

Issue No. 390 2nd Quarter 2025 April 2025

Positive Growth Continues in March Orders and Sales Both Up

March bookings increased by +12.4% while billings increased +7.5%.

Regional Performance:

YOY, four of the six regions, Europe, Japan, China, and Asia Pacific exhibited continued growth. greatest growth was seen in the Asia Pacific region, YOY billings increased an amazing +36.1%, followed by China where sales increased a healthy +21.9%. America and ROW exhibited a decline in billings, with North America showing a YOY decline of -7.2% and ROW a decline of -4.6%. See page 5.

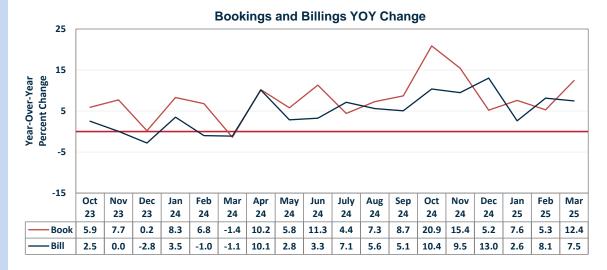
Industry Backlog:

March backlog was \$21,845 million (12.2 weeks).

2025 Currency Impact:

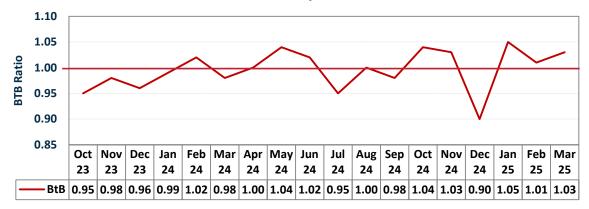
The industry registered a YOY increase in sales in March 2025, of +7.5% in USD and a decrease in sales of -0.2% in local currency.





The book-to-bill ratio in March was 1.03, up from 1.01 in February. This is the ninth month in the last 12 months where the book-to-bill has been 1.0 or better.

Connector Industry Book-to-Bill



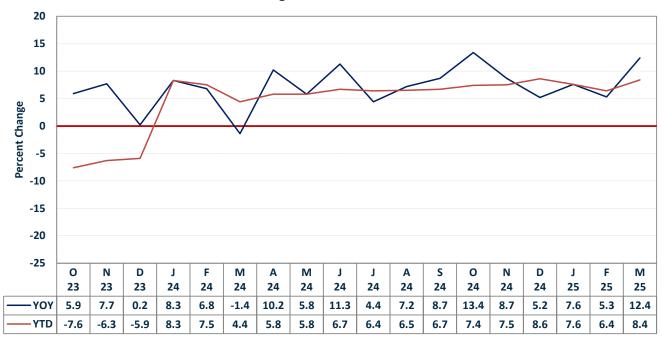


Booking Highlights and Conclusions

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

		Sequential		,	Year-Over-Ye	ar		Year-To-Date	•
Month	2023	2024	2025	2023	2024	2025	2023	2024	2025
Jan	-1.3%	9.1%	2.3%	-18.4%	8.3%	7.6%	-18.4%	8.3%	7.6%
Feb	10.1%	5.2%	5.5%	-13.8%	6.8%	5.3%	-18.4%	7.5%	6.4%
Mar	1.2%	-2.9%	2.1%	-12.9%	-1.4%	12.4%	-16.6%	4.4%	8.4%
Apr	-5.1%	3.2%		-9.7%	10.2%		-15.0%	5.8%	
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



- March bookings increased +12.4% year-over-year.
- Orders increased +2.1% on a sequential basis in February.
- The book-to-bill ratio for February was 1.03, up from 1.01 in February.

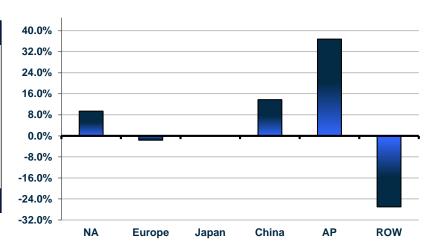


Regional Performance: BOOKINGS

March 2025 Bookings

Year-To-Date Bookings by Region

Region	Sequential	YOY	YTD
NA	6.2%	15.9%	9.4%
Europe	-12.0%	2.0%	-1.6%
Japan	3.5%	-3.4%	0.1%
China	27.6%	19.3%	13.8%
AP	-11.5%	32.1%	36.8%
ROW	-13.7%	-18.3%	-27.0%
Total	2.1%	12.4%	8.4%



- Year-to-date, March bookings increased by +8.4%. Sequentially North America, Japan, and China all saw increases, with China showing the greatest increase with sales growing +27.6%.
- Similar to January and February, year-to-date and year-over-year orders in March rose in four of the six regions, although different regions. The only region to decline both year-over-year and year-to-date, was the ROW region. North America, Europe, China, and Asia Pacific saw increases year-over-year, with Asia Pacific showing the most growth. Year-to-date, North America, Japan, China, and Asia Pacific saw increases, with Asia Pacific increasing the most at +36.8%.
- Year-over-year order growth has now been positive for 12 consecutive months.

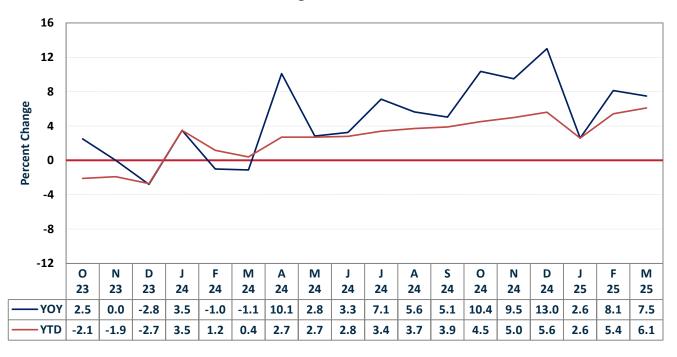


Billing Highlights and Conclusions

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

		Sequential		,	Year-Over-Ye	ar		Year-To-Date	÷
Month	2023	2024	2025	2023	2024	2025	2023	2024	2025
Jan	-3.1%	5.8%	6.0%	0.5%	3.5%	2.6%	0.5%	3.5%	2.6%
Feb	9.7%	2.8%	9.9%	-1.0%	-1.0%	8.1%	-0.3%	1.2%	5.4%
Mar	-0.9%	0.4%	0.0%	0.3%	-1.1%	7.5%	-0.1%	0.4%	6.1%
Apr	-7.9%	1.7%		-1.0%	10.1%		-0.3%	2.7%	
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



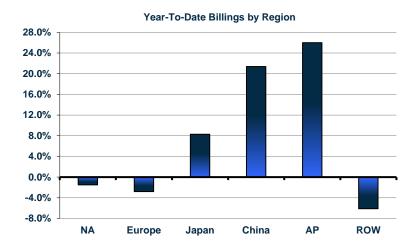
- March billings grew +6.1% year-to-date and +7.5% year-over-year.
- Sequentially, March billings remained flat.
- Year-over-year sales growth has now been positive for 12 consecutive months and year-to-date for 15 consecutive months.



Regional Performance: BILLINGS

March 2025 Billings

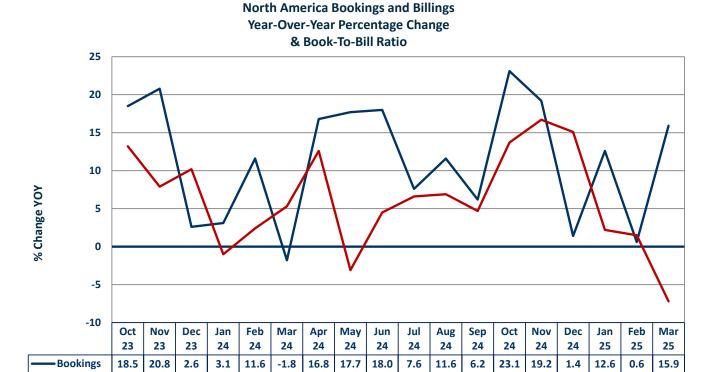
Region	Sequential	YOY	YTD
NA	-0.3%	-7.2%	-1.5%
Europe	-5.5%	5.0%	-2.8%
Japan	0.9%	11.9%	8.3%
China	3.9%	21.9%	21.4%
AP	7.8%	36.1%	26.0%
ROW	-10.3%	-4.6%	-6.1%
Total	0.0%	7.5%	6.1%



- March connector sales increased by +7.5% compared to the same period last year.
- Three out of six regions saw a sequential increase, with Asia Pacific increasing the most at +7.8%, followed by China with growth of +3.9%.
- Year-over-year four of the six regions saw an increase. Asia Pacific saw the greatest growth, increasing +36.1. Asia Pacific was followed by China where sales increased +21.9%. North America and the ROW region saw year-over-year decreases, declining -7.2% and -4.6% respectively. Year-to-date, North America, Europe, and the ROW region had decreases, with the ROW region experiencing the greatest decline at -6.1%. Of the remaining regions, Asia Pacific saw the greatest growth, increasing +26.0%, followed by China where sales increased +21.4%.



