

Customer Supplied Material Guide

Shipping Guidelines:

- Multiple kits may be shipped at one time, but they must be separated and labeled accordingly.
 - Kits that are not separated are subject to additional kitting and labeling fees to separate the materials.
- Packing list must include a TouchPad order confirmation number, TouchPad quote number, or TouchPad issued Material order number to reference. It is also
 preferable to have your TPE Project Manager as "Attention to" on packing list.
 - Materials should have accurate quantities and if available unit prices for each component for value tracking purposes internally.
 - o If materials are shipped without any proper identification, the shipment may be rejected or placed on hold.
- Upon shipment of materials, provide tracking to your assigned project manager.
- Inspection and Kitting of supplied materials will not begin until all materials have been received.
- The shipment plan for material shall be communicated.
 - A lack of a shipment plan will prevent your project from being scheduled.

Packaging Requirements:

- Parts must be adequately packed to prevent damage during shipping, and in-plant handling.
- MSL Components must be packaged per the manufacturer's requirements.
 - Accurate records must be kept of exposure times.
 - Components shall have enough working life remaining to build the project.
 - Components that are expired or have a failed humidity indicator card will be subject to a bake cycle to bring back into compliance. This will result in project delays and a fee for the baking process.
 - Packages must be accompanied by a desiccant pack and humidity indicator card.
- Thru-hole components and hardware may be supplied in bulk.
 - o Components that are susceptible to damage should be packaged in a way to prevent damage.
- Surface mount components must be supplied in the following carriers:
 - Cut strips must be continuous.
 - o Full reels
 - o Tubes, Trays
- All components shall be supplied in full in the minimum quantity of carriers required. Partials of bulk bags, reels, cut strips, tubes, or trays will incur additional
 inspection and setup fees.
- Surface mount components that are supplied in bulk may be rejected or incur fees to properly place in carriers.
 - o Delays in the project due to improper packaging may occur.

FAB Requirements:

- Panelized files from the fab (PCB) Manufacture are provided and panel layout considers overhanging components.
- Rails at least 12.7mm wide with fiducial markings present that are 4.8mm from edge of the rail in the X and Y dimension.
- TouchPad Electronics requires that all panel designs be submitted and approved as manufacturable prior to order acceptance.

Component Identification Labeling:

- Labeling requirements:
 - Machine readable:
 - 1D or 2D Barcode containing the manufacture part number.
 - o Human readable:
 - Manufacture Name
 - Manufacture Part Number
 - Quantity
- Other labeling requirements if applicable:
 - Customer part number
 - Reference designators
 - Part description
 - o TPE BOM export line number from time of quote.

Inventoried Materials

- Materials will not be placed into TouchPad's inventory system without prior agreement.
- Materials that are not stored in our inventory system will be returned upon completion of the project.
- If a final count is required after use of materials, prior to returning, a fee will be incurred.
 - o A final recount of materials shall be communicated at the time of the quote request.

Attrition Rates:

- 0402 or smaller: 35% or minimum 100pc, whichever is larger.
- 0603 or larger: 10%, or minimum 50pc, whichever is larger.
- High Cost (\$1+/pc): 5% or 5pc, whichever is larger.
- All cut strips should be no less than 4in in length.