

Double-Digit Growth in Bookings and Billings in April

Regional Performance:

YOY, the only region not to exhibit continued growth in April was the ROW region. The greatest growth, like last month was in the Asia Pacific region, where billings increased a strong +31.0%, followed by China, where billings increased +20.5%. YTD, sales are positive in three of the six regions, with the greatest YTD growth in Asia Pacific. North America, Europe, and the ROW region were negative with the ROW region exhibiting the greatest decline. See page 5.

Industry Backlog:

April backlog was \$21,915 million (11.7 weeks).

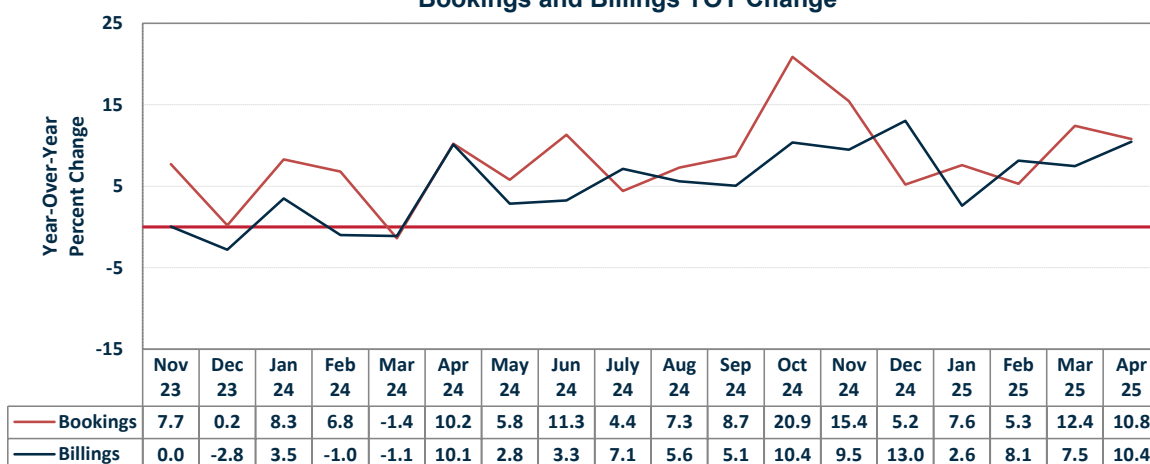
2025 Currency Impact:

The industry registered a YOY increase in sales in April 2025, of +10.4% in USD and +1.4% in local currency.



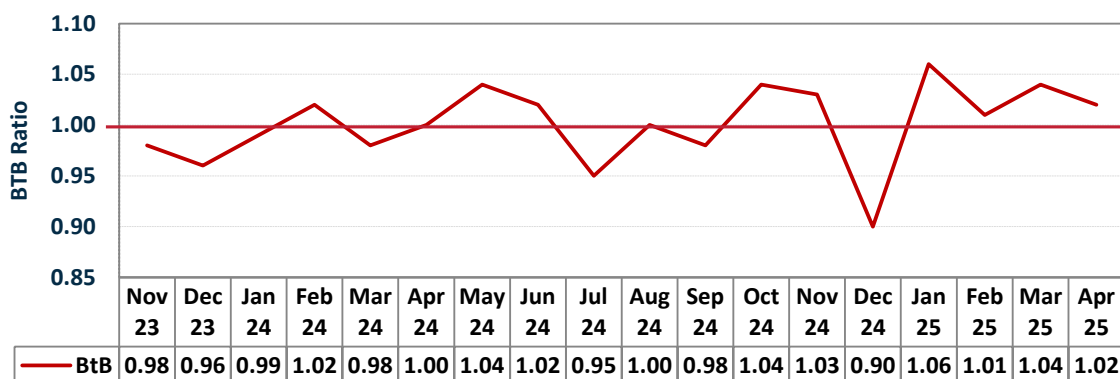
April bookings increased by +10.8% while billings increased +10.4%.

Bookings and Billings YOY Change



The book-to-bill ratio in April was 1.02, down from 1.04 in March. This is the 11th month in the last 18 months where the book-to-bill has been 1.0 or better.

Connector Industry Book-to-Bill

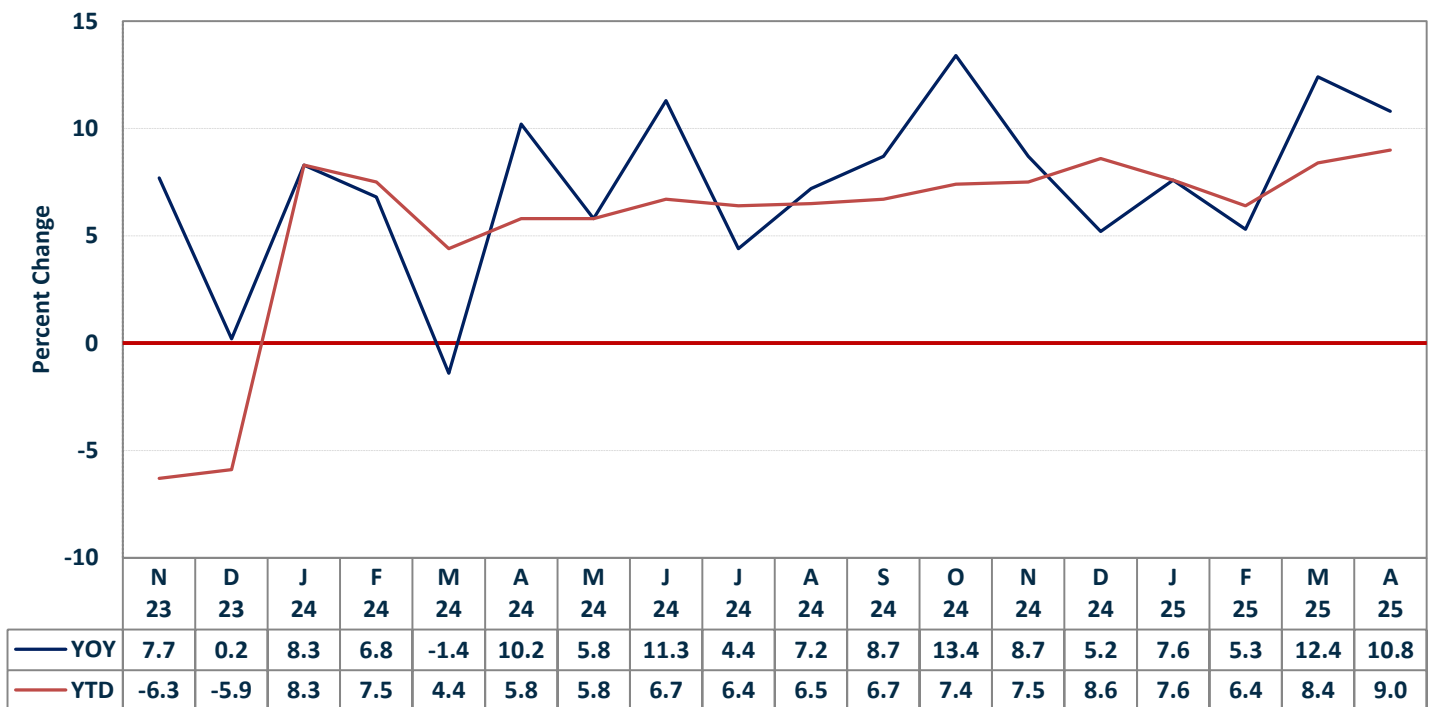


Booking Highlights and Conclusions

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%	2.3%	-18.4%	8.3%	7.7%	-18.4%	8.3%	7.7%
Feb	10.1%	5.2%	5.5%	-13.8%	6.8%	5.3%	-18.4%	7.5%	6.5%
Mar	1.2%	-2.9%	2.1%	-12.9%	-1.4%	12.4%	-16.6%	4.4%	8.4%
Apr	-5.1%	3.2%	-1.3%	-9.7%	10.2%	10.8%	-15.0%	5.8%	9.0%
May	13.5%	9.1%		-3.9%	5.8%		-12.8%	5.8%	
Jun	-12.7%	-6.8%		-10.3%	11.3%		-12.4%	6.7%	
Jul	0.3%	-5.8%		-0.3%	4.4%		-10.9%	6.4%	
Aug	9.2%	11.6%		0.7%	7.3%		-9.5%	6.5%	
Sep	-5.4%	-5.0%		-3.7%	8.7%		-8.9%	6.8%	
Oct	-3.2%	9.6%		5.9%	20.9%		-7.6%	8.1%	
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



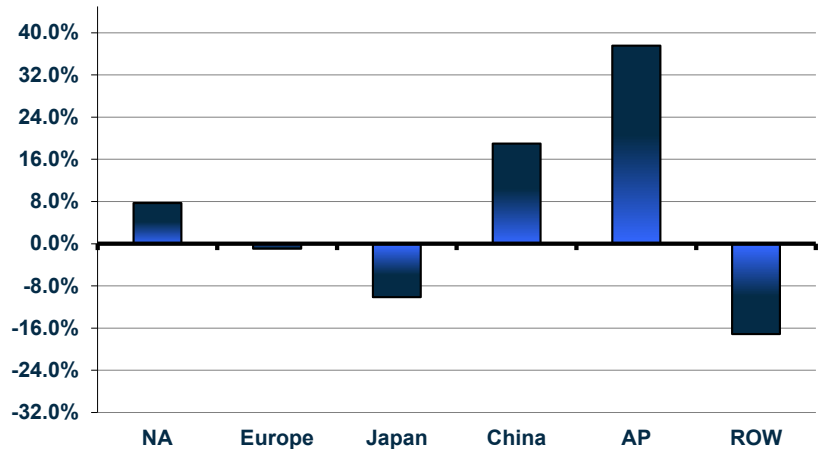
- April bookings increased +10.8% year-over-year.
- Orders decreased -1.3% on a sequential basis in April.
- The book-to-bill ratio for April was 1.02, down from 1.04 in March.

Regional Performance: BOOKINGS

April 2025 Bookings

Region	Sequential	YOY	YTD
NA	-8.4%	1.9%	7.7%
Europe	-4.3%	0.0%	-0.9%
Japan	-3.5%	-7.4%	-10.1%
China	7.5%	32.0%	19.0%
AP	3.0%	31.0%	37.6%
ROW	31.7%	15.0%	-17.1%
Total	-1.3%	10.8%	9.0%

Year-To-Date Bookings by Region



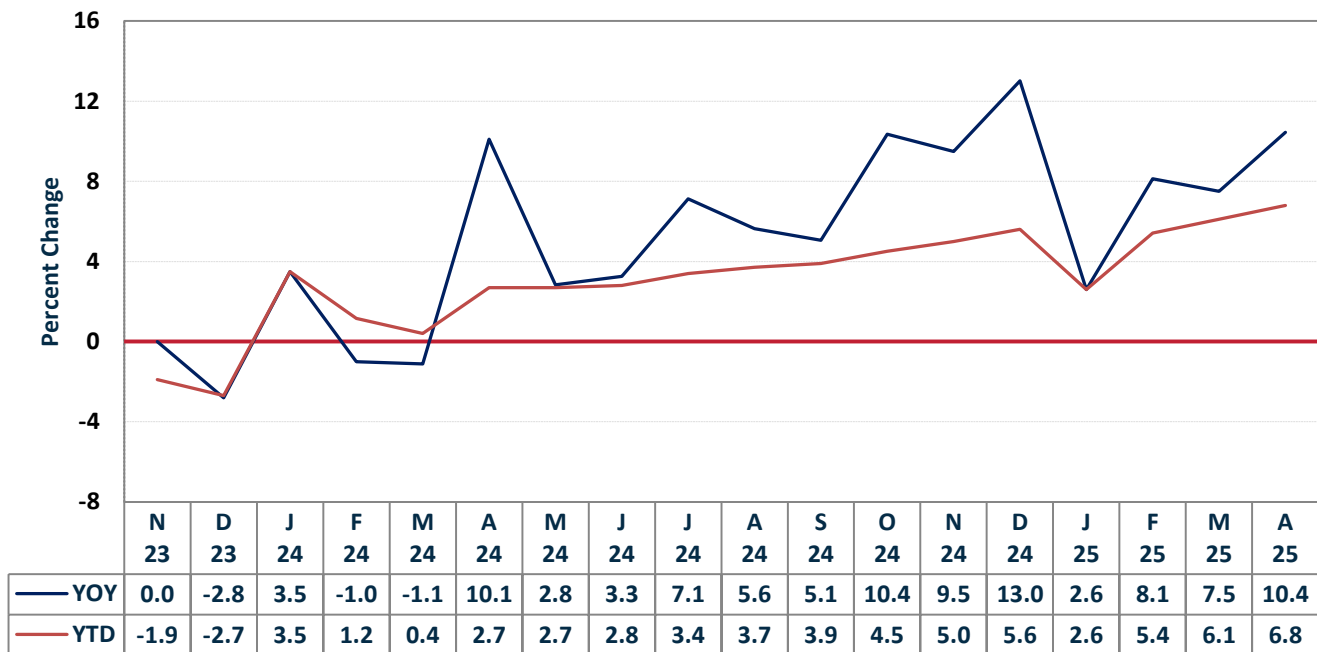
- Year-to-date, April bookings increased by +9.0%. Sequentially North America, Europe, and Japan, all saw decreases, with North America showing the greatest decrease with sales declining -8.4%.
- In April, year-over-year orders rose in all but one region, Japan, where bookings decline -7.4%. All other regions saw growth, with China growing the most, up +32.0%, followed by Asia Pacific, where sales increased +31.0%. From a year-to-date standpoint, sales grew in three of the six regions, with the greatest growth in the Asia Pacific region where sales increased +37.6%, followed by China, where sales increased +19.0%.
- Year-over-year order growth has now been positive for 13 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%	2.1%	0.5%	3.5%	2.1%
Feb	9.7%	2.8%	9.9%	-1.0%	-1.0%	7.6%	-0.3%	1.2%	4.9%
Mar	-0.9%	0.4%	0.0%	0.3%	-1.1%	7.0%	-0.1%	0.4%	5.6%
Apr	-7.9%	1.7%	0.4%	-1.0%	10.1%	10.4%	-0.3%	2.7%	6.8%
May	12.1%	4.3%		-0.6%	2.8%		-0.4%	2.7%	
Jun	-6.0%	-4.9%		-6.7%	3.3%		-1.5%	2.8%	
Jul	-1.7%	1.8%		-1.2%	7.1%		-1.4%	3.4%	
Aug	7.2%	5.8%		-2.8%	5.6%		-1.6%	3.7%	
Sep	-2.7%	-3.0%		-10.0%	5.1%		-2.6%	3.9%	
Oct	-2.1%	3.2%		2.5%	10.4%		-2.1%	4.5%	
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

