ISSUE 18 – OCTOBER 2026

RAW MATERIAL NEWS

High-end copper foil demand for artificial intelligence servers totalled about 24,000 tons in 2026, up about 260% year-on-year, and was forecast to reach 50,000 tons in 2027 - Soochow Securities

Over the past two years, the most prominent segment in the artificial intelligence industrial chain has belonged to chips.
NVIDIA's GPUs have become core assets that draw global capital market attention. Servers, optical modules, and data centers centered on computing power have also become the main line of repeated trading in the A-share market.
But in 2026, a new change is emerging.
The market has begun to shift its focus from the upstream most chip segment to links closer to the manufacturing end.

The PCB is now becoming a key part in the upgrading of AI infrastructure.
Since September, the PCB industrial chain has remained continuously active.
From high-speed PCBs to copper clad laminates, and then to copper foil materials, many listed companies have attracted market attention.

As of the close of trading on September 23, Aohong Electronics maintained its strong momentum, notching 7 daily limit ups in 9 trading days; although Daxiang Shengya has issued a clarification stating that the ultra-thin PCB fiberboard in its wood-based panel products is not an electronic component, does not form part of a PCB, and is only used to pad under the copper clad laminate (raw material for PCB) to play an auxiliary and protective role, its stock price still recorded 4 consecutive daily limit ups; in addition, multiple stocks including Zhongyi Technology, Jitai Co., Ltd., Jiangnan New Materials, and Yiton Electronics have also hit their daily limit ups one after another.

What the market is trading in is no longer just the "AI concept", but a more practical question: when AI computing power continues to expand, who can support the next-generation computing infrastructure?
The answer is pointing to a circuit board.

The Underestimated PCB That Is Bottlenecking AI Computing Power

The AI competition over the past two years is essentially a computing power race.
Whoever has more GPUs and larger data centers will have stronger large model training capabilities.
Therefore, the capital market first focused on chips.
AI chips, servers, and optical modules have become the most sought-after directions in the industrial chain.
However, as AI infrastructure continues to expand, a new problem has emerged: if the number of GPUs keeps increasing, where is the bottleneck that truly limits the development of AI?
The answer is shifting from chips to the entire system.
The reason is very simple.
AI servers are no longer the same type of equipment as traditional servers.
Traditional servers rely more on CPUs for computing, while AI servers require a large number of GPUs to work in coordination.
This means higher data transmission volume, higher signal frequency, greater power consumption, and more complex connection requirements.

The stronger the chip performance, the higher the requirements for the infrastructure that carries the chips, and the importance of PCBs is being rediscovered in this process.
PCB is known as the "mother of electronic products". In the past, it mainly undertook the connection function. Mobile phones need PCBs, computers need PCBs, and automotive electronics also need PCBs.

But AI servers are changing this logic. Because what AI servers need are not ordinary PCBs, but high-speed, high-frequency, low-loss PCBs. They need to carry data transmission between GPUs, switching chips, high-speed storage, and power systems.
A single PCB begins to determine whether the entire computing power system can operate efficiently. This is why the value of the AI industrial chain is shifting from chips to infrastructure.

Apart from Chips, There is Also a "Copper Foil War" in AI Hardware
If you further disassemble a high-end PCB, you will find that the real competition is not only in PCB manufacturing, but the upstream materials are becoming a new battlefield.
Behind a high-performance PCB, copper foil, fiberglass cloth, resin, and copper clad laminate are required. Among them, copper clad laminate determines the performance of PCB, and what AI servers need are high-frequency and high-speed materials.

In the process of high-speed data transmission, signal loss has become a new limiting factor, so the importance of low-loss materials keeps rising.
HVLP copper foil is a representative of such materials.
Compared with ordinary copper foil, HVLP copper foil can reduce high-speed signal transmission loss, and is one of the important materials for high-speed PCBs in AI servers.

