

Connector Demand Continues to Soar 5th Consecutive Month with Double-digit Growth in Bookings and Billings

October bookings increased by +21.5%, while billings increased by +17.5%.

Regional Performance:

Year-to-date, sales are positive in all but one region, the ROW region. The greatest growth is in the Asia Pacific region, where sales grew 38.8%, followed by China where sales increased 21.3%. The ROW region, the only region that is negative year-to-date, is down -0.3%. From a year-over-year sales perspective, once again, all regions but the ROW region exhibited growth in October, with the greatest growth, like in the previous four months, in the Asia Pacific region, where billings increased a startling +51.6%, followed by Europe, where billings increased +16.8%. The ROW region, the only region with negative year-over-year growth, saw sales decline -3.3%. See page 5.

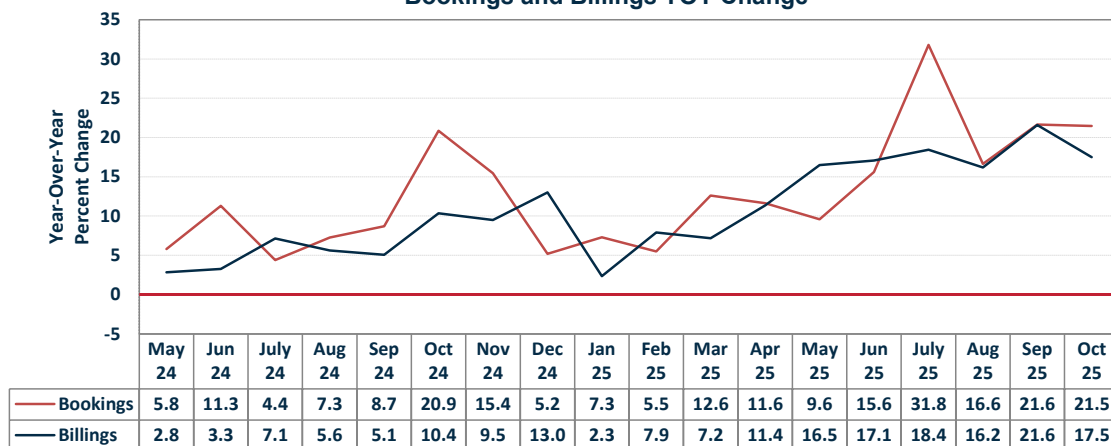
2025 Currency Impact:

The industry registered a YOY increase in sales in October 2025, of +17.5% in USD and +1.5% in local currency.

NEW BISHOP
RESEARCH REPORT

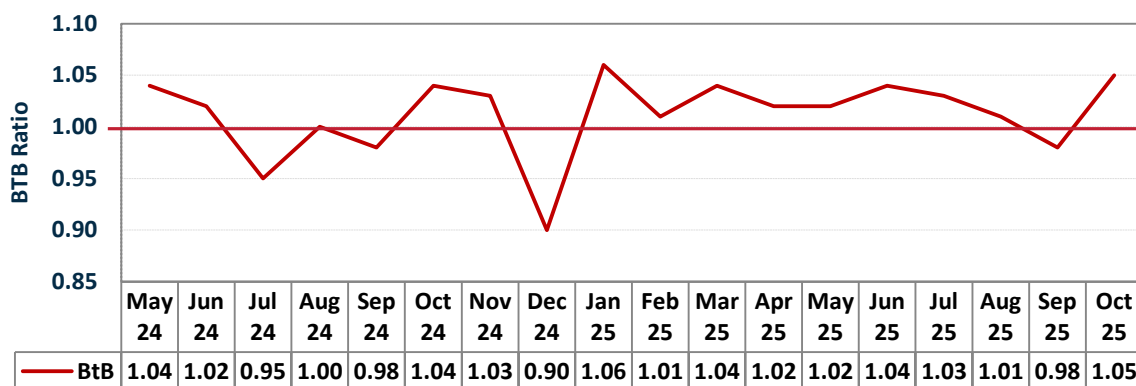
Top 100
Connector
Manufacturers

Bookings and Billings YOY Change



The book-to-bill ratio in October was 1.05, up from 0.98 in September. This is the highest book-to-bill since January.

Connector Industry Book-to-Bill

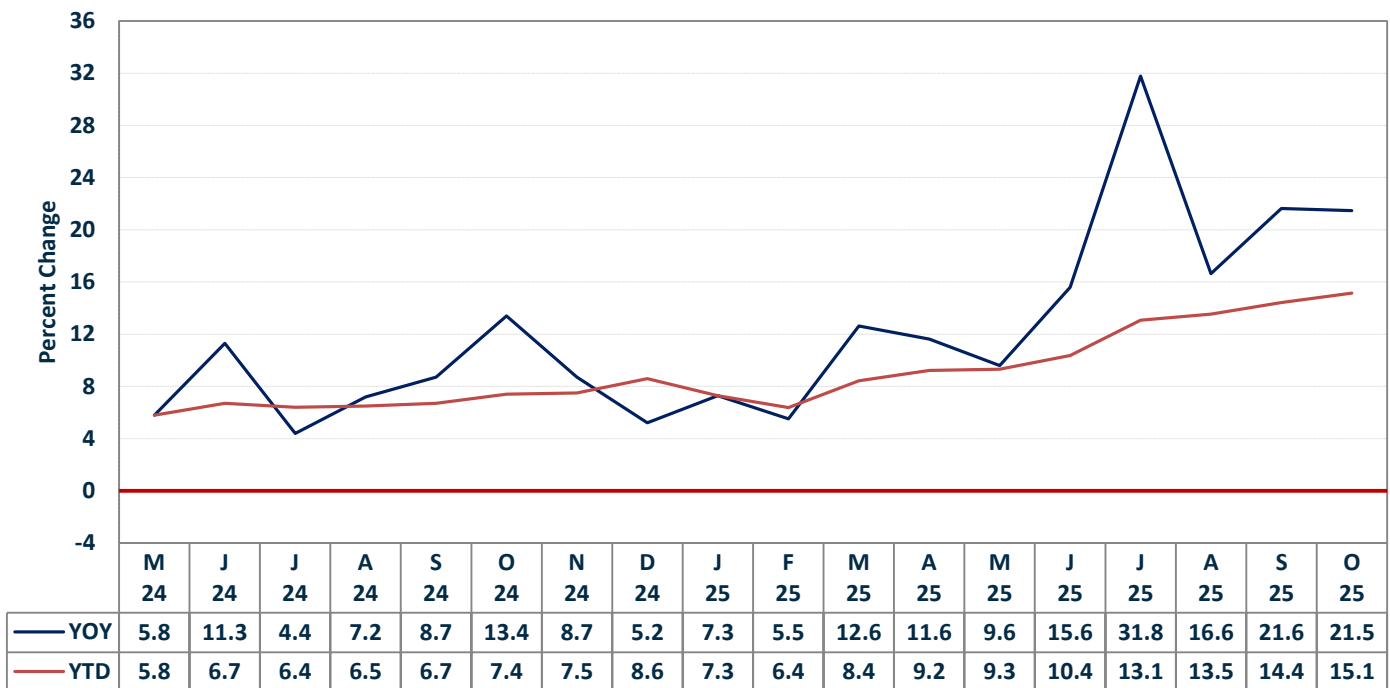


Booking Highlights and Conclusions

Sequential, Year-Over-Year, and Year-To-Date Bookings Percentage Change – 2023/2024/2025

Month	Sequential			Year-Over-Year			Year-To-Date		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
Jan	-1.3%	9.1%	2.2%	-18.4%	8.3%	7.3%	-18.4%	8.3%	7.3%
Feb	10.1%	5.2%	5.6%	-13.8%	6.8%	5.5%	-18.4%	7.5%	6.4%
Mar	1.2%	-2.9%	2.2%	-12.9%	-1.4%	12.6%	-16.6%	4.4%	8.4%
Apr	-5.1%	3.2%	-0.8%	-9.7%	10.2%	11.6%	-15.0%	5.8%	9.2%
May	13.5%	9.1%	11.9%	-3.9%	5.8%	9.6%	-12.8%	5.8%	9.3%
Jun	-12.7%	-6.8%	-5.2%	-10.3%	11.3%	15.6%	-12.4%	6.7%	10.4%
Jul	0.3%	-5.8%	0.1%	-0.3%	4.4%	32.0%	-10.9%	6.4%	13.1%
Aug	9.2%	11.6%	5.3%	0.7%	7.3%	16.6%	-9.5%	6.5%	13.5%
Sep	-5.4%	-5.0%	-3.5%	-3.7%	8.7%	21.6%	-8.9%	6.8%	14.4%
Oct	-3.2%	9.6%	3.9%	5.9%	20.9%	21.5%	-7.6%	8.1%	15.1%
Nov	11.8%	4.9%		7.7%	15.4%		-6.3%	8.8%	
Dec	-13.7%	-21.6%		0.2%	5.2%		-5.9%	8.6%	

Bookings - YOY and YTD

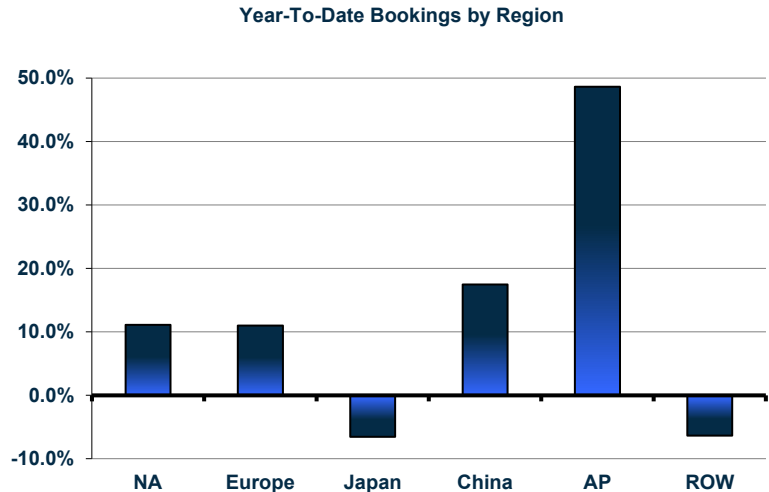


- October bookings increased +21.5% year-over-year.
- Orders increased +3.9% on a sequential basis in October.
- The book-to-bill ratio for October was 1.05, up from 0.98 in September.