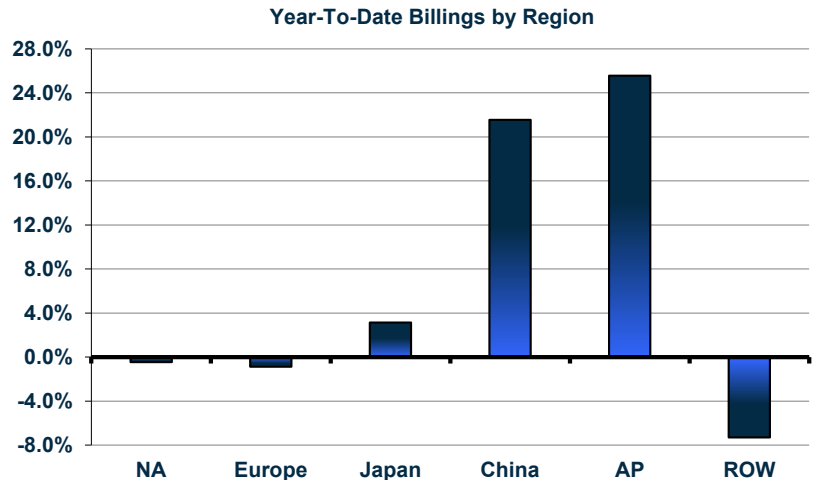


- April billings grew +6.8% year-to-date and +10.4% year-over-year.
- Sequentially, April billings increased +0.4%.
- Year-over-year sales growth has now been positive for 13 consecutive months and year-to-date for 16 consecutive months.

Regional Performance: BILLINGS

April 2025 Billings

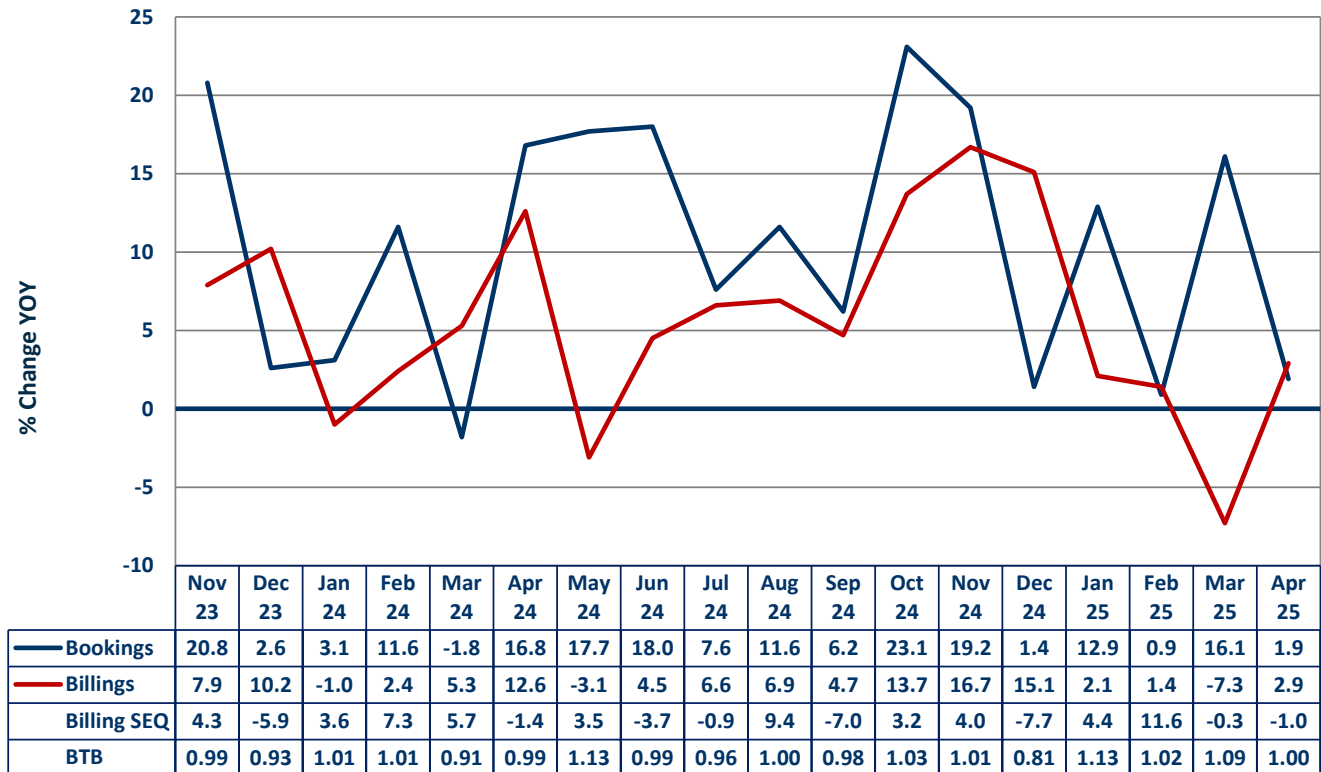
Region	Sequential	YOY	YTD
NA	-1.0%	2.9%	-0.5%
Europe	-0.1%	5.7%	-0.9%
Japan	-0.1%	5.9%	3.1%
China	2.9%	20.5%	21.5%
AP	1.5%	31.0%	25.6%
ROW	-8.2%	-10.2%	-7.3%
Total	0.4%	10.4%	6.8%



- April connector sales increased by +10.4% compared to the same period last year.
- Two out of six regions saw a sequential increase, with China increasing the most at +2.9%, followed by Asia Pacific with growth of +1.5%.
- Year-over-year, all regions but ROW saw an increase, with the greatest increase in Asia Pacific where year-over-year sales increased +31.0%, followed by China where sales grew +20.5%. Year-to-date three of the six regions saw an increase, down from four out of six in March. Asia Pacific saw the greatest growth, increasing +25.6. Asia Pacific was followed by China where sales increased +21.5%. North America, Europe, and the ROW region saw year-to-date decreases, declining -0.5%, -0.9%, and -7.3% respectively.

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**

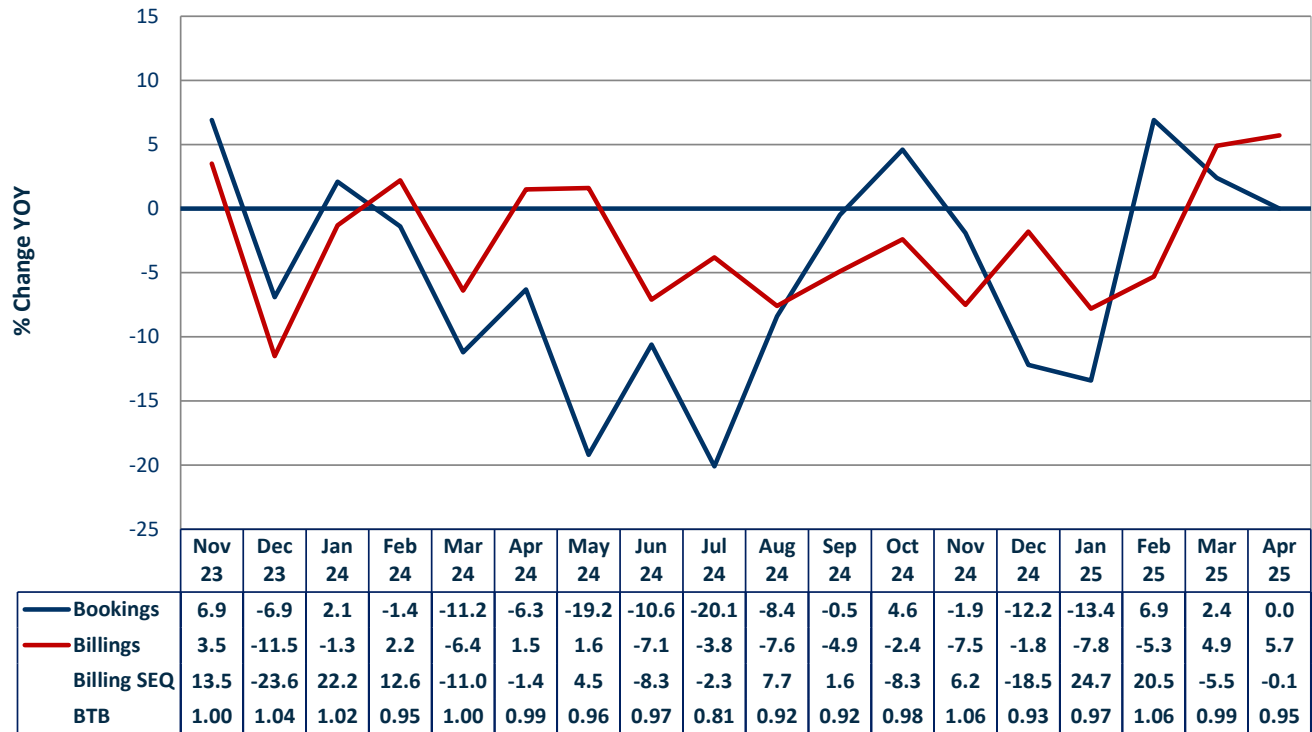


North America Performance

- Sales increased +2.9% year-over-year in North America in April, while orders grew +1.9%. This follows a strong March, where orders grew +16.1%. Sequentially, North American billings decreased -1.0%. The book-to-bill ratio was 1.00.
- “In April, the Consumer Price Index for All Urban Consumers rose 0.2 percent, seasonally adjusted, and rose 2.3 percent over the last 12 months, not seasonally adjusted”, according to the US Bureau of Labor Statistics.
- “Flash U.S. Composite PMI Output Index, which tracks the manufacturing and services sectors, fell to a reading of 53.8 this month from 56.0 in April”, according to Reuters.
- “The unemployment rate remained unchanged at 4.2%”, per the US Bureau of Labor Statistics. “In April 2025, U.S. retail sales experienced a slight increase of 0.1% from the previous month but remained up 5.2% from April 2024” according to the U.S. Census Bureau.
- “The number of new vehicles sold in the U.S. in April 2025, as aggregated by MarkLines as of May 2, was 1,463,493 units up 9.9% year-over-year”. The U.S. has imposed an additional 25% tariff on all passenger cars and light trucks that was effective April 3rd. This tariff was eased on May 3rd while negotiations are underway, but some manufacturers are already discussing raising prices.

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



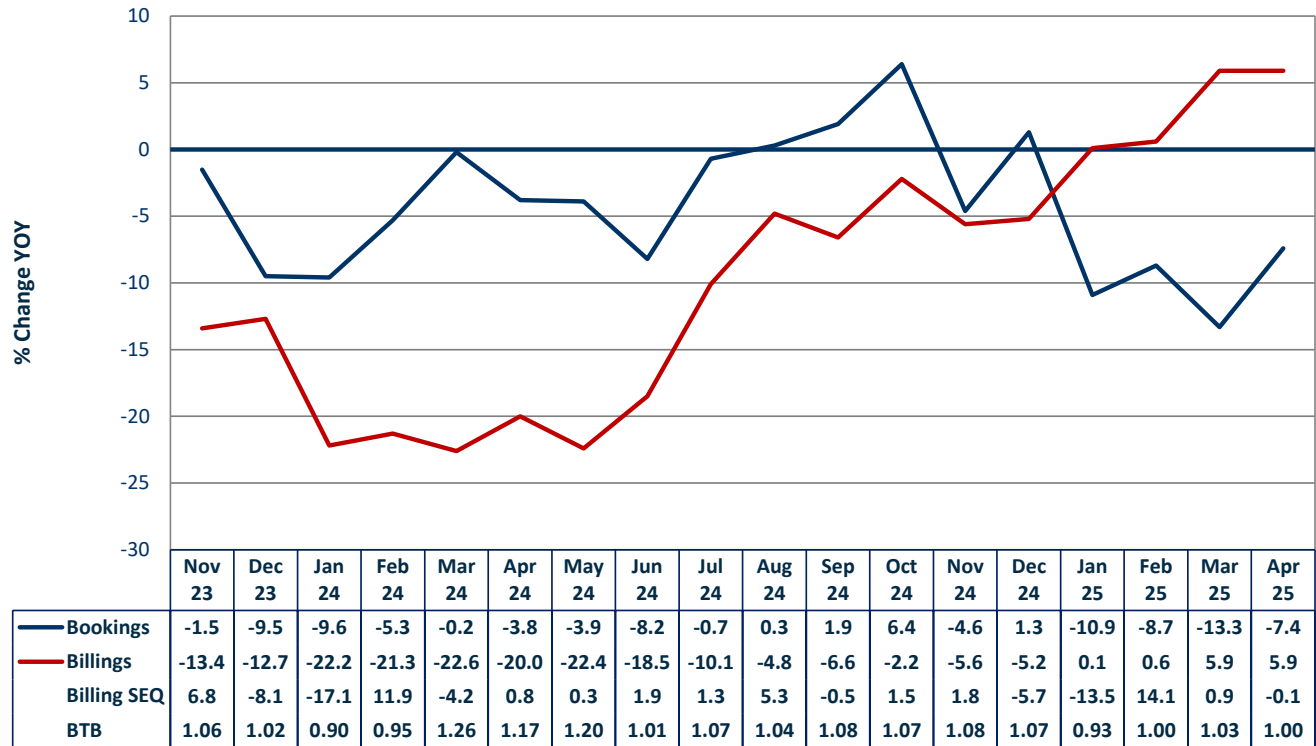
Europe Performance

- Bookings remained flat in April, while billings increased +5.7%. This is the largest increase in billings since October 2023. Sequentially, sales decreased by -0.1%. The book-to-bill ratio was 0.95, down from 0.99 in March.
- In March* 2025, compared with March 2024, industrial production increased by 3.6% in the euro area and by 2.7% in the EU according to Eurostat.
- "In March* 2025, compared with February 2025, the seasonally adjusted retail trade volume decreased by 0.13% in both the euro area and the EU", according to first estimates from Eurostat. They also stated "The annual inflation rate in the Euro Area was 2.2% in April, the same as in March"
- "In March* 2025, the euro area seasonally adjusted unemployment rate was 6.2%, stable compared to Feb.2025 and down from 6.5% in March 2024. The EU unemployment rate was 5.8% in March 2025, also stable compared to Feb.2025 and down from 6.0% March 2024", according to Eurostat.
- "In April 2025, the Economic Sentiment Indicator (ESI) declined by 1.4 points in both the EU (to 94.4) and the euro area (to 93.6). The Employment Expectations Indicator (EEI) declined further in the EU (-0.7 points to 96.9), while remaining unchanged in the euro area (at 96.5)", according to the European Commission.