According to the research report of Soochow Securities, the demand for high-end HVLP copper foil dedicated to AI servers in 2026 is about 24,000 tons, a year-on-year increase of about 260%; the demand is expected to further rise to 50,000 tons in 2027.

However, the problem of high-end materials cannot be solved simply by expanding production capacity. It requires equipment upgrading, process accumulation and customer certification.

This means that the AI industrial chain is forming a new contradiction between supply and demand: not all PCBs are scarce, what is scarce are high-end PCBs and materials that can meet the requirements of AI servers.

This is why the capital market has begun to re-evaluate PCB enterprises, and Shanghai Dianxun Co., Ltd. is a typical case among them.

In the past, investors looked at Shanghai Dianxun Co., Ltd. more as a PCB manufacturing enterprise. But in the AI era, the market began to re-understand it.
The core value of the company is not just manufacturing PCBs but being able to produce high-end PCBs that meet the requirements of high-speed servers.
This change means that PCB enterprises are transforming from traditional electronic manufacturing enterprises to AI infrastructure suppliers.
The same change is also taking place in material enterprises, with Shengyi Technology representing the copper clad laminate direction.
In the past, material enterprises were often in a relatively low position in the industrial chain. But in the AI era, a new logic is taking shape: materials determine the upper limit of performance.
Without better materials, chip performance cannot be fully released, and server speed cannot be further improved.
Therefore, AI competition is not only competition for chips, but also competition for materials.
At the same time, enterprises including Dongshan Precision and Shenghong Technology are also continuously making layouts in the high-end PCB field.
They are all facing the same industrial trend: the growing demand for AI servers is pushing the PCB industry to shift from scale competition to technology competition.
In the past, the one with lower cost had more advantages; in the future, the one that can produce higher-end products will have more advantages.

AI "Shovel Seller", It's PCB's Turn
Every industrial revolution will go through a similar process.
At the very beginning, the capital market focuses on the most eye-catching technologies.
In the Internet era, attention was paid to platforms; in the new energy era, attention was paid to complete vehicles and batteries; in the initial stage of the AI era, attention was paid to GPUs and large models.
However, as the industry enters the large-scale development stage, the market begins to look for infrastructure, and PCB is exactly at this stage.
It is not the most glamorous segment of the AI industry, but it is an unavoidable link for the large-scale implementation of AI.
Because artificial intelligence does not eventually run in concepts, it runs in servers, servers run in data centers, and data centers run on a large number of basic components.
Therefore, the AI industrial chain will definitely return to manufacturing in the end.
However, the capital market also needs to see the other side of the story.

The PCB industry has experienced multiple cycles in the past - rising demand, enterprises expanding production, production capacity release, and price decline.
The biggest difference this time is that the demand brought by AI is more concentrated in the high-end field.
Enterprises that will truly benefit in the future need to meet three conditions: first, have the capability for high-end products; second, be admitted to the supply chain of core customers; third, convert demand into profits.
The capital market can trade on industrial trends in advance, but what ultimately determines the value of an enterprise is still orders and financial data.
This is why the AI PCB market trend will not simply replicate the past electronics cycles.
The future competition is not about who has more production capacity, but about who masters the most scarce manufacturing capabilities in the AI era.
Over the past two years, people have been looking for those who make the AI brain, then those who connect the AI brain, and now those who support the operation of the AI brain.
A PCB seems to be just a circuit board in electronic equipment.
But in the AI era, what it carries is not only circuits, but the entire computing power infrastructure - from GPUs, to optical modules, to PCBs, and then to copper foils, copper clad laminates and testing equipment.
Artificial intelligence will eventually return to manufacturing.
And a PCB is becoming the new "shovel selling business" in the AI era.

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ARTIFICAL INTELLIGENCE NEWS

Artificial intelligence layout tools cut printed circuit board design to 38.5 hours against 428 hours at Quilter and to 75 minutes from three days at Cadence, with a 14% wire length gain

The shift from human-driven layout to algorithm-assisted design is reshaping how engineers approach PCB design and prototype services. Instead of requiring weeks of manual layout work, AI tools analyze thousands of potential configurations in minutes, helping engineers identify any issues earlier in the prototyping phase.

