BANNOCKBURN, IL — Printed circuit board shipments by North American fabricators fell 3.5% in November and orders plunged 9.9% from last year.

Year to date, shipments were down 4.3% and bookings were off 1.9% through November. Shipments fell 4.2% and bookings decreased 1.3% sequentially. The book-to-bill ratio declined 20 basis points to 0.93. It was the second straight month the ratio was below the benchmark 1.0 level after 10 straight months in positive territory.

The ratio is calculated by dividing the value of orders booked over the past three months by the value of sales billed during the same period from companies in IPC's survey sample. A ratio of more than 1.0 suggests that current demand is ahead of supply, which is a positive indicator for sales growth over the next two to three months.

For the month, rigid PCB shipments were down 5.4% year-over-year and bookings fell 8.7%. Year to date, rigid shipments declined 4.5% and bookings decreased 0.9%. Sequentially, rigid shipments were down 5.6% and rigid bookings fell 2.1%. The rigid book-to-bill ratio fell 30 basis points to 0.95.

Flexible circuit shipments in November were up 18% but bookings fell 21.6% from last November. Year to date, flexible circuit shipments decreased 2.2% and bookings decreased 11.5%. Compared to the previous month, flexible circuit shipments increased 10.2 percent and flex bookings were up 9.9%. The North American flex circuit book-to-bill ratio was flat at 0.74.

"Once again, the bright spot in North American PCB sales was in the flexible circuit segment," said Sharon Starr, IPC director of market research. "Orders were weak in both rigid and flex segments of the industry, however, putting downward pressure on the book-to-bill ratio. Lower bookings portend a slow first quarter in 2013."

Rigid PCBs represent an estimated 90% of the PCB industry in North America, according to IPC.

Some 84% of the PCB shipments reported were domestically produced, meaning 16% were built offshore and imported for sale to North America. About 51% of the flex circuit revenues were from assembly and related post-fabrication production.