

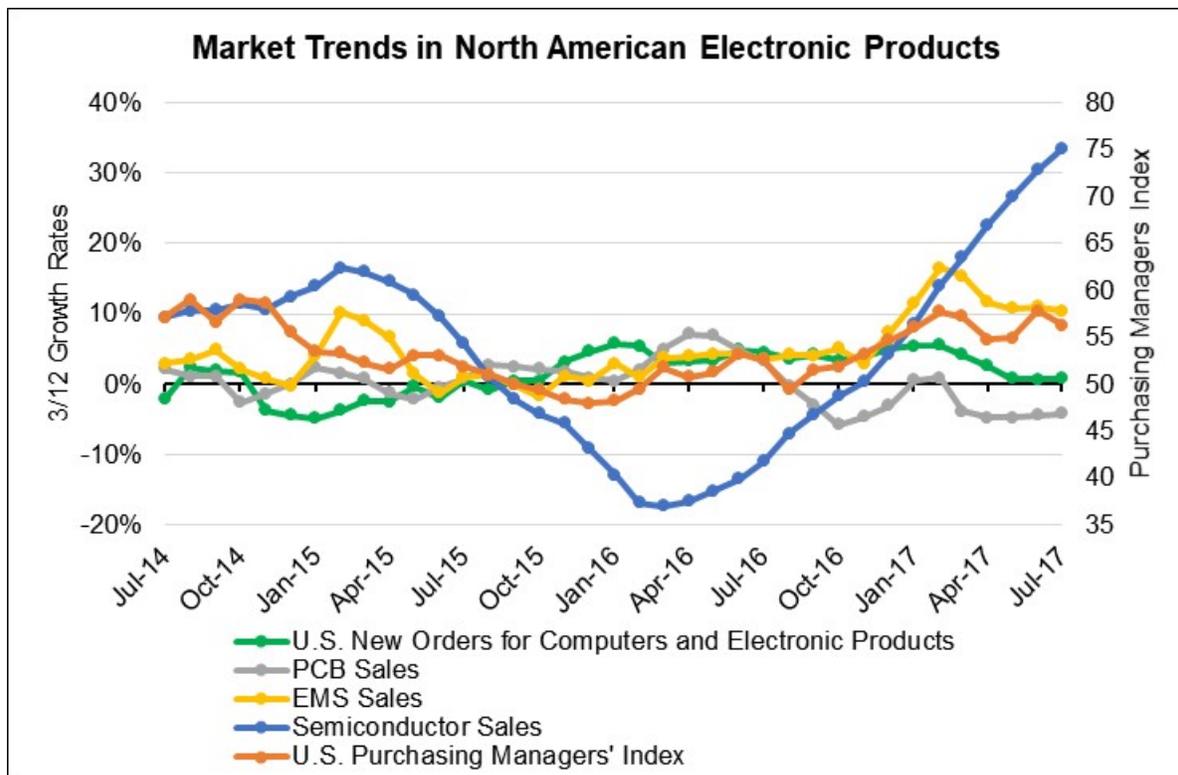
September 2017

## North American Electronics Business Growth Continues

Based on three-month rolling averages, year-on-year growth in North American semiconductor sales continued its upward climb in July 2017. Year-on-year growth in sales by electronics manufacturing services (EMS) companies remained strong, while printed circuit board (PCB) sales continued below last year's levels.

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 continued just barely in positive territory.

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 six consecutive months and rose to 1.09 in July 2017, driven by growth in orders and weak sales. Ratios above parity (1.00) indicate greater demand than supply, which may be a precursor of sales growth for electronics manufacturers. These indicators suggest the likelihood of sales growth in the industry this year, 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](http://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.