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



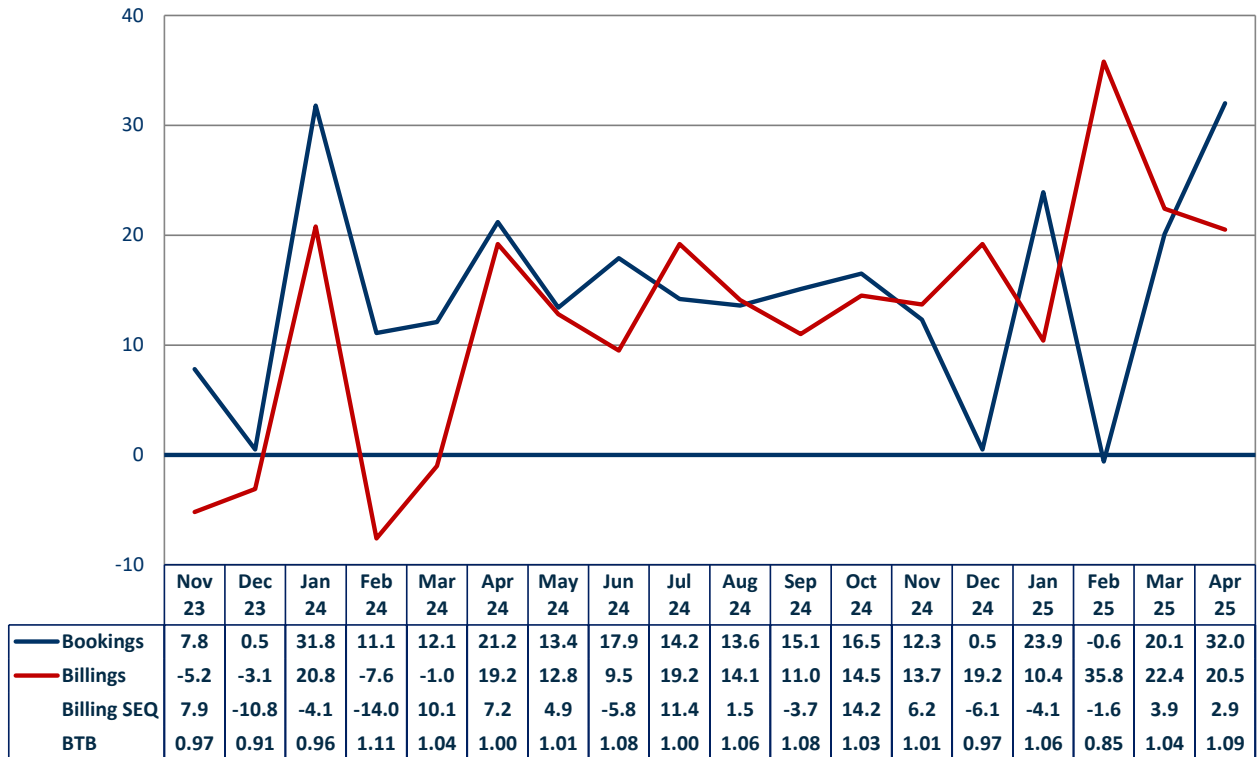
Japan Performance

- Japan's April year-over-year bookings decreased -7.4%, while sales increased +5.9%. Sequentially, sales decreased -0.1%. Japan's book-to-bill ratio was 1.00, down from 1.03 in March.
- Japan's "Consumer Price Index (CPI) increased to 111.10 points in March* from 110.80 points in February of 2025. The CPI in Japan averaged 73.60 points from 1957 until 2025, reaching an all-time high of 111.20 in January 2025", according to Trading Economics.
- In April 2025, composite PMI in Japan "climbed to 51.2, above flash estimate of 51.1. This marked the fifth expansion in private sector activity over the past six months" according to Trading Economics.
- Japanese new vehicle sales in April increased 10.5% YOY to 342.9K units, according to MarkLine.
- "Japan's unemployment rate remained unchanged at 2.5% in March* and their annual inflation rate remained at 3.6% in March* 2025 from 3.7% in the prior month. This is higher than the long-term average of 2.44% according to YCharts.
- Japanese "goods exports were up 8.6% from a year earlier in the first quarter of 2025. Exports to the United States and Asia were the principal drivers of those gains" according to an April 2025 study on the Japanese economy by Deloitte.

**April 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

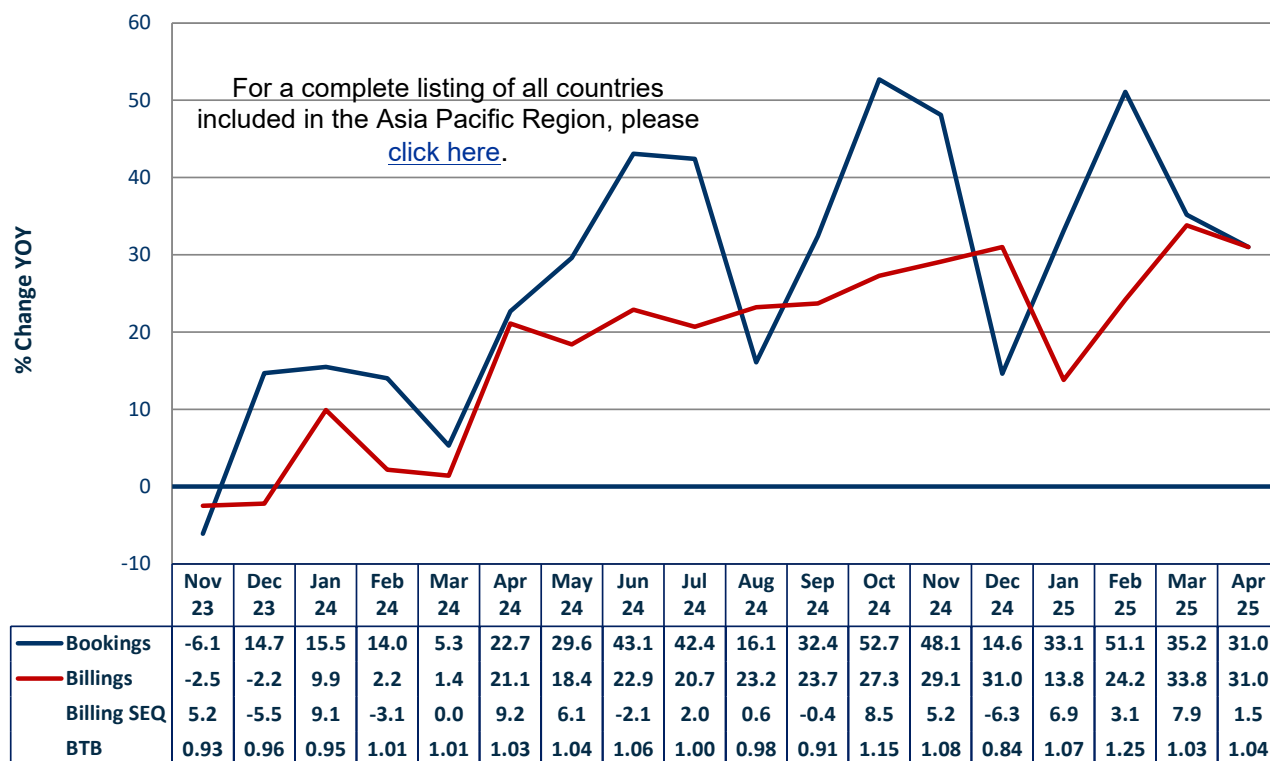


China Performance

- China's April sales grew +20.5% on a year-over-year basis. Bookings increased by +32.0%. Sequentially, sales increased by +2.9%. The BTB increased to 1.09 after climbing to 1.04 in March.
- "China's Manufacturing PMI fell to 49.0 in April 2025 from March's 12-month high of 50.5, below market expectations of 49.8. This marked the first contraction in factory activity since January and the steepest decline since December 2023, according to National Bureau of Statistics of China.
- Marking the third consecutive month of consumer deflation "China's consumer prices dropped by 0.1% year-on-year in April 2025, maintaining the same pace for the second month and matching market expectations". according to Trading Economics.
- April vehicle production and sales volumes totaled 2.619 million and 2.59 million units, up 8.9% and 9.8% year-over-year, respectively. Year-to-date, production and sales volumes were 10.175 million and 10.06 million units, up 12.9% and 10.8% respectively year-over-year according to MarkLines.
- China's surveyed urban unemployment rate was 5.0% in April, down from 5.2% in March, according to the Chinese National Bureau of Statistics (NBS). "The NBS also reported that the surveyed unemployment rate for 31 major Chinese cities was 5% and the rate for rural migrant workers was 4.5%".
- "Exports jumped 8.1% last month in U.S. dollar terms from a year earlier, according to data released by China's customs authority on Friday, sharply beating Reuters' poll estimates of a 1.9% rise", according to CNBC.

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**

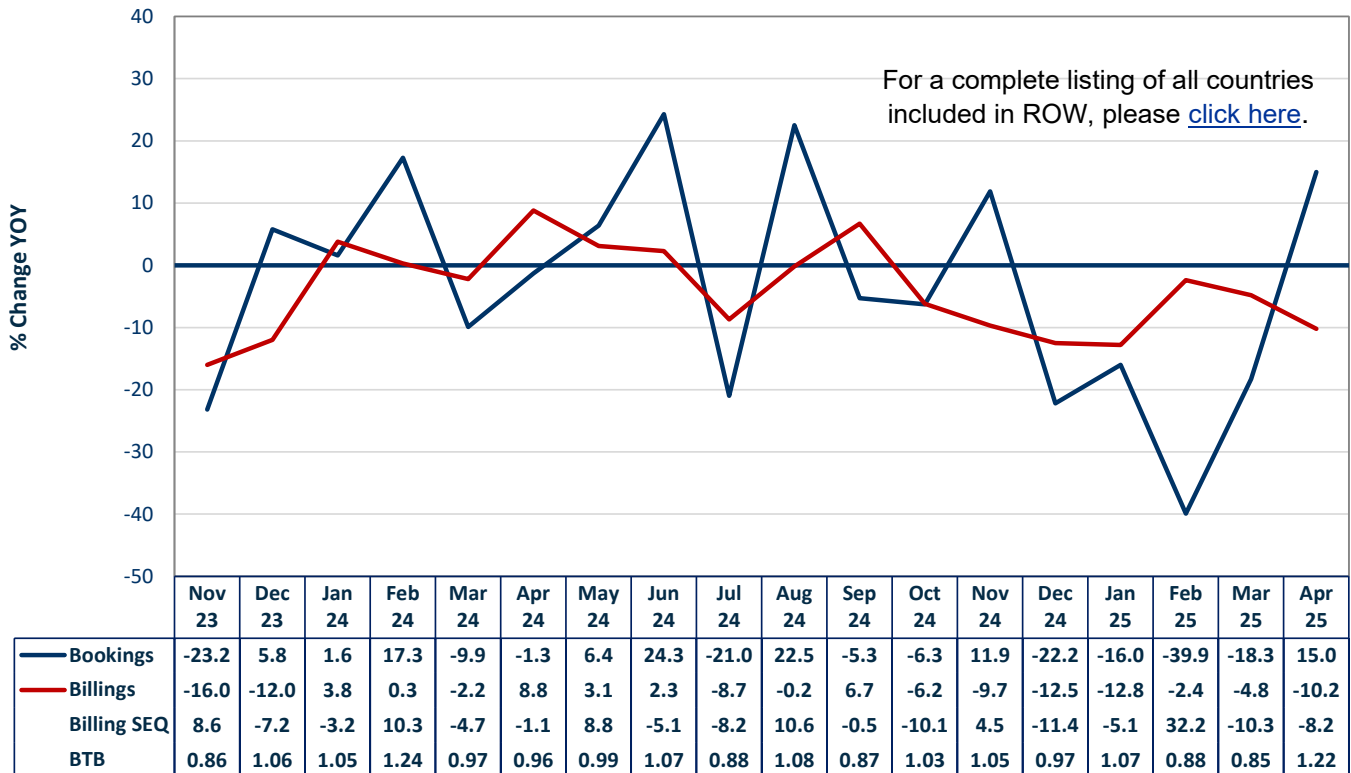


Asia Pacific Performance

- Year-over-year, April orders were up +31.0%, while billings also increased +31.0%. Sequentially, sales increased by +1.5%. The book-to-bill ratio was 1.04, up from 1.03 in March.
- “India's year-on-year inflation rate based on all India Consumer Price Index (CPT) for the month of April 2025 over April 2024 is 3.16% (Provisional)”. There is a decline of 18 basis points in headline inflation of April 2025 in comparison to March 2025. It is the lowest year-on-year inflation after July 2019,” according to the Ministry of Statistics and Programme Implementation National Statistics Office.
- “The HSBC India Manufacturing PMI edged up to 58.2 in April 2025 from 58.1 in March slightly below the flash estimate of 58.4 marking the strongest sector improvement in 10 months”, according to Trading Economics.
- “Exports from South Korea unexpectedly grew by 3.7% year-over-year to USD 58.21 billion in April 2025, easily beating forecasts of a 1.6% drop, after a downwardly revised 3.0% rise in March, due to a surge in semiconductor exports, preliminary estimates showed. It marked the third consecutive month of expansion in exports and the fastest pace in the sequence, despite shipments to the US declining by 6.8%, due to hefty tariffs”, according to Trading Economics.
- South Korea’s seasonally adjusted unemployment rate rose to 2.7% in April 2025 down from 2.9% in March”, 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.