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 Performance

Billings

Billing SEQ

13.2

-6.9

0.96

7.9

4.3

0.99

10.2

-5.9

0.93

-1.0

3.6

1.01

2.4

7.3

1.01

5.3

5.7

0.91

12.6

-1.4

0.99

Sales decreased -7.2% year-over-year in North America in March, while orders grew a strong +15.9%, after a lackluster February where orders only grew +0.6%. Sequentially, North American billings decreased -0.3%. The book-to-bill ratio was 1.08, up from 1.02 in February.

-3.1

3.5

1.13

4.5

-3.7

0.99

6.6

-0.9

0.96

6.9

9.4

1.00

4.7

-7.0

0.98

13.7

3.2

1.03

16.7

4.0

1.01

15.1

-7.7

0.81

2.2

4.5

1.5

11.6

1.02

-7.2

-0.3

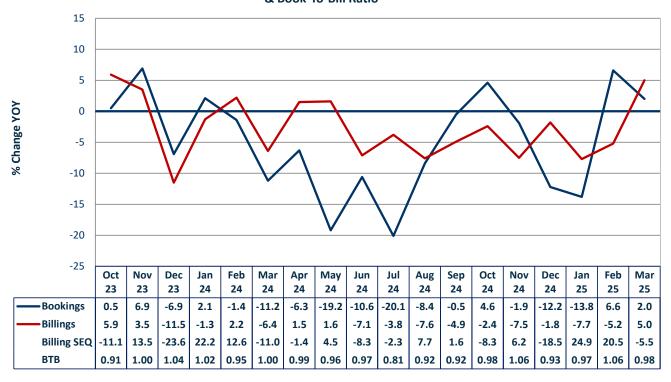
1.08

- "In March, the consumer price index for all urban consumers fell 0.1%, seasonally adjusted, and rose 2.4% over the last 12 months, not seasonally adjusted", according to the US Bureau of Labor Statistics.
- "US business activity growth slowed to a 16-month low in April, according to flash PMI® survey data, with business expectations about the year ahead also dropping to one of the lowest levels seen since the pandemic" according to S&P Global.
- "The unemployment rate was 4.2%", per the US Bureau of Labor Statistics. "This is slightly higher than the 4.1% rate in February 2025".
- "The number of new vehicles sold in the U.S. in March 2025, as aggregated by MarkLines as of April 2, was 1,591,710 units up 9.1% year-over-year". It needs to be noted that the US plan to impose a 25% tariff on all passenger car and light-truck imports effective April 3, likely boosted new car sales in March.
- "US Index of Consumer Sentiment is at a current level of 50.80, down from 57.00 last month and down from 77.20 one year ago", according to YCharts.



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

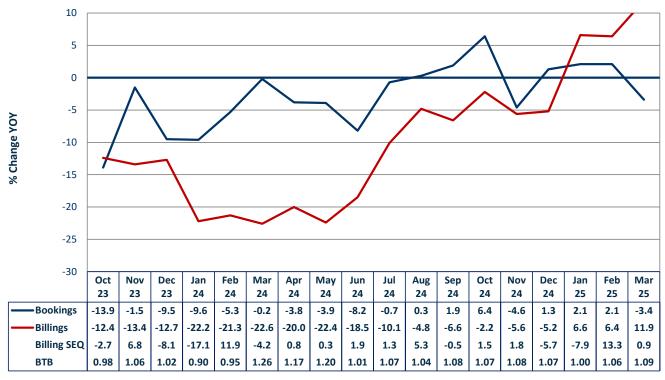
- Bookings increased by +2.0% YOY in March, while billings increased +5.0%. Sequentially, sales decreased by -5.5%. The book-to-bill ratio was 0.98, down from 1.06 in February.
- In February* 2025, compared with February 2024, industrial production increased by 1.2% in the euro area and by 0.6% in the EU according to Eurostat.
- "The annual inflation rate in the Euro Area is expected to be 2.2% in March, down from 2.3% in February", according to Eurostat.
- "In February* 2025, compared with January 2025, the seasonally adjusted retail trade volume increased by 0.3% in the euro area and by 0.2% in the EU, according to first estimates from Eurostat.
- "In February* 2025, the euro area seasonally adjusted unemployment rate was 6.1%, down from 6.2% in January 2025 and from 6.5% in February 2024. The EU unemployment rate was 5.7% in February 2025, also down from 5.8% in January 2025 and from 6.1% February 2024",according to Eurostat.
- "In March 2025, the Economic Sentiment Indicator (ESI) decreased in both the EU (-0.9 points to 96.0) and the euro area (-1.1 points to 95.2)", according to the European Commission.

*March 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

- March, year-over-year bookings decreased -3.4%, while sales increased +11.9%. Sequentially, sales increased +0.9%. Japan's book-to-bill ratio was 1.09, up from 1.06 in February.
- Japan's "Consumer Price Index YoY is at 3.60%, compared to 3.70% last month and 2.70% last year. This is higher than the long term average of 2.44%", according to YCharts.
- In April 2025, composite PMI in Japan "climbed to 51.1 from a final reading of 48.9 in the prior month, which was the lowest level since November 2022, flash data showed" according to Trading Economics.
- Japanese new vehicle sales in March increased 10.7% YOY to 499.7K units, according to MarkLine.
- "Japan's unemployment rate remained unchanged at 2.5% in February* and their annual inflation rate edged to 3.6% in March 2025 from 3.7% in the prior month, marking the lowest print since last November" according to Trading Economics.
- Exports from Japan rose by 3.9% YoY to JPY 9,847.8 billion in March 2025. This growth, though marking the sixth consecutive month of expansion, was below market expectations of 4.5% and slower than the 11.4% rise in February, according to Trading Economics.

*March 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



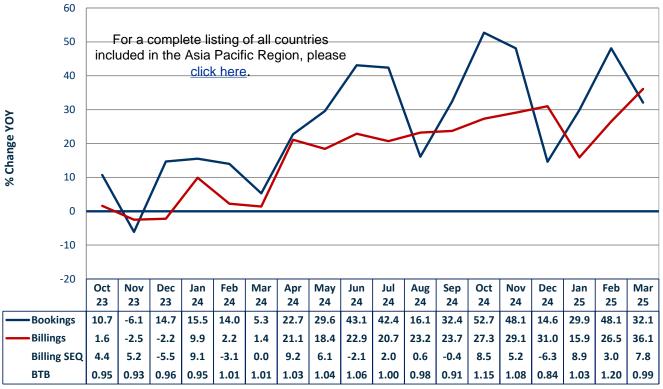
China Performance

- China's March sales grew +21.9% on a year-over-year basis. Bookings increased by +19.3%, after declining -1.4% in February. Sequentially, sales increased by +3.9%, this was a welcome outcome after three previous months of negative sequential billings. The BTB increased to 1.04 after declining to 0.85 in February.
- "China's manufacturing activity expanded at the fastest pace in a year in March, a factory survey showed on Monday, with new orders boosting production", according to Reuters. Registering the best pace in 12 months, the official manufacturing PMI was 50.5 in March, and the non-manufacturing growth was 50.8.
- "China's consumer price index slid 0.1% year on year in March, remaining in deflationary territory after having contracted 0.7% in February, according to data released by the National Statistics Bureau. This is the second straight month of contraction. "Core inflation, which strips out volatile food and fuel prices, rose 0.5%, rebounding from a drop of 0.1% in February, though still lower than the 0.6% growth in January", according to CNBC.
- March vehicle production and sales volumes totaled 3.006 million and 2.915 million units, up 11.9% and 8.2% year-over-year, respectively. Year-to-date, production and sales volumes were 7.561 million and 7.47 million units, up 14.5% and 11.2% respectively year-over-year according to MarkLines and the China Association of Automobile Manufacturers (CAAM).
- China's surveyed urban unemployment rate was 5.2% in March, down from 5.4% in February.



