs rushed to purchase smartphones and commodity chips, mitigating the impact of its underperforming artificial intelligence chip business.

It reported 6.7 trillion won (\$4.68 billion) in operating profit for the quarter ended in March, up 1.2% from a year earlier and in line with its earlier estimate.

Samsung shares, one of the worst-performing major tech stocks last year, fell 0.4% in line with the broader market.

Steep U.S. tariffs on Chinese goods and toughening restrictions on AI chip sales to China, Samsung's top market, threaten to dampen demand for some of the electronics components the company produces such as chips and smartphone displays.

Trump's "reciprocal" tariffs, most of which have been suspended until July, threaten to hit dozens of countries including Vietnam and South Korea where Samsung produces smartphones and displays.

Samsung said it was considering relocating the production of TVs and home appliances in response to the tariffs.

Chip demand is expected to remain solid in the second quarter, driven by AI servers and preemptive purchasing activities after the pause in tariffs, Samsung said.

But it warned that the frontloading of chip shipments by some customers may have a negative impact on demand later this year.

"We believe that demand uncertainties are growing in the second half as a result of recent changes in tariff policies in major countries, and strengthening of AI chip export controls," Kim Jae-june, a Samsung vice president in the memory division, said on an earnings call.

Samsung CFO Park Soon-cheol said however that "we cautiously expect the overall performance to gradually improve as we move into the second half, assuming the easing of current uncertainties".

Some analysts were unconvinced, saying the company did not give detailed guidance for its struggling AI chip business.

"With pull-in demand still ongoing and macro uncertainty lingering, the explanation for the 'firsthalf low, second-half rebound' outlook was lacking," Ryu Young-ho, a senior analyst at NH Investment & Securities said.

AI CHIPS

Samsung's mobile device and network business reported a 23% rise in profit to 4.3 trillion won during the period, reaching its highest level in four years, helped by the latest version of the flagship Galaxy S model with AI features.

Samsung has accelerated smartphone production in Vietnam, India and South Korea ahead of the U.S. duties, a person familiar with the matter told Reuters earlier.

While mobile performed strongly, the chip division's operating profit slumped 42% to 1.1 trillion won from a year earlier despite chip stockpiling by some customers.

Samsung reported a fall in sales of High Bandwidth Memory (HBM) - used in AI processors - due in part to U.S. export controls on AI chips.

Samsung said it had supplied samples of its enhanced HBM3E products to major customers and expected HBM sales, which have bottomed out in the first quarter, to "gradually" rise from the second quarter, without offering detailed targets.

Analysts estimate that about one third of Samsung's HBM revenue has come from China, and it lags behind cross-town rival SK Hynix (000660.KS)in supplying such chips to Nvidia (NVDA.O)in the United States.

SK Hynix last week logged its second-highest quarterly operating profit in the first quarter with a 158% jump to 7.4 trillion won, boosted by strong AI-related demand.

Revenue rose 10% to 79.1 trillion won in the January-to-March period, in line with its earlier estimate of 79 trillion won.

(\$1 = 1,431.5000 won)

Reporting by Hyunjoo Jin, Heekyong Yang and Joyce Lee; Editing by Miyoung Kim and Stephen Coates

43) TSMC shuns high-NA EUV lithography

Semiconductor

April 29, 2025 By Peter Clarke EENewsEurope

Foundry TSMC does not need to use high-NA extreme ultraviolet lithography tools for the manufacture of chips on its A14 (1.4nm) process according to reports from the TSMC North America Technology Symposium.

The company introduced the A14 process at the symposium saying it is expected to enter production in 2028. It has previously been stated that an A16 process due to appear late 2026 and that too does not require a high-NA EUVL tool.

"From 2nm to A14, we don't have to use high-NA, but we can continue to maintain similar complexity in terms of processing steps," Kevin Zhang, senior vice president of business development, is reported saying at the launch.

This provides a contrast to Intel which is has been aggressive in its adoption of high-NA as it follows through on a program to catch up with semiconductor foundry market leaders TSMC and Samsung. Intel was the first company to receive a high-NA EUVL tool and plans to start making chips with high-NA EUVL with its 18A manufacturing process in 2025.

It's all about the price tag

A key reason for TSMC's delay in adoption could be the extreme price tag placed on the tools by monopoly supplier ASML Holding NV. The price of the high-NA EUV exposure machine is said to be about US\$380 million or more than twice the approximately US\$180 million of the previous generation lower-NA EUV machines.

TSMC has apparently calculated that it is more cost-efficient to use multiple patterning using low-NA EUVL and experience slightly longer dwell times in line. In addition, it will benefit from superior well-established yields using the current generation of equipment.

It also remains to be seen whether Intel will stick to its aggressive embrace of the technology as it now has a new CEO - Lip-Bu Tan - whose plans for Intel Foundry have not yet been fully disclosed.

Intel versus TSMC

It has also been reported that Intel and TSMC have reached a preliminary agreement to form a joint venture to run Intel's chip manufacturing plants.

Tan told analysts that he recently met with CC Wei, TSMC's CEO, and Morris Chang, the founder and former chairman of TSMC. "Morris and CC are very long-time friends of mine. We also met recently (to) try to find areas we can collaborate and so that we can create a win-win situation," Tan said on an analyst conference call.

The first instance of TSMC's A14 manufacturing process does not make use of back-side power distribution. A variant called A14P with backside power distribution due in 2029 and a subsequent high-performance version - A14X - could be candidates for high-NA EUVL.

Even if Intel and Samsung press on with the adoption of high-NA EUVL to catch up TSMC in leading-edge processes they well face development costs. By pioneering in this development they could be paving the way for TSMC to step in and use high-NA EUVL when it considers adoption is cost-effective.

44) TSMC starts building third Arizona fab to ramp up US expansion Semiconductor

Wednesday 30 April 2025 Bloomberg

Taiwan Semiconductor Manufacturing Co. has begun construction on a third chip plant in Arizona, ramping up its US expansion as the Trump administration threatens further tariffs to spur American manufacturing.

The world's most advanced chipmaker announced the third phase of its US expansion the same day Commerce Secretary Howard Lutnick toured TSMC's site, which the company called the single largest foreign investment in US history.

TSMC(2330.TW), the main chipmaker to Apple Inc. and Nvidia Corp., is the centerpiece of the US government's effort to entice manufacturing back home. Lutnick has signaled he could withhold promised Chips Act grants as he pushes companies in line for federal semiconductor subsidies to substantially expand their US projects, Bloomberg News has reported.

In March, TSMC CEO C.C. Wei joined Trump at the White House to unveil plans to invest an additional US\$100 billion in US plants that will boost its output on American soil. The spending adds to US\$65 billion in planned TSMC investments in the US and would eventually bring its American presence to a half-dozen plants for advanced wafer fabrication and a couple more for advanced packaging.

Semiconductor AI

45) ASE Technology Holding: evaluating how it will support Nvidia's \$500 billion US plan

TAIPEI, April 30 (Reuters) - Taiwan's ASE Technology Holding Co. (3711.TW)has yet to decide how it will support a plan by Nvidia (NVDA.O)to build artificial intelligence servers worth as much as \$500 billion in the U.S. over the next four years, it said on Wednesday.

The company, the world's largest chip packaging and testing provider, is still evaluating an invitation from a customer to invest in the U.S. and has yet to decide on the investment size or timing, its Chief Financial Officer Joseph Tung told an earnings call.

He did not name the customer but the company later confirmed to Reuters that he was talking about a plan announced by AI chip giant Nvidia made public earlier this month to expand production in the U.S., with the help of partners including ASE subsidiary Siliconware Precision Industries.

Analysts have questioned whether the sum of \$500 billion is realistic, given difficulties suppliers may have in moving production.

Nvidia declined to comment.

The customer had invited ASE to "evaluate the possibility of having some operations to support their business in the U.S," Tung said.

"Currently we are engaging in discussion and are evaluating opportunities with interest. There are no further details so far in terms of the actual investment size or the timing of it. But any decision that we will eventually make will be made with economic viability."

When asked by analysts about what kind of product would be considered, Tung he said it would be an extension of what the company offers in Taiwan.

Siliconware Precision Industries, which carries out chip packaging for Nvidia, has no manufacturing presence in the U.S. Another ASE subsidiary, ISE Labs, has two testing factories in California.

Reporting by Wen-Yee Lee and Ben Blanchard; editing by Barbara Lewis and Jan Harvey

46) VSORA SA has obtained €40 million (about US\$46 million) in funding to enable it to take an AI inference processor into 5nm production with TSMC in 2025

Semiconductor AI

April 29, 2025 By Peter Clarke EENewsEurope

The funding was led by Otium and the office of an unnamed wealthy French family. Additional funding was provided by Omnes Capital and Adélie Capital with co-financing from the European Innovation Council (EIC) fund.

VSORA (Paris, France) was founded by CEO Khaled Maalej in 2015 to develop DSP IP cores for chipmakers that were supporting digital communications systems, such as 5G.

Performance figures

The latest round of funding is intended to support the Jotunn 8 (J8) processor, which the company claims will deliver 3x the performance of existing AI inference processors while consuming half the power. The specific AI inference processor being benchmarked against is not disclosed. In a Linkedin posting Maalej said the J8 chip delivers 3,200 teraflops which is the same as the best-inclass chips while consuming less than half the power.

In email VSORA told eeNews Europe that the perfomance claims are based on published MLPerf 4.0 data center inference data when implementing the Llama2-70B LLM.

"This funding marks a pivotal moment for VSORA as we accelerate our mission to revolutionize AI chips and ensure Europe's technological sovereignty in AI computing," said Maalej, in a statement.

When operating on tensor cores J8 achieves 800 TFLOPS using an FP16 datatype and 3200 TFLOPS with FP32 datatype. The design is host processor agnostic and includes RISC-V cores to run AI on-chip. The component is designed for 288Gbytes of HBM3e stacked DRAM with a throughput of 8Tbytes per second.