For electronics teams evaluating custom PCB prototyping options, these AI-assisted workflows highlight key performance advantages: faster iteration, stronger routing discipline, and tighter handoffs from engineering to production.

Redefining design cycles with AI automation
Designers must make thousands of individual decisions about component positioning, trace routing, and layer allocation. In some workflows, automated tools can reduce tasks that previously took days or weeks to a much shorter period. These tools can also help engineers evaluate design integrity and electrical performance during development.

Quilter claimed that its physics-driven AI has demonstrated this transformation through one of its recent projects. A single engineer used Quilter's platform to design a functioning two-board computer system in under a week. The project required 38.5 hours of human input, compared to traditional estimates of 428 hours. The company said the baseboard alone showed "12 hours on the baseboard against a 238-hour manual quote," while the system-on-module required 26.5 hours instead of a conventional estimate of 190 hours.

Efficiency gains like these can enable organizations to test multiple design approaches before committing to production runs, potentially identifying issues earlier and reducing the risk of expensive respins after manufacturing. As a result, engineering resources can focus on novel technical challenges rather than tedious placement and routing tasks.

Optimizing the custom PCB prototype

AI-powered platforms can support prototyping by analyzing patterns from previous projects and presenting engineers with potential design options. The algorithms can draw on vast repositories of design data accumulated from completed boards, identifying successful strategies without requiring explicit programming for every scenario.

According to EMSG, "AI-powered design assistants can suggest optimal component placements, routing paths, and layer configurations." Engineers designing a custom PCB prototype can leverage platforms that use historical data and machine learning to generate recommendations based on approaches that have performed well in previous designs. Instead of replacing human expertise, the technology provides informed suggestions that professionals can accept, modify, or reject based on project-specific requirements and architectural constraints.

Real-time assistance during active development helps designers explore creative solutions while maintaining technical rigor. Automated analysis handles repetitive evaluation tasks so professionals can focus on innovation and strategic decision-making. The technology accelerates development cycles while leaving final engineering decisions and validation to the design team.

Accelerating component placement

Positioning hundreds or thousands of components represents one of the most computationally intensive challenges in board development, directly impacting signal integrity, thermal management, and manufacturing feasibility.

Conventional approaches rely on experience-based heuristics that work well for simple layouts but struggle with dense designs containing multiple functional blocks and strict electrical requirements. AI algorithms address these limitations by evaluating vast solution spaces against multiple constraints, allowing engineers to explore options that would be difficult to assess manually within the same timeframe.

Cadence claimed that its Allegro X AI technology has demonstrated the practical impact of this capability. According to Saugat Sen, VP of product marketing at Cadence, one undisclosed customer had a design that "took three days to do PCB placements using manual human methods, but only 75 minutes" when routed through the platform. This not only reduced processing time for complex boards but also included a 14% improvement in wire length.

Shorter connections can support signal integrity and may reduce routing complexity and manufacturing costs. However, the effects on EMI and manufacturing cost depend on the board's stack up, materials, power requirements, and production process.
Professionals can now conduct early-phase feasibility analysis by quickly testing multiple configurations. Rather than committing to a single approach based on limited assumptions, teams can compare several configurations before investing significant time in detailed routing work.

Solving complex routing and manufacturing challenges

Circuit boards function like cities with multilevel road systems, where hundreds of connection points require careful planning. Bridging upper and lower layers requires vias, which are plated holes that create electrical connections between layers so signals and power can move through the board stack. However, each via introduces unwanted electrical interference while increasing manufacturing complexity and cost. This creates a significant optimization challenge for designers working with dense, high-performance layouts.

InstaDeep said its DeepPCB platform approaches this problem by using algorithms to evaluate and refine routing options. When tested on a benchmark board containing 444 airwires and 157 nets, the company said the system has demonstrated substantial improvements over successive development cycles.