 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



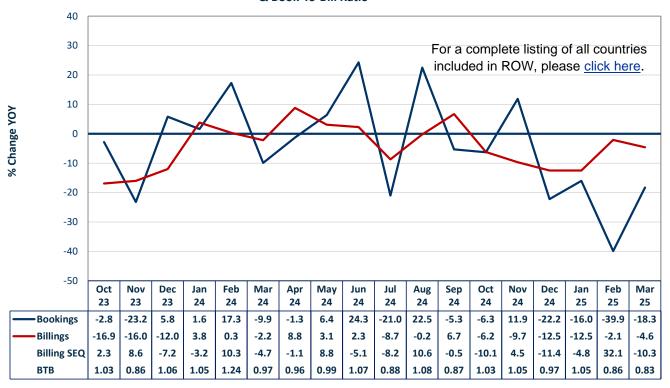
Asia Pacific Performance

- Year-over-year, March orders were up +32.1%, while billings increased +36.1%. This was the highest billings increase since May of 2021. Sequentially, sales increased by +7.8%. The book-to-bill ratio was 0.99, down from 1.20 in February.
- "India's Consumer Price Index (CPI) inflation eased to 3.34% in March 2025, a six-year low, according to CNBC and PIB. This decline is primarily attributed to a significant easing in food prices".
- "The HSBC India Manufacturing PMI rose to 58.4 in April 2025 from 58.1 in the previous month, according
 to preliminary estimates. The reading indicated stronger operating conditions and marked the fastest pace
 of growth in a year", according to Trading Economics.
- "South Korea's overall exports for the first 20 days of April fell 5.2% from a year earlier, dragged down by U.S.-bound shipments. Exports of automobiles fell 6.5% and auto parts dropped 1.7%. This is after the U.S. introduced 10% blanket tariffs and 25% auto and steel tariffs. Reciprocal 25% tariffs on South Korea have currently been paused for 90 days." Talks are presently underway, according to Reuters.
- South Korea's seasonally adjusted unemployment rate rose to 2.9% in March 2025 from 2.7% in February, marking the first increase in three months", 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 decreased -18.3%, while billings decreased -4.6% year-over-year. Sequentially, sales decreased by -10.3%. The book-to-bill ratio was 0.83, down from February's book-to-bill of 0.86.
- "The annual inflation rate in Brazil, Latin America's largest economy was 5.26% in March, up from 4.96% in the previous month and remaining well above the upper end of the central bank's 1.5%-4.5% target range, according to Reuters.
- "The S&P Global Brazil Manufacturing PMI slipped to 51.8 in March of 2025 from 53.0 in the previous month, marking the fourteenth monthly expansion in factory activity, but remaining firmly below the average from the previous year", according to Trading Economics.
- "The seasonally adjusted Absa Purchasing Managers' Index (PMI) for South Africa was 48.7 in March 2025, marking a slight improved from 44.7 in February stated Trading Economics.
- The "inflation rate in Israel decreased to 3.30% in March from 3.40% in February of 2025. The inflation rate in Israel averaged 26.75% from 1952 until 2025", 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	1.6% Down	1.0% Steady	0.6% Down	5.4% Up	N/A	N/A
Industrial Production Growth	1.3% Up	1.2% Up	2.3% Down	7.7% Up	N/A	N/A
Manufacturing PMI*	49.0 Down	48.6 Up	51.1 Up	50.5 Up	N/A	N/A
Inflation Rate	2.4% Down	2.2% Down	3.6% Down	-0.1% Up	N/A	N/A
Unemployment Rate	4.2% Up Slightly	6.1% Down	2.5% Unchanged	5.2% Down	N/A	N/A
Retail Sales Growth YOY	4.6% Up	2.3% UP	4.6% Up	5.9% Up	N/A	N/A
March Connector Sales	-7.2%	5.0%	11.9%	21.9%	36.1%	-4.6%
YTD Connector Sales	-1.5%	-2.8%	8.3%	21.4%	26.0%	-6.1%
March Connector Orders	15.9%	2.0%	-3.4%	19.3%	32.1%	-18.3%
YTD Connector Orders	9.4%	-1.6%	0.1%	13.8%	36.8%	-27.0%

^{*} Purchasing Manager Index - Below 50 is contracting factory activity

Key Take Aways:

- Inflation appears to be down slightly in all regions but China, where although still negative, did rise slightly. Japan, mantains the highest inflation rate at 3.6%.
- Unemployment rose slightly in North America in March, but remained unchanged or down in Europe, Japan, and China. Europe's 6.1% rate, although stable, remains the highest among all regions Bishop tracks.
- March connector sales were up double-digits in Japan, China, and the Asia Pacific region.



The Industry Backlog Is 12.2 Weeks

The industry shipped \$1,793 million per week through March. Orders are up +8.4% year-to-date. This will cause the industry to increase the order backlog.

The following table shows the world connector backlog of orders.

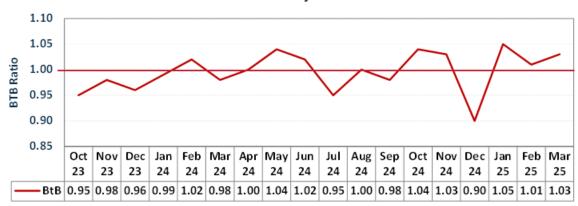
Industry Backlog

	2024	March 2025
BtB Ratio	1.00	1.03
Beginning Backlog	\$21,017	\$21,287
YTD Bookings	\$86,592	\$23,145
YTD Billings	\$86,322	\$22,587
Ending Backlog	\$21,287	\$21,845
Backlog in Weeks	12.6	12.2

\$ Millions

The book-to-bill (BtB) ratio was 1.03 in March. The following displays the trend of BtB ratios since October of 2023.

Connector Industry Book-to-Bill



The backlog has increased by a half billion during the first three months of 2025. See the table below.

Change in Backlog

2024 Ending Backlog	\$21,287
2025 March Ending Backlog	\$21,845
Backlog Growth	\$558

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

Local Currency to One USD 2024 YTD versus 2025 YTD

Currency	2024	2025	% Change
Euro	0.9199	0.9269	-0.8%
Yuan	7.2018	7.2510	-0.7%
Yen	149.7225	149.1755	0.4%

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

Industry Sales Performance March 2025 USD-vs-Local Currencies

Region	U.S.\$	Local Currency
North America	-7.2%	-7.2%
Europe	5.0%	-0.8%
Japan	11.9%	-0.7%
China	21.9%	0.4%
Asia Pacific	36.1%	36.1%
ROW	-4.6%	-4.6%
World	7.5%	-0.2%

Connector sales in March of 2025 decreased -0.2% when measured in local currencies, versus an increase of +7.5% in US dollars.



2025 Outlook for Connectors

The Trump administration's tariff policies are causing a lot of uncertainty about the economy. In spite of the uncertainty Bishop & Associates is bullish on 2025 because orders and sales were up significantly in the first quarter.

World Connector Results YTD March 2025 Percentage Change

	Jan	Feb	March	YTD
Orders	7.6%	5.3%	12.4%	8.4%
Sales	2.6%	8.1%	7.5%	6.1%

We believe that demand for electronics will build as the year progresses. Our outlook is for full-year 2025 sales growth of +7.9%.

As noted in the next segment, the historical methodology suggests sales growth in 2025.

2025 Outlook: Historical Analysis

Over the past 15 years (2010 through 2024), sales through March averaged 24.1% of full year sales. The industry shipped \$22,587 million in 1Q25. If history repeats, 2025 sales would be \$93,722 million, up +8.4% over 2024 sales of \$86,478.

Continuing this analysis, the 15-year high through March was 25.5% of sales, medium was 24.1%, and low was 23.1%. This allows us to calculate a range of possible outcomes for 2025.

2025 Sales Outlook Historical Analysis Methodology YTD March Sales \$22,587

	15-Year	2025	2024	Percent
Range	Percentage	Sales	Sales	Growth
Low	23.1%	\$97,779	\$86,478	13.1%
Medium	24.1%	\$93,722	\$86,478	8.4%
High	25.5%	\$88,576	\$86,478	2.4%

\$ Millions



As noted on the previous page, the historical analysis projects a range of possible outcomes or +2.4% to +13.1% sales growth.