The J8 AI processor has a proprietaty software development platform that uses standard high-level entry points, such as ONNX, Pytorch and others, and then a dedicated LLVM compiler. (ONNX, Pytorch,...) and LLVM compiler. This is the same starting point as the current market leader is using,said Jan Pantzar, vice president of sales and marketing at VSORA, making it straightforward to port existing algorithms to VSORA hardware.

In 2023 VSORA announced the Jotunn 4 chiplet-based although without information on the manufacturing process the design was targeting. It also announced €13 million in funding earmarked for development phase of the project.

In January 2022 VSORA introduced the Tyr series of chips for autonomous driving saying they would sample in 4Q22 and be available in-vehicle in 2024.

Semiconductor Assembly & Packaging

47) ASE Technology Holding Co., Ltd. Reports Its Unaudited Consolidated Financial Results for the First Quarter of 2025

TAIPEI, April 30, 2025 /PRNewswire/ -- ASE Technology Holding Co., Ltd. (TWSE: 3711, NYSE: ASX) ("We", "ASEH", or the "Company"), the leading provider of semiconductor assembly and testing services ("ATM") and the provider of electronic manufacturing services ("EMS"), today reported its unaudited net revenues[1] of NT\$148,153 million for 1Q25, up by 11.6% year-over-year and down by 8.7% sequentially. Net income attributable to shareholders of the parent for the quarter totaled NT\$7,554 million, up from NT\$5,660 million in 1Q24 and down from NT\$9,312 million in 4Q24. Basic earnings per share for the quarter were NT\$1.75 (or US\$0.106 per ADS), compared to NT\$1.31 for 1Q24 and NT\$2.15 for 4Q24. Diluted earnings per share for the quarter were NT\$1.64 (or US\$0.100 per ADS), compared to NT\$1.27 for 1Q24 and NT\$2.07 for 4Q24.

We completed the purchase price allocation calculation in relation to Hirschmann acquisition as of September 30, 2024, and have retrospectively adjusted the consolidated financial results for 1Q24.

RESULTS OF OPERATIONS

1Q25 Results Highlights - Consolidated

Net revenues from packaging operations, testing operations, EMS operations, and others represented approximately 46%, 11%, 42%, and 1% of the total net revenues for the quarter, respectively.

Cost of revenues was NT\$123,260 million for the quarter, down from NT\$135,633 million in 4Q24.

- Raw material cost totaled NT\$72,343 million for the quarter, representing 49% of the total net revenues.
- Labor cost totaled NT\$16,997 million for the quarter, representing 11% of the total net revenues.
- Depreciation, amortization and rental expenses totaled NT\$14,672 million for the quarter.

Gross margin increased by 0.4 percentage points to 16.8% in 1Q25 from 16.4% in 4Q24.

Operating margin was 6.5% in 1Q25, compared to 6.9% in 4Q24.

In terms of non-operating items:

- Net interest expense was NT\$1,256 million.
- Net foreign exchange loss was NT\$1,675 million, primarily attributable to the appreciation of the U.S. dollar against the New Taiwan dollar.
- Net gain on valuation of financial assets and liabilities was NT\$2,873 million.
- Net gain on equity-method investments was NT\$40 million.
- Other net non-operating income was NT\$157 million, primarily attributable to miscellaneous income.

Total non-operating income and expenses for the quarter was NT\$139 million.

Income before tax was NT\$9,810 million in 1Q25, compared to NT\$11,441 million in 4Q24. We recorded income tax expenses of NT\$2,022 million for the quarter, compared to NT\$1,862 million in 4Q24.

Net income attributable to shareholders of the parent was NT\$7,554 million in 1Q25, compared to NT\$5,660 million in 1Q24 and NT\$9,312 million in 4Q24.

Our total number of shares outstanding at the end of the quarter was 4,418,995,632, including treasury stock owned by our subsidiaries in 1Q25. Our 1Q25 basic earnings per share of NT\$1.75 (or US\$0.106 per ADS) were based on 4,328,341,956 weighted average numbers of shares outstanding in 1Q25. Our 1Q25 diluted earnings per share of NT\$1.64 (or US\$0.100 per ADS) were based on 4,410,238,275 weighted average number of shares outstanding in 1Q25.

1Q25 Results Highlights - ATM

Net revenues were NT\$86,668 million for the quarter, up by 17.3% year-over-year and down by 1.9% sequentially.

Cost of revenues was NT\$67,057 million for the quarter, up by 14.9% year-over-year and down by 1.0% sequentially.

- Raw material cost totaled NT\$23,566 million for the quarter, representing 27% of the total net revenues.
- Labor cost totaled NT\$14,050 million for the quarter, representing 16% of the total net revenues.
- Depreciation, amortization and rental expenses totaled NT\$13,238 million for the quarter.

Gross margin decreased by 0.7 percentage points to 22.6% in 1Q25 from 23.3% in 4Q24.

Operating margin was 9.6% in 1Q25, compared to 10.7% in 4Q24.

1Q25 Results Highlights - EMS

Net revenues were NT\$62,295 million, up by 4.9% year-over-year and down by 16.8% sequentially.

Cost of revenues for the quarter was NT\$56,767 million, up by 5.3% year-over-year and down by 17.4% sequentially.

- Raw material cost totaled NT\$49,087 million for the quarter, representing 79% of the total net revenues.
- Labor cost totaled NT\$2,845 million for the quarter, representing 5% of the total net revenues.
- Depreciation, amortization and rental expenses totaled NT\$1,169 million for the quarter.

Gross margin increased by 0.6 percentage points to 8.9% in 1Q25 from 8.3% in 4Q24.

Operating margin was 2.6% in 1Q25, compared to 2.7% in 4Q24.

LIQUIDITY AND CAPITAL RESOURCES

Equipment capital expenditures in 1Q25 totaled US\$892 million, of which US\$395 million was used in packaging operations, US\$472 million in testing operations, US\$23 million in EMS operations and US\$2 million in interconnect materials operations and others.

Total unused credit lines amounted to NT\$358,413 million as of March 31, 2025.

Current ratio was 1.04 and net debt to equity ratio was 0.41 as of March 31, 2025.

Total number of employees was 96,436 as of March 31, 2025, compared to 95,492 as of December 31, 2024.

BUSINESS REVIEW

Customers

ATM BASIS

Our five largest customers together accounted for approximately 44% of our total net revenues in both 1Q25 and 4Q24. Two customers each accounted for more than 10% of our total net revenues in 1Q25 individually.

Our top 10 customers contributed 61% of our total net revenues in 1Q25, compared to 60% in 4Q24.

Our customers that are integrated device manufacturers or IDMs accounted for 34% of our total net revenues in 1Q25, compared to 32% in 4Q24.

EMS BASIS

Our five largest customers together accounted for approximately 68% of our total net revenues in 1Q25, compared to 72% in 4Q24. One customer accounted for more than 10% of our total net revenues in 1Q25.

Our top 10 customers contributed 74% of our total net revenues in 1Q25, compared to 78% in 4Q24.

About ASE Technology Holding Co., Ltd.

ASEH is the leading provider of semiconductor manufacturing services in assembly and test. The Company develops and offers complete turnkey solutions covering front-end engineering test, wafer probing and final test, as well as packaging, materials and electronic manufacturing services through USI with superior technologies, breakthrough innovations, and advanced development programs. With advanced technological capabilities and a global presence spanning Taiwan, China, South Korea, Japan, Singapore, Malaysia, Philippines, Vietnam, Mexico, and Tunisia as well as the United States and Europe, ASEH has established a reputation for reliable, high quality products and services.

For more information, please visit our website at https://www.aseglobal.com.

Semiconductor EDA

48) MediaTek Inc. Reports First-Quarter Consolidated Results April 30, 2025

Taiwan-International Financial Reporting Standards (TIFRS) financial measures

-1Q25 consolidated revenue of NT\$153,312 million, up 11.1% quarter-over-quarter and 14.9% year-over-year

- 1Q25 consolidated gross margin of 48.1%, down 0.4 percentage points from the previous quarter and 4.3 percentage points year-over-year
- 1Q25 consolidated operating income of NT\$30,053 million, up 40.4% from the previous quarter and down 6.6% year-over-year
- 1Q25 consolidated net income of NT\$29,529 million, up 23.3% quarter-over-quarter and down 6.7% year-over-year; EPS of NT\$18.43

Consolidated Revenue

MediaTek Inc. today announced financial results of its first quarter ended March 31, 2025. The first-quarter revenue was NT\$153,312 million, up 11.1% quarter-over-quarter and 14.9% year-over-year. The quarter-over-quarter and year-over-year increases were mainly due to higher market demand and the structural mix enhancements driven by customers' increased adoption of AI, 5G and Wi-Fi 7 technologies.

Consolidated Gross Profit and Gross Margin

The first-quarter gross profit was NT\$73,809 million, up 10.2% quarter-over-quarter and 5.6% year-over-year. Gross margin for the quarter was 48.1%, down 0.4 percentage points from the previous quarter and 4.3 percentage points year-over-year. The quarter-over-quarter decrease was mainly due to product mix changes. The year-over-year decrease was mainly due to a higher base in the year-ago quarter benefitted from a one-time item.

Consolidated Operating Expenses

Operating expenses for the quarter was NT\$43,756 million (28.5% of revenue), compared with NT\$45,589 million (33.0% of revenue) in the previous quarter and NT\$37,721 million (28.3% of revenue) in the year-ago quarter. The quarter-over-quarter decrease was mainly due to higher year-end expenses in the previous quarter. The year-over-year increase was mainly due to higher R&D investments in the quarter.