According to DeepPCB, the platform "achieved a remarkable reduction of over 50% in via count" over the past year, producing more efficient configurations by identifying routing paths that conventional planning methods might overlook during manual layout sessions. Reducing unnecessary vias can simplify fabrication and may improve some electrical characteristics. However, manufacturing yield and reliability depend on the full board design, material selection, fabrication tolerances, and inspection process.

As designs contain fewer potential points of failure, manufacturing yields improve while streamlined layouts accelerate production timelines. By applying lessons from completed projects, the technology helps engineers refine strategies to tackle increasingly complex routing scenarios more consistently.

The future of hardware engineering

Automated routing and placement tools can reduce bottlenecks that once constrained development timelines, allowing professionals to focus on innovation and rigorous testing rather than repetitive tasks. Organizations developing a custom PCB prototype can now allocate more resources toward perfecting functionality before committing to production tooling.

AI-assisted placement and routing are unlikely to eliminate the need for experienced PCB designers. Their more immediate value is reducing the time required to evaluate alternatives, allowing engineering teams to test more configurations before committing to fabrication. The next challenge will be proving that these faster workflows consistently produce designs that meet electrical, thermal, and manufacturing requirements.

September 24, 2026

EE Times

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NEWS FROM GERMANY

Schweizer Electronic moved its shares from the regulated market to the Frankfurt Stock Exchange Scale segment for smaller companies from 30 September 2026 to cut regulatory and administrative costs

September 29, 2026
Schweizer Electronic

Shares in Schweizer Electronic AG (ISIN: DE0005156236, WKN: 515623) will be traded on the Scale segment of the Frankfurt Stock Exchange from 30 September 2026. The company is thus completing the transition from the regulated market to the Scale segment of the open market, as announced on 13 August 2026.

The steps required for the segment change have been completed as planned. The last trading day for the shares of Schweizer Electronic AG on the regulated market of the Frankfurt Stock Exchange (General Standard) and on the regulated market of the Stuttgart Stock Exchange is 29 September 2026. From 30 September 2026, the shares will be listed on the Scale segment of the Frankfurt Stock Exchange.

The tradability of SCHWEIZER shares will remain fully guaranteed throughout the segment change. The shares will continue to be tradable via Xetra and other trading venues.
By moving to Scale, Schweizer Electronic AG is aligning its stock market listing with the company's size and capital market orientation. Scale is a segment of the Open Market (Freiverkehr) of the Frankfurt Stock Exchange with additional transparency requirements and is aimed at small and medium-sized enterprises.

As previously announced in an ad hoc announcement dated 13 August 2026, Schweizer Electronic AG's aim in changing segments is to reduce the regulatory and administrative burden associated with listing on the regulated market, including the associated costs, whilst maintaining its presence on the capital market.
The company will continue to provide shareholders, investors and other capital market participants with regular and transparent updates on the company's performance.

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NEWS FROM FRANCE

CSI Sud-Ouest inaugurated its rebuilt Toulouse printed circuit board factory on September 29, 2026, two years after an arson fire destroyed 2,000 square meters of the 3,500-square-meter site and caused 25 million euros in damages, and ran it at 80% capacity

Electronics manufacturer CSI Sud-Ouest inaugurated its fully rebuilt printed circuit board factory in Toulouse on Tuesday, September 29, 2026, two years after a violent arson fire destroyed three-quarters of the original facility. The arson attack, which occurred during the night of July 26-27, 2024, destroyed 2,000 square meters of the 3,500-square-meter site on Chemin de Fenouillet, causing 25 million euros in damages, including over 12 million euros in specialized machinery replacement.

Despite the destruction, the company retained all 57 of its employees and maintained its entire base of 300 industrial clients, including major defense, aerospace, and research leaders such as Airbus, Safran, Dassault, Thales, and CNRS.