Regional Performance: BOOKINGS

October 2025 Bookings

Region	Sequential	YOY	YTD
NA	9.2%	30.6%	11.1%
Europe	3.2%	23.6%	11.0%
Japan	0.5%	-6.3%	-6.6%
China	-9.4%	16.0%	17.5%
AP	26.5%	25.6%	48.6%
ROW	6.8%	-9.3%	-6.4%
Total	3.9%	21.5%	15.1%



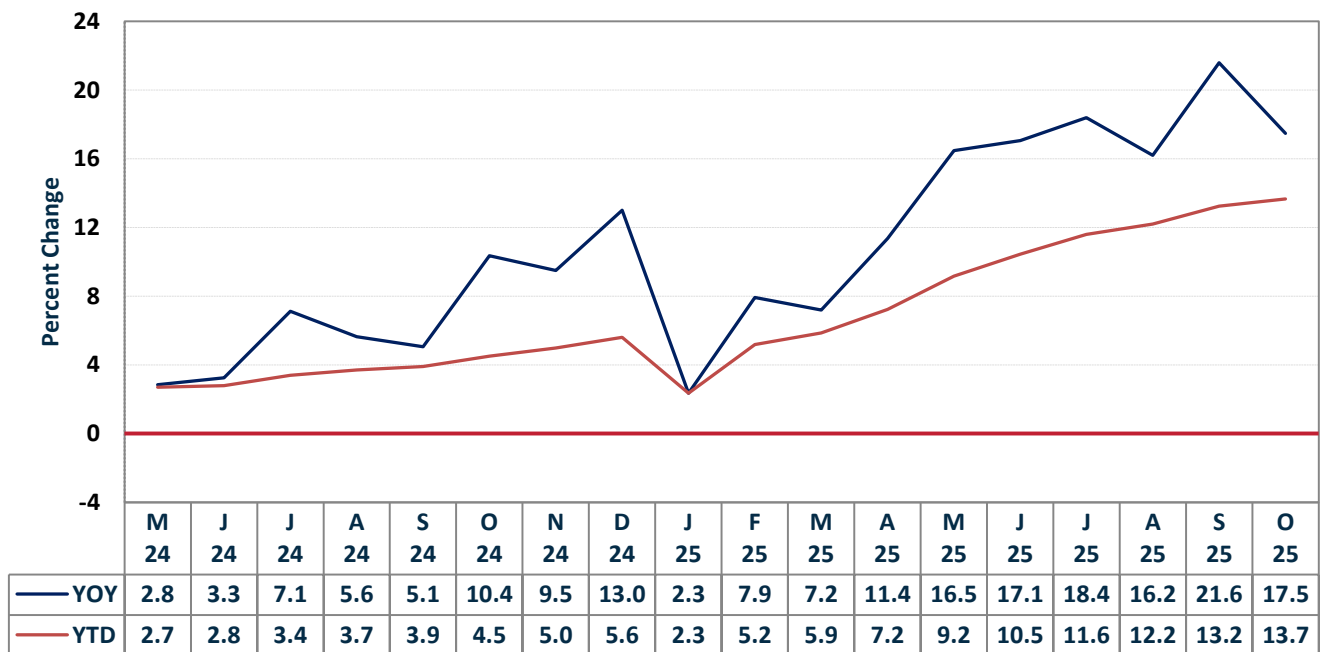
- Year-to-date, October bookings increased +15.1%, with the greatest growth in the Asia Pacific region, where sales increased a strong +48.6%, followed by China, where sales grew +17.5%. The two regions showing a year-to-date decline, Japan and the ROW region, decreased -6.6% and -6.4% respectively. Sequentially all regions except China saw growth, with the greatest growth in the Asia Pacific region, where sequentially sales increased +26.5%. China, the only region showing a sequential decline, saw sales decrease -9.4%.
- Like in September, in October, year-over-year orders rose in all but two regions, Japan and the ROW region, where bookings declined -6.3% and -9.3% respectively. All other regions saw growth, with North America growing the most, up a very strong +30.6%, followed by the Asia Pacific region, where sales increased +25.6%.
- Year-over-year total world order growth has now been positive for 19 consecutive months.

Billing Highlights and Conclusions

Sequential, Year-Over-Year, and Year-To-Date Billings Percentage Change – 2023/2024/2025

Month	Sequential			Year-Over-Year			Year-To-Date		
	2023	2024	2025	2023	2024	2025	2023	2024	2025
Jan	-3.1%	5.8%	5.5%	0.5%	3.5%	2.3%	0.5%	3.5%	2.3%
Feb	9.7%	2.8%	9.9%	-1.0%	-1.0%	7.9%	-0.3%	1.2%	5.2%
Mar	-0.9%	0.4%	-0.1%	0.3%	-1.1%	7.2%	-0.1%	0.4%	5.9%
Apr	-7.9%	1.7%	1.1%	-1.0%	10.1%	11.4%	-0.3%	2.7%	7.2%
May	12.1%	4.3%	11.6%	-0.6%	2.8%	16.5%	-0.4%	2.7%	9.2%
Jun	-6.0%	-4.9%	-6.9%	-6.7%	3.3%	17.1%	-1.5%	2.8%	10.5%
Jul	-1.7%	1.8%	0.9%	-1.2%	7.1%	18.4%	-1.4%	3.4%	11.6%
Aug	7.2%	5.8%	7.4%	-2.8%	5.6%	16.2%	-1.6%	3.7%	12.2%
Sep	-2.7%	-3.0%	-0.2%	-10.0%	5.1%	21.6%	-2.6%	3.9%	13.2%
Oct	-2.1%	3.2%	-3.2%	2.5%	10.4%	17.5%	-2.1%	4.5%	13.7%
Nov	7.9%	5.1%		0.0%	9.5%		-1.9%	5.0%	
Dec	-12.4%	-9.5%		-2.8%	13.0%		-2.7%	5.6%	

Billings - YOY and YTD

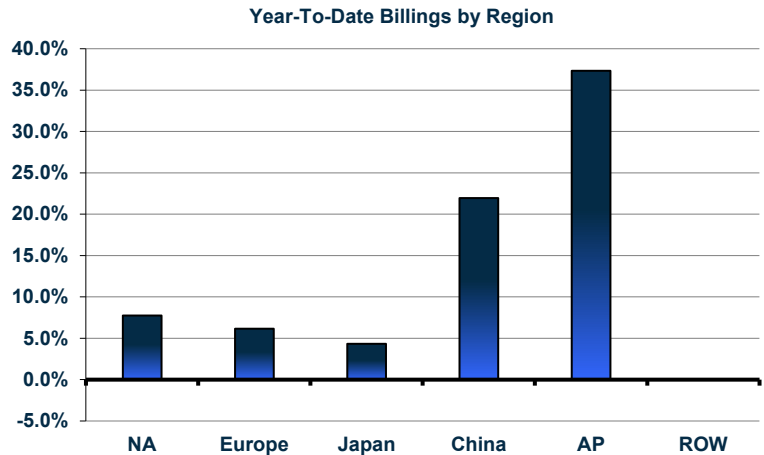


- October billings grew +13.7% year-to-date and +17.5% year-over-year.
- Sequentially, October billings decreased -3.2%.
- Year-over-year sales growth has now been positive for 19 consecutive months and year-to-date for 22 consecutive months.

Regional Performance: BILLINGS

October 2025 Billings

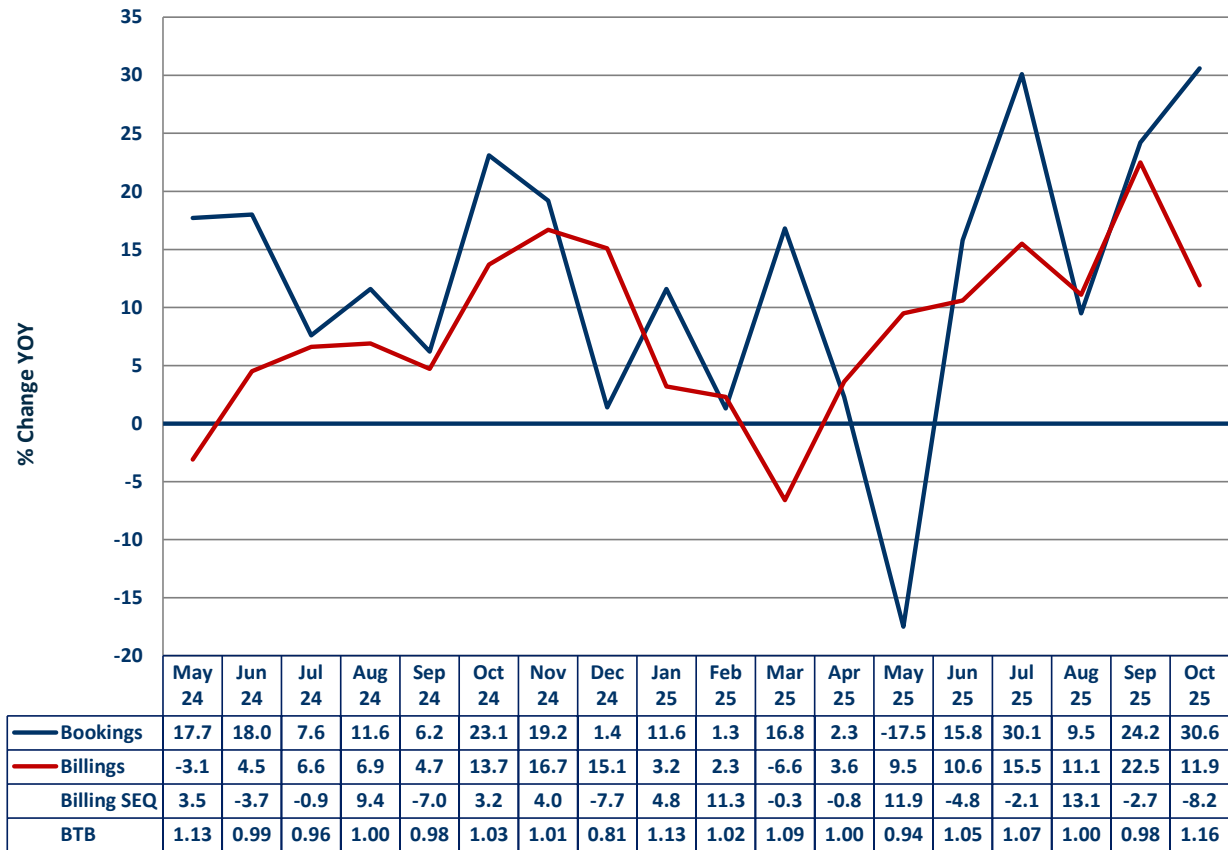
Region	Sequential	YOY	YTD
NA	-8.2%	11.9%	8.1%
Europe	-9.3%	16.8%	7.1%
Japan	-0.8%	-0.4%	3.8%
China	7.7%	16.0%	21.3%
AP	2.3%	51.6%	38.8%
ROW	-19.7%	-3.3%	-0.3%
Total	-3.2%	17.5%	13.7%



- October connector sales increased by +17.5% compared to the same period last year.
- Like last month, only two regions showed a sequential increase in October. Unlike September though, the regions were China, where sale increased +7.7% and Asia Pacific, where sequentially sales increased +2.3%, while in September they were Europe and Japan. All other regions showed a decrease in sequential sales, with the ROW region showing the greatest decline at -19.7%, followed by the European region, where sales declined -9.3%.
- Year-over-year, four of the six regions saw an increase, with the greatest increase in the Asia Pacific region where sales increased a strong +51.6%, followed by the European region, where sales increased +16.8%.
- Year-to-date all regions but the ROW region, where sales decreased -0.3%, saw an increase. The greatest year-to-date growth was in the Asia Pacific region where sales increased +38.8%, followed by the Chinese region, where sales increased +21.3%. The remaining regions all exhibited single-digit growth.

