

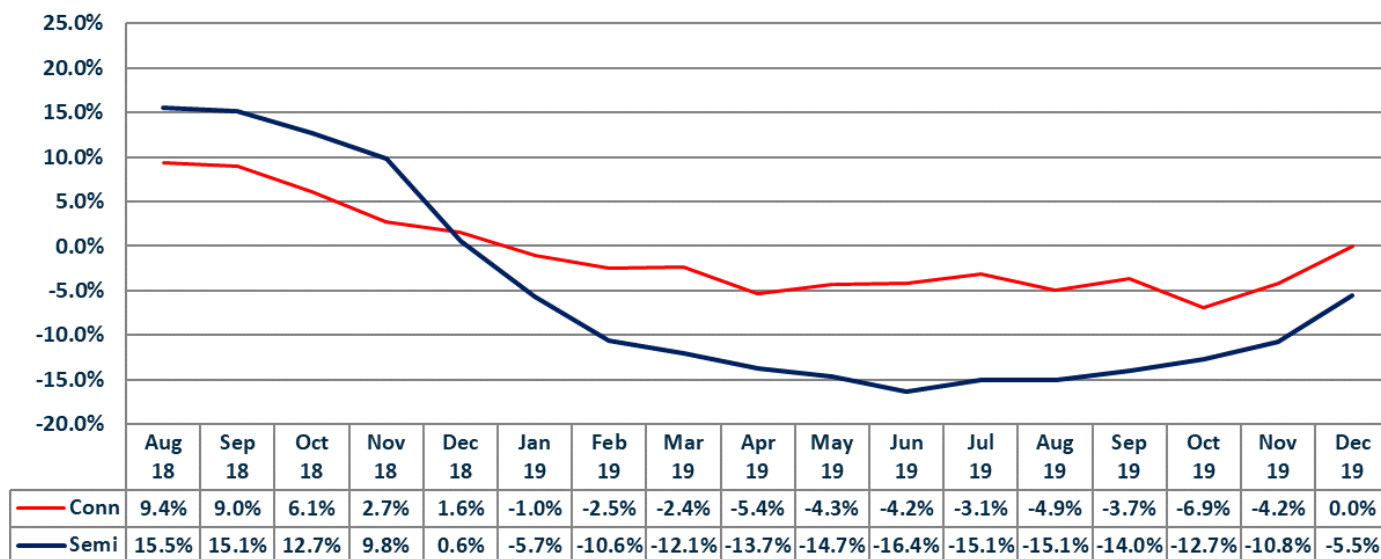
## Semi Sales Contracted -5.5% in December Best YOY Performance Since December 2018

The Semiconductor Industry Association (SIA) reported December sales of \$36.1 billion, down -5.5% from prior year, and down -1.7% sequentially. Regionally for December, the SIA reported that the Americas contracted -10.8% YOY, Japan was down -8.3%, Asia Pacific/Other decreased by -7.5%, Europe was down -7.6%, and China grew +0.8%. This is a marked improvement in YOY performance. Semis finished 2019 down -12.2%.

Connector industry sales, measured in US dollars, was flat to prior year but decreased -11.1% sequentially. Regionally for December, YOY sales increased +1.4% in Japan, +2.7% in Europe, and +1.9% in China. Sales decreased -7.0% in ROW, North America decreased -1.1%, and Asia Pacific decreased -5.2% YOY. This is the first time since December 2018 that connector sales did not contract. Connectors finished 2019 down -3.8%.

The following graph compares semiconductor sales performance to the connector industry since August 2018.

Monthly Sales Performance  
Year-Over-Year



- In December, semi sales contracted for the 12<sup>th</sup> consecutive month but at a slower rate. Connectors sales were flat to the prior year. Connector sales have outperformed semis in the last 13 months.
- Semi and connector sales performance are slowly improving in the YOY comparisons.

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

**Sales Performance  
2019 December YTD**

	<b>Semiconductors</b>	<b>Connectors</b>
<b>North America</b>	<b>-24.4%</b>	<b>0.1%</b>
<b>Europe</b>	<b>-6.5%</b>	<b>-4.0%</b>
<b>Japan</b>	<b>-9.4%</b>	<b>-3.1%</b>
<b>China</b>	<b>-9.4%</b>	<b>-7.0%</b>
<b>Asia Pacific/Other</b>	<b>-8.6%</b>	<b>-2.8%</b>
<b>World</b>	<b>-12.2%</b>	<b>-3.8%</b>

Source SIA & Bishop

Semi sales performance is still trailing connectors, but the separation between them is down to 8.3 percentage points. YTD sales growth in North America is separated by 24.4 percentage points but is improving.

High demand for semiconductors usually leads to strong connector sales, but the opposite has also occurred. Weak semi demand will, historically, result in weak connector demand.

On a positive note, semi sales have had positive sequential growth in four of the last six months. This seems to point to a potential turn-around for the industry.

The various tariffs between the major regions/countries and slowing GDP growth in many of these countries, has had an impact on the worldwide economic growth in 2019. The move by the Federal Reserve and the ECB to hold or reduce interest rates has helped slow the economic contraction. China is taking similar actions. Trade talks between the US and China have born positive results and will help improve economic growth, although we do expect the first quarter of 2020 to have muted results due to the negative impact of the coronavirus in China, and its supply chain to other regions.