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



Rest of World Performance

- Orders increased +15.0%, while billings decreased -10.2% year-over-year. Sequentially, sales decreased by -8.2%. The book-to-bill ratio was 1.22, up from March's book-to-bill of 0.85.
- "In April 2025, Brazil's annual inflation rate was 5.53%. This figure is the highest since February 2023 and remains above the Central Bank of Brazil's upper target of 4.5% for the sixth consecutive month, according to Trading Economics. Unemployment stood at 7.0%
- "The S&P Global Brazil Manufacturing PMI fell to 50.3 in April, down from 51.8 in March, indicating a near standstill in the sector's health. The headline figure was at its lowest mark since December 2023".
- "The seasonally adjusted Absa Purchasing Managers' Index (PMI) for South Africa dropped to 44.7 in April 2025 from 48.7 in March 2025, indicating the sixth consecutive month of contraction in the country factory activity", stated Trading Economics.
- "Israel's annual inflation rate rose to 3.6% in April 2025 from 3.3% in the previous month, exceeding market expectations of 3.2%." 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	1.8% Steady	1.1% Steady	0.6% Same	4.0% Down	N/A	N/A
Industrial Production Growth	1.3% Flat	1.2% Flat	2.6% Up	6.1% Up	N/A	N/A
Manufacturing PMI*	50.2 Up	49.0 Up	48.7 Up	49.0 Down	N/A	N/A
Inflation Rate	2.3% Down	2.2% Unchanged	3.4% Up	-0.1% Unchanged	N/A	N/A
Unemployment Rate	4.2% Unchanged	6.2% Stable	2.5% Unchanged	5.0% Down	N/A	N/A
Retail Sales Growth YOY	4.7% Up	1.5% Up	3.1% Up	5.1% Up	N/A	N/A
April Connector Sales	2.9%	5.7%	5.9%	20.5%	31.0%	-10.2%
YTD Connector Sales	-0.5%	-0.9%	3.1%	21.5%	25.6%	-7.3%
April Connector Orders	1.9%	0.0%	-7.4%	32.0%	31.0%	15.0%
YTD Connector Orders	7.7%	-0.9%	-10.1%	19.0%	37.6%	-17.1%

* Purchasing Manager Index - Below 50 is contracting factory activity

Key Take Aways:

- Inflation remains down or unchanged in all regions but Japan. As in previous months, Japan, maintains the highest inflation rate at 3.4%. Industrial production growth was flat in North America and Europe, but up in Japan and China.
- Unemployment was stable or unchanged in all regions but China, where it dropped to 5.0%. The highest unemployment rate was in Europe.
- April connector sales were up double-digits in China and the Asia Pacific region, and remained positive in all regions but ROW. Bookings continue to be strong with double-digit year-over-year booking growth in three out of six regions.

The Industry Backlog Is 11.7 Weeks

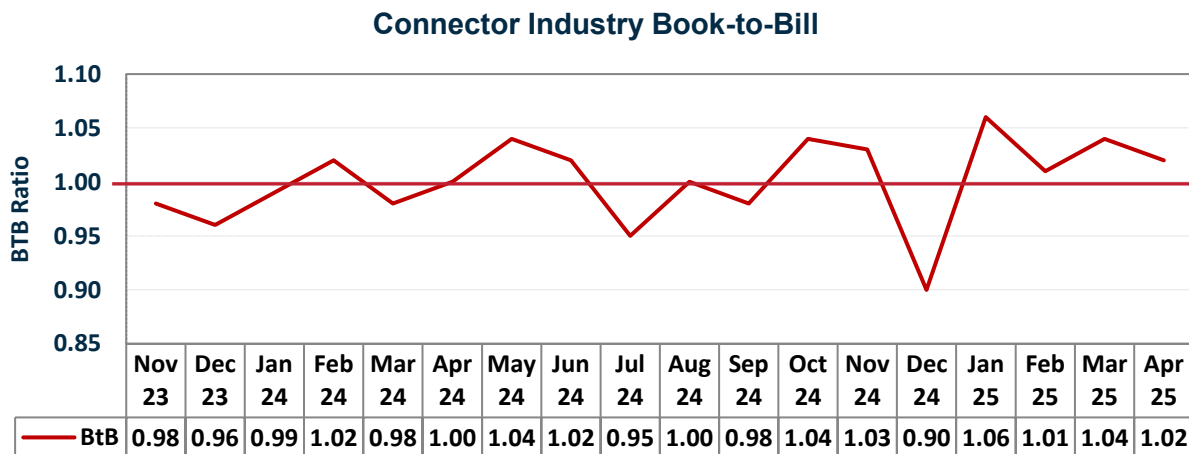
The industry shipped \$1,870 million per week through April. Orders are up +9.0% year-to-date. Which is encouraging for backlog growth.

The following table shows the world connector backlog of orders.

Industry Backlog		
	2024	April 2025
BtB Ratio	1.00	1.02
Beginning Backlog	\$21,017	\$21,287
YTD Bookings	\$86,592	\$30,862
YTD Billings	\$86,322	\$30,234
Ending Backlog	\$21,287	\$21,915
Backlog in Weeks	12.6	11.7

\$ Millions

The book-to-bill (BtB) ratio is 1.02 YTD in April. The following displays the trend of BtB ratios since November of 2023.



The backlog has increased by \$628 million during the first four months of 2025. See the table below.

Change in Backlog	
2024 Ending Backlog	\$21,287
2025 April Ending Backlog	\$21,915
Backlog Growth	\$628

\$ 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 April 2024 versus April 2025 and shows results for these three currencies.

Local Currency to One USD 2024 YTD versus 2025 YTD

Currency	2024	2025	% Change
Euro	0.9323	0.8912	4.6%
Yuan	7.2369	7.2912	-0.7%
Yen	153.8385	144.3541	6.6%

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 April YOY performance by region in US dollars and local currencies.

Industry Sales Performance April 2025 USD-vs-Local Currencies

Region	U.S.\$	Local Currency
North America	2.9%	2.9%
Europe	5.0%	4.6%
Japan	11.9%	6.6%
China	21.9%	-0.7%
Asia Pacific	31.0%	31.0%
ROW	-10.2%	-10.2%
World	10.4%	1.4%

Connector sales in April of 2025 increased +1.4% when measured in local currencies, versus an increase of +10.4% in US dollars.

2025 Outlook for Connectors

The industry is off to a good start with positive growth in bookings and billings for the first four months of 2025.

World Connector Results Percentage Change

Month	Bookings	Billings
January	7.7%	2.1%
February	5.3%	7.6%
March	12.4%	7.0%
April	10.8%	10.4%
Year-to-Date	9.0%	6.8%

Note: The numbers vary slightly from the April Bishop Report because of adjustments from participating companies.

We are encouraged by the good start to 2025. We also believe that the uncertainty of the U.S. tariff policy is easing. For example, China, the United Kingdom, and India are making deals.

The geopolitical environment also looks more favorable for business conditions. For example, the Pakistan and Indian conflict has stopped. Iran is in direct talks with the U.S. Russia and Ukraine are close to cease fire discussions. The Middle East countries are investing heavily in the U.S. economy.

These are all positive signs for a good 2025 business environment. As a result, we are holding to our growth forecast of +7.9% for the connector industry.

2025 Outlook: Historical Analysis

Over the past 15 years (2010 through 2024), sales through April averaged 32.0% of full year sales. The industry shipped \$30,234 million year-to-date April. If history repeats, 2025 sales would be \$94,481 million, up +9.3% over 2024 sales of \$86,478.

Using this methodology, we can forecast a range of possible outcomes in 2025. Over the same 15-year period, the lowest April was as, a percentage of 2025 sales was 30.8%, and the highest was 33.6%. As already noted, the medium was 32.0%.

2025 Range of Possible Outcomes

YTD 15-Year Percent of Total	2025 Forecast	2024 Actual	Percent Growth
30.8%	\$98,162	\$86,478	13.3%
32.0%	\$94,481	\$86,478	9.3%
Bishop	\$93,275	\$86,478	7.9%
33.6%	\$89,982	\$86,478	4.1%

This analysis results in a high forecast of +13.3% to a low of +4.1%.

The following table breaks out the Bishop forecast by region.

2023, 2024, and 2025F Connector Sales By Region with Percent Change

Region	2023	2024	Percent Change	2025F	Percent Change
North America	\$18,840.8	\$20,124.7	6.8%	\$21,713.9	7.9%
Europe	\$17,992.7	\$17,417.3	-3.2%	\$17,934.5	3.0%
Japan	\$4,683.7	\$4,035.8	-13.8%	\$4,124.9	2.2%
China	\$24,977.1	\$28,003.5	12.1%	\$31,020.8	10.8%
Asia Pacific	\$11,310.0	\$13,483.5	19.2%	\$14,978.6	11.1%
ROW	\$4,049.8	\$3,412.9	-15.7%	\$3,502.6	2.6%
Total World	\$81,854.1	\$86,477.7	5.6%	\$93,275.3	7.9%

\$ in Millions

Bishop & Associates ©2025

Significant Events

May 2025 News

Manufacturing Sector Contracted Further in April

Economic activity in the U.S. manufacturing sector contracted in April for the second month in a row, following a brief two-month expansion. The contraction occurred amidst reports of weakening demand, declining production, and persistent challenges related to tariffs.

According to the report issued by the Institute for Supply Management (ISM), the Manufacturing PMI registered 48.7% in April, a decrease of 0.3% compared to the 49.0% recorded in March.

MANUFACTURING AT A GLANCE April 2025						
Index	Series Index Apr	Series Index Mar	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Manufacturing PMI®	48.7	49.0	-0.3	Contracting	Faster	2
New Orders	47.2	45.2	+2.0	Contracting	Slower	3
Production	44.0	48.3	-4.3	Contracting	Faster	2
Employment	46.5	44.7	+1.8	Contracting	Slower	3
Supplier Deliveries	55.2	53.5	+1.7	Slowing	Faster	5
Inventories	50.8	53.4	-2.6	Growing	Slower	2
Customers' Inventories	46.2	46.8	-0.6	Too Low	Faster	7
Prices	69.8	69.4	+0.4	Increasing	Faster	7
Backlog of Orders	43.7	44.5	-0.8	Contracting	Faster	31
New Export Orders	43.1	49.6	-6.5	Contracting	Faster	2
Imports	47.1	50.1	-3.0	Contracting	From Growing	1
OVERALL ECONOMY				Growing	Slower	60
Manufacturing Sector				Contracting	Faster	2

Credit: Institute for Supply Management

Key report's highlights:

- The **Manufacturing PMI registered 48.7%**, indicating contraction for the second consecutive month.
- The **New Orders Index contracted for the third month** in a row, registering 47.2%, up 2% from 45.2% in March. Panelists noted a weakening level of demand.
- The **Production Index dropped further into contraction**, registering 44.0%, a significant decrease of 4.3% from March's 48.3%.
- The **Employment Index registered 46.5%**, up 1.8% from March's 44.7%, but remained in contraction for the third consecutive month. Companies continued to reduce head counts.

- The **Supplier Deliveries Index indicated a continued slowing of deliveries**, registering 55.2%, a 1.7% increase from 53.5% in March. A reading above 50% indicates slower deliveries.
- The **Inventories Index registered 50.8%**, down 2.6% from March's 53.4%, but indicated expansion for a second consecutive month.
- The **Customers' Inventories Index registered 46.2%**, a decrease of 0.6% from March's 46.8%, remaining in 'too low' territory.
- The **Prices Index remained in expansion** (increasing), registering 69.8%, up 0.4% from March's 69.4%.
- The **Backlog of Orders Index registered 43.7%**, down 0.8% from March's 44.5%, indicating order backlogs contracted for the 31st consecutive month.
- The **New Export Orders Index dropped sharply further into contraction**, registering 43.1%, a substantial 6.5% lower than March's 49.6%.
- The **Imports Index dropped into contraction** in April, registering 47.1%, 3% lower than March's 50.1%.

Hon Hai Net Profit Surges 91 Percent

Hon Hai Precision Industry Co, a major iPhone assembler, reported net profit last quarter grew 91 percent to NT\$42.1 billion (US\$1.39 billion) from NT\$22 billion a year earlier, driven by strong demand for cloud service and computer products.

Earnings per share were NT\$3.03, up from NT\$1.59 a year earlier, but down from NT\$3.34 in the previous quarter. Gross margin last quarter decreased to 6.11 percent, from 6.32 percent a year earlier, while operating margin improved to 2.83 percent from 2.78 percent, the firm said.

First-quarter revenue reached NT\$1.64 trillion, up 24 percent from a year earlier, but down 23 percent from the previous quarter — meeting the firm's March forecast.

Smartphone Market Slows Worldwide, Apple and Samsung Still Lead the Pack

The global smartphone market grew by just 0.2 percent in the first quarter of 2025. Shipments reached 296.9 million units during the first three months of the year and while growth is growth, Q1 2025 became the third consecutive quarter in which growth slowed.