Operating expenses for the quarter included:
- R&D expenses of NT\$35,782 million (23.3% of revenue), decreased from NT\$36,752 million in the previous quarter and increased from NT\$31,147 million in the year-ago quarter.
- Selling expenses of NT\$4,990 million (3.3% of revenue), decreased from NT\$5,642 million in the previous quarter and increased from NT\$3,754 million in the year-ago quarter.
- Administration expenses of NT\$2,985 million (1.9% of revenue), decreased from NT\$3,194 million in the previous quarter and increased from NT\$2,820 million in the year-ago quarter.

Consolidated Operating Income and Operating Margin

Operating income for the quarter was NT\$30,053 million, up 40.4% sequentially and down 6.6% year-over-year. Operating margin for the quarter was 19.6%, up from 15.5% in the previous quarter and down from 24.1% in the year-ago quarter.

Consolidated Non-operating Income (loss) and Income Tax

Non-operating income for the quarter was NT\$4,500 million, or 2.9% of revenue, mainly from interest income and dividend income. Income tax expense for the quarter was NT\$5,024 million.

Consolidated Net Income, Net Profit Margin and EPS

Net income for the quarter was NT\$29,529 million, up 23.3% sequentially and down 6.7% yearover-year. Net profit margin for the quarter was 19.3%, up from 17.3% in the previous quarter and down from 23.7% in the year-ago quarter. EPS was NT\$18.43, up from NT\$14.95 in the previous quarter and down from NT\$19.85 in the year-ago quarter. The quarter-over-quarter increases in net income, net profit margin and EPS were mainly due to higher revenue in the quarter. The yearover-year decreases in net income, net profit margin and EPS were mainly due to a higher gross profit base in the year-ago quarter benefitted from a one-time item and higher R&D investments in the quarter.

Consolidated Cash and Financial Assets-Current

Cash and financial assets-current at the end of the quarter was NT\$210,445 million. This represents 29.3% of the company's total assets. Cash and financial assets-current was NT\$219,624 million and NT\$159,767 million at the end of previous quarter and the year-ago quarter, respectively. Financial assets-current portfolio includes mutual funds, bonds, derivatives and so on.

Consolidated Accounts Receivable

Accounts receivable (net) at the end of the quarter was NT\$79,152 million. The accounts receivable turnover was 37 days based on quarterly average net receivables divided by annualized net revenue. The turnover was higher than 30 days in the previous quarter and the same as the year-ago quarter.

Consolidated Inventory

Net inventory at the end of the quarter was NT\$54,537 million. The inventory turnover was 65 days based on quarterly average inventory divided by annualized cost of goods sold. The turnover was lower than 73 days in the previous quarter and 66 days in the year-ago quarter.

Consolidated Cash Flow from Operations

Net cash provided by operating activities during the quarter was NT\$13,423 million, compared with NT\$44,685 million in the previous quarter and NT\$25,204 million in the year-ago quarter.

Earnings Webcast

MediaTek will hold a public webcast today (April 30). Materials for the conference call will be published 30 minutes prior to the call and an audio replay will be available in one hour after the call at the investors section of MediaTek's website.

https://corp.mediatek.com/investor-relations/financial-information/quarterly-earnings

Schedule:

Date: Wednesday, April 30, 2025

Time: 3:00 – 4:00 p.m. (Taiwan Time)

Language: English

Webcast Links:

https://webpage-ott2b.cdn.hinet.net/webpage/live?contentProvider=mediatek

Investors who want to raise questions may use the toll number below. Dial-in Number: +852-21121444 / +886-2-33961191 Password: 3819030#

About MediaTek Inc.

MediaTek Incorporated (TWSE: 2454) is a global fabless semiconductor company that enables nearly 2 billion connected devices a year. We are a market leader in developing innovative systems-on-chip (SoC) for mobile device, home entertainment, connectivity and IoT products. Our dedication to innovation has positioned us as a driving market force in several key technology areas, including highly power-efficient mobile technologies, automotive solutions and a broad range of advanced multimedia products such as smartphones, tablets, digital televisions, 5G, Voice Assistant Devices (VAD) and wearables. MediaTek empowers and inspires people to expand their horizons and achieve their goals through smart technology, more easily and efficiently than ever before. We work with the brands you love to make great technology accessible to everyone, and it drives everything we do. Visit <u>www.mediatek.com</u> for more information.

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49) Qualcomm forecasts Trump tariffs will dent revenue, shares fall 6%

Semiconductor EDA

Qualcomm shares, down about 3% YTD, drop another 6% after hours Qualcomm SEC filing says company uncertain about tariff effects Midpoint of profit forecast range would top estimates April 30 (Reuters) - Mobile chip designer Qualcomm on Wednesday forecast third-quarter revenue that would not meet estimates, joining other tech companies such as Snap and Samsung that voiced concerns about the effects of U.S. President Donald Trump's trade war.

Qualcomm third-quarter estimates reflected the impact of the tariffs "as they stand today," Chief Financial Officer Akash Palkhiwala said in a conference call with analysts following the results. But he said the situation could change due to rapid developments in U.S.-China trade tensions.

"We do not see any material, direct impact - there is smaller direct impact and some minor changes in demand," Palkhiwala said, in reference to the tariffs. "(It's) difficult for us to predict."

Qualcomm forecast third-quarter revenue just shy of Wall Street estimates, expecting tepid demand for its smartphone chips. Apple, which is known to be Qualcomm's largest customer, has also begun to produce its own modem chips and is expected by analysts to buy fewer of Qualcomm's modems as it introduces its home-grown chips into more products.

Qualcomm's stock, which was already down more than 3% year to date, sank 6% more in extended trading, as investors have worried about global trade turmoil.

The company's chips are currently excluded from Trump's steep tariffs but slower economic growth will likely hit demand. In a securities filing on Wednesday, Qualcomm said it was uncertain about the effects tariffs and other "related actions" might have on its business.

"Tariff uncertainties will definitely have an impact to its topline outlook as Qualcomm is exposed to the smartphone, consumer IoT and the automotive end-markets," Summit Insights Group analyst Kinngai Chan said.

For its current fiscal quarter, the company expects a sales range with a midpoint of \$10.3 billion, below analysts' average estimates of sales of \$10.35 billion, according to data compiled by LSEG.

San Diego, California-based Qualcomm (QCOM.O) is the world's biggest supplier of modem chips that connect smartphones to wireless data networks.

It expects adjusted profits between \$2.60 per share and \$2.80 per share. The midpoint is above estimates of \$2.67 per share.

APPLE-QUALCOMM 'DIVORCE'

Despite mounting competition in China's domestic chip sector, Qualcomm has retained its stronghold of the smartphone market, supplying both Apple (AAPL.O)and Chinese handset makers such as Xiaomi (1810.HK), opens new tab, Oppo and Vivo.

However, Apple's increasing push toward building in-house modem chips threatens Qualcomm's share of the iPhone makers' silicon components. In the second quarter, Apple accounted for 27% of Qualcomm's revenue, Chan said.

"Apple's long-telegraphed move to bring modem development in-house is less a surprise and has been more of a slow-motion divorce - with Qualcomm playing the role of the efficient but increasingly expendable ex," said Michael Schulman, Running Point Capital investment chief.

In the conference call, Palkhiwala said that Qualcomm is forecasting it will retain a 70% share in the products Apple launches in the fall, when the iPhone maker typically unveils its latest gadgets.

Schulman said he expects Apple to supply no revenue to Qualcomm by 2027.

Even though Qualcomm's chips so far have been excluded from Trump's steep tariffs, escalating Sino-U.S. trade tensions have cast a shadow over the company's revenue from its biggest market. China accounted for about 46% of its total sales in its last fiscal year.

Qualcomm categorizes geographical revenue on the basis of a customer's headquarters.

"As we navigate the current macroeconomic and trade environment, we remain focused on the critical factors we can control - our leading technology roadmap, best-in-class product portfolio, strong customer relationships and operational efficiencies," CEO Cristiano Amon said in a statement.

While the U.S. government has granted smartphones and chips special exclusions from steep tariffs, Trump has warned of sector-specific levies to come for semiconductors.

Global smartphone shipments rose 1.5% in the first three months of the year, according to data from research firm IDC, with major Qualcomm customer Apple (AAPL.O)front-loading supply to sidestep potential tariffs.

Qualcomm reported adjusted per-share profit of \$2.85, edging past estimates of \$2.82. The company reported sales of \$10.98 billion for its fiscal second quarter ended March 30, beating estimates of \$10.66 billion.

The company's licensing segment generated sales of \$1.32 billion, while its chip business reported revenue of \$9.47 billion. Both were ahead of Wall Street estimates.

Reporting by Arsheeya Bajwa in Bengaluru and Max A. Cherney in San Francisco; Editing by David Gregorio

Semiconductor Flip Chip and WLP

50) LG Innotek to build FC-BGA into 700 million USD business by 2030 with its state-of-the-art Dream Factory

SEOUL, South Korea, April 30, 2025 /PRNewswire/ -- LG unveiled the Dream Factory, a hub for the production of FC-BGAs (Flip Chip Ball Grid Arrays), the company's next-generation growth engine, to the media for the first time and announced it on the 30th April.

In 2022, LG Innotek announced its plans to launch a business producing FC-BGAs, high-value semiconductor substrates. To build the Dream Factory, the company acquired LG Electronics' Gumi 4 Factory and began full-scale mass production in February 2024.

A process of Line Quality Control (LQC), which checks whether the product meets the specifications (thickness, size, etc.) required by the customer. The inspection result data is immediately transmitted to the customer and cannot be manipulated. This quality transparency is one of the most important factors for LG Innotek's global clients.

A process of Line Quality Control (LQC), which checks whether the product meets the specifications (thickness, size, etc.) required by the customer. The inspection result data is immediately transmitted to the customer and cannot be manipulated. This quality transparency is one of the most important factors for LG Innotek's global clients.