The following table adds the Bishop forecast to the range of possible outcomes for 2025.

Range of Possible Outcomes

YTD 15-Yr	2025	2024	Percent
% of Total	Forecast	Actual	Growth
23.1%	\$97,779	\$86,478	13.1%
24.1%	\$93,722	\$86,478	8.4%
Bishop	\$93,275	\$86,478	7.9%
25.5%	\$88,576	\$86,478	2.4%

^{\$} Millions

The following table provides the Bishop forecast by region.

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

			Percent		Percent
Region	2023	2024	Change	2025F	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

April 2025 News

TE Connectivity Completes Acquisition of Richards Manufacturing

TE Connectivity completed the previously announced acquisition of Richards Manufacturing Co.

Richards is a North American leader in utility grid products, including underground distribution equipment. The acquisition will enable TE to capitalize on the region's grid replacement and upgrade cycle, strengthening its leadership in serving utilities and other energy customers around the world.

The acquired business will continue to be run by the Richards management team, ensuring business continuity as it integrates with TE.

Electronics Industry Demand Strengthens in March

This past March, electronics industry demand strengthened to its highest level in nearly a year, indicating strong expansion in customer and manufacturing activity according to IPC's March Sentiment of the Global Electronics Manufacturing Supply Chain Report. In addition, the Shipment Index also reached its highest point since March 2024, reflecting firms' abilities to fulfill rising demand and maintain supply chain performance. Capacity utilization increased to its highest level since late 2023, indicating strong operational activity and efficient resource deployment.

Per the report, ease of recruiting skilled talent improved to a record-high, indicating that hiring constraints are continuing to ease for many firms. Material costs have risen, reversing a multi-month decline and pointing to renewed input cost pressures that may warrant monitoring. Labor costs decreased slightly.

In response to special questions regarding supply chain management strategies being considered or implemented to address the impact of recent or proposed tariffs, 31 percent of electronics manufacturers have invested in automation or optimization to counter the impact of tariffs, while 28 percent have switched to non-tariffed suppliers.

Sixty-one percent of electronics manufacturers are considering renegotiating supplier contracts, making it the most widely considered supply chain strategy. Said Shawn DuBravac, Ph.D., IPC chief economist and report author, "On the workforce side, 18 percent have implemented a hiring freeze, with another 36 percent considering it—indicating growing caution around workforce expansion."

North American EMS Industry Up 1.7 Percent in February

IPC announced the February 2025 findings from its North American Electronics Manufacturing Services (EMS) Statistical Program. The book-to-bill ratio stands at 1.33.

Total North American EMS shipments in February 2025 were up 1.7 percent compared to the same month last year. Compared to the preceding month, February shipments were up 0.2 percent. February's year-to-date (YTD) shipments decreased by 0.4% year-over-year (YOY).

EMS bookings in February decreased 3.6 percent year-over-year and increased 8.6 percent from the previous month. February's YTD bookings decreased 2.6% compared to the same period last year.



North American PCB Industry Sales Up 11.3 Percent in February

IPC announced the February 2025 findings from its North American Printed Circuit Board (PCB) Statistical Program. The book-to-bill ratio stands at 1.33.

Total North American PCB shipments in February 2025were up 11.3 percent compared to the same month last year. Compared to the preceding month, February shipments were down 1.5 percent. February's year-to-date (YTD) shipments increased by 15.5 percent year-over-year (YOY).

PCB bookings in February were up 17.8 percent compared to the same month last year. February bookings were up 19.9 percent compared to the preceding month. February's YTD bookings increased 28.8 percent compared to the same period last year.

Foxconn Posts Record Q1

Hon Hai Precision Industry Co, the world's largest contract electronics maker, posted its highest-ever first-quarter revenue on strong demand for artificial intelligence (AI) products, but said it would need to closely watch global politics.

Revenue for Apple Inc's biggest iPhone assembler jumped 24.2 percent year-on-year to NT\$1.64 trillion (US\$49.5 billion), Hon Hai said in a statement on Saturday, just missing the NT\$1.68 trillion LSEG SmartEstimate, which gives greater weight to forecasts from analysts who are more consistently accurate.

GM's First Quarter US Vehicle Sales Lead Industry as Automakers Braces for Tariffs

General Motors and other automakers reported notable increases in their first-quarter U.S. vehicle sales, as the automotive industry braces for the impacts of President Donald Trump's auto tariffs that are set to take effect this week.

GM reported a 16.7% jump in new vehicle sales compared with the first quarter of 2024, led by incremental gains in sales of new all-electric vehicles such as the Cadillac Escalade IQ and Cadillac Optiq, as well as notable increases in entry-level crossovers and full-size SUVs.

The Detroit automaker is expected to have significantly outpaced overall industry sales for the first quarter, which appear to be more robust than expected. Auto analysts originally had forecast roughly 1% or less year-over-year sales growth.

South Korean automakers Hyundai Motor and Kia Motors also reported double-digit sales gains of roughly 10% and 11%, respectively, compared with the first quarter of 2024. Nissan Motor, meanwhile, reported a 5.7% increase during the first quarter, followed by a 5.3% jump for Honda Motor and roughly 1% quarterly year-over-year gain for Toyota Motor.

Outliers for first quarter sales included Chrysler parent Stellantis, down roughly 12% amid a company turnaround plan, and Ford Motor, which reported a 1.3% sales decline largely due to the discontinuation last year of its Ford Edge SUV.

The sales results come ahead of tariffs ordered by Trump taking effect this week, including 25% levies on imported vehicles starting Thursday. The auto industry is also awaiting announcements of potential additional "reciprocal" tariffs that could affect automakers on Wednesday.



Electronics Industry Demand Strengthens in March

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The PC Market Enters Volatile 2025 on Strong Results

Top 5 Companies, Worldwide Traditional PC Shipments, Market Share, and Year-Over-Year Growth, Q1 2025 (Preliminary results, shipments are in millions of units)						
Company	1Q25 Shipments	1Q25 Market Share	1Q24 Shipments	1Q24 Market Share	1Q25/1Q24 Growth	
1. Lenovo	15.2	24.1%	13.7	22.8%	10.8%	
2. HP Inc	12.8	20.2%	12.0	20.0%	6.1%	
3. Dell Technologies	9.6	15.1%	9.3	15.4%	3.0%	
4. Apple	5.5	8.7%	4.8	8.0%	14.1%	
5. ASUS	4.0	6.3%	3.6	6.0%	11.1%	
Others	16.2	25.6%	16.8	27.9%	-3.6%	
Total	63.2	100.0%	60.2	100.0%	4.9%	
Source: IDC Quarterly Personal Computing Device Tracker, April 8, 2025						

PC shipments during the first quarter of 2025 grew 4.9% from the prior year, with global volumes reaching 63.2 million shipments, according to preliminary results from the International Data Corporation (IDC) Worldwide Quarterly Personal Computing Device Tracker. Looking ahead to 2025, the PC industry has several tailwinds and headwinds, which make for a challenging outlook and difficult demand planning.

Most of the underlying demand factors for PCs, such as the installed base upgrade ahead of Windows 10 end of support, and demand for on-device AI, remain strong, as illustrated by the volumes shipped in Q1 2025. However, the uncertainty surrounding US tariffs and associated inflationary pressure, and global recessionary risks will negatively impact demand for PCs in the following quarters in 2025.



Gartner Says Worldwide PC Shipments Increased 4.8% in First Quarter of 2025

Table 1: Gartner Data Snapshot: Preliminary Worldwide PC Vendor Unit Shipment Estimates for 1Q25 (Thousands of Units)

Company	1Q25	1Q25 Market	1Q24	1Q24 Market	1Q25-1Q24
	Shipments	Share (%)	Shipments	Share (%)	Growth (%)
Lenovo	15,275	25.9	13,933	24.8	9.6
HP Inc.	12,761	21.6	12,051	21.4	5.9
Dell Technologies	9,621	16.3	9,419	16.7	2.1
Apple	5,933	10.1	5,547	9.9	7.0
Acer	3,853	6.5	3,780	6.7	1.9
ASUS	3,715	6.3	3,405	6.1	9.1
Others	7,790	13.2	8,137	14.5	-4.3
Total	58,947	100.0	56,272	100.0	4.8

Worldwide PC shipments totaled 59 million units in the first quarter of 2025, a 4.8% increase from the first quarter of 2024, according to preliminary results by Gartner, Inc. U.S. PC shipments grew 12.6%, reaching 16 million units in the first quarter of 2025.

