

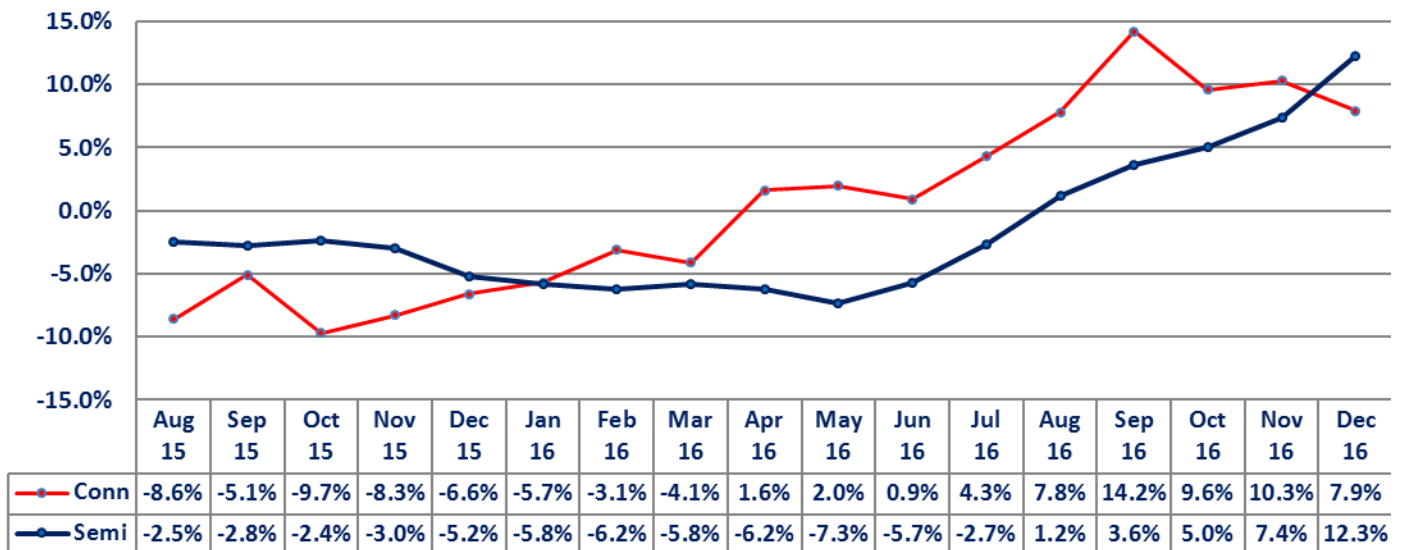
## Semi Sales Increase +12.3% in December Double Digit Growth Returns

The Semiconductor Industry Association (SIA) reported December sales of \$31.0 billion, up +12.3% from December 2015 and flat sequentially from November. Regionally for December, the SIA reported that China grew +20.4% YOY, Japan grew +10.5%, Asia Pacific/Other grew +9.7%, the Americas grew +10.1% and Europe grew +1.3%. For the full-year, industry sales were \$338.9 billion, flat to 2015.

The connector industry sales, measured in U.S. dollars, increased +7.9% to prior year in December and contracted -10.6% sequentially. Regionally for December, YOY sales increased +5.5% in North America, +5.2% in Europe, +17.2% in China, +8.5% in Japan and +9.9% in ROW. Asia Pacific contracted -1.1%. For the full-year, industry sales grew 4.1% to \$54,164 million.

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

Monthly Sales Performance  
Year-Over-Year



- For the first time since January 2016, semiconductors outperformed connectors in YOY growth.
- The YOY growth numbers have been more closely tracking each other since June 2016.

The following table displays full year 2016 results by region..

**Sales Performance  
December Year-To-Date**

	<b>Semiconductors</b>	<b>Connectors</b>
<b>North America</b>	<b>-7.7%</b>	<b>3.1%</b>
<b>Europe</b>	<b>-5.3%</b>	<b>5.4%</b>
<b>Japan</b>	<b>2.2%</b>	<b>-7.8%</b>
<b>China</b>	<b>NA</b>	<b>11.9%</b>
<b>Asia Pacific*</b>	<b>2.0%</b>	<b>-3.4%</b>
<b>World</b>	<b>-0.3%</b>	<b>4.1%</b>

\* Including China for SIA, Source SIA & Bishop

Connectors grew +4.1% in 2016 while Semis declined -0.3%.

Both components are experiencing improved demand. Connectors have achieved nine consecutive months of growth. Semi sales achieved sales increases in the past five months.

December Semi sales were up double digits at +12.3%. This is very encouraging and leads us to believe that 2017 is going to be a growth year. See the January 2017 issue of the Bishop Report for our forecast.