The Dream Factory, spanning a total area of 26,000 square meters, is regarded as the industry's most advanced "smart" factory, integrating the latest IT technologies, including artificial intelligence, deep learning, robotics, and digital twin technologies. By applying automation,

information, and intelligence technologies to the entire process, it has established a cutting-edge FC-BGA production infrastructure that eliminates the four major factors known to undermine production competitiveness: human error (Man), failure cost (F-cost), breakdown maintenance (BM) loss, and accidents.

"Elimination of defects caused by human contact" through automation of all processes and logistics using robots

For semiconductor substrate products such as FC-BGAs, which require a highly demanding ultrafine process, even the smallest foreign objects (eyelash, saliva, etc.) can cause quality issues. Therefore, it is crucial to minimize human contact with products during production.

To this end, LG Innotek has introduced a completely automated logistics system at the Dream Factory, where coming across a person is a rare event. Apart from essential personnel, such as equipment maintenance and repair workers, all 10 steps of the FC-BGA production and logistics processes are unmanned.

Dozens of autonomous mobile robots (AMRs) move materials around the production line autonomously. When a production order is placed, which is done automatically, based on the customer's delivery timeframe entered in the RTS (real-time schedule), the AMRs transport the raw materials to the process facility. Once the barcode on the raw material is detected, also done automatically, by the machine, the process recipe is automatically set on the equipment according to the product specifications through the recipe management system (RMS), after which the product processing begins. The AMRs are also responsible for loading the finished product back into the stocker.

In addition, the process of peeling off the protective film from the panel (film detach) is also replaced by a robot. This enables the early prevention of fine scratches and defects caused by foreign objects such as dust particles and foreign substances. The construction of non-touch production facilities, involving such equipment as collaborative robots, in the entire process has significantly reduced mishandling by workers.

Unmanned AI-based FC-BGA quality inspection, enhancing customer confidence by ensuring quality "transparency"

The Dream Factory generates more than 200,000 files and 100GB of data related to FC-BGA production every day. LG Innotek collects this data throughout the production process through sensors installed in all of its facilities. By applying AI, which continuously learns from this big data, to the defect prediction and inspection system, the company has significantly reduced the lead time caused by defects.

In addition, LG Innotek has applied an AI deep learning vision inspection system to the Automated Optical Inspection (AOI) process, which is the most important step in determining whether a product is of good quality. Tirelessly, the robot moves the finished FC-BGA board products to the vision screening inspection table. Next, the AI, which has been trained on tens of thousands of data points on defective and good quality FC-BGAs, detects micro-level defects that are challenging to identify with the naked eye, and it does so in only 30 seconds.

LG Innotek is operating a further advanced AOI process. In the room next to the AOI equipment for faulty circuits, there is a much larger robot and inspection system. Called Line Quality Control (LQC), it can automatically check whether the various specifications (thickness, size, etc.) of the product requested by the customer have been fulfilled. The inspection data is immediately sent to

the customer, ensuring product quality transparency, which leads to higher customer confidence. This industry-leading sophistication of LG Innotek's AOI equipment has been cited as one of the most impressive aspects of the factory by the global customers who have visited it.

AI can identify defective products, and since every product has a barcode that tracks its process history, products that are deemed defective are automatically filtered out without the need for human intervention, reducing F-costs by more than 50%.

Additionally, AI has been applied to the digital simulation system, which prevents product defects and equipment failures. Previously, the process of workers manually checking products for defects and identifying which machines were faulty and how to repair them in response to defects required a lot of time. This can now be significantly improved.

By 2026, LG Innotek plans to introduce an intelligent Quality Management System (i-QMS) that detects and analyzes quality irregularities during production in real time and automatically corrects them. The company plans to automate the entire FC-BGA production process, especially by developing a platform that uses digital twin technology to share information on all processes, from product development to production, with customers in real time to enhance customer responsiveness.

Optimized FC-BGA process equipment using digital twin technology, "halving the ramp-up period"

Since even the smallest variables can lead to poor performance in FC-BGAs, equipment optimized for mass production and process recipes and production environments set to perfect values are fundamental to achieving high yields.

The FC-BGA process equipment installed in the Dream Factory is set to optimal conditions through digital twin technology. In the past, identifying optimal conditions for the FC-BGA process required a lot of time and money, along with hundreds of tests. Before building the facility, LG Innotek managed to identify problems with the initial setup of the FC-BGA process facility in advance by conducting a "factory simulation" using 3D modelling in virtual space. This enabled the facility to be carefully set for optimal conditions, such as liquid, heat, and air flow, which were difficult to measure inside the actual facility. As a result, the ramp-up period (increase in production capacity by improving initial production yields) was shortened by nearly half compared to the previous operation period.

In addition, digital twin technology is applied to the Line Monitoring System (LMS), which monitors production status in real time. The real-time monitoring system enables users to monitor the production line currently in operation, product movement, inventory status, equipment irregularities, production performance, and product quality status at a glance on the large screen of the integrated control room where the LMS is installed. This makes it possible to respond immediately in the event of any irregularity.

Internalization of glass core technology, step-by-step entry into the high-end FC-BGA market: "Fostering the business into 700 million USD business by 2030"

Over the past 50 years, LG Innotek has accumulated core technologies for high-value semiconductor substrates, such as ultra-fine microcircuits and high-density, multi-layer substrate matching technology (stacking multiple substrate layers accurately and evenly), through its substrate material components business.

Based on this know-how, the company began full-scale mass production of FC-BGAs for personal computers (PCs) for North American big-tech customers at the end of last year and recently succeeded in securing additional global big-tech clients. This year, LG Innotek aims to enter the FC-BGA market for PC central processing units (CPUs). Its strategy is to enter the high-end FC-BGA market in phases, including entering the server FC-BGA market as early as 2026. In preparation for this, LG Innotek has already acquired facilities that are essential in the manufacturing of FC-BGA products for servers, such as "edge coating" that blocks the generation of dust particles.

In line with this goal, LG Innotek will also accelerate the development of next-generation substrate technologies in collaboration with global big-tech clients. By 2027, the company plans to internalize technologies such as re-distribution layer (RDL) technology, which engraves microcircuit patterns directly onto the substrate; device embedding technology, which minimizes power loss by embedding devices into the substrate; and multi-layer core (MLC) and glass core (glass substrate) technologies, which prevent warping when implementing large-area substrates. In particular, LG Innotek has been promoting glass substrates by strengthening its collaboration with global customers.

Minseok Kang, vice president and head of LG Innotek's Substrate & Material Business Unit, said, "LG Innotek will continue to expand the production of FC-BGAs that provide exceptional customer value based on its state-of-the-art Dream Factory and develop the FC-BGA business into 700 million USD business by 2030."

According to the Fuji Chimera Research Institute, the size of the global FC-BGA market is expected to more than double from USD 8 billion in 2022 to USD 16.4 billion in 2030.

[Glossary]

FC-BGA (Flip Chip Ball Grid Array): This is a semiconductor substrate that is widely applied to electronic devices equipped with semiconductor chips (CPU, GPU, AI chips, etc.) that perform various computing functions. Demand for high-performance semiconductor substrates is growing rapidly due to increased data throughput, higher semiconductor processing speeds, and the need for low-power semiconductors. For these reasons, FC-BGAs have a larger area and more layers than conventional semiconductor substrates. They are also known to have high barriers to market entry because they require top-level facilities and technologies to produce.

SOURCE LG Innotek

Semiconductor Memory

51) China's DRAM surge could upend global memory prices and supply chains, warns Etron

Thursday 1 May 2025 Siu Han, Taipei; Levi Li, DIGITIMES Asia

The global memory market is recovering from a downturn, with memory poised to become a key pillar of AI computing. However, Etron Technology Chairman Nicky Lu warned that Chinese manufacturers are rapidly expanding low- to mid-end DRAM capacity, potentially boosting China's market share to 40% within two years and disrupting global pricing and industry structure.

Lu noted that although second-quarter 2025 demand is starting to materialize, it remains unclear whether it reflects genuine consumption or inventory replenishment. He expects momentum to build further into the third and fourth quarters of 2025.

Despite tariff pressures, Etron(5351.TW) reported no negative feedback from automotive customers and is managing short-term volatility while advancing its long-term application plans.

Etron explained that its memory products have limited direct exposure to the US, but during the 90day tariff exemption period, it observed stronger stocking momentum among certain customers, especially in networking products.

Shipments to China remained steady, driven mainly by domestic demand in sectors such as IP cameras and security systems.

Memory demand enters structural transformation amid AI boom

Lu said memory will represent about 50% of future AI system architecture, alongside logic chips and software. As AI adoption grows, memory demand is undergoing a structural shift, with both HBM and general-purpose DRAM markets projected to expand long term.

SK Hynix has secured an early lead in HBM, riding the AI wave. Lu emphasized that the memory sector is at a critical inflection point where innovation and IP protection will determine future winners. He noted that Etron has already positioned itself to seize upcoming opportunities over the next three to five years.

Lu warned that China's low-cost, high-volume approach is fueling a rapid surge in memory capacity. Chinese vendors now control about 20% of sub-DDR5 memory and could push their share to 40% within two years.

Samsung Electronics and other major players are reportedly starting to phase out DDR4 products. Although Samsung will remain active in the sub-DDR5 market, it plans to strategically limit capacity to manage pricing pressures.

Lu cautioned that China's memory supply surge is an abnormal influx that could spark a fresh wave of global price corrections. As US-China tensions spill into Europe, governments are growing wary of Chinese product overflow disrupting supply-demand dynamics and threatening tech protections.

Taiwan urged to strengthen IP and differentiation to stay competitive

Lu predicted that a quota system could emerge in the global memory market and urged Taiwan to prepare by boosting product differentiation, process innovation, and IP development, rather than relying solely on large-scale manufacturing.

With some countries mass-producing memory without patent protections, Lu warned that Taiwan must secure its global supply chain role through original designs and core technologies, or risk tariffs, export restrictions, and excess output burdens.