There were no major changes in the top six vendor rankings worldwide in the first quarter of 2025 (see Table 1). In worldwide PC shipments, Lenovo had the strongest growth rate among the top six vendors at 9.6% year-over-year, while Acer experienced the slowest growth at 1.9%.

In the U.S. market, HP was in the top spot with 25.1% market share (see Table 2), followed by Dell with 23.9% of the market.

Table 2: Gartner Data Snapshot: Preliminary U.S. PC Vendor Unit Shipment Estimates for 1Q25 (Thousands of Units)

Company	1Q25 Shipments	1Q25 Market Share (%)	1Q24 Shipments	· ·	1Q25-1Q24 Growth (%)
HP Inc.	4,116	25.1	3,641	25.0	13.1
Dell Technologies	3,923	23.9	3,652	25.1	7.4
Lenovo	3,147	19.2	2,606	17.9	20.7
Apple	2,613	15.9	2,249	15.4	16.2
Acer	944	5.8	811	5.6	16.4
ASUS	464	2.8	399	2.7	16.3
Others	1,185	7.2	1,202	8.3	-1.4
Total	16,391	100.0	14,559	100.0	12.6



Notes: Data includes desktop and laptop PCs that are equipped with Windows, macOS and Chrome OS. All data is estimated based on a preliminary study. Final estimates will be subject to change. The statistics are based on shipments selling into channels. Numbers may not add up to totals shown due to rounding. Source: Gartner (April 2025)

Worldwide Smartphone Market Grew 1.5% in Q1 2025, Amid On-going US-China Trade Tension

Top 5 Companies, Worldwide Smartphone Shipments, Market Share, and Year-Over-Year Growth, Q1 2025 (Preliminary results, shipments in millions of units)

Company	1Q25 Shipments	1Q25	1Q24 Shipments	1Q24	1Q25/1Q24
		Market Share		Market Share	Growth
1. Samsung	60.6	19.9%	60.2	20.1%	0.6%
2. Apple	57.9	19.0%	52.6	17.5%	10.0%
3. Xiaomi	41.8	13.7%	40.8	13.6%	2.5%
4. OPPO	23.5	7.7%	25.2	8.4%	-6.8%
5. vivo	22.7	7.4%	21.3	7.1%	6.3%
Others	98.4	32.3%	100.1	33.3%	-1.7%
Total	304.9	100.0%	300.3	100.0%	1.5%
Course IDC World	dwide Ouarterly Mohile P	hana Tracker April 1	1 2025		

Source: IDC Worldwide Quarterly Mobile Phone Tracker, April 14, 2025

According to preliminary data from the International Data Corporation (IDC) Worldwide Quarterly Mobile Phone Tracker, global smartphone shipments increased 1.5% year-over-year (YoY) to 304.9 million units in the first quarter of 2025 (1Q25). The smartphone market performed in line with IDC forecasts, as manufacturers ramped up production in anticipation of the expected announcement by the U.S. Administration on tariffs on China imports.

Globally, last quarter saw growth among top smartphone vendors, particularly the Chinese vendors in the home market, bolstered by the subsidies from the Chinese government launched last year, but extended to smartphones in January 2025. The subsidy program, which aims to stimulate consumption, targets products priced below CNY6,000 (\$820), representing most sales among Chinese vendors. Among the top vendors:

Samsung regained its market leadership, driven by the continuous success of its Galaxy S25 premium device and the Galaxy A series in the mid-range, particularly the latest Galaxy A36 and A56, offering AI at more affordable prices.

Apple had the best Q1 ever in terms of units shipped, stockpiling to avoid the U.S. tariffs, but also to other regions, as the channels fear that supply chain disruption could lead to a shortage of stock and price increases. Its performance in China declined, as Apple's Pro models were exempt from the Chinese government subsidy program.

Xiaomi's performance was mainly driven by its growth in China due to the subsidies from the Chinese government, which positively impacted the sales of its mid-range products.



China Smartphone Market Grew 3.3% in 1Q25, Outperforming Global Growth Ahead of US-China Trade Tensions

According to preliminary data from the International Data Corporation (IDC) Worldwide Quarterly Mobile Phone Tracker, China's smartphone market shipped 71.6 million units in 1Q25, a 3.3% year-on-year (YoY) increase. This growth was driven by the government subsidies that extended to smartphones in January 2025, as well as the peak sales season of the Spring Festival. The market outperformed the global growth of 1.5% but came below IDC's projections as the effect of the government subsidies on bolstering existing consumer demand appeared to be modest.

Worldwide Hardcopy Peripherals Shipments Increased 3.5% Year-Over-Year in the Fourth Quarter of 2024

In the fourth quarter of 2024, the global Hardcopy Peripherals (HCP) market experienced a 3.1% year-over-year (YoY) growth, with nearly 22 million units shipped. This marks the second consecutive quarter of positive YoY growth, as reported by the IDC Worldwide Quarterly Hardcopy Peripherals Tracker.

The fourth quarter of 2024 showed varied regional outcomes. Five out of nine regional markets recorded positive YoY growth, including Western Europe (10.5%), Asia Pacific (excluding Japan and PRC) (5.4%), Latin America (29.5%), the Middle East & Africa (4.3%), and Canada (10.6%). These increases were attributed to improved economic conditions in certain regions and attractive promotions from key vendors.

Growth Expected to Pause for AR/VR Headsets

Global shipments for AR/VR headsets grew 10% in 2024 according to new data from the International Data Corporation (IDC) Worldwide Quarterly Augmented and Virtual Reality Headset Tracker. The launch of new products during the holiday quarter as well as multiple new entrants throughout the year helped the market return to growth after two years of declines.

Meta continued to dominate capturing 74.6% share throughout the year followed by Apple at 5.2%, Sony with 4.3%, ByteDance capturing 4.1% and XREAL rounding out the top five with 3.3% share. However, amongst the top five only Meta and XREAL recorded year-over-year growth thanks to newer products and gaming focused use-cases. Both companies also managed to drive up average selling prices (ASP) for their respective brands by offering more premium solutions.

Throughout 2024, the launch of new headsets from Apple along with well received headsets such as the Quest 3 (and later 3S) as well as the Pico 4 led to an increase in commercial demand. Developers were eager to create mixed reality experiences with devices from Meta and Apple while those looking to scale deployments opted for Pico's products in addition to Quest. Adding fuel to the fire was Meta's push into the education segment which led the category to grow 69.4% in 2024 versus the prior year. In total, commercial shipments were up 14.9%.

"Last year was a great year for hardware as we got to see new mixed reality headsets from large brands such as Apple and Meta, and it was also a great year for smaller brands such as Even Realities and RayNeo each of which focused on slimming down the form factor and providing consumer friendly designs for glasses with displays, rivaling popular smart glasses such as Meta's Ray-Bans but with added display tech," said Jitesh Ubrani, research manager, Worldwide Mobile Device Trackers at IDC. "In 2025, we anticipate even more glasses with displays and multi-modal artificial intelligence along and the introduction of Android XR hardware which is likely to lead to platform rivalries among the key players: Meta, Apple, Google, and everyone else."



Despite newer hardware expected in 2025, IDC forecasts an annual decline of 12% as supply indicators point to delayed launches for some key players though a rebound is expected in 2026 with 87% growth and volume will surpass the peak of 11.2 million units recorded during the pandemic in 2021. Between 2025 and 2029, IDC anticipates a compound annual growth rate (CAGR) of 38.6%.

As the ARVR market grows, so will the opportunity for consumer and commercial usage.

Huawei 2024 Revenue Surges to Near-Record High as China Smartphone Comeback Takes Hold Huawei on Monday reported a sharp jump in 2024 revenue as its core telecommunications and consumer businesses accelerated.

Huawei reported revenue for 2024 of 862.1 billion Chinese yuan (\$118.2 billion), a 22.4% year-on-year rise.

It is the company's second-highest revenue figure ever, according to CNBC calculations, just shy of the record 891.4 billion yuan reported for 2020.