North America: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill (BTB) ratio is also displayed.

North America Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio

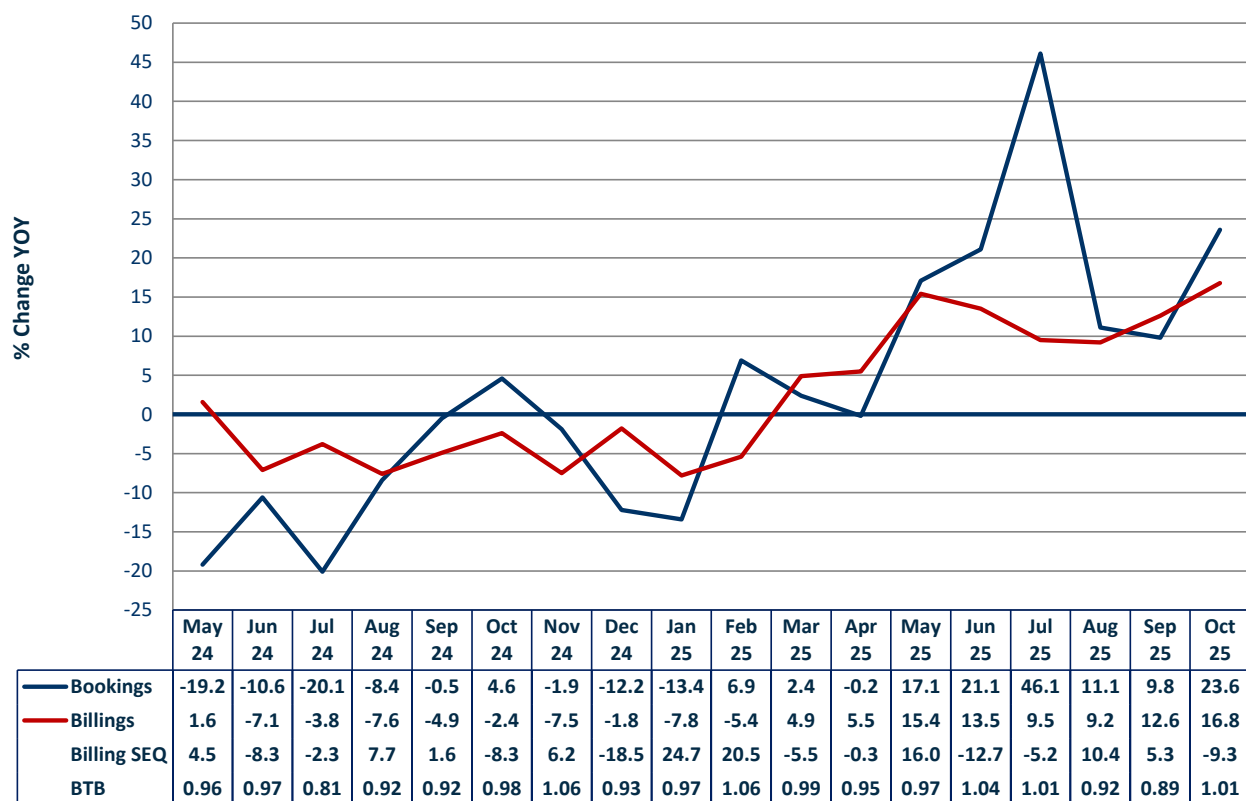


North America Performance

- Sales increased +11.9% year-over-year in October, while orders increased +30.6%, up from +24.2% in September. Sequentially, North American billings decreased -8.2% after declining -2.7% in September. The book-to-bill ratio increased to a strong 1.16, after dropping to 0.98 in September.
- “The U.S. jobless rate likely edged up in Oct. to the highest in four years as the hiring rate for unemployed workers slowed and the rate of layoffs and other job separations increased, according to an estimate by the Chicago Fed. The regional Fed bank estimated the unemployment rate climbed to 4.36% last month, from 4.35% in September.
- US consumer spending increased in October as people prepared for the holiday season. Revenue improved 0.6% compared to the previous month, following a 0.7% drop in September, according to the National Retail Federation (NRF). Year-on-year retail sales remained robust, rising 5% in October, the federation added.
- As of November 4th, the number of new vehicles sold in the U.S. was 1,272,043 units, down 5.2% year-over-year, according to MarkLines. This decline was a result of federal tax credits that expired at the end of September.

Europe: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.

Europe Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio

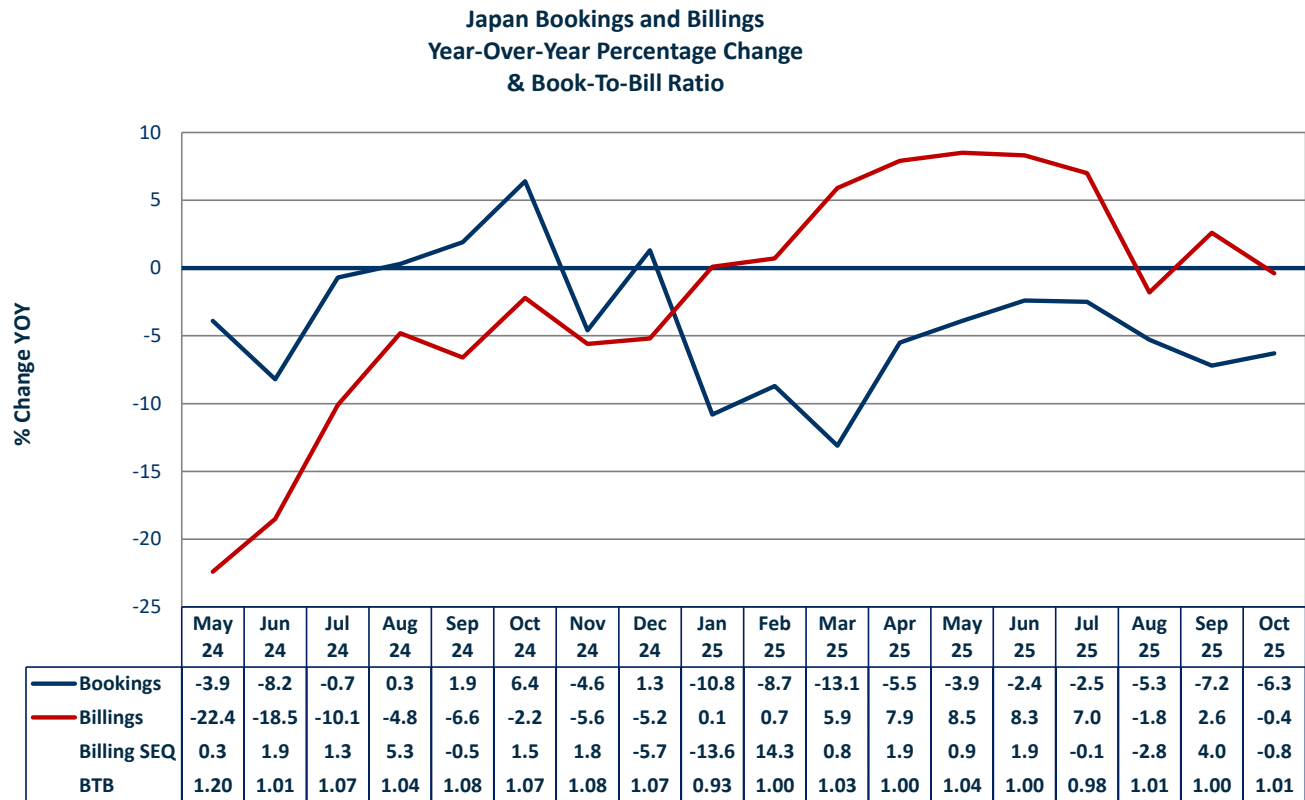


Europe Performance

- Bookings increased by a strong +23.6% in October, up from +9.8% in Sept., and the second highest booking number in the last 18 months. Billings increased by +16.8%, up from +12.6% in Sept. Sequentially, sales decreased -9.3%. The book-to-bill ratio was 1.01, up from 0.89 in Sept.
- “By September* 2025 year-to-date, new EU car registrations increased by 0.9% compared to the same period last year, marking the third consecutive month of growth”, according to the European Automobile Manufacturers’ Association (ACEA). “The euro area annual inflation rate was 2.1% in October 2025, down from 2.2% in September”, according to Eurostat.
- “In September* 2025, the euro area seasonally adjusted unemployment rate was 6.3%, stable compared with August 2025 as well as with Sept. 2024. The EU unemployment rate was 6.0% in Sept. 2025, also stable compared with August 2025 and up from 5.9% in Sept. 2024”, according to Eurostat.
- "In October 2025, the Economic Sentiment Indicator picked up in both the EU (+1.0 points to 96.7) and the Euro Area (+1.2 points to 96.8). The EEI also improved compared to Sept. in both areas (EU: +0.6 points to 99.7, Euro Area: +.04 points to 96.9). Both indicators continue to score below their long-term average of 100.”, according to the European Commission.

**October readings not published at the time of this reporting.*

Japan: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.