Lu said Taiwan's semiconductor industry does not fear US manufacturing shifts or hollowing-out concerns, noting that Taiwan remains one of the world's few complete semiconductor ecosystems. "Whichever way you look at it, Taiwan is the protagonist," he said.

He urged government, industry, and academia to build a societal consensus to defend Taiwan's critical role in the global electronics and AI sectors, paving the way for a "next golden 20 years."

Etron focuses on smart living applications amid Wi-Fi and automotive growth

Etron said it is focusing its memory strategy on three major smart living segments: smart connectivity, smart mobility, and smart homes.

Wi-Fi 6/6E is expected to reach nearly 80% penetration by 2025, while Wi-Fi 7 is projected to climb from 2.1% in 2024 to 7.1% in 2025 and 13.6% by 2026. Etron's DDR4 4Gb products are already in mass production for global telecoms' Wi-Fi 6E deployments, and its DDR4 4Gb and 8Gb chips are set to enter Wi-Fi 7 supply chains starting in 2025.

Etron's DDR3 4GB and 8GB products have been adopted across various automotive electronics applications, including in-vehicle entertainment systems. Its KGDM technology has also gained traction in international brands for smart locks, smart speakers, panoramic cameras, and network cameras.

52) Samsung taps Llama 4 to close semiconductor gap with Hynix, Micron

Semiconductor Memory

Thursday 1 May 2025 Jessica Tsai, Joseph Chen, DIGITIMES Asia

Samsung Electronics' Device Solutions (DS) division has begun deploying Meta's latest generative AI model, Llama 4, marking a strategic pivot to strengthen its internal AI capabilities and sharpen its competitive edge in the global memory and semiconductor race.

According to Seoul Economic Daily, Samsung integrated Llama 4 into its internal assistant tools in April 2025. The move signals a shift from Samsung's prior reliance on proprietary large language models (LLMs), such as "DS Assistant," which faced performance limitations due to constrained training data and resources.

Meta officially released the Llama 4 family in March 2025. The models-featuring multimodal support across text, images, voice, and video-represent the cutting edge of open-source AI. Samsung has reportedly implemented both the flagship "Llama 4 Maverick" and the lightweight "Llama 4 Scout" to support a broad range of internal workflows, from document summarization to chip design optimization.

Crucially, Samsung opted for an on-premises deployment of Llama 4, reflecting its heightened sensitivity to data security. By avoiding external cloud infrastructure, the company aims to minimize risks of intellectual property leakage and cyber intrusion-longstanding concerns in the semiconductor industry.

Industry analysts view this integration as Samsung's attempt to close the AI productivity gap with rivals like SK Hynix and Micron Technology, both of which have accelerated AI adoption to streamline R&D and improve time-to-market.

Looking ahead, insiders say Samsung plans to support more high-performance open-source AI models as part of a broader digital transformation strategy within its semiconductor operations. The goal: enhance employee productivity and maintain technological leadership amid rising AI-driven complexity in chip design and manufacturing.

Semiconductor Process Equipment

53) ASM International shifts some manufacturing to US to escape tariffs

ASM International starts US production US sales account for 21% of revenue, highest among European peers CEO says local production is competitive advantage

April 30 (Reuters) - Dutch chip-making equipment supplier ASM International (ASMI.AS)has started local production of tools for U.S. chipmakers in response to the U.S. tariffs backdrop, its Chief Executive said on Wednesday.

"We've already started to manufacture some of the tools for our customers in the U.S., just to get us started," CEO Hichem M'Saad said a day after the company reported quarterly earnings.

"Our global installed base, our global infrastructure, allows us to really have manufacturing in many places - and Phoenix, Arizona, is one of them."

ASM is the most exposed to the U.S. market among European peers including ASML (ASML.AS)and BESI (BESI.AS), opens new tab, with U.S. sales accounting for 21% of its revenue last year.

It also competes with major U.S. players such as Applied Materials (AMAT.O) and LAM Research (LRCX.O), opens new tab, and analysts have warned it is at risk of losing market share to them.

Europe's second-largest semiconductor equipment supplier has had a presence in Arizona for more than half a century, where it has been joined by customers such as Intel (INTC.O) and TSMC (2330.TW) which manufacture advanced chips for Nvidia (NVDA.O) and AMD (AMD.O), opens new tab.

M'Saad said being close to chipmakers will help with the development and adoption of ASM's most advanced processes, like Atomic Layer Deposition, where it has so far had little competition.

ALD allows for the creation of ever smaller chip circuits by depositing atomic thin layers of materials on a silicon wafer.

Reporting by Nathan Vifflin Editing by David Goodman, Kirsten Donovan

54) China cracks EUV light source barrier, builds new experimental platform

Semiconductor Process Equipment

Wednesday 30 April 2025 Staff reporter, Taipei; Levi Li, DIGITIMES Asia

Amid escalating tech restrictions and geopolitical tensions, China has made a breakthrough in semiconductor research. The Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, announced it has established a fully functional experimental platform for extreme ultraviolet (EUV) light sources-a critical step toward overcoming key bottlenecks in advanced chip manufacturing.

The results were published as the cover article in the June 2025 issue of the Chinese Journal of Lasers.

Solid-state laser system achieves record efficiency

The project was led by Lin Nan, a former ASML executive and current research fellow at the Shanghai Institute of Optics and Fine Mechanics. His team achieved a peak energy conversion efficiency (CE) of 3.42% by bombarding a tin (Sn) target with a 1-micron solid-state laser, approaching the top global benchmarks.

The achievement surpasses previous benchmarks set by ETH Zurich and the Netherlands' Advanced Research Center for Nanolithography (ARCNL). Although it falls short of the approximately 5.5% CE seen in commercial CO? laser-driven systems, it marks a significant milestone for China's EUV development efforts.

EUV lithography is critical for producing 5-nanometer and smaller semiconductor nodes, with efficient and stable light sources at its core. To date, only Dutch-based ASML has commercialized the technology. Under pressure from the US, ASML is prohibited from selling its most advanced EUV systems to China, leaving Chinese researchers racing to develop alternative solutions.

China pursues independent development amid export barriers

After receiving scientific training under 2023 Nobel Physics Prize laureate Anne L'Huillier and support from the European Union's Marie Sk?odowska-Curie Actions (MSCA), Lin Nan returned to China in 2021. He promptly formed a research team and built China's first solid-state laser-driven EUV light source platform.

Unlike ASML's commercial systems that use large, energy-intensive CO? lasers, Lin's team developed a high-efficiency, compact solid-state laser system. With 1-micron lasers already reaching kilowatt-class outputs and potentially exceeding 10 kilowatts, their superior efficiency and smaller form factor position them as strong contenders for next-generation EUV lithography sources.

ASML CEO Christophe Fouquet recently expressed skepticism over China's prospects of producing EUV lithography machines in the near term, but Lin's team's progress underscores China's determined pursuit of technological independence.

According to ASML's 2024 annual report, released in March 2025, China became its largest single market, generating EUR10.195 billion (US\$11.6 billion) in revenue and accounting for 36.1% of total sales. This surpasses Taiwan for the first time and more than doubles the US share of 16%. The data highlights China's pivotal role in the global semiconductor equipment supply chain despite increasing US export restrictions.

55) Philoptics Unveils New TGV Inspection System for Glass Substrates

Semiconductor Process Equipment

May 01, 2025 HuNan Printed Circuit Association of China

South Korean laser equipment maker Philoptics (KOSDAQ: 161580) has developed a new inspection system for Through Glass Via (TGV) holes in semiconductor glass substrates, the company announced on April 30. The equipment is designed to detect defects in hole shape, size, position, and potential damage to the substrate-key quality metrics in next-generation semiconductor packaging.

The inspection process involves sequential steps of high-speed imaging, scanning, image generation, and defect identification. Using an advanced optical system developed with SD Optics, the equipment can simultaneously capture the top, middle, and bottom sections of each TGV hole-up to 1.9 million per panel-within approximately 16 minutes. This full-surface imaging is enabled by a tilted camera approach that creates a 2.5D image, improving accuracy without flipping the substrate.

Philoptics applied deep learning and big data analytics to handle image files as large as 700GB per panel. This enables automated classification and analysis of defects, significantly improving inspection speed and production yield. The company emphasized that accurate and fast defect detection is a critical bottleneck in scaling glass substrate production for advanced packaging.

The new equipment expands Philoptics' semiconductor glass substrate portfolio to five product lines, which already include TGV drilling, Ajinomoto Build-up Film (ABF) drilling, direct imaging (DI) exposure systems, and singulation tools. The company has supplied these systems to major global customers, with additional shipments expected within this year.

Philoptics sees the inspection system as a strategic complement to its existing TGV drilling equipment, noting that customers increasingly demand integrated solutions for defect detection and process control. The company began TGV equipment development in 2019 and has since internalized key capabilities for production yield evaluation.

Philoptics is also targeting glass substrate R&D and metrology needs in the materials and components sectors, with discussions underway for both domestic and overseas supply. Initial deliveries of the inspection system are expected as early as Q3 or Q4 2025.

Notably, in March, Philoptics shipped its first laser singulation equipment to a global semiconductor customer-building on its earlier achievement as one of the first suppliers of TGV drilling tools for high-volume production lines.

"We aim to reshape the inspection landscape, which has long relied on slower measurement-based defect detection," said Vice President Choi Woo-hyuk, who led the development. "With this new solution, we are responding to a surge in demand tied to the commercialization of glass-based semiconductor packaging."

Sensors

56) GalaxyCore rides high-pixel boom to triple profit, targets Al glasses, automotive vision next

Wednesday 30 April 2025 Levi Li, DIGITIMES Asia, Taipei

GalaxyCore Inc. reported its 2024 earnings on April 28, posting annual revenue of CNY6.383 billion (approx. US\$875 million), a 35.9% increase from the previous year. Net profit attributable to shareholders soared 287.2% to CNY187 million, while EBITDA rose 107.1% to CNY1.415 billion.

