



Guideline Document for Component Contingency Supply

Sage Electcon

Your Quality Partner in Electronics Construction & Consulting

Component Contingency Guidelines

for

PCB Assembly Manufacturing

1. Component Supply Contingency Guidelines:

- 1.1 Due to the nature of placing many small components in an automated process, a small number of components are lost due to setting up (we need about 10mm of leading section on the tape)
- 1.2 During placement, the machines will also reject components due to any of the following:
 - 1.2.1 Component size differs by more than 0.3mm (malformed, incomplete component, cracked ceramic or encapsulation, etc).
 - 1.2.2 Component plating corroded, not sufficient or contains voids.
 - 1.2.3 Component pins bent / damaged.
 - 1.2.4 Mispicks due to sticky or damaged tape.
 - 1.2.5 Various other less common reasons.
- 1.3 These contingency guidelines are based on what is necessary to ensure that the required/ordered quantity of boards can be completed for final delivery without shortages.
- 1.4 Therefore, we recommend the following component contingency quantities:
 - 1.4.1 +/- 50pcs on 0201 etc
 - 1.4.2 +/- 20pcs on 0402, SOD323 etc
 - 1.4.3 +/- 15pcs on 0603 etc
 - 1.4.4 +/- 8pcs on 0805, SOT23 etc
 - 1.4.5 +/- 3pcs on 1206 and anything bigger
 - 1.4.6 Components bigger than 6x6mm: 1pcs extra is fine
 - 1.4.7 Through-hole components: 1pcs extra is fine
 - 1.4.8 Expensive Items: Exact quantity is fine

2. Preferred Packaging for Components

- 2.1 We prefer all components in Reel or Cut-Tape where possible.
- 2.2 For ICs, broken up trays are also welcome.
- 2.3 Try to stay away from Tube / Stick where possible, but if only Tube / Stick packaging is available during procurement, then please proceed. We can place components out of a Tube / Stick, but it is not preferred.

Process Engineer:

Nico vd Merwe – For any questions please contact me at 0827528457 or sage.electcon@gmail.com