PCB Assembly – Doing Business Online and Out-of-State

It goes without saying that Silicon Valley is a worldwide hotspot for Printed Circuit Board (PCB) assembly and production, but how can out-of-state manufacturers achieve results as quickly and reliably as California's West Coast tech companies?

As early as a few years ago, long shipping and testing times forced manufacturers to rely on local suppliers, but this is no longer the case. The best PCB assembly companies can produce and ship circuit boards within 24 hours and then send them out using overnight shipping, putting valuable services in the hands of manufacturing concerns around the country.

Working this way, manufacturers can enjoy world-class PCB design and assembly services from engineering teams with valuable first-hand experience working in aerospace, consumer electronics, military hardware, and more.

Reliable PCB Assembly is Key

Before delving into which shipping options are best-suited to the PCB prototyping process, it is important that we underline the importance of prototype reliability.

When dealing with out-of-state clients, PCB assembly companies are hard-pressed to deliver results that are markedly more consistent than those of local providers. Although shipping providers can send delicate electronics safely across state lines using overnight shipping, the manufacturer must be able to trust the quality of the PCB prototype upon arrival.

If, for instance, an electronics manufacturer does not provide adequate manufacturability guidelines, there is a chance that the resulting PCBs may not hold up to testing. If the boards need to be sent back, reworked, and then sent again to their original intended destination, per-unit shipping costs will rise considerably.

For this reason, working with a trusted PCB assembly company is of utmost importance. Since most PCB assembly companies operate under non-disclosure agreements that prevent prospective clients from determining who their other clients are, referrals to reputable prototype assemblers are incredibly valuable.

PCB Logistics and Communication

When it comes to choosing a shipping provider for out-of-state PCB prototype delivery, there are two well-known shipping providers that stand out:

• FedEx offers multiple overnight shipping options. Manufacturers can ensure delivery by 10:30 AM to most US addresses, or pay a reduced rate and have their boards arrive by 3:00 PM.

• UPS has the largest fleet of overnight cargo planes running in the United States. The company can ensure delivery by 8:00 AM, 10:30 AM, and 3:00 PM to almost any address in the country.

With well-designed, high quality PCBs shipped by either of these two companies, manufacturers across the country can enjoy access to the world's best assembly companies. While most manufacturers are used to sending design specifications by email, fully-featured communication applications like Skype and Slack are typically more useful in these circumstances.

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[Slack](#), in particular, creates a shared workspace for communication between individuals in both assembly and manufacturing. The platform offers members automatic updates from *Slack Bots* – which can include shipping confirmation from FedEx and UPS.

Using this tool, a PCB manufacturer's engineering team can immediately know when their expected shipment of PCBs arrives, and share [feedback](#) with the PCB assembly team in real-time. It creates a workflow as streamlined as working with a local supplier would.