The surge in earnings was fueled by an upgraded smartphone CMOS Image Sensor (CIS(2326.TW)) lineup, led by strong demand for high-resolution products.

Revenue from 13-megapixel and above CIS products exceeded CNY1.5 billion in 2024—more than triple the 2023 figure, making up 40% of GalaxyCore's mobile CIS sales, according to Cninfo.

The 32MP sensor, launched in 2023, has been adopted by key models including the vivo Y300 Pro, Oppo A3x, Reno12 (international version), and iQOO 13.

The company's 50MP sensors also entered mass production in 2024, spanning multiple pixel sizes—1.0?m (GC50B2), 0.7?m (GC50E1), and 0.61?m (GC50F6)—to meet diverse customer requirements.

In 2024, GalaxyCore launched mass production of its multispectral CIS, designed to capture spectral information under challenging lighting conditions. The sensor enhances color accuracy and supports a wide array of smart detection applications. Rising sales of premium models signal strong demand for the firm's single-chip high-resolution integration technology.

The rollout of multispectral CIS underscores GalaxyCore's vertically integrated design and manufacturing capabilities, along with its supply chain expertise. The company plans to ramp up R&D efforts targeting next-gen technologies and market-oriented innovation while advancing product and process development.

Diversifying beyond smartphones: expansion into automotive and AI wearables

GalaxyCore expanded its CIS portfolio beyond smartphones in 2024 with the launch of the 4MP GC4103 sensor. Featuring a 2?m pixel size and support for a 1/3-inch optical format, the sensor delivers high resolution, wide dynamic range, and starlight-level full-color night vision. Its proprietary low-power design enables continuous image output at just 2mW—suitable for smart doorbells and other home devices.

GalaxyCore's 8MP sensors have entered mass production and secured orders from branded customers, according to ICsmart. Additional products targeting non-smartphone applications are under development, with new models slated for release in 2025.

GalaxyCore is also accelerating its push into automotive imaging. The company completed R&D and tape-out of its first front-view in-vehicle CIS in 2024, with commercial rollout anticipated in 2025.

Amid rapid growth in the AI glasses market, GalaxyCore is expanding into next-gen consumer tech. The company recently unveiled TCOM—a compact, high-performance packaging solution optimized for space-limited devices like AI glasses. TCOM modules are 10% smaller than comparable COB packages while offering enhanced reliability and lower costs.

GalaxyCore's 5MP CIS has entered mass production for use in AI glasses. The company plans to integrate its imaging chips with advanced packaging to develop slimmer, smarter visual solutions for future smart devices.

Servers

57) Al servers remain in high demand, says Quanta chair

Thursday 1 May 2025 Aaron Lee, Taipei; Charlene Chen, DIGITIMES Asia

Is AI development sustainable? Barry Lam, chairman of Quanta, pointed out that AI development consists of seven stages, and we are currently only at the second stage. The GB200 and GB300 models that Quanta produced for 2025 are designed to meet the demands of this second stage. He added that AI server computing power will increase tenfold over the next two years, and Quanta is

already prepared for this growth. Lam expressed his excitement as an engineer about the many applications of AI.

As a key supplier of AI servers, Quanta's operational trends and outlook reflect the state of AI development. During Quanta's 37th anniversary celebration on April 26, 2025, Lam told the media that AI demand remains very strong, not just for 2025 but also for 2026.

Recently, concerns have grown regarding the sustainability of AI development, especially after major US cloud service providers announced cancellations or reductions in future data center lease agreements. Additionally, some Chinese cloud giants publicly stated that their AI investment has exceeded actual demand, fueling market worries about potential bottlenecks and slowing growth momentum in AI.

However, Lam noted that current customer orders show no sign of decline; they continue to fulfill as much demand as possible and have been expediting shipments in recent months. Regarding prospects for 2026, he said customer demand remains steady because data centers represent critical investments for cloud service clients.

He explained that as the four major tech giants fiercely compete with each other, their business models are increasingly reliant on AI. Currently, AI has progressed to the second stage: the first was ChatGPT, followed by generative AI now, with five more stages ahead. Each stage exponentially increases server computing requirements.

Lam stated that even within the second stage, there are numerous applications blossoming everywhere. Moreover, AI costs are dropping significantly every year. An ordinary person using AI can effectively gain expertise comparable to a physics or medical doctor, and he expressed confidence that many more applications will emerge in the future.

Quanta's role in Nvidia's ecosystem

Nvidia recently announced a US\$500 billion investment to build supercomputers in the US, naming Foxconn and Wistron among participants, but notably excluding Quanta(2382.TW). Lam clarified that Quanta is not an Nvidia supplier but rather a downstream manufacturer. Nvidia prepares modules, which Quanta then assembles into systems for the four major tech giants: Microsoft, Google, AWS, and Meta.

Preparing for future challenges

Lam reiterated that AI is still only at the second stage, with the third to seventh stages remaining, each involving different applications and business models. Some focus on data centers, others on edge computing. R&D is becoming increasingly sophisticated and deep, requiring more talent. Manufacturing must evolve toward smart manufacturing, as components grow more complex. Beyond automation, quality management becomes more complicated-these are future challenges.

He described AI servers as essential tools in the AI era. To meet human needs, AI technology advances require diverse services and various platforms rather than standardized products. Quanta plans to shift from advanced R&D to independent innovation, generating original ideas instead of merely acting as an OEM.

Vice chairman C.C. Leung added that opportunities extend beyond servers and AI servers to areas such as autonomous driving, low-earth orbit communications, and AI integration with portable devices. These fields are highly competitive, with everyone closely monitoring market developments. Quanta will certainly keep pace and not fall behind.

58) Super Micro slumps on forecast cut, analysts downplay broader Al demand concerns

Servers

April 30 (Reuters) - Super Micro Computer (SMCI.O)shares tumbled 18% on Wednesday after the server maker slashed its revenue forecast, the latest blow to the former AI darling trying to regain investor confidence following late filings and short-seller attacks.

The company blamed the cut on delays in purchases from customers, fanning worries that big technology companies were reining in spending on AI infrastructure as the economic outlook worsens and the short-term returns remain uncertain.

While several Big Tech firms have reaffirmed their hefty AI spending plans in recent months, analysts say Microsoft (MSFT.O) and Amazon.com (AMZN.O) have slowed new data center leases as they become cautious about expanding capacity.

But several analysts including those at brokerage J.P. Morgan said Super Micro's cut was unlikely to be representative of any industry-wide slowdown in demand or supply constraints.

This was "driven by specific customer decisions on platforms which shifted in relation to timing," J.P. Morgan analysts said, while Rosenblatt Securities called them "isolated issues".

While Super Micro, seen as a proxy for Nvidia demand, fell sharply, Nvidia (NVDA.O)itself slipped 3% and Advanced Micro Devices (AMD.O)fell 3.2% - smaller declines that mirrored broader market weakness. AI server rivals Dell (DELL.N)and Hewlett Packard Enterprise (HPE.N)slid 5.4% and 2.1%, respectively.

Some analysts said the cut could deepen investor scrutiny of Super Micro's forecasts, given it had predicted just last month that sales would be around \$40 billion in its next fiscal year, almost twice what analysts expect for the current one.

With its shares soaring more than triple in value in 2023, the company was one of the biggest winners of the generative AI boom until last year when it had to delay its annual report, lost its auditor and faced short-seller reports from the now-disbanded Hindenburg Research. Last year, its stock rose 7.2%, widely underperforming the benchmark S&P 500 index (.SPX), opens new tab

Reporting by Aditya Soni in Bengaluru; Editing by Krishna Chandra Eluri

Smartphones

59) Global smartphone market grew by a modest 0.2% in Q1 2025, with shipments reaching 296.9 million units- Canalys

30 April 2025

According to the latest Canalys (now part of Omdia) research, in Q1 2025, the global smartphone market recorded a slight growth of 0.2%, with shipments reaching 296.9 million units. As the peak replacement cycle came to an end and vendors prioritized healthier inventory levels, global smartphone market growth slowed for the third consecutive quarter. Samsung maintained its lead, shipping 60.5 million units, supported by the launch of its latest flagship models and competitively priced new A-series products. Apple ranked second with 55.0 million units shipped and a 19% market share, driven by growth in emerging Asia Pacific markets and the United States. Xiaomi secured third place with 41.8 million units shipped and a 14% market share, leveraging its diverse

product ecosystem to strengthen its brand in Mainland China and emerging overseas markets. vivo and OPPO followed in fourth and fifth places, with shipments of 22.9 million and 22.7 million units, respectively.



"The regional smartphone landscape is becoming increasingly complex," said Toby Zhu, Principal Analyst at Canalys (now part of Omdia). "Markets that had shown strong momentum over the past year, such as India, Latin America, and the Middle East, are now experiencing notable declines in Q1 2025, indicating saturation in replacement demand for mass-market products. Most Android brands actively adjusted inventory levels in Q1 to avoid disruptions to new product launches and channel pricing. The European market has also dropped after a brief recovery, with vendors facing high flagship inventory from late last year and disruptions in mid- and low-end product lines due to the upcoming eco-design directive. Nonetheless, some regions are still demonstrating strong demand. Government subsidy programs stimulated Mainland China's growth, while Africa continued to benefit from vibrant retail activities and proactive market expansion efforts. Vendors can still expand by optimizing their product portfolios in this complex regional environment. For instance, vivo and HONOR achieved double-digit growth in their overseas markets, with HONOR reaching a historic high in its overseas shipments."



