

September 2019

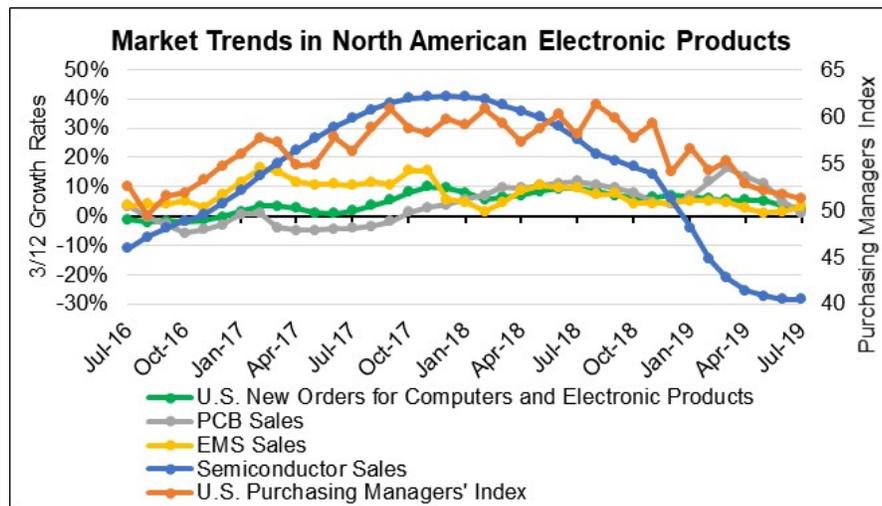
## North American Electronics Industry Slowdown Continues

North American electronics industry growth has been slowing since the beginning of this year but most supplier segments' sales growth through July 2019 remained positive. Sales growth slowed in July for printed circuit board (PCB) fabricators but held steady for electronics manufacturing services (EMS) and semiconductors. Semiconductor sales growth appears to be turning a corner after sinking into negative territory this year. These year-over-year growth rates reflect three-month rolling averages.

The leading indicators remained positive in July 2019 but they too are weakening. The U.S. Purchasing Managers' Index (PMI), which tends to lead industry sales by two to six months, remains positive (above 50). The 3/12 rate of change for U.S. new orders for electronic products, which leads industry sales by one to three months, also weakened slightly but remains in positive territory.

Another leading indicator is IPC's PCB book-to-bill ratio. It is based on three-month rolling averages of orders and sales, and normally leads industry sales by three to nine months. The book-to-bill ratio remained at parity (1.00) in July. The North American PCB industry's growth rates for both sales and orders have been slowing this year. Because orders have slowed more than sales, the book-to-bill ratio has decreased. A ratio at parity suggests that a period of no growth may be on the horizon. Ratios above parity indicate greater demand than supply, which may be a precursor of sales growth for electronics manufacturers, while ratios below parity indicate the reverse. Following some volatility last winter, the PCB book-to-bill ratio has been trending downward since March.

These indicators suggest the likelihood of slowing sales growth for the EMS and PCB segments of the industry in the coming months.



Notes:

1. This information is provided by IPC International, Inc.
2. Other industry data can be found at [www.ipc.org](http://www.ipc.org).
3. Three-month rolling averages smooth out some of the volatility in monthly data to show clearer trends.
4. The U.S. Department of Commerce revised its historical data on U.S. new orders for computers and electronic products, as of May 16, 2019. This graph reflects the revised data.

Sources: IPC statistical programs for the EMS and PCB industries; SIA for semiconductor data; U.S. Census Bureau for U.S. new orders for computer and electronic products; and Institute for Supply Management for the U.S. Purchasing Managers' Index.