Management sustained operations through temporary arrangements, sub-contracting parts while preserving internal computer-aided manufacturing and quality control tasks, and rotating employees to a sister facility in Ennery, near Metz, where workers traveled on weekends to meet production targets.

Staff members were also temporarily placed with other local companies or interim agencies to ensure no loss of income, resulting in only two total resignations among the workforce during the two-year transition. Reconstruction of the facility took 18 months following the completion of site demolition in late 2024, financed through insurance payouts alongside state and regional support via the France 2030 investment plan.

The plant resumed initial manufacturing in Toulouse in February 2026 and currently operates at 80 percent capacity, with full operational capacity projected for January 2027. Executive Director Eric de Ponthaud reflected on the recovery efforts during the official opening ceremony.

"From the very first days, we looked for all possible solutions to keep working," said Eric de Ponthaud, Executive Director of CSI Sud-Ouest. He emphasized the solidarity among staff and the milestone achieved by the reconstruction team. "Despite the difficulties, in everyone's mind, there was always concern for the other," said Eric de Ponthaud, Executive Director of CSI Sud-Ouest.

He noted that rebuilding the specialised facility in record time represented an unprecedented feat for the industry in France.

"It is almost a miracle, an achievement for the profession. It is the first factory of this type to be rebuilt in France," said Eric de Ponthaud, Executive Director of CSI Sud-Ouest. Group leadership recalled the initial shock when the intrusion alarm sounded at 12:18 a.m. on the night of the incident. "For two hours, firefighters were prevented from intervening. We are bruised and stunned by the scale and brutality of the event," said Laurent Bodin, General Director of Cimulec Group.

Staff representatives highlighted the strong company culture and low turnover rate, which averages 20 years of employee seniority.
"We are very proud to be part of CSI, to share our values and our courage," said Kevin Souchon, Employee Representative at CSI Sud-Ouest. Public officials attending the ceremony praised the resilience of the workforce and management team.
"You allow us to receive a life lesson," said Jean-Luc Moudenc, Mayor of Toulouse. "You show us that even when we are at our lowest, if there is will, solidarity, and self-surpass, everything is possible." Regional representatives echoed the praise for the rapid rebuilding effort.

"Bravo, I have no other words," said Delphine Mercadier, Deputy at the Regional Secretariat for General Affairs. Regional Councilor Thierry Cottelle characterised the recovery as work "that commands admiration." During the event, nine company employees and managers received National Defense bronze medals in recognition of their strategic manufacturing support for the defense sector, which includes printed circuit components used in aeronautics, satellite systems, and telescope measurement instruments.

Law enforcement investigations into the 2024 arson attack remain ongoing, as authorities have not yet identified the perpetrators responsible for the fire.

October 1, 2026
Suara Garut

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NEWS FROM ISRAEL

Eltek appointed chief financial officer Ron Freund as chief executive officer effective September 23, 2026, succeeding Eli Yaffe, and reported second-quarter 2026 revenue down 8.00% at USD 11.50 million with a USD 2.70 million net loss

Eltek appointed Ron Freund as chief executive officer effective September 23, 2026, succeeding Eli Yaffe, according to StockTitan. The leadership change gives the company an internal successor while Freund continues to serve as chief financial officer.

Leadership changes on September 23
Yaffe led Eltek since July 2018 and is scheduled to join the board as a director on March 8, 2027, according to the same September 9, 2026 release carried by StockTitan. Freund has served as Eltek's chief financial officer since January 2022 and will retain that role until a successor is appointed.
The handover arrives as Eltek works through a difficult operating period. The company manufactures complex printed circuit boards for defense, aerospace, medical and industrial customers, making execution and production capacity central to the next phase.