"The US smartphone market stood out, growing 12% year on year in Q1, primarily driven by Apple," said Le Xuan Chiew, Research Manager at Canalys (now part of Omdia). "Apple proactively built up inventory ahead of anticipated tariff policies. While iPhones produced in Mainland China still account for the majority of US shipments, production in India ramped up toward the end of the quarter, covering standard models of the iPhone 15 and 16 series, alongside accelerating production of the 16 Pro series. With ongoing fluctuations in reciprocal tariff policies, Apple is likely to further shift US-bound production to India to reduce exposure to future risks. Tariffs are also expected to disproportionately impact entry-level devices, potentially reducing the availability of lower-cost models and driving average selling prices (ASPs) higher in the US. These dynamics introduce new uncertainties not only for Apple but also for Android brands competing in the market. Pricing strategies, operator bundling packages and future product structures will come under significant pressure. Meanwhile, the US smartphone market is expected to experience considerable volatility over the next two to three quarters, impacted by inventory corrections and weakening consumer confidence."



"Major smartphone brands have not yet adjusted their full-year shipment targets, despite the lackluster performance in Q1," stated Zhu. "They remain optimistic about a market rebound in Q2 and in the second half of the year. Some regions, such as Southeast Asia and Latin America, already showed signs of gradual recovery in March. Additionally, decreasing inventory levels and the mid-year launch of new mid- and low-end products have boosted their confidence. However, vendors still face multiple challenges. First, brands are adopting a cautious approach to hardware upgrades in mass-market segments to offset rising costs, necessitating more refined management of product life cycles, pricing and go-to-market strategies. Second, competition in the mid-range (US\$200 to US\$400) segment will intensify as brands seek breakthroughs in ASPs. Third, the possibility of escalating global trade tensions could drive more countries to pursue localized smartphone manufacturing, posing additional investment and cost pressures for vendors."

| Global smartphone shipments and annual growth Canalys Smartphone Market Pulse: Q1 2025 | | | | | | |
|---|-----------|---------|-----------|---------|--------|--|
| Vendor | Q1 2025 | Q1 2025 | Q1 2024 | Q1 2024 | Annual | |
| | shipments | market | shipments | market | growth | |
| | (million) | share | (million) | share | | |

| Samsung | 60.5 | 20% | 60.0 | 20% | 1% | |
|--|-------|------|-------|------|-----|--|
| Apple | 55.0 | 19% | 48.7 | 16% | 13% | |
| Xiaomi | 41.8 | 14% | 40.7 | 14% | 3% | |
| vivo | 22.9 | 8% | 21.4 | 7% | 7% | |
| ОРРО | 22.7 | 8% | 25.0 | 8% | -9% | |
| Others | 94.0 | 32% | 100.5 | 34% | -6% | |
| Total | 296.9 | 100% | 296.2 | 100% | 0% | |
| Note: Xiaomi estimates include sub-brand Redmi and POCO. Percentages may not add up to 100% due to rounding. Source: Canalys Smartphone Analysis (sell-in shipments), April 2025 | | | | | | |
| For more information, please contact: | | | | | | |

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About Smartphone Analysis

Canalys' (now part of Omdia) worldwide Smartphone Analysis service provides a comprehensive country-level view of shipment estimates far in advance of our competitors. We provide quarterly market share data, timely historical data tracking, and detailed analysis of storage, processors, memory, cameras and many other specs. We combine detailed worldwide statistics for all categories with our unique data on shipments via tier-one and tier-two channels. The service also provides a unique view of end-user types. At the same time, we deliver regular analysis to give insights into the data, including the assumptions behind our forecast outlooks.

About Canalys

Canalys, now part of Omdia, is a leading global technology market analyst firm with a distinct channel focus. We strive to guide clients on the future of the technology industry and to think beyond the business models of the past. We've delivered market analysis and custom solutions to technology vendors worldwide for over 25 years. Our research covers emerging, enterprise, mobile and smart technologies. Understanding channels is at the heart of everything we do. Our insightful reports, data and forecasts inform our clients' strategies, while the Canalys Forums and Candefero online community give the channel feedback opportunities. We stake our reputation on the quality of our data, our innovative use of technology and our high level of customer service.

60) Why Apple can't easily move iPhone production to the US: 2,700+ parts, 187 suppliers, 28 countries

Smartphones

Just 30 Apple suppliers operate entirely outside of China

April 29, 2025 By Rob Thubron techspot.com The Trump administration has big ambitions for iPhone production: it wants Apple's handsets to be completely manufactured in the US. But moving production to the United States is a near impossibility for a device whose components come from 187 suppliers in 28 countries.

Donald Trump believes the huge tariffs implemented on goods imported from China and other countries will encourage US firms to manufacture their devices domestically. That's easier said than done for a lot of firms, especially Apple, which relies heavily on China for iPhone production.

In a deep dive into the iPhone's manufacturing process, the Financial Times writes that new models consist of around 2,700 different parts, and that Apple uses 187 suppliers in 28 countries. China makes most of these components - only 30 Apple suppliers operate entirely outside of the country - though some of the high-end parts are made in Taiwan, and a few key elements are manufactured in South Korea and Japan.

There are some iPhone components made in the US, but less than 5% of the total are manufactured domestically, including the glass casing and the lasers that enable Face ID. However, certain elements of these parts, such as the backlit display and layer that enables user interaction, are made in China.

The FT writes that the 74 tiny screws that hold the iPhone together are primarily made in China and India - and fixed in place by hand.

Earlier this month, US secretary of commerce Howard Lutnick said that the "army of millions and millions of people screwing in little, little screws to make iPhones, that kind of thing is going to come to America."

Then there's the assembly. Apple ships the equivalent of 438 iPhones every minute, 85% of which are assembled by Foxconn, which has dozens of locations in China.

IBM pledges to invest \$150 billion in US manufacturing over the next five years In total, there are more than 700 production sites making iPhone components.

With so many moving parts in the supply chain and all the components involved, the fact that most of the manufacturers are located in China makes the production process easier.

"There are a lot of advantages to co-locating the activities in the supply chain, in terms of speed and quality of communication and innovation in the product and process design," Andy Tsay, a professor at Santa Clara's Leavey School of Business, told the FT.

While overseas companies used to go to China for cheap labor, the attraction now is the skill and type of skills available in one location.

"It is like the products we do require really advanced tooling and the precision that you have to have in tooling and working with the materials that we do are state-of-the-art, and the tooling skill is very deep here," Apple CEO Tim Cook said in 2017.

Apple is currently racing to move all assembly of iPhones destined for the US market from China to India by the end of 2026, further emphasizing that a 100% US-made iPhone isn't going to happen. And even if Apple were somehow able to do it, the move would take years and would likely result in a much more expensive iPhone price tag - some predict as much as \$3,500.

Software

61) Microsoft earnings press release available on Investor Relations website

REDMOND, Wash., April 30, 2025 /PRNewswire/ -- Microsoft Corp. on Wednesday announced that fiscal year 2025 third-quarter financial results are available on its Investor Relations website. The direct link to the earnings press release is <u>https://www.microsoft.com/en-us/Investor/earnings/FY-2025-Q3/press-release-webcast</u>.

As previously announced, the company will host a conference call at 2:30 p.m. Pacific Time. A live webcast of the call can be accessed on Microsoft's Investor Relations website at <u>https://www.microsoft.com/en-us/Investor/</u>.

Microsoft (Nasdaq "MSFT" @microsoft) creates platforms and tools powered by AI to deliver innovative solutions that meet the evolving needs of our customers. The technology company is committed to making AI available broadly and doing so responsibly, with a mission to empower every person and every organization on the planet to achieve more.

SOURCE Microsoft Corp.

Storage

62) Silicon Motion Announces Results for the Period Ended March 31, 2025

Business Highlights

First quarter of 2025 sales decreased 13% Q/Q and decreased 12% Y/Y

SSD controller sales: 1Q of 2025 decreased 10% to 15% Q/Q and decreased 20% to 25% Y/Y

eMMC+UFS controller sales: 1Q of 2025 decreased 15% to 20% Q/Q and decreased 0% to 5% Y/Y

SSD solutions sales: 1Q of 2025 decreased 20% to 25% Q/Q and decreased 35% to 40% Y/Y

Announced new \$50 million share repurchase program

Financial Highlights

| | | 1 |
|--|--|---|
| | <u>1Q 2025 Non-</u> | |
| <u>1Q 2025 GAAP</u> | <u>GAAP*</u> | |
| Net sales | \$166.5 million (- 13% Q/Q, - 12% Y/Y) | \$166.5 million (- 13% Q/Q, -12% Y/Y) |
| Gross margin | | |
| | 47.1 % | 47.1 % |
| Operating margin | | |
| | 5.9 % | 8.9 % |
| Earnings per diluted ADS | | |
| | \$0.58 | \$0.60 |

• Please see supplemental reconciliations of U.S. Generally Accepted Accounting Principles ("GAAP") to all non-GAAP financial measures mentioned herein towards the end of this news release.

TAIPEI and MILPITAS, Calif., April 30, 2025 /PRNewswire/ -- Silicon Motion Technology Corporation (NasdaqGS: SIMO) ("Silicon Motion," the "Company" or "we") today announced its financial results for the quarter ended March 31, 2025. For the first quarter of 2025, net sales (GAAP) decreased sequentially to \$166.5 million from \$191.2 million in the fourth quarter of 2024. Net income (GAAP) decreased to \$19.5 million, or \$0.58 per diluted American depositary share ("ADS") (GAAP), from net income (GAAP) of \$21.6 million, or \$0.64 per diluted ADS (GAAP), in the fourth quarter of 2024.

For the first quarter of 2025, net income (non-GAAP) decreased to \$20.3 million, or \$0.60 per diluted ADS (non-GAAP), from net income (non-GAAP) of \$29.4 million, or \$0.87 per diluted ADS (non-GAAP), in the fourth quarter of 2024.

All financial numbers are in U.S. dollars unless otherwise noted.

