

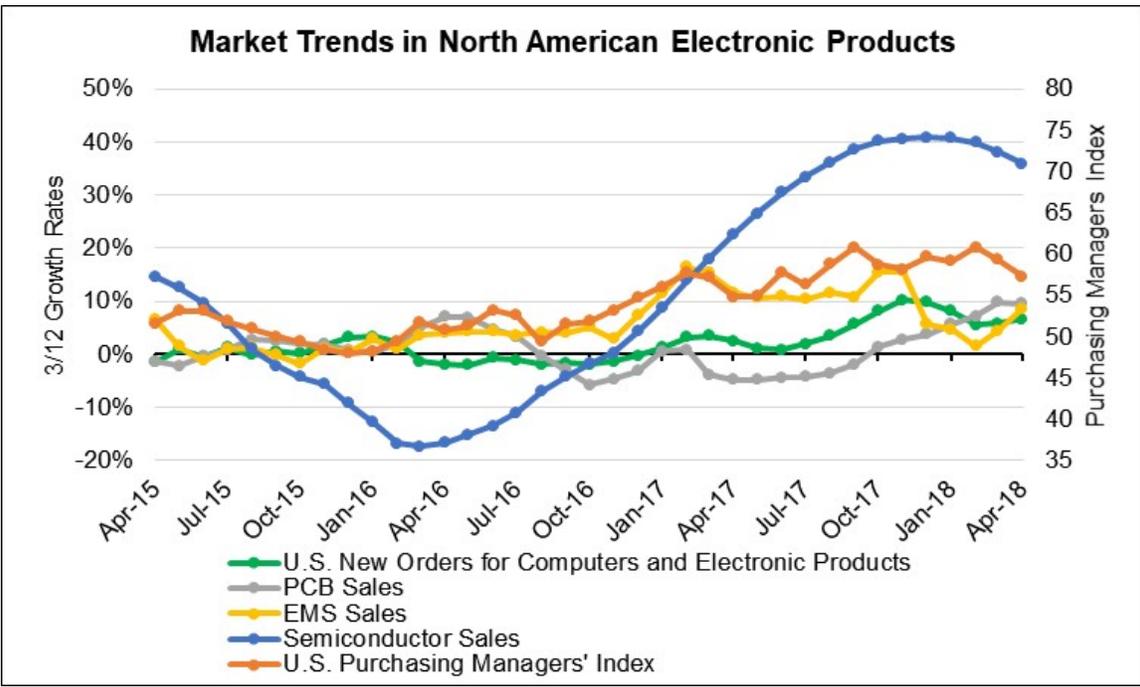
June 2018

**North American Electronics Business Growth Continues**

North American printed circuit board (PCB), electronics manufacturing services (EMS) and semiconductor sales growth continued in April 2018. The PCB growth rate held steady, remaining at around 10 percent above the same period last year. The EMS growth rate rebounded after slowing in the first quarter of 2018. Semiconductor sales growth remains strong but continues to retreat from its fourth-quarter 2017 peak. These year-over-year growth rates are based on three-month rolling averages.

The U.S. Purchasing Managers' Index (PMI), which tends to lead industry sales by two to six months, decreased but remained strong in April. It has been in positive territory (above 50) for more than two years. The 3/12 rate of change for U.S. new orders for electronic products, which leads industry sales by one to three months, continues to increase and remains strong.

Another leading indicator, IPC's PCB book-to-bill ratio, is based on three-month rolling averages of orders and sales, and normally leads industry sales by three to nine months. The ratio has been in positive territory for the past 15 consecutive months, driven mainly by growth in orders. The book-to-bill ratio continued to retreat following a 12-year high in early 2018, but remains strong at 1.08. Ratios above parity (1.00) indicate greater demand than supply, which may be a precursor of sales growth for electronics manufacturers, especially when a run of positive ratios over several months is seen. These indicators suggest the likelihood of continued sales growth in the industry in 2018.



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 and issued new data on May 17, 2018. The graph above 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.