Revenue falls 8.00 percent
Eltek generated USD 11.50 million of revenue in the second quarter of 2026, down 8.00 percent from USD 12.50 million in the second quarter of 2025, while the net result changed from USD 0.40 million of income to a USD 2.70 million loss, ScanX reported on September 21, 2026. The comparison shows that the pressure was not limited to sales: the company moved from a quarter-year profit to a loss. Gross loss improved sequentially from USD 1.80 million in the first quarter of

2026 to USD 1.00 million in the second quarter, according to ScanX. Eltek also reported USD 0.70 million of operating cash flow for the quarter and held USD 11.50 million in cash as of June 30, 2026.

ELTEK remains below its yearly high

On Nasdaq, ELTEK was trading at USD 7.67 at 1:15 p.m. ET on October 1, 2026. The quote stood 33.82 percent below the USD 11.59 52-week high and 5.07 percent above the USD 7.30 52-week low; market capitalization was USD 51.5 million.

MarketBeat identifies Eltek as a Nasdaq-listed technology company in the electronic components industry and gives its 52-week range as USD 7.30 to USD 11.59. For investors, the leadership transition and the second-quarter figures belong together: Freund inherits a business with cash on hand, but also a clear need to improve the conversion of demand into profitable shipments.

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NEWS FROM THE USA

United States share of global printed circuit board production fell from approximately 30% to 4% since the 1990s, with domestic fabricators down from more than 2,000 to about 145 - Printed Circuit Board Association of America

Advanced chips have been getting hit by tariffs for years, with policymakers framing them as efforts to rebuild America's semiconductor supply chain. But one piece of that supply chain hiding in plain sight rarely gets the same attention: the printed circuit board (PCB).

While the U.S. has invested tens of billions of dollars through the CHIPS Act to reshore chip manufacturing, the PCB remains a critical, unsolved link in the electronics supply chain. Reduced resources, a lack of policy incentives, and a shrinking pool of qualified talent have left this part of the industry largely to fend for itself.

Fabricating the chip is only one early step in the long process of manufacturing a full system. Every CPU, every GPU, and every other piece of AI hardware needs a PCB to connect it to power, memory, sensors, and other boards. The PCB layout is also the one component in any electronic system that's never a commodity. Chips are mass-produced and sold off the shelf, but every board needs to be custom designed for its specific application before even one can be fabricated.
That design step is the bottleneck, both in AI hardware and equally in robotics, defense, aerospace, EVs, and telecom.

The PCB Bottleneck, By the Numbers
The numbers tell the story. Since the 1990s, the U.S. share of global PCB production has dropped from approximately 30% to 4% today, according to data from the Printed Circuit Board Association of America. The number of domestic PCB fabricators has fallen from more than 2,000 to about 145 over the same period, and the U.S. now produces only about 1% of the world's PCBs directly. Thus, engineers in the U.S. rely largely on Asia for roughly 90% of their boards, with more than half coming from China.

Years of offshoring has left the U.S. with a structural dependency on foreign supply chains, creating an infrastructure gap in which American companies still can't build fast enough to meet demand.

New Investments Trickle Down to PCB Production

Policymakers have started to notice. A 2018 Department of Defense industrial base assessment, conducted under Executive Order 13806, called the domestic PCB industry "aging, shrinking, and failing to maintain the state of the art," and flagged that some advanced board types were "simply not producible in the U.S."

Mike Cadenazzi, the current U.S. assistant secretary of war for industrial base policy, has since warned that chips, substrates, and PCBs represent "multiple avenues of attack for a potential malicious actor," with worst-case scenarios including missiles that malfunction in flight due to compromised boards.

In early 2023, the U.S. invoked Defense Production Act Title III to support domestic PCB production, and the Department of Defense has since put more than $118 million in DPA grants behind manufacturers. That includes $11.7 million awarded in 2024 specifically to expand PCB assembly capacity for hypersonic weapons.

A bipartisan bill, the Protecting Circuit Boards and Substrates Act (HR 3597), would add a 25% tax credit and a $3 billion assistance program modeled on the CHIPS Act. But it remains in committee.