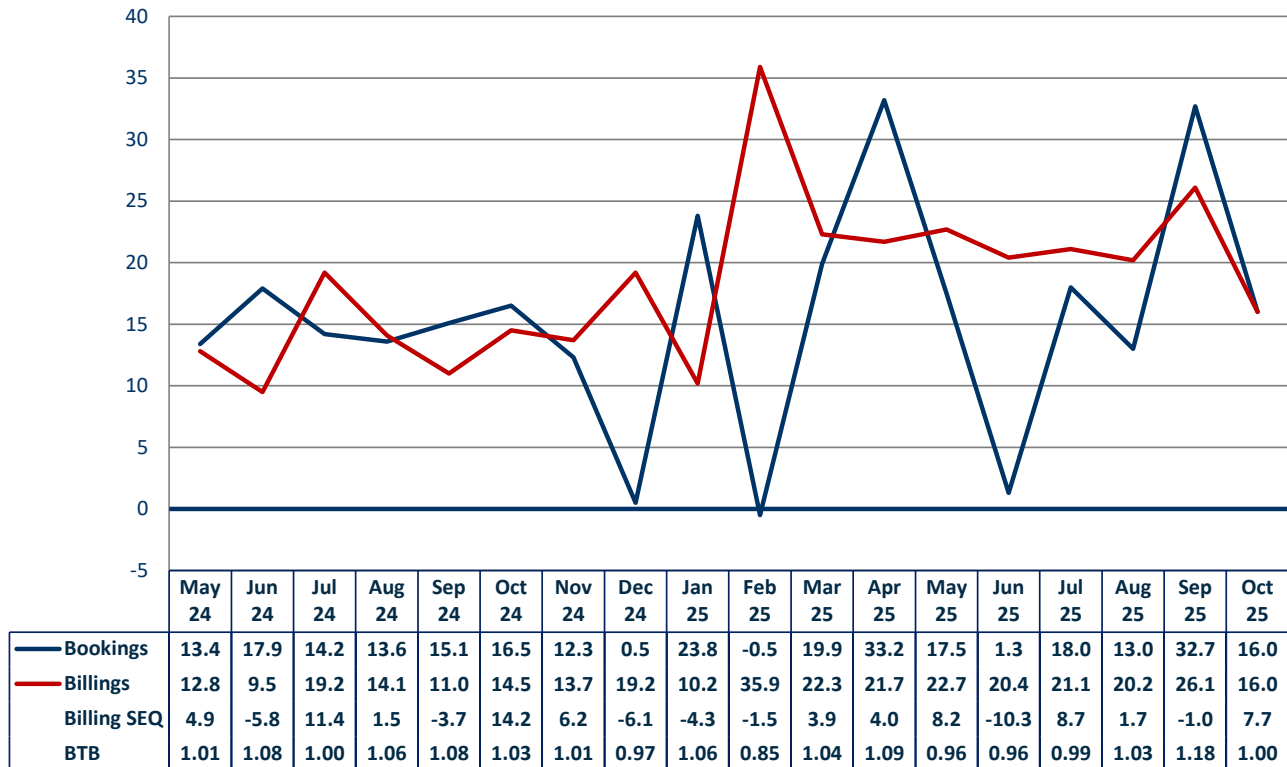
Japan Performance

- Japan's October year-over-year bookings decreased -6.3%, while sales decreased -0.4%, after rising +2.6% in September. Sequentially, sales decreased -0.8%, after increasing in September, +4.0%. Japan's book-to-bill ratio was 1.01, up from 1.00 in September.
- "Core consumer prices in Tokyo's Ku-area rose 2.8% year-on-year in October 2025, picking up from a 2.5% gain in the previous two months and surpassing market forecasts of 2.6%. The reading remained well above the Bank of Japan's 2% target, reinforcing expectations of a gradual shift toward a tighter policy", according to Trading Economics.
- "The S&P Global Japan Composite PMI stood at 51.5 in October 2025, above the flash estimate of 50.9 and up from September's four-month low of 51.3, marking a second month of expansion in private sector activity", according to Trading Economics.
- "Japan's unemployment rate remained at 2.6% in September* 2025 unchanged from the previous month, but slightly above market expectations of 2.5%", according to Trading Economics. Japanese vehicle production was 395,189 units, a decrease of 1.7% year-over-year, driven by a 4.8% decline in non-mini vehicles and offset by 2.9% increase in mini vehicles, according to MarkLine.
- "Japan's October 2025 exports are forecast to have increased by a modest 0.8% year-over-year, following a strong 4.2% gain in September", according to TradingView.

**October readings not published at the time of this reporting.*

China: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.

China Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio

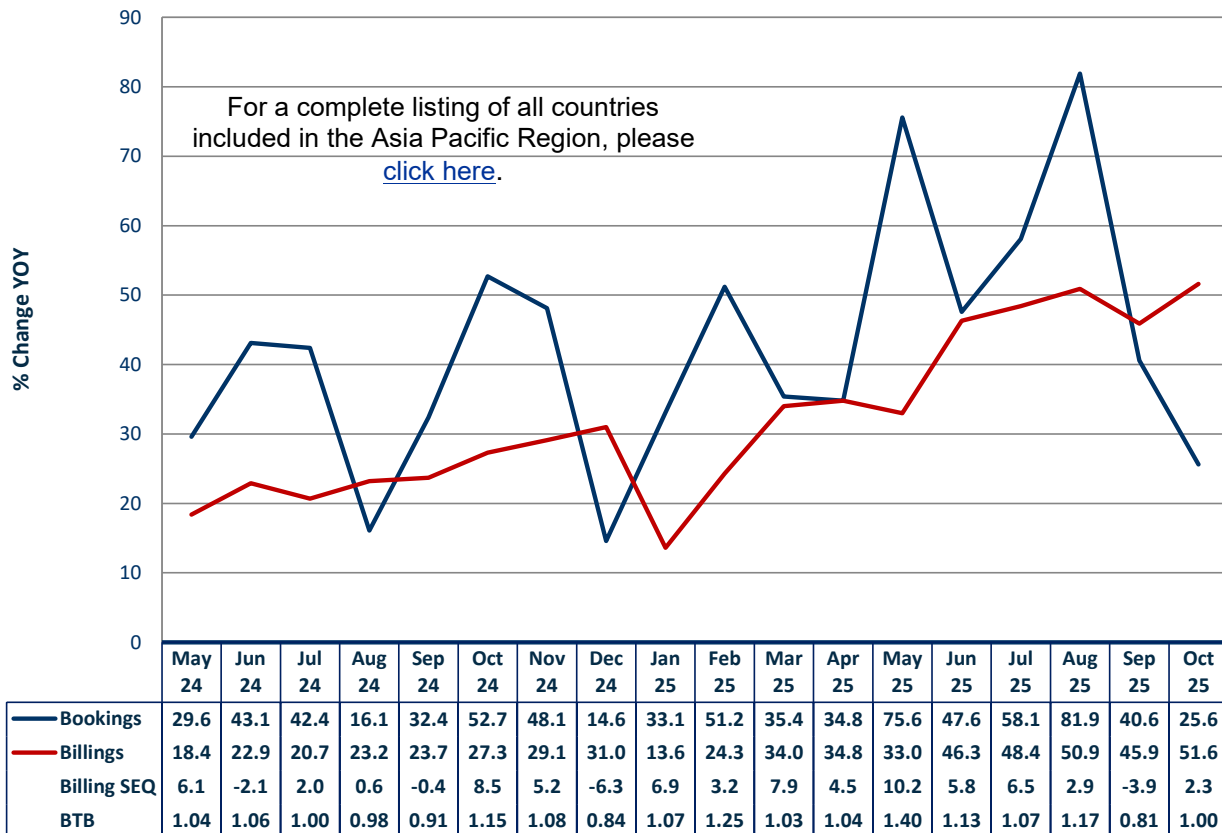


China Performance

- China's October sales grew +16.0% on a year-over-year basis. Bookings also increased +16.0% in October, while sequentially, sales increased by +7.7%. The book-to-bill declined to 1.00, down from 1.18 in September.
- "China's Consumer Price Index (CPI) rose by 0.2% year-on-year, rebounding from a decline in September and beating market expectations" according to China Data Online (CDL). "Specifically, the price index in urban areas increased by 0.3% while that in rural areas decreased by 0.2%."
- In October, "vehicle production rate was 3.36 million units, marking a 12.1% increase compared to the same month in the previous year. Production and sales also increased by 2.5% and 3.0% respectively compared to September 2025", according to South East Asia Iron and Steel Institute (SEAISI).
- "China's surveyed unemployment rate fell to 5.1% in October 2025. This rate is the lowest in four months, according to Trading Economics.
- "China's exports unexpectedly fell by 1.1% year-on-year to an eight-month low of \$305.4 billion in October 2025, missing expectation for a 3% increase and reversing an 8.3% gain in September", according to Trading Economics.

Asia Pacific: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.

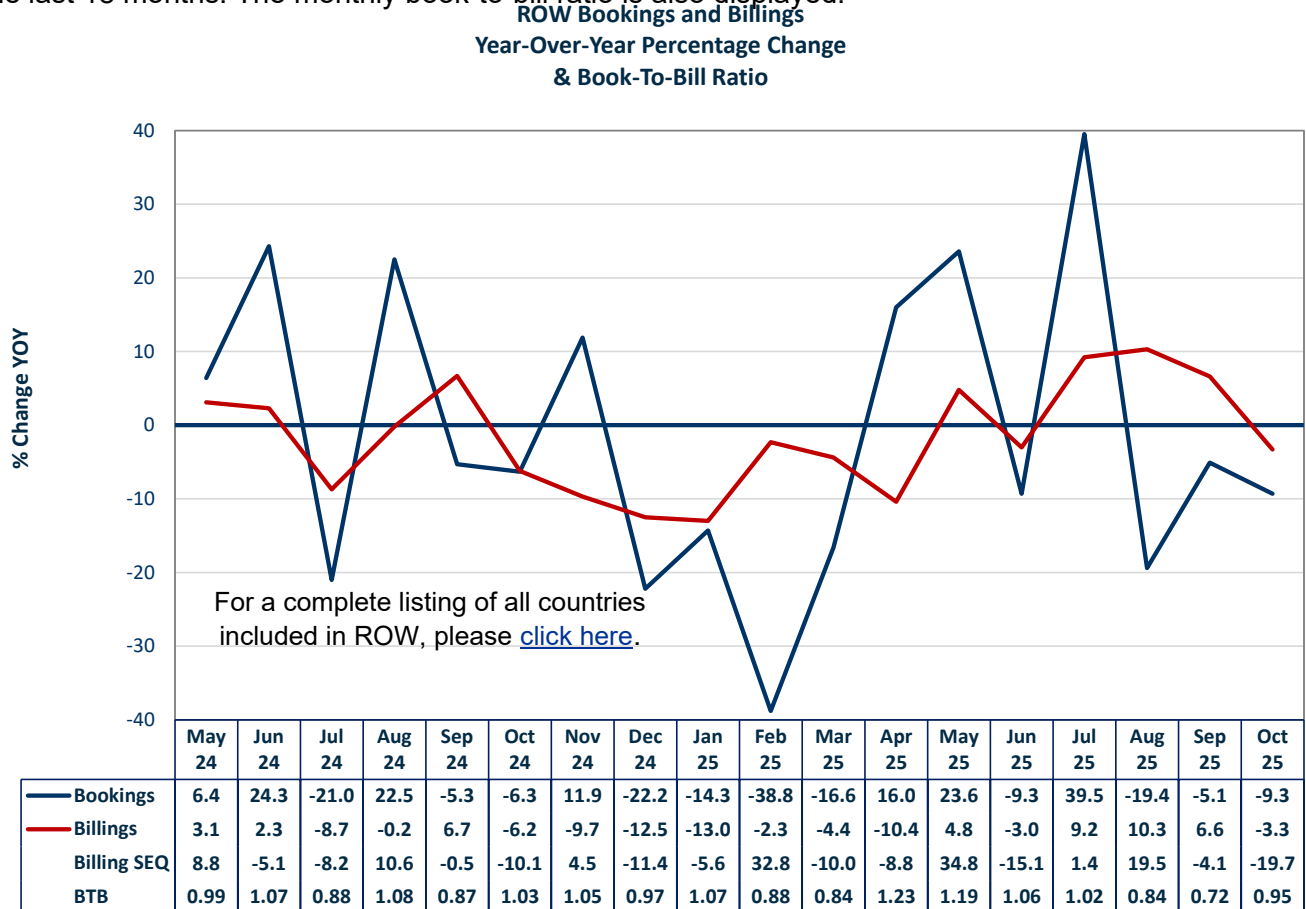
Asia Pacific Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio



Asia Pacific Performance

- Year-over-year, October orders were up a healthy +25.6%. Billings increased by an astonishing +51.6%, the highest billings growth in over five years. Sequentially, sales increased by +2.3%. The book-to-bill ratio was 1.0, back up from 0.81 in September.
- “The consumer price inflation rate in India fell to 0.25% in October of 2025 from the downwardly revised 1.44% in the previous month, the lowest on record, and well below the market consensus of 0.48%. It was the ninth consecutive month that the inflation rate was below the Reserve Bank of India's 4% target, and the third in the sequence that was below the 2-percentage point lower tolerance bank of 2, prompting calls for the central bank to deliver more rate cuts”, according to Trading Economics.
- “The HSBC India Manufacturing PMI rose to 59.2 in October, above the flash estimate of 58.4 and September's 57.5, signaling faster growth in factory activity. New orders expanded sharply, supported by strong demand, advertising efforts and optimism over GST reform. Employment grew for the 20th straight month”, according to Trading Economics.
- “Exports from South Korea's rose 3.6% year-over-year to USD 59.57 billion in October 2025, slowing from a 12.7% surge in September. This marked the fifth consecutive month of export growth, driven by robust demand for semiconductors. The unemployment rate edged up to 2.6% in October from 2.5% in September, according to Trading Economics.

Rest of World: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.



Rest of World Performance

- Orders decreased by -9.3% in October. This means in the last 18 months, sales have declined 11 out of 18 months. Billings decreased by -3.3% year-over-year, after growing in the three previous months. Sequentially, sales decreased by -19.7%. The book-to-bill ratio was 0.95, up from 0.72 in September.
- “The Consumer Price Index in Brazil increased to 7365.68 points in October from 7359.06 points in September of 2025. Brazil’s annual inflation rate edged down to 4.68% in October 2025 from 5.17% in September, according to Trading Economics.
- “The S&P Global Brazil Manufacturing PMI rose to 48.2 in October 2025 from 46.5 in September, signaling a softer contraction and marking six straight months below 50. The decline in product was the mildest in six months, and the drop in sales the weakest since May. Foreign demand worsened for the third month, mainly from the U.S., according to Trading Economics. Also, “Brazil’s unemployment rate remained at 5.6% in the September, marking the lowest rate for a 3rd quarter since 2012.”
- “South Africa’s seasonally adjusted Absa Purchasing Managers' Index (PMI) fell to 49.2 in October 2025 from 50.8 in the previous month, indicating that the country’s factory activity has returned to contraction. “Business confidence remains low as the sector continues to navigate external trade constraints, supply-side uncertainty, and cost volatility, Absa said”, according to Trading Economics.

Regional Summary Snapshot

The following table shows a snapshot of the performance of each region. The table displays the latest metric available, and the trend of the metric compared to prior months/quarters.

	North America	Europe	Japan	China	Asia Pacific	ROW
GDP Growth YOY	2.0% Steady	0.2% Up	-0.4% Down	4.8% Steady	N/A	N/A
Industrial Production Growth	0.5% Up	0.2% Up	-1.6% Down	4.9% Down	N/A	N/A
Manufacturing PMI*	52.5 Up	50.0 Up	48.2 Down	49.0 Down	N/A	N/A
Inflation Rate	3.0% Stable	2.1% Down	2.8% Up	0.2% Up	N/A	N/A
Unemployment Rate	4.36% Up	5.9% Stable	2.6% Stable	5.1% Down	N/A	N/A
Retail Sales Growth YOY	5.11% Up	3.1% Up	0.5% Down	2.9% Down	N/A	N/A
October Connector Sales	11.9%	16.8%	-0.4%	16.0%	51.6%	-3.3%
YTD Connector Sales	8.1%	7.1%	3.8%	21.3%	38.8%	-0.3%
October Connector Orders	30.6%	23.6%	-6.3%	16.0%	25.6%	-9.3%
YTD Connector Orders	11.1%	11.0%	-6.6%	17.5%	48.6%	-6.4%

* Purchasing Manager Index - Below 50 is contracting factory activity

Key Take Aways:

- Manufacturing PMI continued to hover between 49 and 52 in all regions, except Japan, where it dipped to 48.2. Retail sales remained up in North America and Europe and down in Japan and China.
- Although still high, unemployment was stable in Europe and Japan, and up again in North America. Once again, the only region where it declined was the China region.
- Similar to September, four of the six regions had year-over-year connector sales in the double-digit range in October, with the greatest growth in the Asia Pacific region followed by China. From a year-to-date perspective, double-digit growth was seen in China and Asia Pacific, while sales declined -0.3% in the ROW region.

The Industry Backlog Is 12.1 Weeks

The industry shipped \$1,915 million per week in October. Orders are up +15.1% year-to-date, moving the order backlog up to \$23,207 million.

The following table displays the order backlog at the end of October.

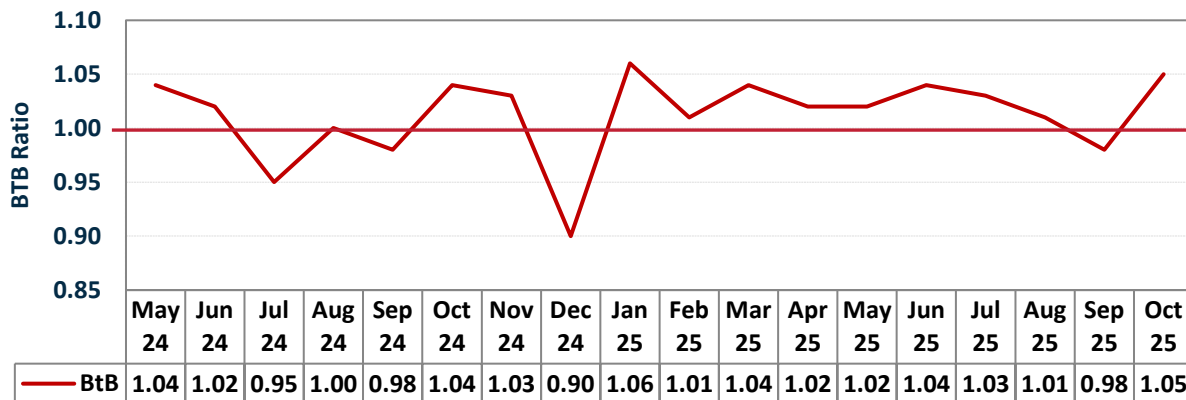
Industry Backlog

	Full Year 2024	Oct 2025
BtB Ratio	1.00	1.05
Beginning Backlog	\$21,017	\$21,287
YTD Bookings	\$86,592	\$83,585
YTD Billings	\$86,322	\$81,665
Ending Backlog	\$21,287	\$23,207
Backlog in Weeks	12.6	12.1

\$ Millions

The book-to-bill (BtB) ratio was 1.05 in October. Backlog in weeks was 9.9 in September but rose to 12.1 weeks in October. This is because the industry booked \$606 million more than shipped in October. The following displays the trend of book-to-bill ratios since May of 2024.

Connector Industry Book-to-Bill



The backlog has increased by \$1,920 million during the first 10 months of 2025. See the table below.

Change in Backlog

2024 Ending Backlog	\$21,287
2025 October Ending Backlog	\$23,207
Backlog Growth	\$1,920

\$ Millions

Currency Fluctuations Reduce Performance between USD and Local Currency

The dollar has been fluctuating against the euro, the yen, and the yuan. The following table measures the impact for October 2024 versus October 2025 and shows results for these three currencies.

**Local Currency to One USD
2024 YTD versus 2025 YTD**

Currency	2024	2025	% Change
Euro	0.9171	0.8585	6.8%
Yuan	7.0817	7.1206	-0.5%
Yen	149.6690	151.0921	-0.9%

Europe, China, and Japan account for approximately 60% of world connector sales. Currency fluctuation against the US dollar can have a significant impact on our reporting of sales performance in US dollars.

The following table shows October YOY performance by region in US dollars and local currencies.

**Industry Sales Performance
October 2025
USD-vs-Local Currencies**

Region	U.S.\$	Local Currency
North America	11.9%	11.9%
Europe	16.8%	6.8%
Japan	-0.4%	-0.9%
China	16.0%	-0.5%
Asia Pacific	51.6%	51.6%
ROW	-3.3%	-3.3%
World	17.5%	1.5%

Connector sales in October of 2025 increased +1.5% when measured in local currencies, versus an increase of +17.5% in US dollars.

2025 Connector Sales & Orders

Connector sales and orders have increased every month in 2025. As shown in the following table, growth was in the low and mid-single-digits in January and February. Since then, connector demand has been double digits, with orders growing by +21.6% and +21.5% in the last two months.

2025 Orders and Sales Growth in 2025 by Month Percentage Change

Month	Orders	Sales
January	7.3%	2.3%
February	5.5%	7.9%
March	12.6%	7.2%
April	11.6%	11.4%
May	9.6%	16.5%
June	15.6%	17.1%
July	31.8%	18.4%
August	16.6%	16.2%
September	21.6%	21.6%
October	21.5%	17.5%
Year-to-Date	15.1%	13.7%

Note: The numbers may vary slightly from those previously published in 2025 Bishop Reports because of adjustments from participating companies.

Connector demand is strong. We have recorded 19 consecutive months of growth in both orders and sales.

2025 Outlook: Historical Analysis

Over the past 15 years (2010-2024), sales through October averaged 82.9% of full-year sales. The industry has shipped \$81,655 million through October. Should history repeat, 2025 full year sales would be \$98,498. This would be full year sales growth of +13.9%.

The least percentage of full-year sales since 2010 was 78.1%. The most was 86.8%. Using sales history, we can calculate a range of possibilities.

The following table provides an analysis of industry sales history. This analytical calculation provides a range of possible sales outcomes.