Net profit fell, however, to 62.6 billion yuan, a decline of 28% versus 2023. Huawei said this was a result of increasing investments.

It comes as the Chinese technology giant tries to adapt its business to deal with U.S. sanctions that have restricted its access to key technologies like semiconductors.

Huawei's sales last year were driven by its two biggest businesses — ICT infrastructure and consumer — which together account for around 82% of the company's total revenue.

Revenue at the ICT infrastructure division, which includes its carrier business, rose 4.9% year-on-year to 369.9 billion yuan. This is the Shenzhen headquartered-firm's biggest business by revenue. Huawei is one of the world's largest telecommunications equipment companies and the company said large-scale deployment of next-generation 5G networks had helped drive growth.

The company also said that 2024 was the first year of commercial deployment of next-generation networks, dubbed 5.5G or 5G advanced, which also helped give sales a boost.

Groundbreaking New EV Charging Tech Adds 250 Miles of Range in 5 Minutes

Electric vehicle charging is finally starting to catch up to the pace of daily life. Huawei just unveiled a new EV megawatt charging system that can add around 250 miles of range in just five minutes—fast enough to make waiting around for a charge feel like a thing of the past.

The 1.5 megawatt charger was announced at the China Electric Vehicle 100 Forum and is aimed at something most chargers don't touch: heavy-duty electric trucks. These are the kind of vehicles that need to get back on the road quickly, and a 15-minute full charge could be a game-changer.

According to Huawei, the charger delivers up to 2,400 amps of current and pumps in energy at a rate of 20 kilowatt-hours per minute. That's not just fast, it's one of the fastest charging systems we've seen. It's also a big step forward in the slow-moving world of EV megawatt charging.



Foxconn Reportedly to Double iPhone Manufacturing in India

Foxconn reportedly plans to double iPhone production in India by 2025, aiming to produce 25-30 million units annually. This expansion, driven by Apple's diversification strategy and Indian government incentives, marks a significant shift in global iPhone manufacturing.

The Economic Times, citing industry sources, reported that Foxconn plans to produce 25 million to 30 million iPhones in India in 2025, significantly increasing from the 12 million assembled in 2024.

Apple is enhancing its iPhone production in India to reduce reliance on China. *The Financial Times* reported that by early 2025, India will contribute about 15% of global iPhone output, with plans to increase this to 25% by 2027. A significant move in this direction is Tata Group's acquisition of a 60% stake in Pegatron Technology India, which manages an iPhone assembly plant near Chennai.

The Indian government is supporting this effort by eliminating import duties on components essential for smartphone production. In March 2025, Finance Minister Nirmala Sitharaman announced the removal of duties on 28 items related to mobile phone production to bolster local manufacturing capabilities and enhance India's competitive edge in exports.

Alphabet Shares Rise on Stronger-Than-Expected Revenue Growth

Alphabet, the parent company of Google and YouTube, reported stronger-than-expected first-quarter growth on Thursday after the bell. Shares rose more than 5% in after-hours trading.

Here's how the company did, compared with estimates from analysts polled by LSEG:

- Revenue: \$90.23 billion vs. \$89.12 billion expected
- Earnings per share: \$2.81 vs. \$2.01 expected

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Wall Street is also watching several other numbers in the report:

- YouTube advertising revenue: \$8.93 billion vs. \$8.97 billion, according to StreetAccount
- Google Cloud revenue: \$12.26 billion vs. \$12.27 billion, according to StreetAccount
- Traffic acquisition costs (TAC): \$13.75 billion vs. \$13.66 billion, according to StreetAccount

Alphabet's search and advertising units are still showing strong growth despite artificial intelligence competition heating up, according to its first-quarter earnings report.

The company's overall revenue grew 12% year over year, higher than the 10% Wall Street expected. Google's YouTube advertising revenue came in just short of analysts' expectations at \$8.93 billion. Overall advertising brought in \$66.89 billion, up 8.5% from the year prior.

The company's "Search and other" segment reported \$50.7 billion, up 9.8% from \$46.16 billion a year prior. Alphabet said Al Overviews, its Al tool placed at the top of Google's search results page, now has 1.5 billion users per month, up from one billion in October.

Alphabet's net income increased 46% to \$34.54 billion, or \$2.81 per share, from \$23.66 billion, or \$1.89 per share, a year earlier. The company said that included \$8 billion in unrealized gains on its nonmarketable equity securities related to Alphabet's investment in a private company.

According to LSEG, Alphabet's adjusted earnings, excluding that gain, was \$2.27 per share, which exceeded analysts' estimates.



The company reported revenue of \$12.26 billion for its cloud computing business, which was slightly below analysts' expectations of \$12.27 billion, according to StreetAccount. But the cloud unit saw its revenue increase 28% year over year, and its margins came in at 17.8%, compared to 9.4% a year ago.

Alphabet made its largest acquisition ever in March when it agreed to buy Wiz for \$32 billion in cash, almost \$10 billion more than it offered for the startup in 2024, and said it expects the deal to close next year, subject to regulatory approvals. With the acquisition, Google will seek to bolster its cloud division's security offerings.

The company said its "Other Bets" segment, which includes its self-driving car unit Waymo and life sciences unit Verily, brought in \$450 million, down 9% from \$495 million a year earlier. The unit lost \$1.23 billion, up from \$1.02 billion the year prior.

Alphabet said Waymo is providing more than 250,000 fully autonomous paid rides per week across the San Francisco, Los Angeles, Phoenix and Austin regions. That is up from 200,000 in February, before the service opened in Austin and the broader San Francisco Bay area.

Apple to Invest Billions in U.S. Manufacturing

Apple Inc. plans to invest more than \$500 billion in America over the next four years. As part of the initiative, the company is building a 250,000-square-foot factory in Houston that will mass-produce servers.

In addition, Apple will double its U.S. Advanced Manufacturing Fund, create a training academy in Detroit, and grow its domestic R&D investments to support cutting-edge fields like artificial intelligence and silicon engineering.

Apple India Makes US\$22bn of Phones in Production Shift

Apple Inc assembled US\$22 billion worth of iPhones in India in the 12 months ended last month, increasing production by nearly 60 percent over the previous year in a sign of continued diversification away from China.

The Cupertino, California-headquartered company now makes 20 percent, or one in five, of its prized iPhones in the South Asian country, people familiar with the matter said.

The dollar figure represents the devices' estimated factory gate value, rather than the marked-up retail price.

Apple Assembles it Entire iPhone Range in India

Apple now assembles its entire iPhone range in India, including the more expensive titanium Pro models. Its manufacturing success in the world's most populous nation is also helped by state subsidies tied to Indian Prime Minister Narendra Modi's ambition to turn the country into a manufacturing hub.

Modi is also seeking to widen electronics component manufacturing with US\$2.7 billion in new financial incentives, and is focused on advancing its semiconductor ambitions.

Apple has a nearly 8 percent market share in India's smartphone market, where its sales — a bulk of those from iPhones — reached almost US\$8 billion in fiscal 2024.

The ramp-up suggests the iPhone maker and its suppliers are accelerating a pivot to India from China. The bulk of India-made iPhones are assembled at Foxconn Technology Group's (富士康) factory in southern India. Tata Group's electronics manufacturing arm, which bought Wistron Corp (緯創) and controls Pegatron Corp's (和碩) operations, is also a key supplier.



Of the total India production, Apple exported 1.5 trillion rupees (US\$17.42 billion) in iPhones from the region in the fiscal year through last month, Indian Minister of Railways, Information and Broadcasting, and Electronics and Information Technology Ashwini Vaishnaw said on Tuesday last week.

Shipments of iPhones from India to the US accelerated after US President Donald Trump announced plans for "reciprocal" tariffs in February, the people said.

Apple's average India production and exports surged all through the fiscal year to last month.

Trump Administration Exempts Phones, Computers, CPUs, Memory, and Chipmaking Tools From Sweeping Tariffs

The exemptions cover \$390 billion in yearly US imports.

The Trump administration has granted a reprieve to global technology manufacturers by exempting smartphones, laptops, CPUs, memory chips, and electronics to make semiconductors from its sweeping tariffs on imports – a move that could ease pressure on companies like Apple and Nvidia while offering relief to consumers.

The exclusions, published late Friday by US Customs and Border Protection, narrow the scope of Trump's aggressive trade measures by sparing these products from the 125 percent China-specific tariff and the baseline 10 percent tariff imposed on nearly all other countries.