The Bottleneck Behind the Bottleneck: PCB Design

Every one of these interventions targets the same three things: fabrication, substrates, or assembly. None of them touch the bottleneck upstream of all three: design.

The AI boom driving unprecedented demand for PCBs is also the force most capable of addressing the talent and throughput constraints on the design side. Tax credits and DPA grants can build a fab. They can't shorten the design queue feeding it, and a reshored fab running at partial utilization because customers still need three months for a layout doesn't solve the strategic problem.

That's the bet behind a new wave of AI-assisted layout tools, including the one developed at Quilter: Take the slowest, most repetitive parts of the layout process off a designer's plate so a fixed-size team can carry meaningfully more volume. Teams using these tools cut layout time from multiple months to a matter of weeks. The goal isn't to replace engineers, but to give the ones we have left the leverage that policy alone can't legislate into existence on a useful timeline.

The U.S. has made real progress at the chip level, but chips don't function in isolation. Congress can fund new fabs in a few years, but we can't legislate a new generation of senior PCB designers into existence on that same timeline. Without a resilient domestic design ecosystem to match the manufacturing investment, the broader push to rebuild America's electronics supply chain risks running into a bottleneck almost no one is talking about. While we still need to rebuild the talent pipeline, automated PCB design is one of the only levers available at the speed necessary to tackle this problem. The electronics industry's best path forward is equipping the designers it does have with tools that multiply their output.

News from
WECC members

WECC
World Electronic Circuits Council

Issue 18 - October 2026

NEWS FROM THE TPCA

The PCB industry is expected to post combined domestic and overseas output of NT$1.14 trillion (US$35.83 billion) this year

Taiwan News

The PCB industry is expected to post combined domestic and overseas output of NT$1.14 trillion (US$35.83 billion) this year, the Taiwan Printed Circuit Association said Thursday.

Q2 output reached NT$279.1 billion, up 27.9% from a year earlier, while first-half output rose 23.9% to NT$524.7 billion, per CNA. The TPCA said output this year has been stronger than in the previous two years.

The association said demand for AI servers, high-speed networking equipment, and memory is boosting demand for high-end PCBs, including IC substrates, high-layer-count boards, and high-density interconnect boards. Tight supplies of high-end materials and rising raw material costs have also pushed PCB prices higher.

The TPCA expects combined output to rise 24.5% year on year in the second half to NT$611.8 billion, according to UDN. Growing AI applications and emerging uses such as AI glasses and satellite communications are expected to support demand.

The industry still faces risks from rising component costs, tight supplies of key materials, geopolitical tensions, and uncertainty over returns on AI infrastructure investments, the TPCA said. Changes in supply and demand could also affect growth in the second half.

Despite the risks, the association expects AI infrastructure investment to continue expanding. Continued shortages of high-end materials are expected to support PCB prices and shipment volumes.

Taiwan printed circuit board materials production value rose 38.6% to NT$271.6 billion in first-half 2026 and equipment rose 27.8% to NT$46.08 billion, with 2026 board output seen at NT$1.1365 trillion - Taiwan Printed Circuit Association

Rapid growth in AI server and high-speed networking demand since the second half of 2025 has tightened supply across printed circuit boards (PCBs), integrated circuit (IC) substrates, and critical materials.

The situation has shown little sign of significant improvement in 2026. Shortages that initially centred on high-end materials such as low-coefficient-of-thermal-expansion (low-CTE) and second-generation low-dielectric-constant (low-Dk2) glass fiber cloth and grade 4 hyper very low profile (HVLP4) copper foil have gradually spread to copper-clad laminates (CCLs), high-end PCBs, Ajinomoto Build-up Film (ABF) substrates, process equipment, and consumables. Some mid- to lower-end materials and general-purpose CCL grades are also beginning to see longer lead times or price increases.

As of the second quarter of 2026, supplies of high-end materials, PCBs, substrates, and certain process equipment remained tight. PCB and substrate manufacturers, material suppliers, and equipment makers are all expanding capacity, with new production expected to come online between 2027 and 2029.