**Range of Projected 2025
Connector Sales with YOY Percentage Growth**

	% Full Year Sales	2024 Actual Sales	Projected 2025 Sales	YOY % Growth
Least	78.1%	\$86,478	\$104,552	20.9%
Average	82.9%	\$86,478	\$98,498	13.9%
At Most	86.8%	\$86,478	\$94,073	8.8%

\$ Millions

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For comparison, sales are up +13.7% through October 2025. The industry's 30-year CAGR is only 5.0%. Clearly, we are having an outstanding year.

Significant Events

October 2025 News

North American PCB Industry Posts Double-Digit Year-to-Date Gains in Shipments and Bookings

The Global Electronics Association announced the September 2025 findings from its North American Printed Circuit Board (PCB) Statistical Program. The book-to-bill ratio stands at 0.92.

Total North American PCB shipments in September 2025 were up 32% compared to the same month last year. Compared to the preceding month, September shipments were down 7.8%. September's year-to-date (YTD) shipments increased by 10.5% year-over-year (YOY).

PCB bookings in September were up 1.8% compared to the same month last year. September bookings were down 1.6% compared to the preceding month. September's YTD bookings increased 13.1% compared to the same period last year.

"Production in September strengthened as factories cleared backlogs and met steady demand, while orders eased into a more sustainable range," said Dr. Shawn DuBravac, Global Electronics Association's chief economist. "Data center investments, especially around AI infrastructure, continue to provide an important floor for demand."

North American PCB activity in September shows output firming while order growth cools. The 3-month book-to-bill printed 0.92 and the 1-month ratio improved to 0.94, signaling shipments continued to run ahead of bookings but the near-term gap narrowed. Month over month, shipments rose about 2.2% and bookings eased 1.6%. On a rolling 3-month basis, shipments increased roughly 1.8% while bookings declined about 4.1%, which is consistent with a digestion phase after earlier strength. Year over year, shipments advanced about 32% and bookings were up roughly 1.8%. Year to date, shipments are tracking +10.5% and bookings +13.1%, indicating 2025 remains solidly ahead of last year.

Manufacturers appear to be converting prior commitments and improving throughput as supply conditions stabilize. Heading into Q4, the key watchpoints include the pace of new program awards, fiscal year-end timing effects, and the scale of ongoing AI infrastructure buildouts. If AI server capital spending remains on track, data center programs should help offset cyclical softness in other end markets, sustaining shipment levels and supporting margins through higher-value product mix. Provided bookings hold near current levels, backlog and mix should keep factory activity well supported through the end of the year.

Manufacturing Contraction Quickens in October

Economic activity in the U.S. manufacturing sector contracted for the eighth consecutive month in October. This extended period of decline follows a brief two-month expansion which was preceded by 26 straight months of contraction. Despite the manufacturing sector's contraction, the overall U.S. economy continued its expansion for the 66th consecutive month.

The latest report from the Institute for Supply Management (ISM) indicates that while several demand indicators showed improvement, they remained in contraction territory, reflecting continuing economic uncertainty.

Susan Spence, Chair of the ISM Manufacturing Business Survey Committee, reported that the Manufacturing PMI registered 48.7% in October. This figure represents a 0.4-percentage point decrease compared to the 49.1% recorded in September. A reading below 50% signifies contraction in the manufacturing sector.

Spence noted that “In October, U.S. manufacturing activity contracted at a faster rate, with contractions in production and inventories leading to the 0.4-percentage point decrease of the Manufacturing PMI”.

Server Shipments to Grow 6%, AI Servers to Rise 24.1%

Global server shipments this year are expected to grow about 6 percent from last year to 14.49 million units, while artificial intelligence (AI) server shipments are forecast to exceed 2.1 million units, rising 24.1 percent year-on-year, Taipei-based market researcher TrendForce Corp reported.

Next year, the global server market is expected to grow by more than 4 percent, with the AI server segment set to expand by about 21 percent, it said.

Global CSPs’ combined capital expenditures are projected to rise 40 percent this year, signaling strong momentum, even after two years of rapid expansion, Kung said.

The momentum in US CSPs is expected to sustain next year, after leading firms, including Amazon.com Inc, Google, Microsoft Corp and Meta Platforms Inc, significantly raised their capital expenditures, he said.

In China, Baidu Inc, Alibaba Group Holding Ltd and Tencent Holdings Ltd continued to play a key role in driving local AI demand since the beginning of this year, Kung said.

Among OEMs, Dell Technologies Inc has shown the strongest performance, followed by HP Enterprise Co, tier-2 CSPs and sovereign cloud operators, he said.

Despite strong market demand, the server supply chain is facing several key risks, including US export controls on chips supplied to China and tariff policies targeting the country, he said.

Gartner Forecasts IT Spending in Europe to Grow 11% in 2026

IT spending in Europe is projected to total \$1.4 trillion in 2026, an increase of 11.1% from 2025, according to the latest forecast by Gartner, Inc, a business and technology insights company. IT spending in Europe is on pace to reach \$1.3 trillion by the end of 2025.

“AI, cloud and cybersecurity are driving the rise in IT spending for European organizations in 2026,” said John-David Lovelock, Distinguished VP Analyst at Gartner. “Despite IT budget constraints and minimal headcount growth, CIOs in Europe will be spending heavily on software to access new AI features from their current providers. Gartner projects end-user spending on GenAI models in Europe to grow 78.2% in 2026.”

“Cloud investments in Europe will be more turbulent in 2026 as CIOs focus on digital sovereignty and move their cloud services closer to home,” said Lovelock. Gartner projects end-user public cloud services spending to grow 24% in 2026.

Gartner analysts are exploring IT spending priorities for IT leaders and CIOs during Gartner IT Symposium/Xpo.

In 2026, software spending will remain a high spending priority for European organizations as they aim for more intelligent, efficient and personalized applications (see Table 1). In addition, price increases across all software categories are raising software spending.

Table 1. Europe IT Spending Forecast (Millions of U.S. Dollars)

	2025 Spending	2025 Growth (%)	2026 Spending	2026 Growth (%)
Data Center				
Systems	83,632	38.2	99,335	18.8
Devices	143,668	11.0	158,193	10.1
Software	290,235	14.7	335,409	15.6
IT Services	490,398	9.0	539,927	10.1
Communications		7.0	294,988	6.2
Services	277,826			
Overall IT	1,285,760	11.6	1,427,852	11.1

Source: Gartner (November 2025)

EMS Market Steadies in September, Setting Stage for Continued Growth

The Global Electronics Association announced the September 2025 findings from its North American Electronics Manufacturing Services (EMS) Statistical Program. The book-to-bill ratio stands at 1.31.

Total North American EMS shipments in September 2025 were down 1.2% compared to the same month last year. Compared to the preceding month, September shipments were up 1.1%. September's year-to-date (YTD) shipments decreased by 0.8% year-over-year (YOY).

EMS bookings in September decreased 3.2% year-over-year and decreased 10.9% from the previous month. September's YTD bookings increased by 0.7% compared to the same period last year.

"September data show momentum consolidating in North America's EMS sector," said Dr. Shawn DuBravac, Global Electronics Association's chief economist. "Conditions are stabilizing at a healthy level, pointing to sustainable growth heading into the final quarter of 2025."

September results indicate the EMS market is settling into a steadier rhythm after several months of elevated activity. Bookings cooled from August's peak but remained solid, showing that underlying demand continues to hold firm. Shipments edged higher as production throughput improved, suggesting manufacturers are finding better balance between order intake and delivery capacity.

The rise in the three-month book-to-bill ratio points to consistent demand strength, while the softer one-month figure reflects a natural recalibration following prior gains. Taken together, the data portrays a market neither overheating nor contracting but maintaining a constructive pace of expansion. Supply conditions continue to improve, aided by greater labor availability and easing component pressures.

While shipment volumes are still running slightly behind last year, the gap continues to narrow. Booking trends on a year-to-date basis remain positive, indicating durable end-market demand and a supportive production pipeline heading into year-end.

Hon Hai Reports Record High Q3 Profit

Hon Hai, which is Apple Inc's primary iPhone assembler and makes servers powered by Nvidia Corp's AI accelerators, said earnings per share expanded to NT\$4.15 from NT\$3.55 a year earlier and NT\$3.19 in the second quarter.

Gross margin improved to 6.35 percent, up from 6.19 percent a year earlier and 6.33 percent in the previous quarter, which the company attributed to better vertical integration of its products and a larger operational scale.

The growth momentum in AI servers is expected to extend into next year and the following two to three years, as the "major five" cloud service providers have raised their capital expenditure to about US\$600 billion for next year, Hon Hai chairman Young Liu told investors.

Next year, the cloud and networking product business is expected to remain a key revenue pillar for the company, while its smartphone and PC businesses are also likely to benefit from an upgrade trend driven by the adoption of AI and edge computing in end devices, he said.

The company's Model B electric vehicles (EVs) have entered mass production for overseas and domestic markets, and revenue from the segment is also expected to continue rising next year, Liu said.

Mass production for the EV models is slated for the first quarter of next year, he said.

Last quarter, the cloud and networking product business accounted for 42 percent of Hon Hai's overall revenue of NT\$2.06 trillion, up from 32 percent in the third quarter last year. Smartphones made up 37 percent, shrinking from 45 percent a year earlier.

This quarter, Hon Hai's cloud and networking product business is expected to post strong quarterly and annual growth, as next-generation AI servers have entered mass production, Liu said.

During the first three quarters of this year, AI server revenue reached NT\$1 trillion.

This quarter's AI server revenue would improve from last quarter, with the growth momentum projected to persist until next year, Liu said.

Meanwhile, AI server rack shipments last quarter grew 300 percent and are expected to rise by a high double-digit percentage this quarter, Hon Hai said.

However, the computing business is to see a significant decline in revenue this quarter compared with the same period last year due to milder PC demand and exchange rate fluctuations, Liu said, adding that a mild decline from last quarter is also expected.

Revenue from the component and other products business — which includes connectors, camera modules and auto parts — is expected to show little change from the same period last year but is expected to record significant growth from the previous quarter, he added.

Overall, Hon Hai expects to post significant revenue growth this year, driven by booming AI technology development, Liu said.

Manufacturing giant Hon Hai Precision Industry Co posted its best third-quarter profit in the company's history, backed by strong demand for artificial intelligence (AI) servers.

Net profit expanded 17 percent annually to NT\$57.67 billion (US\$1.86 billion) from NT\$44.36 billion, the company said.

On a quarterly basis, net profit soared 30 percent from NT\$44.36 billion, it said.