Samsung narrowly edged out Apple for the number one spot with 60.5 million units shipped in Q1, good for a 20 percent market share but just one percent growth compared to the same period a year earlier. Apple shipped 55 million iPhones, capturing 19 percent of the market. Strong growth in the US and Asia Pacific markets helped Apple grow its market share by 13 percent year over year.

Xiaomi, Vivo, and Oppo rounded out the top five with shipments of 41.8 million, 22.9 million, and 22.7 million units, respectively. All others combined shipped 94 million units for a 32 percent share.

Hon Hai Says Revenue Surged 25.5%

Hon Hai Precision Industry Co, the main contract manufacturer for Apple Inc and Nvidia Corp, said its revenue last month rose 25.5 percent year-on-year, likely boosted by the hastening of orders ahead of US tariffs that could upend business for its customers.

Hon Hai, also known as Foxconn Technology Group, said consolidated sales reached NT\$641.37 billion (US\$21.28 billion), up from NT\$510.9 billion a year earlier.

That contributed to Hon Hai's best ever total for the first four months of the year — up 24.58 percent to NT\$2.28 trillion, the company said in a statement, crediting “strong pull-in momentum” for things such as artificial intelligence products.

Samsung Flags Uncertain Economic Climate After Smartphone, Chip Sales Power Quarterly Results Beat

Samsung Electronics' operating profit and revenue beat analysts' estimates, as sales of its flagship smartphones as well as memory chips rose.

The South Korean company posted a record quarterly revenue, up 10% from a year earlier, while its first-quarter operating profit climbed 1.5%.

Here are Samsung's first-quarter results compared with LSEG SmartEstimates, which are weighted toward forecasts from analysts who are more consistently accurate:

- **Revenue:** 79.1 trillion Korean won (\$55.4 billion) vs. 78.1 trillion Korean won
- **Operating profit:** 6.7 trillion Korean won vs. 6.4 trillion Korean won

First-quarter revenue marginally topped Samsung's forecast of 79 trillion Korean won, while operating profit also came in higher than the company's expectations of 6.6 trillion Korean won.

IBM Pledges to Invest \$150 billion in US Manufacturing Over the Next Five Years

IBM has joined the list of companies pledging to pour billions into the US manufacturing industry. The software giant has announced it will be investing \$150 billion in the United States over the next five years, including \$30 billion toward production of its mainframe and quantum computers.

Arvind Krishna, IBM chairman, president and chief executive officer, said, "We have been focused on American jobs and manufacturing since our founding 114 years ago, and with this investment and manufacturing commitment we are ensuring that IBM remains the epicenter of the world's most advanced computing and AI capabilities."

IBM writes that it is one of the nation's largest technology employers, adding that its data processing systems have enabled the US Social Security system, the Apollo Program that put a man on the moon, and powered businesses in every industry. More than 70% of the entire world's transactions by value run through the IBM mainframes that are manufactured in America.

A \$30 billion chunk of the \$150 billion investment will go toward expanding IBM's US manufacturing of quantum computers and mainframes. The company writes that its Quantum Network provides access to IBM's quantum systems for nearly 300 Fortune 500 companies, academic institutions, national laboratories, and startups, and is accessed by over 600,000 active users.

Nissan to Cut 10,000 More Jobs Worldwide

Nissan Motor Co plans to cut 10,000 more jobs worldwide, Japanese media reported, a day before the struggling carmaker was expected to report a record annual loss of about US\$5 billion.

Public broadcaster NHK said the decision, in addition to an announcement in November last year that it would slash 9,000 positions, means Nissan is now aiming to reduce its total workforce by approximately 15 percent. The company — one of the top 10 automakers by unit sales — last month issued a stark profit warning, saying it expects an annual net loss of ¥ 700 billion to ¥ 750 billion (US\$4.73 billion to US\$5.06 billion) for the 2024-2025 financial year.

Its previous worst full-year net loss was ¥684 billion in 1999-2000, during a financial crisis that birthed its rocky partnership with French automaker Renault SA.

The automaker, whose shares have tanked nearly 40 percent over the past year, appointed a new CEO in March.

Nissan this month shelved plans, only recently agreed, to build a US\$1 billion battery plant in southern Japan, owing to the tough “business environment.”

An additional headwind is the 25 percent tariff imposed by US President Donald Trump on all imported vehicles into the US.

Of all Japanese major automakers, Nissan is likely to be the most severely impacted, Bloomberg Intelligence analyst Tatsuo Yoshida said.

Its clientele has historically been more price-sensitive than that of its rivals, he said.

One potential solution for Nissan could be Taiwanese electronics behemoth Hon Hai Precision Industry Co, also known as Foxconn Technology Group, which assembles iPhones and is expanding into cars.

Foxconn in February said it was open to buying Renault’s stake in Nissan, and this month agreed in principle to develop and supply an electric vehicle model to Mitsubishi Motors Corp, an alliance partner of Renault and Nissan.

External help is “very much needed” for Nissan, which can no longer differentiate itself from its rivals by making internal efforts to save costs alone, Yoshida said.

Apple Watch Shipments Down 29% in Two Years, Blamed on Lack of New Features

Apple's smartwatch shipments have seen their fifth straight quarter of falling sales, according to a new report from Counterpoint Research. The 19% YoY decline in 2024 follows a 10% drop in 2023, marking an overall 29% dip since 2022.

Apple Watches saw declines globally with the exception of India. Somewhat surprisingly, most of the declining shipments were driven by the significant fall in the North American market.

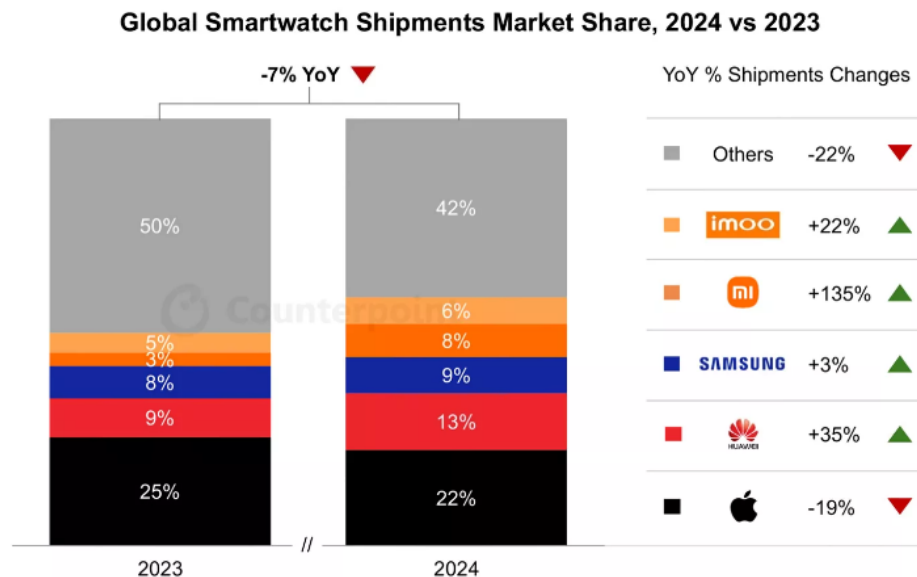
Counterpoint writes that a lack of a new Apple Watch SE model was the biggest factor behind the falling shipments. Apple's value model has been its most popular version of its smartwatch post-launch, thanks to

the flagship-level speed and all the core health, fitness, and safety features – but without the pricier sensors and always-on screen. The last SE model arrived in the third quarter of 2022.

The analyst firm also cites fewer substantial upgrades in the Apple Watch Series 10, giving consumers less incentive to upgrade to the latest model. It has also been affected by the lawsuit stemming from a patent dispute with medical device maker Masimo, which resulted in Apple being required to disable the blood oxygen sensor on its US models.

Apple never released an Apple Watch Ultra 3 in 2024. The Ultra line had accounted for over 10% of Apple Watch shipments globally, but the lack of a new model meant its share dropped to under 8% in the fourth quarter of 2024. Combined with the lack of a Watch SE, it means that Q3 2024 was the first time Apple saw a YoY shipment decline during a quarter in which a new smartwatch series was also launched.

Despite the declines, Apple continues to lead the global smartwatch market with a 42% share, though this has shrunk by 8% compared to 2023. It was also the only brand in the top five to experience a shrinking market share as rivals such as Samsung and Huawei made big gains.



Inventec to Invest up to US\$85 million in Texas Facility; Joins Wave of US expansions for Taiwanese ODMs

Taiwanese electronics maker Inventec announced on April 28 that its board of directors has approved an investment plan of up to US\$85 million to establish a manufacturing facility in Texas, marking the latest move by a major original design manufacturer (ODM) to expand US operations. The investment follows similar commitments by fellow Taiwanese ODM giants Foxconn, Wistron, and Wiwynn.

The company stated that its US subsidiary will lead the project, aligning with Inventec's broader globalization strategy. The move is aimed at strengthening client relationships and mitigating risks associated with US trade and tariff policies. The investment, capped at US\$85 million, will be used to identify and develop a suitable site in Texas.

Funding for the project will come from a mix of internal operating capital and bank loans, according to the company's filing.

Inventec previously indicated that Texas was the preferred location for a new US-based server assembly plant, citing its proximity to the company's facility in Mexico, stable and ample electricity supply, and overall suitability for AI server assembly, which requires high power for testing.

Sources say Inventec has been surveying potential sites in Texas since early this year, and the decision to move forward has now been finalized.

The investment adds to a growing presence of Taiwanese server ODMs in the US: Quanta has facilities in California and Tennessee, Foxconn in Wisconsin and Texas, Wistron and WiWynn both in California and Texas, MiTAC's cloud computing arm in California, and Pegatron also in California. Compal remains the only major Taiwanese server ODM that has not yet announced US manufacturing plans.

Industry sources suggest Compal is considering bidding for ZT Systems' US operations, a move that could give it access to ZT's production facilities and experienced workforce, while potentially deepening ties with AMD. Compal has not commented on the rumors but currently operates an automotive equipment plant in Indiana.

Apple iPhones from India, Earnings Highlight Week's News

Apple is reportedly planning a significant pivot away from China to assemble iPhones sold in the United States. According to individuals familiar with the matter, the tech giant aims to shift the assembly of all iPhones for the US market to India as soon as next year.

The initiative accelerates Apple's existing supply chain diversification strategy, moving faster and further than some investors may realize. The ambitious goal is to source more than 60 million iPhones sold annually in the US. from India by the end of 2026.

This push primarily responds to trade tensions initiated under President Donald Trump's administration. While China has historically been the primary manufacturing hub for iPhones, largely through third-party partners like Foxconn, it has been subject to aggressive U.S. tariffs. Although the government initially offered temporary reprieves for smartphones, the devices are still subject to a 20% tariff rate on all imports from China.

Apple has been building capacity in India with contract manufacturers like Tata Electronics and Foxconn, though most smartphone assembly still occurs in China. Last year, as Apple sought to increase output from India, Foxconn and Tata began importing pre-assembled component sets from China.

The US market accounted for approximately 28% of Apple's global iPhone shipments in 2024. Meeting the target of supplying all US orders from India will necessitate further capacity increases in the country.

Experts view this as a crucial step for Apple to maintain growth and momentum, addressing tariff risks at what one analyst described as "relative light speed" given the company's resources.

Microsoft Laying off About 6,000 people, or 3% of Its Workforce

Microsoft said that it's laying off 3% of employees across all levels, teams and geographies, affecting about 6,000 people.

"We continue to implement organizational changes necessary to best position the company for success in a dynamic marketplace," a Microsoft spokesperson said in a statement to CNBC.

The company reported better-than-expected results, with \$25.8 billion in quarterly net income, and an upbeat forecast in late April.

Microsoft had 228,000 employees worldwide at the end of June. On Tuesday Washington state said the company was reducing headcount tied to its Redmond headquarters by 1,985 people, including 1,510 in office.

In total, it's likely Microsoft's largest round of layoffs since the elimination of 10,000 roles in 2023. In January the company announced a small round of layoffs that were performance-based. These new job cuts are not related to performance, the spokesperson said.

One objective is to reduce layers of management, the spokesperson said. In January Amazon announced that it was getting rid of some employees after noticing "unnecessary layers" in its organization.

Why Apple Can't Easily Move iPhone Production to the US: 2,700+ parts, 187 suppliers, 28 countries

In a deep dive into the iPhone's manufacturing process, the Financial Times writes that new models consist of around 2,700 different parts, and that Apple uses 187 suppliers in 28 countries. China makes most of these components – only 30 Apple suppliers operate entirely outside of the country – though some of the high-end parts are made in Taiwan, and a few key elements are manufactured in South Korea and Japan.

There are some iPhone components made in the US, but less than 5% of the total are manufactured domestically, including the glass casing and the lasers that enable Face ID. However, certain elements of these parts, such as the backlit display and layer that enables user interaction, are made in China.

The FT writes that the 74 tiny screws that hold the iPhone together are primarily made in China and India – and fixed in place by hand.

In total, there are more than 700 production sites making iPhone components.

With so many moving parts in the supply chain and all the components involved, the fact that most of the manufacturers are located in China makes the production process easier.

Apple is currently racing to move all assembly of iPhones destined for the US market from China to India by the end of 2026, further emphasizing that a 100% US-made iPhone isn't going to happen. And even if Apple were somehow able to do it, the move would take years and would likely result in a much more expensive iPhone price tag – some predict as much as \$3,500.

Waymo, Toyota Strike Partnership to Bring Self-driving Tech to Personal Vehicles

Alphabet-owned Waymo and Toyota on Tuesday announced a preliminary partnership to explore bringing robotaxi tech to personally owned vehicles.

"The companies will explore how to leverage Waymo's autonomous technology and Toyota's vehicle expertise to enhance next-generation personally owned vehicles," the two companies announced.

The companies said they aim to use the partnership to more quickly develop driver assistance and autonomous vehicle technologies for personal vehicles. Toyota is the world's largest automaker by sales.

Waymo co-CEO Tekedra Mawakana said the strategic partnership could also result in the Google-owned company incorporating Toyota's "vehicles into our ride-hailing fleet."