First Quarter of 2025 Review

"Despite the challenging macro environment in the first quarter of 2025, we executed our plan and delivered quarterly revenue at the high end of our guided range and delivered another quarter of gross margin expansion," stated Wallace Kou, President and CEO of Silicon Motion. "Our industry leading PCIe Gen 5 controller experienced stronger than expected demand during the quarter, partially driven by growing AI inference demands from white box server makers leveraging more mainstream hardware components. Our eMMC and UFS controllers also experienced better than expected demand given a rebound in the smartphone market and our ongoing market share gains. While the near-term remains challenging given the broader economic challenges associated with tariffs and potential trade wars, we remain focused on delivering strong, sustainable long-term growth through product diversification; expanding into new markets; and growing market share across our portfolio of consumer, enterprise, automotive, industrial and storage solutions."

| Key | Financi | al Result | S |
|-----|---------|-----------|---|
|-----|---------|-----------|---|

| (\$ in millions, except per ADS | GAAP | | | Non-GAAP | | |
|---------------------------------|---------|---------|---------|----------|---------|---------|
| amounts) | 1Q 2025 | 4Q 2024 | 1Q 2024 | 1Q 2025 | 4Q 2024 | 1Q 2024 |
| Revenue | \$166.5 | \$191.2 | \$189.3 | \$166.5 | \$191.2 | \$189.3 |
| Gross profit | \$78.4 | \$87.6 | \$85.1 | \$78.4 | \$87.9 | \$85.2 |
| Percent of revenue | 47.1% | 45.8% | 45.0% | 47.1% | 46.0% | 45.0% |
| Operating expenses | \$68.6 | \$69.9 | \$67.2 | \$63.6 | \$58.3 | \$62.5 |
| Operating profit | \$9.8 | \$17.7 | \$18.0 | \$14.9 | \$29.6 | \$22.6 |
| Percent of revenue | 5.9% | 9.3% | 9.5% | 8.9% | 15.5% | 12.0% |
| Earnings per diluted ADS | \$0.58 | \$0.64 | \$0.48 | \$0.60 | \$0.87 | \$0.64 |

Other Financial Information

| (\$ in millions) | 1Q 2025 | 4Q 2024 | 1Q 2024 |
|--|---------|---------|---------|
| Cash, cash equivalents, and restricted cash- | | | |
| end of period | \$331.7 | \$334.3 | \$349.3 |
| Dividend payments | \$7.0 | \$7.3 | \$5.0 |
| Dividend payments | \$17.0 | \$16.8 | \$16.8 |
| Share repurchases | \$24.3 | | |

During the first quarter of 2025, we had \$11.7 million of capital expenditures, including \$7.0 million for the routine purchases of testing equipment, software, design tools and other items, and \$4.7 million for building construction in Hsinchu, Taiwan.

Returning Value to Shareholders

On February 6, 2025, we announced that our Board of Directors had authorized a new program for the Company to repurchase up to \$50 million of our ADSs over a six-month period. In the first quarter of 2025, we repurchased \$24.3 million of our ADSs at an average price of \$56.96 per ADS.

Business Outlook

"We are rapidly expanding our market opportunities as we invest in new products and enter new markets, which we anticipate will drive improved revenue and profitability for many years to come. In 2025, we expect to benefit from the introduction of several new products, including our 8-channel PCIE Gen 5 controller, our 4-channel PCIe Gen 5 controller targeting the mass market that will be introduced in late 2025, our higher-end UFS 4.1 and new low-cost UFS 2.2 controllers that will ramp in the second half of 2025. We introduced our first MonTitan enterprise/AI-class products at the end of 2024, and we expect these to ramp-up production with our first customers in the second half of 2025. Additionally, we continue to expand our automotive product portfolio and our market share across multiple applications. While the near-term environment remains challenging given the macro environment, including the potential impact of tariffs and potential trade wars, we continue to believe we will see a strong rebound in the consumer markets in the second half of 2025, enhanced by our new product introductions, and we continue to target a revenue run rate of \$1 billion as we exit the year."

For the second quarter of 2025, management expects:

| | | Non- | |
|--------------------------------------|----------------|---------------------|----------------|
| (\$ in millions, except percentages) | GAAP | GAAP Adjustment | Non-GAAP |
| | \$175 to \$183 | | \$175 to \$183 |
| Revenue | +5% to 10% Q/Q | | +5% to 10% Q/Q |
| | | Approximately | |
| Gross margin | 47.0% to 48.0% | \$0.1* | 47.0% to 48.0% |
| | | Approximately \$3.1 | |
| Operating margin | 6.6% to 9.2% | to \$4.1** | 8.9% to 10.9% |

• Projected gross margin (non-GAAP) excludes \$0.1 million of stock-based compensation. ** Projected operating margin (non-GAAP) excludes \$3.1million to \$4.1 million of stock-based compensation and dispute related expenses.

Conference Call & Webcast:

The Company's management team will conduct a conference call at 8:00 am Eastern Time on April 30, 2025.

Conference Call Details

Participants must register in advance to join the conference call using the link provided below. Conference access information (including dial-in information and a unique access PIN) will be provided in the email received upon registration.

Participant Online Registration:

https://register-conf.media-server.com/register/BI5c69a4c2d96041b59a2bf8a51cec1881

A webcast of the call will be available on the Company's website at <u>www.siliconmotion.com</u>.

Supply Chain

63) Why Making an All-American Product Is So Hard

Manufacturers say key components are too expensive, too scarce or simply unavailable from U.S. sources

April 28, 2025 John Keilman WSJ

From the start, the Idaho-based company Decked has aspired to be an All-American manufacturer. It makes slide-out organizers for pickup trucks, and 95% of its spending on materials goes to U.S. suppliers.

Moving that last 5% stateside has been a challenge. Chief Executive Bill Banta said the company searched for a domestic source for the ball bearings it buys from China, only to hit a dead end.

"We've struggled to find components that are competitive in terms of price and lead time," he said.

Companies have long highlighted "Made in the U.S.A." products even after much of the nation's industrial base migrated overseas. Some manufacturing returned in the wake of the Covid-19 supply-chain disruptions, and President Trump has said his tariffs are meant to bring back much more.

Manufacturers that already make products in the U.S. said it is tough to create an entirely domestic supply chain. Parts or materials vital to their products are no longer made here, they said, or are available only in quantities that are too low or prices that are too high.

Ricky Cousido is co-owner of Brooklyn-based Rapid Plastics, a six-person company that makes high-end coat hangers for department stores and other retailers. He said the domestic suppliers that furnished the metal hooks for his company's hangers closed or went overseas more than two decades ago.

He now gets the hooks and other metal components from China, and the U.S. tariffs on imports from the country are rapidly boosting his expenses. The bar of a skirt hanger, which cost 40 cents before the duties were imposed, now costs 80 cents, he said.

Cousido said government policy should make exceptions for manufacturers unable to find U.S.made components.

"I can't beg some company, 'open up, make this item for us," he said.

Haas Automation, a California-based builder of factory machinery, makes a similar argument. It imports cast iron from China to make the frames for its products. Peter Zierhut, vice president of outside operations for Haas, said the U.S. has no foundries capable of generating the more than 100 million pounds the company consumes each year, and he sees little chance any will return.

Building a new foundry would require hundreds of millions of dollars in investment to turn out a commodity that is worth just a few dollars per pound, he said. Finding workers would be tough as well, he said.

"It just doesn't seem realistic that cast iron-a super low-tech industry-is going to build their operations in the United States," Zierhut said.

The tariffs the company is paying on iron and other parts from China could raise the price of its machines by about 20%, he said. Meanwhile, competitors based in South Korea, Taiwan and Japan are sending their products to the U.S. at just a 10% to 14% tariff.

Haas said it has already cut production and eliminated overtime at its plant in Oxnard, Calif. The company is building a \$500 million factory in Nevada to serve what it had expected to be increased

demand for its machines, but Zierhut said that without tariff relief the plant's opening might be delayed.

Some manufacturers said they are making progress at Americanizing their supply chains. Two years ago, CorVent Medical, which makes ventilators at a factory in North Dakota, got up to 70% of its parts from China.

Today, CorVent gets up to 70% of its parts from U.S. suppliers and aims to boost that to 100% within the next few years.

Components made of sheet metal and plastic have been relatively easy to repatriate, said Richard Walsh, CorVent's CEO. Others have been far more difficult. The transistors, motors and power boards used in its ventilators are available only in Taiwan, he said.

However, the company has been able to bring a key part of its supply chain back to the U.S. by contracting with a Minnesota company called Versa Electronics, which makes circuit boards. Walsh said while some of the boards' components come from overseas, the bulk of the cost comes from assembly.

Versa CEO Kevin Johnsrud said his company uses automated machines to place resistors, capacitors and integrated circuits onto circuit cards, though workers sometimes solder components by hand. Versa can compete with overseas suppliers because it specializes in low-volume runs, Johnsrud said.

"We don't do millions of cellphones or other devices," he said.

Even as the trade war begins, fewer consumer packaged goods and grocery items are being marketed as "Made in the U.S.A.," data from NielsenIQ shows. About 100,000 separate products carried that designation over the 12 months that ended April 12, the firm said, down from 102,000 over the prior 12 months.

Some attorneys have said companies could face extra scrutiny from the Federal Trade Commission over the provenance of their goods. The agency has strict rules that govern whether a product can be advertised as American-made, saying "all or virtually all" of its components must come from within the country.

Manufacturers sometimes add qualifiers to their marketing, but Pennsylvania-based tool maker Channellock calls its domestically produced pliers, tool bags and drivers "100% Made in USA." Ryan DeArment, the company's executive vice president of sales and marketing, said every bit of their content, including the metal, fabric and cardboard packaging, has a domestic source.

Even so, the tariffs have him concerned. DeArment said the mills that make the steel for Channellock pliers could prioritize automakers and other big customers if import duties boost demand for American metal.

"It might not impact us in 2025, but when we go back to the table in 2026, we could see a change," he said. "There are so many moving parts."