

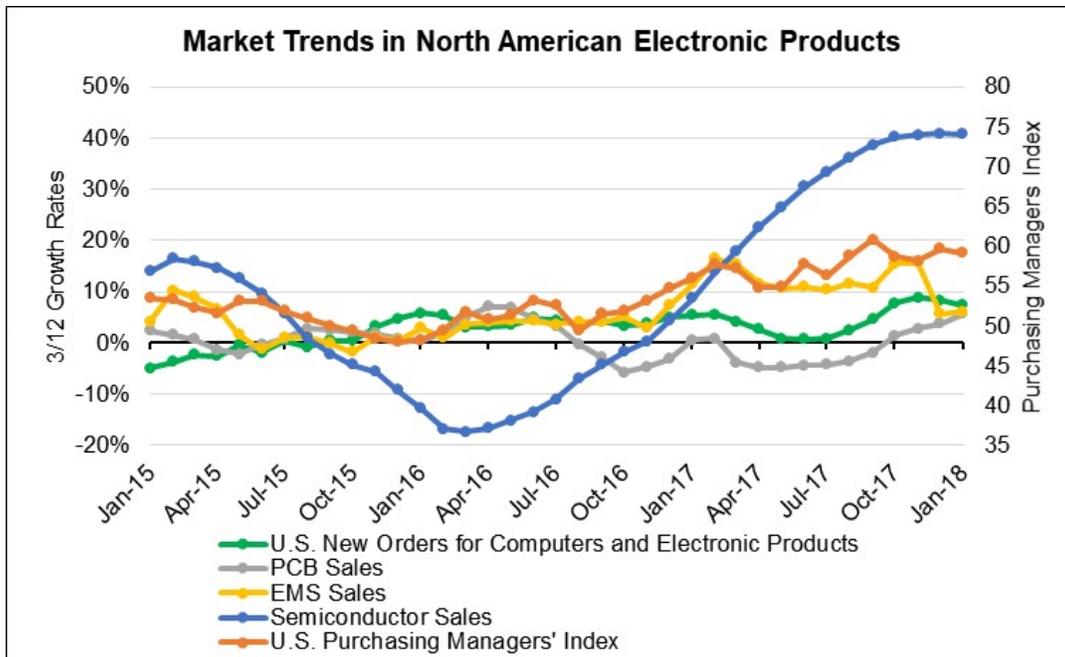
March 2018

North American Electronics Business Off to a Strong Start in 2018

The new year started on a high note as sales in three industry segments and three leading indicators posted strong results in January 2018. Based on three-month rolling averages, North American sales of semiconductors, electronics manufacturing services (EMS) and printed circuit boards (PCBs) in January 2018 continued to outperform the previous year. Year-on-year sales growth in the semiconductor and EMS sectors held steady, while PCB sales growth continued to climb.

The U.S. Purchasing Managers' Index (PMI), which tends to lead industry sales by two to six months, retreated slightly in January but remained strong. It has been trending upward over the past year and has been in positive territory (above 50) for 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, also slipped by bit but remains strong. It has been strengthening since mid-2017.

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 12 consecutive months, driven mainly by growth in orders. The book-to-bill ratio climbed to a 12-year high of 1.16 in January 2018. 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 sales growth in the industry in early 2018, but with some volatility.



Notes:

1. Three-month rolling averages iron out some of the volatility in monthly data to show clearer trends.
2. This information is provided by IPC — Association Connecting Electronics Industries®.
3. Other industry data can be found at www.ipc.org.
4. The U.S. Department of Commerce revised its historical data on U.S. new orders and issued new data on May 18, 2017. The graph above reflects the revised data, showing that U.S. new orders have been positive for the past twenty months.
5. IPC's EMS and PCB 3/12 rate-of-change data going back to March 2017 have been updated as of July 2017.

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.