The Toyota tie-up is the latest automotive partnership for Waymo.

The self-driving company has previously worked with automakers such as Jaguar Land Rover, Stellantis predecessor Fiat Chrysler, Daimler Trucks, Mercedes-Benz parent Daimler, Hyundai Motor and China's Geely. The partnerships, many of which touted long-term tie-ups, largely resulted in automakers producing modified vehicles for testing or for Waymo to use in its fleets.

The partnership with Toyota will not affect Waymo's plans to deploy Hyundai and Geely vehicles through the Waymo One ride-hailing service in the future, a spokesman for the Alphabet-owned company told CNBC.

Waymo is now serving 250,000 paid rides per week, up from 200,000 in February, before Waymo opened in Austin and expanded in the San Francisco Bay Area in March. Waymo is already running its commercial, driverless ride-hailing services in the San Francisco, Los Angeles, Phoenix and Austin regions.

Meta Launches Stand-alone AI App to Take on ChatGPT

Meta Platforms is launching a stand-alone artificial intelligence app and going head-to-head with ChatGPT maker OpenAI.

The new AI assistant offering will run on Meta's Llama AI model, the company said Tuesday. It includes a Discover feed that shows how others are interacting with the tool and offer prompts.

The news confirms previous CNBC reporting from February, citing sources familiar with the matter. Meta's new app directly competes with other AI platforms such as ChatGPT as the AI arms race intensifies. Other key competitors include Anthropic's Claude, xAI's Grok and Google's Gemini.

Meta launched an AI chatbot in September 2023, pitching it as a generative AI-powered digital assistant that can provide responses and create images based on user prompts within its existing apps. The company brought Meta AI to the forefront of its apps in April, when it replaced the search feature for Facebook, Instagram, WhatsApp and Messenger with the chatbot.

Zuckerberg in January said he believes 2025 "is going to be the year when a highly intelligent and personalized AI assistant reaches more than 1 billion people, and I expect Meta AI to be that leading AI assistant."

As of January, Meta AI had roughly 700 million monthly active users, Meta finance chief Susan Li said at the time. That was up from 600 million in December.

Meta's debut of a stand-alone Meta AI app follows similar efforts by Google and Elon Musk's xAI. Those two companies recently released individual apps for their respective digital assistants Gemini and Grok.

Recycled Plastics in the Electronics Supply Chain

As electronic waste quantities grow and supply chain shortages persist, many decision-makers wonder if they could tackle both of these issues by focusing on efforts to use more recycled plastics in electronics production. Although such work remains in the early stages, fascinating progress has occurred so far that should catch the attention of those within the global electronics industry.

Making plastics easier to recycle

Many electronics products have brominated flame retardants on their internal components. Applying them is a widespread manufacturing practice since such coatings could prevent fires caused by lithium-ion batteries or other sources. However, the additions make e-waste more challenging to recycle. Plus, people have discovered electronic improvements that make blazes less likely.

Researchers tackled the problem by examining three potential ways to remove flame retardants from one of the most commonly used plastics in the electronics industry. Since estimates show the material accounts for about 30% of e-waste, they wanted to address the contamination these coatings cause.

Their experiments allowed the group to develop a solvent mixture using a microwave-assisted extraction method. The results showed this technique recovered more than 80% of the plastic and removed over 95% of the flame retardants.

Although another method removed more of them, it was less effective concerning plastic recovery outcomes. One of the main advantages of microwave-assisted extraction is that it retains the plastic's physical and thermal properties, increasing the chances of electronics professionals using the material in future products.

Apple iPhone: The Gadget That Rewired Modern Life

The iPhone needs no introduction – yet it deserves a proper one. In 2007, Steve Jobs pulled a small, glossy rectangle from his pocket and casually rewired modern life. Today, an entire generation has come of age without memory of a world before everyone carried either an iPhone or an Android phone in its hands. But what kind of a world was it, then?

An iPod, a Phone, an Internet Communicator

In January 2007, Steve Jobs stepped onto the Macworld stage and announced that Apple was unveiling "an iPod, a phone, and an Internet communicator." He repeated the line until the audience caught on – these weren't three separate products. They were one and the same.

At a time when most smartphones sported cramped QWERTY keyboards and a maze of physical buttons, the iPhone presented a radically clean design: a single Home button and a 3.5-inch touchscreen. Its display boasted twice the resolution (480 x 320) of most rivals yet remained small enough for a thumb to navigate edge to edge – no pinky support required. It used the familiar 30-pin iPod connector for charging and syncing. The original iPhone launched with a 4GB model priced at \$499 (roughly \$800 today), with an 8GB version for \$100 more. Critics quickly noted its biggest shortcoming: no support for 3G networks, which made internet use sluggish without Wi-Fi.

Microsoft CEO Steve Ballmer famously dismissed the iPhone as irrelevant to the business world: "That is the most expensive phone in the world, and it doesn't appeal to business customers because it doesn't have a keyboard, which makes it not a very good email machine." In hindsight, his words were less wrong than revealing – he failed to grasp that the iPhone wasn't courting enterprise users. It was courting everyone else.

The Best iPod Ever

When the iPhone finally hit shelves in June 2007, customers waited for hours – sometimes days – outside Apple and AT&T stores. In its first weekend, Apple sold 270,000 units. Yet after the initial frenzy, sales reportedly slowed.

Apple seemed to anticipate a potential ceiling: for some, the "phone" part of the iPhone might be a dealbreaker. So, that September, the company introduced the iPod Touch. It was, essentially, an iPhone without the cellular modem, speaker, or camera – making it thinner and cheaper.

The 8GB model retailed for \$299, with a 16GB version at \$399. It became a runaway success, offering the touchscreen revolution to those who didn't want – or couldn't yet justify – an iPhone. Competitors took notice. Microsoft launched the Zune HD in response, but the iPod Touch held its ground. By 2013, Apple had sold over 100 million of them.

Apple launched the iPhone 3G in July 2008: a sleeker, faster model with GPS and support for high-speed mobile data. Even more significant was the simultaneous release of iPhone OS 2 and the App Store, which opened the floodgates to a new generation of mobile software.

The response was explosive. The iPhone 3G sold one million units in its first three days. By that quarter's end, it had dethroned the Motorola Razr V3 as America's best-selling phone.

From the beginning, the iPhone wasn't just about convenience. Before it arrived, most single-purpose gadgets – music players, cameras, GPS units – required syncing to a computer, the so-called "digital hub." Buying songs on iTunes or uploading photos to Flickr often meant waiting until you got home.

The iPhone made everything immediate. It turned everyday moments into shareable stories, shrank distances between loved ones, and gave millions a creative canvas right in their pocket.

For those who carried one in the late 2000s, it felt like holding magic. Compared to users still clutching "feature phones," iPhone owners seemed to possess near-supernatural abilities. Yet with that power came a new kind of dependency. The iPhone was not just empowering – it was engrossing, sometimes overwhelmingly so. By 2008, psychologists coined a term for the unease people felt when separated from their device: nomophobia – the fear of being without a mobile phone. It was a harbinger of a society where constant connection became both a blessing and a burden.

Google Adds On-device AI to Chrome to Catch Scams in Real Time

What just happened? While AI startups continue promoting the technology as transformative, Google has turned to its language models to improve the online environment. Mountain View recently unveiled several AI-based tools designed to combat potential scams.

Google now deploys its latest artificial intelligence advancements to detect and combat online scams more effectively. By integrating large language models into platforms like Search, Chrome, and Android, the company reports significantly better results in blocking malicious actors who try to steal money, personal information, or both.

Language models help Google detect and block millions of dangerous results daily. The company adapted machine learning algorithms to identify patterns, anomalies, and linguistic cues that may signal fraudulent activity. As scammers' tactics evolve, the search giant aims to stay one step ahead with a proactive approach to emerging threats.

Google claims that the AI-powered detection system helped it discover 20 times more scam pages than before. The modified models analyze vast amounts of text on the web and have contributed to identifying a rise in criminal campaigns impersonating airline customer services. This type of scam has already decreased by more than 80 percent.

Google now uses its Gemini Nano LLM to enhance security in Chrome's Enhanced Protection mode. This on-device, desktop-only model provides instant insights into potentially dangerous websites, helping prevent scams that are still undetected. By leveraging Nano's ability to distill the complex nature of websites, Google can quickly adapt to new scam techniques.

Mountain View also employs AI to protect mobile users from unwanted Chrome notifications on Android. When Chrome flags a notification as potentially dangerous, its on-device LLM warns users and offers the option to unsubscribe from the content. Earlier this year, Google introduced another AI-powered feature to detect scammers attempting to call users via Android's phone functionality.

Apple's Brilliant New Shortcut Helps You Capture Ideas Before You Forget Them

While Apple created this shortcut especially for neurodivergent minds, it's also great for those constantly interrupted during a task, which might affect their productivity.

Apple explains that users have two options when using the Hold That Thought shortcut: to capture the information displayed on the screen or to recall it later. Here's how it works:

"Run the shortcut and select Capture to capture a screenshot of what you're doing, any calendar events in the next hour, the current open webpage in Safari (Mac only), and Clipboard contents. You'll then be prompted to write short notes about what you are doing and what you're about to do. Run the shortcut again and select Recall to find the last created note with all the captured information. All notes will be saved with the title 'Hold That Thought' and the date and time saved."

What I like most about this Apple shortcut is how thoughtful it is. Using shortcuts is one of the best ways to make your Apple device more powerful, and this one is especially useful on the Mac. Of course, you can also enjoy it on iPhone and iPad, but the Mac is Apple's true powerhouse and is so handy.

Apple's Hold That Thought shortcut is available for free. You can say, "Hey Siri, Hold That Thought." Another option, if you have an iPhone 15 Pro or newer, you can set it on the Action Button, especially if you're often interrupted while brainstorming.

Connector Industry Forecast

Research Report F-2025-01
May 2025





Bishop & Associates has just released the 2025 **Connector Industry Forecast** update. This eight-chapter report provides an in-depth, and detailed forecast of the worldwide connector industry. In addition to the detailed forecasts for each region of the world (North America, Europe, Japan, China, Asia Pacific, and ROW), an industry overview is included which provides current market trends, currency fluctuation effects, and industry sales performance, as well as an outlook narrative.

Worldwide and each regional forecast includes:

Computers & Peripherals

- Mobile Computers
- Desktops
- Servers
- Storage Equipment
- Input/Output Equipment
- Communication LAN Devices
- Other Computer Equipment

Business/Office Equipment

- Retail/POS Equipment
- Imaging Systems
- Other Business/Office Equipment

Instrumentation

- Automatic Test Equipment
- Analytical/Scientific Instruments
- Other Instrumentation

Medical Equipment

- Diagnostic & Imaging Equipment
- Therapeutic Equipment
- Other Medical Equipment

Industrial

- Factory Automation and Machinery
- Construction and Civil Engineering
- Energy Markets
- Other Industrial Equipment

Automotive

- Body Wiring & Power Distribution
- Powertrain
- Comfort, Convenience & Entertainment
- Navigation & Instrumentation
- Safety & Security

Transportation (non-auto)

- Commercial Vehicles
- RVs & Power Sports
- Commercial Air
- Marine
- Rail
- Construction
- Farm & Garden

Military/Aerospace

Telecom/Datacom

- Carrier Network
- Enterprise Network
- Wireless Infrastructure
- Subscriber Equipment
- Other Telecommunications

Consumer

- Personal/Portable Consumer Electronics
- Consumer Entertainment Electronics
- Consumer White Goods
- Other Consumer

2025— A Year That Could be Shaped by Economic & Political Uncertainty

Coming out of a negative year is always difficult and 2024 was no exception. A year that started with weak year-over-year and year-to-date billings, 2024 ended up being a pleasant but well-earned surprise for the connector industry. Year-over-year, the connector industry grew +5.6%, with all market sectors and product types showing growth. Not all regions though, performed as well as others, with several regions showing negative year-over-year growth. But the regions that grew, Asia Pacific, China, and North America more than compensated for their decline. Among events that highlighted the year was the completion of a presidential election in the U.S., the rise of populism and far-right parties in several European countries and continued potential instability in the Taiwan Strait, as well as several natural disasters worldwide.

Unlike previous years, where most of these developments were reflected in the bookings, in 2024, year-over-year bookings remained strong and positive for all but one month of the year. The greatest year-over-year growth was seen in October, when bookings grew +13.4%, followed by June with bookings growth of +11.3%. From a year-to-date standpoint, bookings were strong in all 12 months, and we ended the year with over 12 weeks of backlog. 2025 is also shaping up to be a year of strong bookings, with double-digit year-over-year growth in March and April.

Industry Sales Performance by Region

In 2024, as seen by the table below, growth and decline were not equal across all regions, nor will they be in 2025. The Asia Pacific region saw the greatest growth in 2024, growing +19.2%. With growth of +12.1%, the Chinese region followed Asia Pacific. The only other region showing an increase was North America, where sales increased +6.8%. All other regions declined in 2024, with the greatest decline in the ROW region, where sales in US dollars decreased -15.7%, followed by Japan with a decline of -13.8%. Europe, the only other region declining, showed a decrease of -3.2%.

**2023 and 2024 Connector Sales by Region
With Percent Change**

Region	2023	2024	Percent Change
North America	\$18,840.8	\$20,124.7	6.8%
Europe	\$17,992.7	\$17,417.3	-3.2%
Japan	\$4,683.7	\$4,035.8	-13.8%
China	\$24,977.1	\$28,003.5	12.1%
Asia-Pacific	\$11,310.0	\$13,483.5	19.2%
ROW	\$4,049.8	\$3,412.9	-15.7%
Total World	\$81,854.1	\$86,477.7	5.6%

\$ Millions

Connector Industry Forecast

Examining projected performance in 2025, you see Asia Pacific, who was ranked number two in 2024, is anticipated to move up to the number one spot in 2025, with sales increasing +YY.1%. The Asia Pacific region will be followed by China, where sales are anticipated to increase +YY.8% in 2025. All other regions are projected to grow in the single digits, with North America increasing +Y.9%, followed by Europe at Y.0%, the ROW region at +Y.6% and the Japanese region at +Y.2%.