Tablet Market Levels Off in 3Q 2025 Following Six Quarters of Growth Driven by Replacement Demand

Worldwide tablet shipments declined 4.4% year-over-year in the third quarter of 2025 (3Q25), totaling 38 million units, according to data from the International Data Corporation (IDC) Worldwide Quarterly Personal Computing Device Tracker. Following six consecutive quarters marked by several product refreshes and a replacement cycle upswing, the tablet market began to show signs of cooling. Elevated inventory levels carried over from first half of 2025 partly due to precautionary stockpiling amid tariff concerns-further weighed on sales during the quarter. Demand remained steady in emerging markets where education initiatives, government digitization programs and smartphone vendors expanding their tablet offerings continue to drive shipment volumes.

Top Five Tablet Companies, Worldwide Shipments, Market Share, and Year-Over-Year Growth, Q3 2025 (Preliminary results, combined company view for the current quarter only, shipments in millions)

Company	3Q25 Unit Shipments	3Q25 Market Share	3Q24 Unit Shipments	3Q24 Market Share	Year-Over-Year Growth
1. Apple	13.2	34.7%	12.5	31.6%	5.2%
2. Samsung	6.9	18.3%	7.1	17.8%	-1.9%
3. Lenovo	3.7	9.7%	3.0	7.5%	22.6%
4. Huawei	3.4	8.9%	3.2	8.2%	3.7%
5. Xiaomi	2.5	6.7%	2.4	5.9%	7.2%
Others	8.3	21.8%	11.5	29.0%	-28.0%
Total	38.0	100.0%	39.7	100.0%	-4.4%

Source: IDC Worldwide Quarterly Personal Computing Device Tracker, November 5, 2025

Japan's Economy Contracts for the First Time in Six Quarters as Exports, Residential Investment Drag

Japan's economy contracted by a smaller-than-expected 1.8% in the third quarter on an annualized basis, with growth in private and government consumption limiting the decline.

On a quarter-on-quarter basis, GDP in the three months to September contracted for the first time in six quarters, falling 0.4%, government data released Monday showed. The fall in growth, however, was softer than Reuters poll estimates of a 2.5% annualized contraction and a 0.6% sequential drop. Public demand grew 2.2% annualized, supported mostly by government consumption, while private demand fell 1.8%, dragged lower by a more than 32% drop in residential investments.

Exports shrank 4.5% in the third quarter on an annualized basis and 1.2% compared to the second quarter when they had risen by 2.3%.

The yen weakened marginally against the dollar, while the Nikkei 225 was down 0.29%. Yields on 10-year Japanese government bonds inched up 3 basis points to 1.73%.

Japan's exports had seen contractions for four straight months since May as U.S. tariffs hurt shipments, although September saw a rebound to growth. Tokyo in July clinched a trade deal with Washington, bringing down tariffs on its exports to the U.S. to 15% from 25%, effective Aug. 7.

Domestic consumption helped slow the economic contraction, with government and private consumption up 0.5% and 0.1%, respectively, compared to the second quarter. Public demand was a bright spot, growing 0.5% quarter on quarter and contributing 0.1 percentage point growth to the Japanese economy.

Private demand proved to be the largest drag on GDP this quarter, declining 0.4% compared to the quarter before and pulling the economy down by 0.3 percentage point, as residential investments plunged 9.4%.

Hon Hai to Invest NT\$42 billion in AI Computing Equipment

Hon Hai Precision Industry Co, the largest contract electronics maker in the world, said that its board of directors has approved a NT\$42 billion (US \$1.371 billion) investment plan to purchase artificial intelligence (AI) equipment for a supercomputing center.

The company said in a regulatory filing that the self-financed investment will be made over a year, starting in December, with the goal of expanding its cloud computing services and accelerating the development of its three platforms — smart manufacturing, smart electric vehicles and smart cities.

Hon Hai chairman Young Liu said that the company was making plans for the next five years.

Also known globally as Foxconn Technology Group, Hon Hai has been investing in AI infrastructure in recent years, as it seeks new growth drivers beyond smartphones and traditional electronics manufacturing.

In March, the company announced the launch of its first traditional Chinese version of an advanced AI large language model to improve the analysis efficiency of its smart platforms.

In May, Hon Hai said it was partnering with US-based AI chip designer Nvidia Corp to build an AI factory supercomputing center in Taiwan.

On Oct. 14, Hon Hai said it planned to introduce Nvidia's 800 VDC data center power architecture in its K-1 AI data center in Kaohsiung, making it a model site for its server, data center and renewable energy integration.

Electronics Manufacturing Powers U.S. Growth, Supporting 5.2 million Jobs and \$1.8 trillion in Output

A new report from the Global Electronics Association, "Powering the U.S. Economy: The Economic Reach of Electronics Manufacturing," finds that U.S. electronics manufacturing remains a powerful engine of economic growth and resilience—supporting 5.2 million American jobs, contributing \$853 billion to U.S. gross domestic product (GDP), and generating \$1.8 trillion in total economic output.

Amid slowing global growth, rising tariffs, and persistent inflation, the report highlights how electronics manufacturing is a key anchor of the U.S. economy—driving innovation, sustaining high-wage employment, and strengthening the supply chains that underpin national security and global competitiveness.

“At a time when global supply chains are being reshaped by trade policy and geopolitical pressures, U.S. electronics manufacturing continues to power the economy and strengthen our resilience,” said John W. Mitchell, President and CEO of the Global Electronics Association. “Strengthening the electronics industry is essential to America’s economic future. In an era of uncertainty, our members are proving that strategic investment and skilled talent can shift volatility toward stability.”

The industry directly employs 1.3 million Americans, offering average annual wages of \$156,000—more than 20 percent above the broader manufacturing sector. These high-skill roles span design, fabrication, assembly, and testing, reflecting the industry’s deep integration into the nation’s innovation ecosystem. Yet a persistent shortage of skilled workers continues to constrain growth and threatens the long-term competitiveness of U.S. electronics manufacturing.

Electronics manufacturing’s influence extends well beyond the factory floor:

- Global trade in electronic components exceeded finished goods by \$408 billion in 2023, underscoring the industry’s pivotal role in international supply networks.
- Every dollar of direct output generates \$2.25 in total economic activity.
- Each direct job supports three additional jobs across the U.S. economy.
- Indirect impacts add 1.68 million jobs and \$532 billion in additional output, demonstrating the sector’s deep interconnection with suppliers, logistics, and professional services.

The report finds that the industry’s footprint is national in scope but concentrated in key high-tech hubs:

- California leads with 260,000 direct jobs and \$364 billion in total output, powered by its combination of design leadership and fabrication capacity.
- Texas supports more than 330,000 total jobs across semiconductor, defense, and communications technologies.
- Oregon, Massachusetts, and New York continue to anchor specialized clusters in semiconductor fabrication and precision instruments.

Taiwan’s Foxconn Moves Some Manufacturing Away from China

Foxconn Chair Liu Young-way said companies are moving production away from China, signaling a major global manufacturing shift, per Nikkei Asia.

Speaking at the opening of the two-day Global Management Dialogue in Tokyo, Liu said the push for domestic economic prosperity is driving firms to regionalize production. Three years ago, almost all of Foxconn’s production was concentrated in China, he noted.

Now, 65% of production remains in China, with the rest spread across Vietnam, India, and Mexico. He said the company has set up regional headquarters to manage local operations and build relationships with governments and business partners.

Liu also highlighted the disruptive impact of generative AI. He said Foxconn is exploring the technology to shorten the time it takes to bring innovations to market.

Apple Sees Big December Quarter Driven by Strong iPhone 17 Demand

Apple CEO Tim Cook told CNBC's Steve Kovach that revenue in the current quarter will increase by at least 10%.

"We expect total company revenue to grow by 10 to 12% year over year, we expect iPhone revenue to grow double digits, year over year, and we expect that that would make the December quarter the best ever in the history of the company," Cook said.

Analysts polled by LSEG expect Apple to guide to \$132.31 billion in December quarter sales and earnings of \$2.53 per share. Apple's guide surpasses those expectations. With 11% growth over last year's December quarter, revenue for the upcoming period would be \$137.97 billion.

Cook said that Apple was confident in its guidance because of the strong reception for the company's new iPhone 17 devices, released in September, which he said was "off the chart."

"We look at the results to date, the reception of the consumer on the very strong iPhone lineup," Cook said. "We're looking at traffic in our stores, which is up significantly year on year. We see enthusiasm around the world."

The company had \$27.46 billion in net income during the quarter versus \$14.29 billion in the year-ago period, which was lower because of a one-time tax charge.

For Apple's fiscal 2025, it had \$416 billion in total revenue, a 6% increase over 2024. Sales in the September quarter rose 8% on an annual basis.

Apple Crosses \$4 trillion Market Cap for the First Time

Apple and Microsoft shares have both risen, pushing the companies over a market cap of \$4 trillion.

Both companies are still behind Nvidia, which is the world's most valuable company with a market cap of over \$4.6 trillion. Microsoft previously hit the \$4 trillion benchmark in July. Apple closed just below \$4 trillion, while Microsoft held the valuation.

Microsoft stock climbed about 2% on news that the company finalized a 27% stake in OpenAI's for-profit business. The company has backed the ChatGPT maker since 2019.

The \$4 trillion milestone, a first for Apple, comes as its shares have been surging in recent weeks because iPhone 17 models, released in September, appear to be selling better than their predecessors.

Apple shares are up 25% over the past 3 months. Microsoft is up 6% in the past 3 months.

Mixed Signals Define Electronics Manufacturing as 2025 Winds Down

The Global Electronics Association's October 2025 Global Sentiment Report captures an industry navigating a mix of headwinds and tailwinds as it enters the final quarter of the year. Cost pressures persist, but demand indicators remain resilient, setting the stage for a cautious yet stable close to 2025.

Input Costs Remain Elevated, Margins Under Pressure

Rising costs continue to weigh on profitability across the electronics value chain. Nearly three-fifths (58%) of manufacturers report higher material costs, while 43% cite increasing labor costs. At the same time, backlogs and profit margins remain soft, underscoring the ongoing squeeze on margins.

Still, there are early signs of relief. The Labor Costs Index reached its lowest level on record this month, suggesting that some manufacturers are experiencing improved labor dynamics. A handful of respondents also noted modest declines in material costs, suggesting that inflationary pressures — while still present — may be starting to stabilize.

Orders Strengthen, Backlogs Ease

Despite cost concerns, demand fundamentals remain steady. Orders, shipments, and capacity utilization all held firm in September. Importantly, backlogs continue to ease, signaling that production is catching up with prior demand surges. This reflects a more balanced market where supply and demand are gradually realigning.

Cautious Optimism for the Months Ahead

Looking toward early 2026, manufacturers expect cost pressures to persist, but they remain confident in the sector's underlying strength. Orders are projected to increase in the coming months, though sentiment softened slightly compared to last month's survey.

Inventory levels are expected to remain stable across both suppliers and customers, consistent with a more measured, sustainable demand environment.