The exemption list includes popular consumer electronics such as smartphones, laptops, hard drives, memory chips, and flat-screen displays – items predominantly manufactured outside the United States.

Nvidia Plans to Establish \$500B Worth of Domestic Production Chain

Nvidia, the world's leading AI chip producer, has announced its plans to build \$500 billion worth of AI servers in the US. Until now, a large part of Nvidia's operations have been based in Southeast Asia. However, imposing tariffs would make it infeasible for the tech giants to sustain overseas production units. Hence, the switch.

Nvidia and partners such as TSMC, Foxconn, Wistron, Amkor, and SPIL will build a complete AI server supply chain in the US. This includes a plant in Texas to build AI servers and server assembly plants in Dallas and Houston.

For starters, domestic manufacturing won't be as cheap as getting it done in Taiwan, owing to the high labor costs in the US. However, the benefit outweighs the costs of this move.

It's no secret that AI tech will be at the forefront of the tech industry in the next decade. Whoever controls AI tech controls global markets. Right now, this power isn't with the US, something a giant won't be comfortable with. Considering the omnipresent tension between the US and China, China is the last country the US would want controlling AI production.

More importantly, this can also start a domino effect, with other companies following suit. Apple has already made similar commitments in February to establish domestic manufacturing. So, this \$500B number can swell up to a few trillion in the next five years. It will surely rattle China, but that's precisely what the US may be after.



Nvidia will use its own in-house technology, like Omniverse and Issac GR00T, to improve every step of the production chain. With more automation and robotization, the actual costs of assembled systems are also expected to go down in the long run – a win-win situation for the company.

Google Hit with Second Antitrust Blow, Adding to Concerns About Future of Ads Business

Google's antitrust woes are continuing to mount, just as the company tries to brace for a future dominated by artificial intelligence.

On Thursday, a federal judge ruled that Google held illegal monopolies in online advertising markets due to its position between ad buyers and sellers.

The ruling, which followed a September trial in Alexandria, Virginia, represents a second major antitrust blow for Google in under a year. In August, a judge determined the company has held a monopoly in its core market of internet search, the most-significant antitrust ruling in the tech industry since the case against Microsoft more than 20 years ago.

Google is in a particularly precarious spot as it tries to simultaneously defend its primary business in court while fending off an onslaught of new competition due to the emergence of generative AI, most notably OpenAI's ChatGPT, which offers users alternative ways to search for information. Revenue growth has cooled in recent years, and Google also now faces the added potential of a slowdown in ad spending due to economic concerns from President Donald Trump's sweeping new tariffs.

Parent company Alphabet reports first-quarter results next week. Alphabet's stock price dipped more than 1% on Thursday and is now down 20% this year.

In Thursday's ruling, U.S. District Judge Leonie Brinkema said Google's anticompetitive practices "substantially harmed" publishers and users on the web. The trial featured 39 live witnesses, depositions from an additional 20 witnesses and hundreds of exhibits.

Judge Brinkema ruled that Google unlawfully controls two of the three parts of the advertising technology market: the publisher ad server market and ad exchange market. Brinkema dismissed the third part of the case, determining that tools used for general display advertising can't clearly be defined as Google's own market. In particular, the judge cited the purchases of DoubleClick and Admeld and said the government failed to show those "acquisitions were anticompetitive."

Apple and Meta hit with Combined \$797 million Fine for Violating EU's DMA Antitrust Rules

The European Commission has just hit Apple and Meta with combined fines of almost \$1 billion. It marks the first fines handed out by the Commission under its Digital Markets Act (DMA) and arrives just after President Trump threatened to levy tariffs against any countries that penalize US companies.

Apple was handed the larger fine of 500 million euros (\$570 million), while Meta has to pay 200 million euros (\$228 million), making a combined total of 700 million euros, or \$797 million.

In addition to its \$570 million fine, Apple has been slapped with a cease-and-desist order requiring it to make further product changes by June. If it fails to comply with this order, the Commission can fine it for every additional day it refuses to cooperate.



The penalties come after a year-long investigation in which the Commission found that Meta forced Facebook and Instagram users to either pay a subscription fee to avoid ads or consent to their personal data being used for targeted advertising.

In response to the Commission's findings, Meta has modified its ad approach in the EU, now offering unpaid users a version of the platforms with fewer unskippable, full-screen personalized ads. However, in a compliance report published on March 6, the company argued that it has "continued to receive additional demands that go beyond what is written in the law," despite taking steps to align with the DMA. The Commission is currently examining this model to determine if it complies with the rules.

Apple, meanwhile, broke the DMA's steering rule. This requires gatekeepers – Apple, Meta, Alphabet, Amazon, ByteDance, and Microsoft – to allow business users (like app developers or online sellers) to steer customers to offers or alternative distribution channels outside the gatekeeper's platform, without penalties or restrictions.

Samsung's Texas Fab Reportedly Nears Completion but Delays Loom Amid Rising Costs and Uncertain Demand

As TSMC revealed accumulated losses of over NT\$39.4 billion (approx. US\$1.2 billion) from its Arizona operations over the past four years, attention is turning to Samsung Electronics, which is facing growing uncertainty over its under-construction chip plant in Taylor, Texas. Despite nearing completion, the project is reportedly stuck in limbo as the company hesitates to move forward with the next phase.

According to *ChosunBiz*, Samsung's Taylor fab is now 99.6% complete. At this stage, equipment installation would normally begin. However, industry sources say Samsung has yet to place critical equipment orders, signaling internal indecision over the fab's operational timeline. While the company maintains that the site will begin production in 2026 as planned, sources anticipate that weak market conditions and an unclear demand outlook could result in lower-than-expected revenue, potentially pushing back the plant's activation.

Adding to the pressure are mounting trade and operational costs. Following a US government potential plan to impose tariffs on semiconductor-related imports, Samsung faces a high risk of steep duties on the equipment it will eventually need to bring in. The delayed installation could ultimately translate to higher import costs.

The issue is compounded by a limited pool of skilled workers; visa restrictions have capped the number of Korean engineers Samsung can deploy to the US, forcing the company to rely more heavily on costlier local labor.

One of the biggest cost drivers is advanced lithography equipment. A single EUV machine from ASML costs around US\$350 million, and the potential tariff alone could add in extra cost.

During ASML's most recent earnings call, CFO Roger Dassen acknowledged the potential impact of tariffs on margins but said the company is working with partners to share the burden. Downstream players, such as Samsung, are expected to absorb most of the added costs.

Samsung's situation comes as rival TSMC faces similar financial hurdles in its overseas ventures. According to its latest earnings report, TSMC's Arizona fab recorded a loss of NT\$14.3 billion (approx. US\$440 million) in 2024. Losses were also posted in Japan and Europe, at over NT\$4.3 billion and NT\$500 million, respectively. By contrast, TSMC's Nanjing fab in China generated nearly NT\$26 billion in profit, highlighting the different stages and market dynamics of each site.



DIGITIMES analyst Luke Lin explained that early losses in overseas fabs are typical due to equipment setup, staff training, and testing without revenue. Using TSMC's Nanjing fab as an example, he noted it took three years to become profitable after initial losses of NT\$867 million in 2017 and NT\$8.22 billion in 2018, finally earning NT\$1.29 billion on NT\$18.3 billion in revenue in 2019.

Samsung Electronics announced the Taylor fab plan in November 2021, the company's largest ever in the US. Construction began in early 2022. In June 2024, Texas Governor Greg Abbott inaugurated the Samsung Highway—a US\$16.6 million infrastructure project—underscoring state-level support for the chip industry. The highway serves as a critical access point to the Taylor plant.

The facility is part of a wider national strategy to bolster domestic semiconductor production. Samsung received a US\$6.4 billion federal grant under the Biden administration's CHIPS Act, furthering the goal of increasing the US share of global advanced chip output.

Intel to Announce Plans to Cut Over 20% of Staff

Intel Corp. is poised to announce plans to cut more than 20% of its staff, aiming to eliminate bureaucracy at the struggling chipmaker, according to a person with knowledge of the matter.

The move is part of a bid to streamline management and rebuild an engineering-driven culture, the person said, asking not to be identified because the plans are private. It would be the first major restructuring under new Chief Executive Officer Lip-Bu Tan, who took the helm last month.