2024 and 2025F Connector Sales by Region With Percent Change

Region	2024	2025F	Percent Change
North America	\$20,124.7	\$XX,XXX.X	Y.Y%
Europe	\$17,417.3	\$XX,XXX.X	Y.Y%
Japan	\$4,035.8	\$4,124.9	2.2%
China	\$28,003.5	\$XX,XXX.X	Y.Y%
Asia-Pacific	\$13,483.5	\$XX,XXX.X	Y.Y%
ROW	\$3,412.9	\$3,502.6	2.6%
Total World	\$86,477.7	\$XX,XXX.X	Y.Y%

\$ Millions

In addition to connector sales results varying by region in 2024, electronic connector sales also varied remarkably by market sector. As the table below shows, in 2024, the computer & peripherals equipment/market sector saw the greatest percentage growth, at +10.7%. It is interesting to note that this was the first time since 2006 that the computer & peripherals market sector outperformed all other sectors!

2023 and 2024 Connector Sales by Market Sector With Percent Change

Equipment Sector	2023	2024	YOY Change
Computers & Peripherals	\$9,979.5	\$11,050.4	10.7%
Business/Office Equipment	\$875.4	\$878.3	0.3%
Instrumentation	\$2,364.8	\$2,428.4	2.7%
Medical	\$2,659.7	\$2,720.2	2.3%
Industrial	\$10,742.3	\$11,062.9	3.0%
Automotive	\$18,502.7	\$19,149.2	3.5%
Transportation	\$5,857.4	\$6,025.2	2.9%
Military/Aerospace	\$5,092.7	\$5,291.8	3.9%
Telecom/Datacom	\$18,991.4	\$20,860.9	9.8%
Consumer	\$3,744.4	\$3,890.5	3.9%
Other Equipment	\$3,043.8	\$3,119.9	2.5%
Total World	\$81,854.1	\$86,477.7	5.6%

\$ Millions

2025 and Beyond Outlook

With industry backlog remaining strong, Bishop is forecasting 2025 sales to increase +Y.Y% to \$XX,XX5 million. We anticipate the greatest percentage increase will occur in the Asia Pacific region, where sales will increase +Y.Y%, followed by the Chinese region where sales are anticipated to increase +Y.Y%. When looking at growth in U.S. dollars, although not the greatest increase percentage wise, the largest increase in sales will be seen in the Chinese region, where connector sales will increase by \$X,XXX.X million. The Chinese region will be followed by the North American region, where sales in US dollars will increase \$X,XXX.X million.

2024 and 2025F Connector Forecast by Geographic Region With Percent Change

Region	2024	2025F	Percent Change
North America	\$20,124.7	\$XX,XXX.X	Y.Y%
Europe	\$17,417.3	\$XX,XXX.X	Y.Y%
Japan	\$4,035.8	X,X24.9	Y.Y%
China	\$28,003.5	\$XX,XXX.X	Y.Y%
Asia-Pacific	\$13,483.5	\$XX,XXX.X	Y.Y%
ROW	\$3,412.9	\$3,502.6	2.6%
Total World	\$86,477.7	\$XX,XXX.X	Y.Y%

\$ Millions

2024 and 2025F Connector Forecast by Market Sector With Percent Change

Equipment Sector	2024	2025F	Percent Change
Computers & Peripherals	\$11,050.4	\$XX,XXX.X	Y.Y%
Business/Office Equipment	\$878.3	\$911.0	3.7%
Instrumentation	\$2,428.4	\$X,X58.7	Y.Y%
Medical	\$2,720.2	\$X,XX56.X	Y.Y%
Industrial	\$11,062.9	\$XX,XXX.X	Y.Y%
Automotive	\$19,149.2	\$XX,XXX.X	Y.Y%
Transportation	\$6,025.2	\$X,XX7.X	Y.Y%
Military/Aerospace	\$5,291.8	\$X,XXX.1	Y.Y%
Telecom/Datacom	\$20,860.9	\$XX,XXX.X	Y.Y%
Consumer	\$3,890.5	\$X,X42.1	Y.Y%
Other Equipment	\$3,119.9	\$3,283.0	5.2%
Total World	\$86,477.7	\$XX,XXX.X	Y.Y%

\$ Millions

Forecast Assumptions

Forecasting is always difficult, especially during times of economic and geopolitical uncertainty. Projecting future business conditions in this environment is almost impossible. Consider the following economic headwinds, political challenges, and uncertainties.

- Instability in the worldwide economy. As indicated during the World Economic Forum in January 2025, “56% of leading chief economists expect weaker global economic conditions in 2025, compared to only 17% expecting improvement”. Even in the U.S., where 44% of chief economists predicted strong growth in 2025, up from 15% when they were asked in August last year, there is concern. It was also noted that “short-term prospects for US growth were tempered by concerns over rising debt and inflation, while **Europe has now recorded the weakest regional growth outlook for nearly three years and China’s economic momentum is projected to slow amid subdued consumer demand and weaker productivity**”. All things further “**illustrating the uneven and uncertain nature of any global recovery**”. Strengthening this belief is the fact that when the International Monetary Fund (IMF) released its latest World Economic Outlook, in April, they “**predicted a 2.8% global GDP growth for 2025, down from their January forecast of 3.3%. This revision is primarily due to the impact of trade tensions and policy uncertainty, particularly regarding U.S. trade policies. The IMF also lowered its U.S. growth forecast to 1.8% in 2025, reflecting the impact of these trade tensions**”.
- No drop-in interest rates by the Federal Reserve. Voted on in mid-May 2025, and although highly encouraged by President Trump to rates alone is highly reflective of their desire to be seen as an independent institution that’s main goal is to encourage and maintain stable prices and keep unemployment low and not be swayed by current leadership. It was indicated by Fed Chair Jerome Powell that they needed to wait for “greater clarity” regarding the impact of tariffs before making changes to monetary policy, especially considering the fact the U.S. economy looked quite sound prior to the implementation of tariffs. It is believed the Feds will review interest rates sometime early fall. decrease, the Federal Reserve voted to keep the federal funds interest rate between 4.25% and 4.50%. Many feel their decision to leave
- Like 2023, although global supply chain issues improved drastically in 2024, they still exist and could possibly get worse with the impact of potential tariffs and, as political tensions and economic instability increases. It is anticipated that freight availability, costs, schedule reliability and international trade agreements could easily change as we continue into 2025.

There is also concern regarding the need to find new routes that don't take advantage of the Panama or Suez Canal. According to the Lowy Institute, "after a combined 265 years in operation, the domination of the two great artificial waterways – the Panama and Suez canals – in global trade is under threat from alternative routes for shipping". It appears the Panama Canal, which been "a critical passage for U.S. East Coast bound ocean freight container traffic", is not only facing a potential business slump as a result of Trump's China

tariffs and a rapid decline in manufactured goods being ordered by U.S. shippers, but also due to extreme drought conditions making the canal not "wide or deep enough to take the new giant container ships that currently have to sail all the way around the Cape of Good Hope". Conditions surround the Suez Canal are not much better, with officials indicating Egypt's revenue from the Suez Canal plunged by almost two thirds last year (2024), attributing the sharp drop to regional tensions and wars in the Middle East that have impacted traffic through the key waterway. In fact, there was a decline of over 50% in the number of ships that passed through the canal in 2024 versus 2023

- A shortage of labor, in particular skilled laborers, such as electricians, plumbers, carpenters, machinists, welders, pipefitters, and steelworkers, even doctors, nurses, and pharmacists. A number of reasons are cited for this shortage including a decline in apprenticeship programs and shop classes, an increase in employees retiring, particularly Baby Boomers (generally classified by those born between 1946 and 1964) and not being replaced by younger workers, and a major shift in workers expectations, covering pay, hours, working location – onsite versus remote, work-life balance, and flexibility. Other factors include lack of accessible childcare, a diminishing population (lower birth rates in the U.S. and Europe), and growth in new business start-ups, led by an increase in digital commerce.

In countries like China, the labor environment tends to be the opposite of North America and Europe, with young Chinese having a harder time entering the job market than their counterparts in the U.S. or Europe, leading to a labor shortage of skilled laborers. In China, where according to a study by Harvard, "about 12 million Chinese graduates enter the workforce annually, with this number increasing every year, as China expanded access to higher education to combat the Asian financial crisis in the late 1990s. There are not enough positions for these millions of jobseekers". In fact, also noted in this study, "in 2020, 25.2% of (Chinese) people with a university education between the ages of 16 and 24 were unemployed, compared to the rate of 5.5% in the U.S. the same year".

- **The potential for cyberattacks, that turn digital space into battlegrounds, and can disrupt critical services, cause extreme financial losses, and erode public confidence has become a major concern. As explained by Brandefense, a company that focuses on cyber security, "In today's digital landscape, cyber threats pose a significant risk to businesses of all sizes. These security challenges, from data breaches to ransomware attacks, can lead to critical financial losses, reputational damage, and legal liabilities". Data breaches not only lead to** decreased sales, but require extensive public relations, including things like free credit monitoring for affected individuals, to restore trust.
- Increasing and prolonged political tensions:
 - ✓ Now entering its third year, the war between Ukraine and Russia continues. With Russia currently occupying approximately 20% of Ukraine, it does not appear that even with negotiation assistance from other countries that an end is in sight. It was

Connector Industry Forecast

indicated by Global Conflict Tracker that “since January 2022, Ukraine has received about \$407 billion in aid, including over \$118 billion from the United States. Fighting and air strikes have inflicted over 40,000 civilian casualties, while 3.7 million people are internally displaced, and 6.9 million have fled Ukraine”.

- ✓ Israeli - Palestinian conflict over land and who controls it is one of the longest and most violent disputes ever. After it was announced on January 15, 2025, that the United States, Egypt, and Qatar had successfully mediated a cease-fire between Israel and Hamas to end fifteen months of fighting in Gaza, by late March, tensions grew, and the six-week cease-fire ended.
- ✓ **Territorial disputes in the South China Sea have steadily increased. Much of these disputes have to do with competition over what is believed to be the vast oil and gas reserves contained in the sea. Although China claims control over a large portion of this sea, a good deal of this portion overlaps existing historical or legal claims already in place, contributing to rising tensions and conflicts.**
- ✓ Worsening instability in Haiti, which discourages domestic and foreign investment, hindering economic development and resulting in negative GDP growth and a contraction of the economy.
- Lack of affordable housing worldwide. According to UN-Habitat, by 2030, an estimated three billion people, or about 40% of the world's population, will need access to adequate housing. This translates into a demand for 96,000 new affordable and accessible housing units every day. Unfortunately, as many countries have seen, adequate housing has become a major challenge, plagued with rising costs, limited availability, and ever-growing affordability issues, particularly in major cities.
- With actual expenditures estimated **to be 40% to 80% higher than what is stated, China's continued military buildup, which includes rapid development of its nuclear, space and cyberspace capabilities is of great concern to many countries, particularly the U.S. Currently, "China has become the world's largest shipbuilder, with a capacity 230 times greater than that of the U.S. Its navy is the largest globally, and its arsenal of ballistic and cruise missiles is expanding at an unprecedented rate, with its nuclear stockpile growing faster than any other nation", according to Geopolitical Intelligence Services AG. In fact, by 2030, it is estimated that China will have more than 1,000 nuclear warheads most which will have the range to strike the continental U.S.**
- Climate change is also being touted as a potential headwind. According to S&P Global, “climate change has resulted in more frequent and severe weather events such as hurricanes, droughts, floods and wildfires, which have damaged infrastructure and disrupted supply chains, leading to resource scarcity and economic instability.
- Fluctuating commodity prices. Representing a wide range of assets, from oil and gas to precious and industrial metals, commodity price trends as indicated by US Bank, “tend to gauge the impact on inflation. In recent months, the Consumer Price Index (CPI) edged

Connector Industry Forecast

higher due in large part to commodity price changes. In late 2024, energy prices rose and ended the year up 2.6% for the 12 months ending in December. The price uptick reflected lower inventory levels. Gold prices also increased, but since early 2024, most key agricultural commodities have declined". Commodities like copper and gold, key materials in the manufacturing of electronic connectors have consistently risen over the last year, spurred by increased demand, fears of supply chain disruptions, and potential tariffs.

- Probably one of the most important headwinds that needs to be mentioned is tariffs imposed by the U.S. under President Trump. Intended to boost American manufacturing and protect jobs, President Trump has levied tariffs on imports, as the BBC has stated, throwing "the world economy into chaos" with many arguing that "they will make products more expensive for U.S. consumers". Although the U.S. and China have agreed to slash tariffs they have imposed on each other for 90 days, and the U.S. and U.K. have announced an agreement has been made, many are still concerned how this will affect the world economy. As previously pointed out by the U.S. Fed, "greater clarity" is needed before anyone can actual determine how these tariffs will affect the worldwide economy.

There are also some interesting projections as to why we will see connector growth in 2025 and beyond, and what that growth will be. These include factors such as strong bookings, historical growth, and low unemployment coupled with strong consumer spending.

This report details the markets where Bishop anticipates growth, and which subsectors will drive that growth. This report provides projections for the period 2025F through 2030F, with year-over-year percent change and five-year CAGR by region, market sector, and sub-sector. Will the industry continue to grow, and which years may not be as strong as others? These answers and more are revealed in the May 2025 **Connector Industry Forecast**.

The following table of contents shows the detail provided in this new report.