A Market in Transition

Taken together, October's report points to an industry in transition, one where input costs are high but stabilizing, production is catching up to demand, and manufacturers are adjusting to a slower yet steadier growth trajectory.

The coming months will test how well the sector can sustain this balance as it prepares for another year of global economic uncertainty and continued technological transformation.

EV Sales Are Slowing. Now The Auto Industry Is Banking on a Self-Driving Boom

The American automotive sector was supposed to be well on its way to phasing out internal combustion by now. Most carmakers operating in the United States bet on an electric boom that would take off by the end of the decade, leading to an industry powered by batteries in the 2030s.

Clearly, that's not the case—not with the Trump administration yanking the policy-support rug out from underneath them. Now, car companies need to find another equally lucrative obsession to hyper-focus on, and increasingly, it's autonomous vehicles.

The industry's 2010s-era foray into self-driving didn't really pay off for many automakers. General Motors-backed Cruise lit money on fire while others, like Ford's Argo AI, died in infancy. And while Tesla has steadily improved its Autopilot and Full Self-Driving features over the past decade and even launched a Robotaxi service, it too hasn't achieved its biggest promises.

But things seem to be changing thanks to the boom in AI and computing power. Sterling Anderson, former co-founder of self-driving startup Aurora and former head of Autopilot at Tesla, joined GM earlier this year to boost its entire tech game—including autonomy.

His focus was on how autonomy can make roads safer. In fact, he even called the tech the "cornerstone of GM's modern portfolio." Meaning that it's probably fair to bet that GM is going head-first into spending on autonomy efforts.

This is perhaps why GM decided to focus on what it calls "personal autonomy": i.e., making its Super Cruise hands-free highway driving assistant better and better over time. Eventually, its plan is to add LIDAR to make Super Cruise "eyes-off" as well. That may make a lot more sense than running a robotaxi service, which was a \$10 billion money pit for its now-shuttered Cruise division.

GM isn't the only automaker that's investing in autonomy. Just last week, Stellantis pledged its allegiance to a partnership with Nvidia, Foxconn and Uber. Under this deal, the automaker would start joint production of its autonomous platform in 2028—the U.S. being the first global market with 5,000 vehicles. Volkswagen also has its own partnership with Uber in the works, via the ID. Buzz and its Moia autonomy division. We've also seen similar announcements from Hyundai, Toyota and more recently, Lucid Motors.

AI Boom is Fueling a Memory Chip Shortage that Could Hit Cars and Phones

Chipmakers and analysts are warning of a memory chip shortage that could hit the consumer electronics and automotive industries next year, as companies prioritize massive demand from the artificial intelligence boom.

Analysts say these supply constraint concerns come as chip manufacturers focus on advanced memory chips used in artificial intelligence computing, with less focus on production needed for consumer products.

In the face of supply constraints, memory companies have reportedly been raising prices of their chips.

Reuters reported that Samsung Electronics had quietly raised prices on select memory chips by as much as 60% compared to September.

As a result, it is predicted that prices will increase for consumer products like smartphones and notebooks.

New Data Shows Companies are Rehiring Former Employees as AI Falls Short of Expectations

As hype over artificial intelligence continues to influence corporate strategy, many organizations that trimmed staff amid an uncertain economy are quietly adding them back. New data from workplace analytics firm Visier shared with Axios shows that companies are rehiring a growing share of the same employees they laid off – a sign that automation technologies are not yet replacing workers at the scale some executives anticipated.

Visier analyzed employment data from 2.4 million workers across 142 companies worldwide. About 5.3 percent of employees who were laid off later returned to their previous employer, a rate that has held steady for several years but has recently begun to rise.

Andrea Derler, principal at Visier, said the data suggests many organizations are confronting the practical realities of what AI tools can – and cannot – do. She described artificial intelligence as a convenient explanation for layoffs but not yet an entirely justified one.

The trend underscores a mismatch between expectations for technology and operational outcomes. While AI-powered agents and digital workforce systems are expanding across industries, Visier's findings suggest that these systems rarely replace entire jobs outright. Instead, they tend to automate parts of tasks, often leaving companies short of the human expertise needed to manage or complement new tools. That gap has led some firms to bring back experienced workers as the costs and complexities of AI integration mount.

Even standard cost-cutting moves such as layoffs have hidden consequences. Data from Orgvue, a workforce planning software platform, estimates that companies spend roughly \$1.27 for every \$1 they save from workforce reductions. That figure includes severance, unemployment insurance, and other indirect expenses that can temporarily offset payroll savings.

Derler said these findings point to a larger planning gap that many executive teams must address quickly. Layoffs can provide short-term relief for balance sheets or investor optics, but they rarely simplify long-term workforce or technology strategies. Ultimately, organizations that misjudge the savings potential of AI may find themselves calling back the very talent they had let go.

Toyota Confirms Major US Expansion, One Month after Trump's Announcement

Toyota Motor Corporation announced plans to invest up to US\$10 billion in the US over the next five years, signaling a major expansion of its domestic operations. The confirmation comes less than a month after President Donald Trump publicly mentioned the potential investment in October 2025.

Reports from *Bloomberg* and *Yomiuri Shimbun* note that Toyota's announcement clarifies a period of uncertainty during Trump's recent visit to Japan. At the time, the president indicated that Toyota intended to build multiple factories in the US, with total investments exceeding US\$10 billion. Toyota did not immediately respond, leaving details unclear. The company has now formally confirmed the plan, though specifics of the funding allocation remain under wraps.

During the inauguration of Toyota's new battery plant in North Carolina on November 12, David Christ, group vice president and general manager of the Toyota Division at Toyota Motor North America, stated that the company will release more information about how the investment will be deployed as the project progresses.

According to Toyota, the funding will be directed toward "next-generation mobility", a term the company uses to describe the development of electric and hybrid vehicles, along with related infrastructure and production capabilities. Analysts suggest the investment will likely focus on expanding equipment and facilities for EVs and HEVs.

Market observers also note that the move may be linked to recent US trade policies. Currently, Japanese automakers face a 15% tariff on vehicles exported to the US. Toyota estimates that the tariff could reduce operating profits by approximately JPY1.45 trillion (approx. US\$9.3 billion) in the fiscal year ending March 2026. By boosting domestic production in the US, the company hopes to mitigate the impact of tariffs and strengthen supply chain resilience.

The announcement underscores Toyota's commitment to maintaining a strong presence in the US while adapting to the evolving global automotive landscape, particularly as the industry shifts toward electrification.

AI is Taking Over Google Maps to Plan Routes, Find Parking, and Answer Questions

Following a multi-billion-dollar deal with Apple to integrate Gemini into Siri, Google has announced plans to bring its AI assistant to Google Maps by the end of the year. The company says the integration will enhance the app's voice-activated navigation and provide a safer, more seamless hands-free driving experience.

According to Google, Gemini will be able to locate virtually any destination, including restaurants, hotels, and movie theaters, and automatically suggest the fastest route. It will also identify parking spots, report traffic incidents, check for nearby EV chargers, and perform a variety of other tasks using natural language commands.

Users will also be able to perform multi-step tasks with Gemini, such as asking it to find a budget-friendly vegan restaurant along their route and then navigate to that location if one is available. The assistant can even add calendar events for upcoming appointments, such as meetings or dinner dates.

In addition to Gemini integration, Google Maps will introduce easily recognizable landmarks, including gas stations, restaurants, and famous buildings. The app will use these landmarks for directions – for example, saying, "Turn right after the Thai Siam Restaurant," instead of the less intuitive "Turn right in 500 feet," which can be confusing in real-world navigation.

To enable more accurate navigation using local landmarks, Google analyzed updated information on 250 million locations in Maps and cross-referenced it with Street View imagery. The company says incorporating Street View data helps identify the most visually striking and well-known sites on each street, ensuring directions are both accurate and easy to follow.

Gemini will roll out globally on Google Maps for Android and iOS by the end of the year, with support for Android Auto coming later. Landmark-based navigation is already available in the US with the latest Google Maps update, though availability in other regions has not yet been confirmed.

Top 100 Connector Manufacturers

Research Report M-121-25
August 2025

Top 100



Bishop & associates, inc.

Performance and Forecast of the World Connector Industry

Top 100



Bishop & Associates has just released a new ten-chapter research report providing a comprehensive analysis of the world's Top 100 Electronic Connector Manufacturers. This new report furnishes detailed statistics that benchmark the leading connector manufacturers by 2023/2024 total sales, sales by end-use equipment market, sales by product category, and sales by region. All manufacturers are exhibited by 2024 sales and are ranked by region of the world with percentage year-to-year change. This report provides all the key data needed to analyze the sales performance of each of the top 100 worldwide electronic connector suppliers.

The world's top 100 connector manufacturers recorded shipments of \$70.060 billion in 2024. This represented 81.0% of the worldwide connector market, down from 82.4% in 2023. The balance of the connector industry had shipments of \$16.417 billion in 2024 and represented 19.0% of the total market.

Over the last decade, we have identified more than 750 connector manufacturers, many of which have been acquired by larger companies or consolidated to form new connector companies. In fact, if you were to review the list of top 100 connector companies in 2000 with the list of top 100 connector companies in 2024, you would see that a large percentage of the companies listed in 2000 were acquired by other companies. In fact, in just the last several years, names like CONEC, ERNI, Positronic, Genesis Connector Technology, and Winchester, all at one time, top 100 place holders have been acquired. It doesn't appear this consolidation will end anytime soon. In 2023 we lost Carlisle Interconnect (#24 in 2023) when they were acquired by Amphenol, and in 2025 we will lose CommScope (#25 in 2024) and AirBorn (#41 in 2024). CommScope will be folded in with Amphenol and AirBorn will become part of Molex.

These changes are allowing new companies to appear on Bishop's list of top 100 connector manufacturers. Companies like Qnnect, a portfolio company comprised of connector manufacturers such as Cristek, Fil-Con, Connectronics, and Meritec/Joy Signal, are now listed as the 27th largest connector manufacturer. And a company like Southwest Microwave, who offers a highly focused product offering, is now part of the top 100. As would be expected, we anticipate continuing to discover additional connector companies, especially in China and other developing countries, as well as non-connector companies who are expanding their current product offering to include interconnect, or who are developing application specific connectors to support their other products.

The table on the following page shows percent of sales for the top 100 connector manufacturers, and all other connector manufacturers by geographic region.

Top 100 by Geographic Region - 2024 Sales

Region	1 - 100 Sales	All Other Sales	Total World
North America	XX.X%	X.X%	XX.X%
Europe	XX.X%	X.X%	XX.X%
Japan	3.9%	0.8%	4.7%
China	XX.X%	X.X%	XX.X%
Asia Pacific	XX.X%	X.X%	XX.X%
ROW	2.2%	1.8%	3.9%
Total World	81.0%	19.0%	100.0%

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