

## Offshore Woes? Cut 'Em Down to Size

2001 was a harsh reminder of the importance of choosing – and staying with – a niche.



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**SOMEONE ASKED RECENTLY**, “What type of board business does North America do better than anyone else?” After some thought, my response is, Deliver high-tech product very quickly. No one does it better. The companies that can do this consistently are the companies that thrive, even in a down economy, even one in freefall like last year’s.

Believe it or not, some board shops were profitable last year. Some even grew. One I know of doubled its revenue. What they have in common: They deliver high-tech boards on time, just about every time. The type of shop I’m referring to has an on-time delivery performance of over 97% for quickturn-prototype jobs, as in five days or less, usually in 24 to 72 hours. And the technologies they deliver border on the remarkable: high-layer-count controlled impedance, HDI, microvia, flex, rigid-flex, DUT (design under test).

These shops have something that every board shop, in fact, every company, should have – a niche! In fact, it’s how they differentiate themselves. They know exactly the business they are in, they have developed a strategy for it, and they never deviate. No matter how much they are pressured to build other types of jobs, or to perform volume runs, they never do, because it would be contrary to their niche strategies.

Quickturn-prototype fabricators that don’t stray from their strategy are almost impervious to supply-chain problems in economies like those of 2001. One reason: Companies don’t carry inventories on prototypes. Instead, the boards are typically produced as fast as they are needed. Don’t misconstrue me: Some of these shops will suffer a downturn, but even so it will be a fraction of what the rest of the industry feels. A shop I know saw its business decline less than 10% last year, and it remained profitable – not bad, considering the broader market nose-dived at more than three times that rate. The reason they are able to turn profits owes to the fact that not many companies can deliver on this model. It takes good equipment, training, and top management to build an 18-layer board with blind and buried vias in 72 hours. It takes even more to do it every day.

Moreover, this is a niche that is insusceptible to offshore competition. Companies want their new, low-volume boards built close to home. New technology man-

dates proximity; being close enough to visit means knowing whether their designs are manufactured properly and can reveal specific improvements for better designs. Indeed, as more and more customers have closed their internal R&D ops, they have turned to high-end quickturn-prototype shops to fill the void. This business will not go offshore.

Another reason why these board shops are growing is because quickturn quantities are increasing. Nowadays, it is not uncommon for a quickturn order to consist of several hundred boards, a big improvement on orders of several boards from a few years ago. This means hundreds of

**It takes training, equipment, and management to turn an 18-layer board in 72 hours, every day. AND OEMS DON’T CARRY INVENTORIES ON PROTOTYPES, thus limiting QT prototype shops’ exposure to supply chain problems.**

boards at premium pricing. I believe this trend will continue, helping these fabricators grow and become even more profitable.

We’ve already seen quickturn-prototype runs ranging from five to 50 pieces increase to a series of pilot runs with quantities ranging from 25 to 100, and on to pre-production runs with quantities in the hundreds. This process can repeat itself several times before the part number is shipped off to the volume world, which is susceptible to pricing wars and offshore competition.

This type of work is what the U.S. is known for, and I believe the quickturn-prototype business will stay on this side of the ocean for many years to come. Until we can start “beaming” boards around the world, it’s just too tough for offshore companies to deliver in 48 hours.

Until next month ... good selling. ○

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