

Component Coverage in SMT Assembly

PCB assemblers typically offer multiple types of services for assembling printed circuit boards. For instance, Xingda Hongye offers full turnkey, partial turnkey, and consignment services. If you opt for the full turnkey service, then Xingda Hongye will purchase components, including part overages. Alternatively, if you select a consignment service, then you're agreeing to submit all the components yourself and take on the responsibility of providing enough extra parts.

Commissioning a PCB assembler to build your prototype boards is an efficient way to save time and money, as well as avoid frustration. However, it's crucial to take component overages into consideration to ensure your project is delivered on-time. This means you must purchase additional parts to account for any losses that occur, especially with smaller components such as 0402, and 0201-sized capacitors, resistors and inductors.

Why are extra components needed? Recall that surface-mount components are much smaller than their through-hole counterparts. For example, 0201-sized components, which are among the smallest, measure a mere 0.024×0.012 in. (0.6×0.3 mm); they are practically invisible. Although surface-mount technology is very accurate, parts get lost during mount/dismount from the feeder.



0201-sized component

You can hardly see 0201-sized components, for this reason, it is important to familiarize yourself with the specific overage guidelines outlined by your assembly partner, which includes the recommended number of extra components and correct shipping package procedures. Please note, each assembler requires a different amount of overage depending on its equipment and/or capabilities.

Assemblers will typically request that parts are packaged in reels, tapes, tubes, or trays; again, this depends on individual contractors and the capabilities of their surface-mount pick-and-place machines. For example, Xingda Hongye accepts loose IC parts and passives in continuous cut tape instead of requiring customers to purchase entire part reels for low-volume orders.

Lastly, the best practice for shipping electrical parts is to use antistatic packaging to prevent electrostatic discharge (ESD) from burning out the components. Also, it is a good practice to put your purchase order number in a visible location and provide special handling instructions if there are any (for example, "parts cannot be washed in an aqueous cleaner.") All these details and more should be available on your assembler's website.

About Xingda hongye P.C.B. Co., Ltd.

Xingda hongye P.C.B. Co., Ltd. is an excellent printed circuit board manufacturer, focusing on quick-turn and technologically advanced PCBs, quick-turn assemblies and heavy copper pcb and rigid & flex pcb. xingda

hongye stands for time-to-market, representing how xingda hongye's time-critical, one-stop manufacturing services enable customers to shorten the time required to develop new products and bring them to market. Additional information can be found at www.xingdapcbs.com.

Contact:

Bill

Senior marketing manager

Taking the necessary steps to abide by overage guidelines and packaging requirements will ensure that your quick-turn PCB assembly order is completed in the shortest time possible and with the highest quality.