However, with AI demand continuing to grow, specifications becoming more demanding, and customer qualification and yield ramp-ups requiring time, additional supply is unlikely to fully close the gap in the near term. Supply chain tightness is therefore expected to persist at least through 2027.

Taiwan's PCB manufacturing supply chain includes Zhen Ding Technology, Unimicron Technology, Compeq Manufacturing, Tripod Technology, Gold Circuit Electronics (GCE), Kinsus Interconnect Technology, Nan Ya Printed Circuit Board (N.P.C), and HannStar Board.

Major material suppliers include Elite Material (EMC), Taiwan Union Technology (TUC), ITEQ, Nan Ya Plastics, Co-Tech Development, Topoint Technology, Key Ware Electronics, Taiwan Glass, and Fulltech Fiber Glass.

Equipment suppliers include C Sun Manufacturing, Gallant Precision Machining (GPM), Group Up Industrial, Ampoc Far-East, Ta Liang Technology, and Asia Metal Industries (AMI).

AI demand drives materials and equipment growth

According to the Taiwan Printed Circuit Association (TPCA), the combined domestic and overseas production value of Taiwan's PCB materials industry reached NT$271.6 billion (US$8.6 billion) in the first half of 2026, up 38.6% year-over-year.

Growth was driven primarily by high-frequency, high-speed CCLs for rigid boards, while critical materials such as glass fiber cloth and copper foil remained in short

supply. Tight capacity and rising raw material costs have led suppliers to gradually raise prices, further increasing overall PCB materials production value.
Taiwan's PCB equipment industry recorded combined domestic and overseas production value of NT$46.08 billion during the same period, up 27.8% year-over-year.

Mechanical drilling equipment and drill bits posted particularly strong growth. As PCB layer counts and thicknesses increase, drilling becomes more challenging while consumption of related tools and materials also rises.
Overall, rapid expansion in AI server and high-speed networking demand in 2026 is driving growth across Taiwan's PCB supply chain while accelerating advances in materials and process equipment. The momentum could push the industry's full-year production value to another record.

Taiwan PCB manufacturing output on track to exceed NT$1 trillion
Looking to the second half of 2026, TPCA expects expanding AI applications and emerging markets such as AI glasses and satellite communications to support further growth.

The combined domestic and overseas production value of Taiwan's PCB manufacturing sector is projected to rise 24.5% year-over-year to NT$611.8 billion in the second half.
Full-year output from Taiwan's PCB manufacturing sector is expected to surpass NT$1 trillion for the first time, reaching NT$1.1365 trillion, up 24.2% from 2025.
Notably, rapidly expanding AI infrastructure demand is spreading growth beyond PCB manufacturing into upstream materials and equipment. The trend suggests AI is driving more than a one-off cyclical increase in demand and is also reshaping how value is distributed across the supply chain.
As PCB technologies continue to evolve, the competitive positions of established suppliers could shift, creating opportunities for new entrants.

The ability to keep pace with each generation of AI platform upgrades and translate technological changes into new product value will be critical to whether Taiwan's PCB industry can continue strengthening its competitive position.

International Diary

2026

EUROPEAN MICROWAVE WEEK
4 October
London, UK

EIPC @ EFX 2026
6-8 October
Stuttgart, Germany

TPCA
20-22 October
Taipei, Taiwan

EIPC @ Electronica 2026
10-13 November
Munchen, Germany

FED Austrian Electronics Day
26 November
Dornbirn, Austria

HKPCA
2-4 December
Shenzhen, Hong Kong

2027

EIPC Winter Conference
9 & 10 February

EIPC Summer Conference
8 & 9 June

Electronics Manufacturing & Packaging Symposium (EMPS)
28 June-1 July
ESA/ESTEC Noordwijk, NL

ECWC17 Electronics Circuit World Convention
18-20 August
Bangkok, Thailand