The Changing Chain

By Mike Buetow **Sunday, 01 April 2007**

MONEY MATTERS

Global Sourcing

Bare board distributors are usurping traditional supply lines.

The March announcement of the closing of Photocircuits was significant in that it marked the demise of the last major homegrown North American board shop. Yes, it had been years since Photocircuits was the largest of the large, and yes, sales had fallen to less than $150 million from a high of more than $400 million in 2000. But its fall from the top symbolized more than just another story of a once mighty board shop going under. It also marked the official changing of the guard, as North America transitions from a region that makes as much as it buys to one where service and support have overtaken production as the primary bare board revenue model.

Today, the domestic PWB market is shaped like a pyramid, with a handful of large companies at the top and a lot of little ones at the bottom. TTM is now the largest onshore producer, followed by Merix, DDi, Sanmina-SCI and Endicott Interconnect. Those five, for now, are the only ones left producing in excess of $100 million worth of boards onshore each year. The bulk of manufacturers- more than 90% - have sales under $5 million a year.

Stepping into the middle class is a newer breed of service companies: bare board distributors. These specialized brokers are distinct from their larger component-supplying cousins by several orders of magnitude. (Avnet, the largest electronics distributor, has annual sales over $14 billion, while the largest board distributors have annualized sales of less than $30 million.)

Based on *Circuits Assembly* research, the PWB distribution industry can be segmented into three tiers. Tier one distributors are characterized by dozens of clients and multiple PCB suppliers (**Table 1**). They broker more than $1 million worth of PWBs per month, with the largest now around twice that. Most have grown organically. Three of them - P.D. Circuits, Epec PCB and MWave were founded as bare board fabricators, and over time evolved into more pure-play distribution models. (One of the country's oldest board shops, Epec today is actually the sum of mergers and acquisitions of at least four PCB shops, most recently Tingstol Co., in January.)

Table 1. Tier One PWB Distributors
Bare Board Group
Epec/Tingstol
MWave
PD Circuits

These companies are, for the most part, aggressively expanding their operations, adding staff and even full -fledged offices in Southeast Asia to help ensure quality and delivery from their primary offshore suppliers. Many top and middle tier EMS companies, and hundreds of OEMs, are opting to source from these distributors.

Tier two firms are characterized by a handful of clients and suppliers, or dozens of clients but a single PCB supplier, or no dedicated PCB broker (**Table 2**). Many of these companies are branching into EMS services and other non-electronics components. Among them: Electronic Components Marketing Group represents U.K.-based Circatex plus a pair of Chinese PWB companies, Shenzhen Shennan Circuits Co., and Ellington Electronics Technology Co. Staci offers everything from boards to EMS services to castings. Westwood Associates and Nypac, on the other hand, sell exclusively for Nanya PCB, a top 10 global PWB fabricator.

Table 2. Tier Two PWB Distributors
Electronic Components Marketing Group
Nypac
Staci
Universal Sales
Westwood Associates

Tier three is made up of PWB fabricators also offering brokered boards. Most North American Shops today offer some degree of offshore services. In many cases, their brokered revenues are eclipsing their actual production.

Despite the overall growth, however, brokering is no slam dunk. Just like manufacturing, companies come and go. And while top brokers like Bare Board Group and P.D. Circuits are going gangbusters, whether they will grow to the size of Photocircuits in its heyday remains years away, if ever.

References

1. Dr. Hayao Nakahara, "The Big Get Bigger," Printed Circuit Design & Manufacture, September 2006.

Mike Buetow is editor-in-chief of Circuits Assembly; mbuetow@upmediagroup.com.