The cutbacks follow an effort last year to slash about 15,000 jobs — a round of layoffs announced in August. Intel had 108,900 employees at the end of 2024, down from 124,800 the previous year.

Report No: M-780-25 April 2025



To present the significant changes occurring over the past several years, Bishop & Associates, Inc. announces the release of its newest, technology-based research report on the *World RF Coax Connector Market*. With an academically focused appendix, this 8-chapter, 389-page report examines the way in which advanced technologies and expanded applications have created exceptional growth for the RF coax connector industry. This is further enforced as the report details how the RF coax connectors market is projected to have the second highest growth rate of all connector types, with a CAGR of 9.0%, from 2025F to 2030F.

The report presents past, 2022 & 2023, recent, 2024, and future, 2025F and 2030F sales results and forecasts, plus details on the newest coax connector product developments from the smallest MHF*, to higher frequency 1.35, 0.8-, and 0.6-mm connectors, and industry standards including IEEE-287-2021, MOSA, VITA, and MIL-Spec revisions, with application discussions, and reviews of primary suppliers. The report highlights the importance of miniaturization and higher frequency capabilities, with connectors now operating above 145 GHz.

The report also highlights the significance of international suppliers and standards with an illustrated section on the Next Generation Mobile Networks (NGMN) Alliance of the MQ4/MQ5 cluster connector developed by Huawei for 5G cluster antenna interface.

With the defense industry increasingly adopting mmWave technology for enhanced communication capabilities, the *World RF Coax Connector Market 2025* report shows how the need for higher bandwidth and secure connections with emphasis on SWaPC2 is shaping this industry.

Included in the report is a detailed chapter on the billion-dollar waveguide market, a market that has proven to be essential for high-speed data transmission, communications, and IoT applications, spanning military, aerospace, medical, and industrial sectors. The discussion regarding RF cables and assemblies includes overall market size and new cable technology.



A sampling of the RF coax connector types included in this report is shown below.

Primary RF Family	Connector Series (Family Grouping)
Ultra-Microminiature	U.FL, MHF, MH4, X.FL, K.FL2, UMCC, AMC, UMP
Microminiature	MCX, MMCX, QSL, SuperMini 0.9 mm, MOEBIUS
Subminiature	QMA, SMA, SSMA, SMB, SSMB, SMC, SSMC, SMD, FAKRA, mini-FAKRA, 1.0/2.3, 1.5/3.5, 1.6/5.6
Miniature	BNC/Mini BNC/HD-BNC, UHF/Mini-UHF, MHF, SHV, F, G, 2.2/5
Medium	TNC/RP-TNC, N, QN, HN, ZMA, SMPKey, 4.3/10, 4.1/9.5 Mini-DIN, NEX10, QLI
Large	DIN 7/16, 13/30, L, C, SC, LC, LT
Precision	7mm, 3,5mm, 2.92mm, 2.40mm, 1.85mm, 1.35mm, 1mm, 0.9mm, 0.8mm, 0.6mm
Blindmate	BMA (OSP), BMMA (OSSP), SBMA, BZ, BMZ
Board-to-Board	SMP (GPO), SMPM, SMP3, IMP, MMBX, MBX, SSBB, Compression Types

The level of numerical detail included in this report includes:

2023, 2024, 2025F and 2030F RF Coax Connector Sales by Region With Percent Change and Five-Year CAGR

			Percent		Percent		5-Year
Region	2023	2024	Change	2025F	Change	2030F	CAGR
North America	\$XXX.X	\$XXX.X	YY.Y%	\$XXX.X	-YY.Y%	\$X,XXX.X	YY.Y%
Europe	\$XXX.X	\$XXX.X	-Y.Y%	\$XXX.X	-YY.Y%	\$X,XXX.X	YY.Y%
Japan	\$XXX.X	\$XXX.X	-Y.Y%	\$XXX.X	-YY.Y%	\$XXX.X	YY.Y%
China	\$X,XXX.X	\$X,XXX.X	-YY.Y%	\$XXX.X	-YY.Y%	\$X,XXX.X	YY.Y%
Asia Pacific	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	-YY.Y%	\$XXX.X	YY.Y%
ROW	\$XXX.X	\$XXX.X	-Y.Y%	\$XXX.X	-YY.Y%	\$XXX.X	YY.Y%
Total World	\$X,XXX.X	\$X,XXX.X	-Y.Y%	\$X,XXX.X	-YY.Y%	\$X,XXX.X	YY.Y%

\$ Millions

2023 and 2024F RF Coax Connectors By Region with Percent Change

Due dont Tours	No	orth Ame	rica		Europe			Japan	
Product Type	2023	2024	% Chg.	2023	2024	% Chg.	2023	2024	% Ch
Large Coax									
DIN 7/16 (incl. Low PIM)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
LC/LT, C/SC Series	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Triaxial	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Others & Custom Lrg RF (incl. Sizes 8-12 for Multi-Port), etc.	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Total Large	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Precision Coax									
1.0mm W (110 GHz)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
1.85mm V (65 GHz)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
2.4mm (50 GHz)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
2.9mm (K) (40 GHz)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
3.5 mm	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
7.0 mm / APC-7 (18 GHz)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Proprietary (Custom)	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Other Precision:1.35mm, 0.8mm, 0.6mm, Size 20 Multi-Port, etc	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Total Precision	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Blind-mate Coax									
GPO/SMP/SMPM/SMP3/SMMP Types	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Others, BZ, BMZ, BMA, BMMA, SFB, etc.	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Total Blindmate	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Between Series Adaptors	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Other Adapters, Inline, T, etc.	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Other Special Design	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Yº
Attenuators, Terminations, Dummy Loads, Shorting Caps	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y
Total RF Coax Connectors	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y

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2025F and 2030F Connector Sales by RF Product Family by Region With Five-Year CAGR

RF Product Family	Asia/Pac			ROW			TOTAL		
RF Floudt Family	2025F	2030F	CAGR	2025F	2030F	CAGR	2025F	2030F	CAGR
Ultraminiature Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Board-to-Board Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Microminiature Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Subminiature Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Miniature Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Medium Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
DIN Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Large Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Precision Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Blind-mate Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Accessories, Adaptors, & Customs	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%
Total RF Coax Connectors	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%	\$XX.X	\$XX.X	Y.Y%

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A & P Technology Co., Ltd AIMMET Industrial Co., Ltd Aliner Industries, Inc. **Amphenol Corporation** Anoison Electronics Ltd Anritsu Company

Apex Precision Technology Corp

Automatic Connector **Bel Connectivity**

Bo-Jiang Technology Co., Ltd Cambridge Electronic Industries Ltd

CANARE Electric Co., Ltd

Carlisle Interconnect Technologies, Inc

CeramTec GmbH Coax Connectors Ltd CommScope Inc. Connectronics, Inc

Delta Electronics Manufacturing Corporation

Dynawave, Inc EZ Form Cable Corp

Emerson Network Power Connectivity Solutions

Frontlynk GigaLane Co., Ltd Hirose Electric Co., Ltd **HUBER+SUHNER AG**

IMS Connector Systems GmbH

I-PEX Co., Ltd

ITT Interconnect Solutions (ITT Cannon) JAE - Japan Aviation Electronics Industry, Ltd

MegaPhase, LLC Micro-Coax

Micro Mode Products Inc

Molex Inc

Orient Microwave Corp. Pasternack Enterprises Precision Connector Inc. (PCI)

Radiall S.A. **RF Industries Ltd**

Rosenberger Hochfrequenztechnik GmbH & Co. KG

Samtec, Inc. San-tron, Inc **SGMC Microwave** Signal Microwave, LLC Smiths Interconnect Southwest Microwave, Inc Spectrum Elektrotechnik GmbH

Spinner GmbH TE Connectivity Telegartner Group

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To Order "World RF Coax Connector Market 2025"



Research Report P-780-25, *World RF Coax Connector Market 2025* is available for \$5,525. If you would like additional information about this report, or would like to place an order, please complete the following information, and email or mail it to Bishop & Associates, Inc. To place your order on our website: http://store.bishopinc.com/.

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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 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 F-2024-01	Connector Industry Forecast (June 2024) NEW
Report C-122-24	Connector Industry Yearbook (June 2024) NEW
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 <u>THE BISHOP REPORT</u> (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 <u>Bishopinc.com</u>, to prior issues of The Bishop Report, 30-40 yearly News Briefs, Industry Financial Benchmarks, and various connector industry indices.

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