Table of Contents

Chapter 1 – 2025 – A Year That Could be Shaped by Economic & Political Uncertainty

Bookings Year-over-Year and Year-to-Date
 Billings Year-over-Year and Year-to-Date
 Industry Backlog Continues to Shrink
 Industry Backlog April 2024/2025
 Connector Industry Book-to-Bill
 Change in Backlog
 Industry Sales Performance by Region
 2023 and 2024 Connector Sales by Region with Percent Change
 2023 and 2024 Change in Sales Dollars by Region
 2024 and 2025F Connector Sales by Region with Percent Change
 2024 and 2025F Change in Sales Dollars by Region
 2023 and 2024 Connector Sales by Market Sector with Percent Change
 2024 and 2025F Connector Sales by Market Sector with Percent Change and USD Delta
 Change in Market Share
 Market Share by Region 2015 through 2025F
 Market Share by Region 1994 through 2025F
 Industry Sales Performance by Month
 Historical Sales Performance
 Connector Industry Business Cycles Growth Cycles Highlighted
 Historical Percentage Change in Connector Demand
 2024 and 2025 YTD Currency Impact on Regional Industry Growth
 Local Currency to One USD April 2024 versus April 2025
 Industry Sales Performance April 2025 USD-vs-Local Currencies
 2025 and Beyond Outlook
 World Connector Results YTD March 2015
 2025 Sales Outlook Historical Analysis Methodology
 Range of Possible Outcomes
 2023, 2024, and 2025F Connector Forecast by Geographical Region with Percent Change
 2024 and 2025F Connector Forecast by Geographical Region with Change in US Dollars
 Forecast Assumptions
 Five-Year Outlook (2025-2030)
 Five Year Forecast – Region Percent Year-Over-Year Change Sales
 Five Year Forecast – End-Use Equipment Sector Percent Year-Over-Year Change Sales
 Market Outlook and Comments
 Computers Peripherals Sector
 Overview
 Market Trends
 Global Market Conditions
 Trends by Subsector
 2025F World Computer and Peripheral Connector Forecast – Market Share by Region
 Business/Office Equipment Sector
 Global Market Conditions
 Trends by Subsector
 Overall
 2025F World Business/Office Equipment Connector Forecast – Market Share by Region
 Instrumentation Sector
 Worldwide Instrumentation Market by Sub-Sectors
 Worldwide Instrumentation Connector Sales Forecast – 2023, 2024, 2025F and 2030F with Five-Year CAGR

Chapter 1 – 2025 – A Year That Could be Shaped by Economic & Political Uncertainty (continued)

Automatic Test Equipment Sub-Sector
 Analytical and Scientific Instruments
 Other Instruments
 Regional Sub-Sector Views
 North America
 North American Instrumentation Connector Sales Forecast 2025F through 2030F
 Europe
 Europe Instrumentation Connector Sales Forecast 2025F through 2030F
 Japan
 Japan Instrumentation Connector Sales Forecast 2025F through 2030F
 China
 China Instrumentation Connector Sales Forecast 2025F through 2030F
 Asia Pacific
 Asia Pacific Instrumentation Connector Sales Forecast 2025F through 2030F
 ROW
 ROW Instrumentation Connector Sales Forecast 2025F through 2030F
 2025F World Instrumentation Connector Forecast - Market Share by Region
 Medical Equipment Sector
 Global Market Conditions
 Worldwide Medical Connector Sales Forecast Update 2023, 2024, 2025F through 2030F with Percent Change and Five-Year CAGR
 Worldwide Medical Market Sub-Sectors
 Worldwide Medical Connector Market by Sub-Sector 2025F and 2030F
 Diagnostics and Imaging Equipment Market
 Therapeutic Equipment Market Conditions
 Other Medical Equipment Market Conditions
 Regional Sub-Sector Views
 North America
 North America Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR
 Europe
 Europe Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR
 Japan
 Japan Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR
 China
 China Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR
 Asia Pacific
 Asia Pacific Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR
 ROW
 ROW Medical Connector Sales Forecast Update 2023, 2024, 2025F, and 2030F with Percent Change and Five-Year CAGR

Connector Industry Forecast

Chapter 1 – 2025 – A Year That Could be Shaped by Economic & Political Uncertainty (continued)

2025F World Medical Connector Forecast Market Share by Region
Industrial Equipment Sector
Introduction and Market Definitions
Traditional Industrial Market - Main Market Segments
Industrial Internet of Things – IIoT Market Segments
Key Market Segments for the Industrial Connector Market
Outlook for the Global Industrial Market for Connectors
Industrial Connector Market Sales Performance by Region 2023 – 2025F
Industrial Connector Market Sales Performance by Sector 2024, 2025F and 2030F
2025F and 2030F – Five-Year CAGR Performance by Region
Industrial Connector Market Sales Performance by Market Segment 2024, 2025F, & 2030F With Percent Growth, CAGR, and Market Share
Regional View
North America
Annual YoY Growth Rates and Forecast through 2030F of the NA Industrial Market for Connectors
Europe
Annual YoY Growth Rates and Forecast through 2030F of the European Industrial Market for Connectors
Japan
Annual YoY Growth Rates and Forecast through 2030F of the Japanese Industrial Market for Connectors
China
Annual YoY Growth Rates and Forecast through 2030F of the Chinese Industrial Market for Connectors
Asia Pacific
Annual YoY Growth Rates and Forecast through 2030F of the AP Industrial Market for Connectors
ROW
Annual YoY Growth Rates and Forecast through 2030F of the ROW Industrial Market for Connectors
2025F World Industrial Connector Forecast - Market Share by Region
Automotive Sector
Technology and Market Trends
Regional View
North America
Europe
Japan
China
Asia Pacific
ROW
2025F World Automotive Connector Forecast – Market Share by Region
Transportation – Non-Automotive
Commercial Vehicles
Civil Aviation
Rail
RV and Power Sport (Motorcycles, ATVs, and Other Similar Equipment) and Marine
2025F World Transportation Connector Forecast – Market Share by Region
Military/Aerospace Sector
Global Market Conditions
2025F World Military/Aerospace Connector Forecast - Market Share by Region
Telecom Equipment Sector
Global Market Conditions
Technology and Market Trends
Regional View
North America
Europe
Japan

Chapter 1 – 2025 – A Year That Could be Shaped by Economic & Political Uncertainty (continued)

North America
Europe
Japan
China
Asia Pacific
ROW
2025F World Telecom/Datacom Connector Forecast - Market Share by Region
Consumer Electronics Market Sector
Global Market Conditions & Forecast
Current Nature of this Market and Connector Applications
Sub-Sector Performance
2025F World Consumer Connector Forecast - Market Share by Region

Chapter 2 – World Connector Forecast

World Connector Market Forecast – Year-to-Year Dollar Change
World Connector Market Forecast – Year-to-Year Percent Change
Top Six End-Use Equipment Categories
World End-Use Equipment Forecast - Summary
2024-2025F Percent Change and 2025F-2030F Five-Year CAGR
2025F and 2030F Market Share by Equipment Sector
World End-Use Equipment Forecast - Detail
Computers & Peripherals
Mobile Computers
Desktops
Servers
Storage Equipment
Input/Output Equipment
Communication LAN Devices
Other Computer Equipment
Business/Office Equipment
Retail/POS Equipment
Imaging Systems
Other Office Equipment
Instrumentation
Automatic Test Equipment
Analytical & Scientific Instruments
Other Instruments
Medical
Diagnostic & Imaging Equipment
Therapeutic Equipment
Other Medical Equipment
Industrial
Heavy Equipment
Industrial Automation & Process Control
Building & Civil Engineering
Energy Markets
Machine Tools, Machinery & Robotics
Other Equipment
Automotive
Body Wiring & Power Distribution
Powertrain
Comfort, Convenience & Entertainment
Navigation & Instrumentation
Safety & Security
Transportation
Commercial Air
Commercial Vehicles
Rail
Heavy Equipment
Recreation
Commercial Marine
Military

Connector Industry Forecast

Chapter 2 – World Connector Forecast (continued)

- Telecom/Datacom
 - Carrier Network
 - Enterprise Network
 - Mobile & Wireless
- Wireless Infrastructure
 - Subscriber Equipment
 - Cable-Equipment-Infrastructure
 - Other Telecommunications
- Consumer
 - Personal/Portable Consumer Electronics
 - Consumer Entertainment Electronics
 - Consumer White Goods
 - Other Consumer
- Other Equipment

Chapter 3 – North American Connector Forecast

- North American Connector Market Forecast – Year-to-Year Dollar Change
- North American Connector Market Forecast – Year-to-Year Percent Change
- Top Six End-Use Equipment Categories
- North American End-Use Equipment Forecast - Summary
- 2023-2024F Percent Change and 2024F-2029F Five-Year CAGR
- 2024F and 2029F Market Share by Equipment Sector
- North American End-Use Equipment Forecast - Detail
 - Computers & Peripherals
 - Mobile Computers
 - Desktops
 - Servers
 - Storage Equipment
 - Input/Output Equipment
 - Communication LAN Devices
 - Other Computer Equipment
 - Business/Office Equipment
 - Retail/POS Equipment
 - Imaging Systems
 - Other Office Equipment
 - Instrumentation
 - Automatic Test Equipment
 - Analytical & Scientific Instruments
 - Other Instruments
 - Medical
 - Diagnostic & Imaging Equipment
 - Therapeutic Equipment
 - Other Medical Equipment
 - Industrial
 - Heavy Equipment
 - Industrial Automation & Process Control
 - Building & Civil Engineering
 - Energy Markets
 - Machine Tools, Machinery & Robotics
 - Other Equipment
 - Automotive
 - Body Wiring & Power Distribution
 - Powertrain
 - Comfort, Convenience & Entertainment
 - Navigation & Instrumentation
 - Safety & Security
 - Transportation
 - Commercial Vehicles
 - RV's & Power Sports
 - Commercial Air
 - Marine
 - Rail
 - Construction
 - Farm & Garden

Chapter 3 – North American Connector Forecast (continued)

- Military
- Telecom/Datacom
 - Carrier Network
 - Enterprise Network
 - Mobile & Wireless
- Wireless Infrastructure
 - Subscriber Equipment
 - Cable-Equipment-Infrastructure
 - Other Telecommunications
- Consumer
 - Personal/Portable Consumer Electronics
 - Home Video Equipment
 - Home Audio Equipment
 - Consumer White Goods
 - Other Consumer
- Other Equipment

Chapters 4 Thru 8 Provide the Same Detail Level as Chapter 3

Chapter 4 – European Connector Forecast

Chapter 5 – Japanese Connector Forecast

Chapter 6 – Chinese Connector Forecast

Chapter 7 – Asia Pacific Connector Forecast

Chapter 8 – ROW Connector Forecast

To Order *Connector Industry Forecast*



Research Report F-2025-01, **Connector Industry Forecast** is available for \$5,285. If you would like additional information about this report, or would like to place an order, please complete the following information, and e-mail, or mail it to Bishop & Associates, Inc. To place your order on our website: <https://bishop-research.com/>.

Name:		
Title:		
Company:		
Address:		
City:	State:	Zip:
Phone:	Fax:	
E-Mail Address:		
Signature:		

Connector Industry Forecast

☐ Multi-User Corporate License @ \$5,285

☐ Invoice Me ☐ Check Enclosed ☐ Visa ☐ Master Card ☐ American Express

Illinois Customers Add 8.0% Sales Tax

Credit Card No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Expiration Date

--	--

Mo.

--	--

Yr.



1209 Fox Glen Drive - St. Charles, IL 60174
Phone: 630.443.2702
E-mail: bishop@bishopinc.com
Website: www.connectorindustry.com
Online Store: <https://bishop-research.com/>

What's New ?

Bishop & Associates has recently completed several new research reports about the worldwide connector industry. A table of contents for each report can be found at <https://bishop-research.com>.

- ☐ **Report F-2025-01** **Connector Industry Forecast (May 2025) NEW**
- ☐ **Report P-780-25** **World RF Coax Connector Market (April 2025) NEW**
- ☐ **Report M-700-25** **World Connector Market Handbook (March 2025) NEW**
- ☐ **Report C-150-24** **History of M&A in the Connector Industry 1950-2024 (October 2024) NEW**
- ☐ **Report M-121-24** **2024 Top 100 Connector Manufacturers (August 2024) NEW**
- ☐ **Report P-520-24** **The Rectangular Input/Output Connector Market 2024 (July 2024) NEW**
- ☐ **Report C-122-24** **Connector Industry Yearbook (June 2024)**
- ☐ **Report P-799-24** **World Cable Assembly Market (February 2024)**
- ☐ **Report P-606-23** **Connector Types and Technologies Poised for Growth (October 2023)**
- ☐ **Report M-720-23** **European Connector Market 2021, 2022, 2023F and 2028F (June 2023)**
- ☐ **Report P-430-23** **World Circular Connector Market 2023 (May 2023)**
- ☐ **Report M-1200-22** **Military Ground Vehicle Market for Connectors (October 2022)**
- ☐ **Report P-675-22** **Copper and Fiber Connectivity in the Data Center (July 2022)**
- ☐ **Report T-800-22** **2022 North American Cable Assembly Manufacturers (May 2022)**
- ☐ **Report M-1010-22** **World Automotive Connector Market (April 2022)**
- ☐ **Report P-420-22** **IC Sockets – Systems & Connector Forecast 2020-2030 (January 2022)**
- ☐ **Report M-310-21** **Instrumentation Market for Connectors (June 2021)**
- ☐ **Report P-410-21** **Computer Server Market Trends and Connector Use 2020 – 2030 (May 2021)**

THE BISHOP REPORT - CONNECTOR INDUSTRY YEARBOOK

An annual corporate subscription to **THE BISHOP REPORT** (12 issues) is available for \$2,950, which includes an unlimited number of subscribers and one PDF version of the **Connector Industry Yearbook** report (normally \$1,500).

The Bishop Report subscription includes access, through [Bishopinc.com](https://bishopinc.com), to prior issues of The Bishop Report, 30-40 yearly News Briefs, Industry Financial Benchmarks, and various connector industry indices.

[Click here](#) to view the expanded report description, and complete table of contents, for all Bishop & Associates' research reports.



Performance and Forecast of the World Connector Industry

Bishop & Associates Inc. 1209 Fox Glen Drive • St. Charles, IL 60174
Phone: 630.443.2702 • bishop@bishopinc.com • [Bishopinc.com](https://bishopinc.com)
Online Ordering: <https://bishop-research.com>