

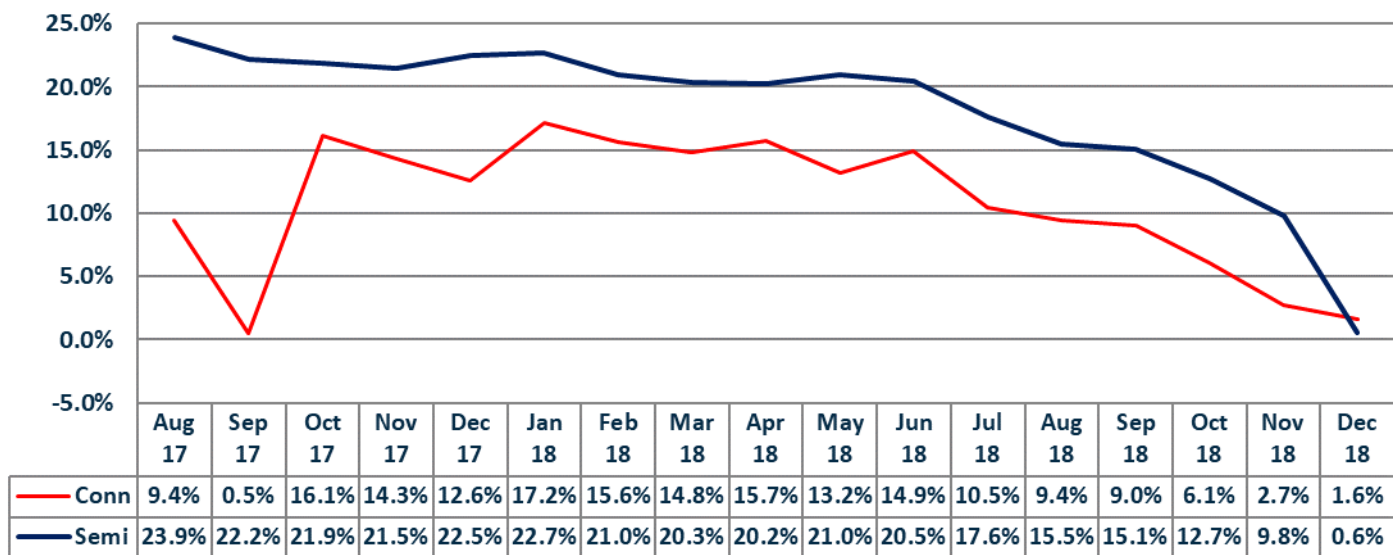
Semi Sales Flat in December

The Semiconductor Industry Association (SIA) reported December sales of \$38.2 billion, up +0.6% from prior year and down -7.0% sequentially. Regionally for December, the SIA reported that China grew +5.8% YOY, Japan grew +2.3%, and Europe grew +2.8%. Asia Pacific/Other contracted -0.7% and the Americas contracted -6.2%. The overall YOY sales growth has slowed for the last eight consecutive months.

The connector industry sales, measured in U.S. dollars, increased +1.6% to prior year and decreased -14.2% sequentially. Regionally for December, YOY sales increased +10.3% in North America, +7.5% in Asia Pacific and +8.7% in ROW. Japan decreased -5.4%, Europe decreased -4.8% and China decreased -1.5%.

The following graph compares semiconductor sales performance to the connector industry.

**Monthly Sales Performance
Year-Over-Year**



- Semis grew for the 29th consecutive month but ended a string 24 consecutive months where Semi growth outperformed Connectors. Connectors have grown for 33 consecutive months.
- Semi sales growth and Connector sales growth continue to tail down due to difficult comparisons to prior year and slowing economic growth worldwide.

The following table displays year-to-date performance, measured in U.S. dollars, by geographic region for both components.

**Sales Performance
2018 Full-Year**

	Semiconductors	Connectors
North America	21.6%	12.2%
Europe	13.7%	14.7%
Japan	10.5%	2.9%
China	22.2%	9.7%
Asia Pacific/Other	7.8%	11.2%
World	16.1%	11.0%

Source SIA & Bishop

Both components sales growth performance tracked more closely in total world sales. On a regional basis, however, performance diverged in North America, Japan and China.

High demand for semiconductors always leads to strong connector sales. Both components had record sales in 2018. and will have strong performance for the full-year 2018. The SIA reported semiconductors growth of +16.1% in 2018 to \$470.3 billion. Bishop reported connector industry growth of +11.0% to \$66.7 billion.

The impact of the various tariffs between the major economies and slowing economic growth had an impact on growth in the last quarter of 2018. Some of the slow-down, however, was certainly due to difficult comparisons to prior year.