


Change History			
Rev	Date	Description of changes	ECN #
-	11/18/16	As Issued	N/A
A	2/28/2018	Updated for 603 Manufacturing Requirements	N/A
B	1/28/2020	Reformatted for internet display	N/A
C	1/12/2022	Updated internet links to Counterfeit Parts and Conflict Minerals policies	N/A
D	6/8/2022	Added AS9100D regulatory authorities and supply chain terminology to Section 5. Changed retention from 7 to 10 years based on revised customer requirements in Section 6.	N/A
Approval Signatures			
Approval		Signature	Date
Lisa Davidson			6/8/2022

In the contract manufacturing electronics industry, the quality and reliability of any product is highly dependent upon the capabilities of the manufacturing suppliers. 603 Manufacturing relies on our suppliers to provide product that meets or exceeds the expectations outlined below. Generally speaking failure to comply with the items outlined on this document or specified drawings and/or purchase is risk of rejection of partial or entire lot.

1. Acceptance of PO

By accepting this PO the supplier has agreed to all of the terms and conditions listed in the QF106 document herein. Any required exceptions to the purchase order and/or documentation provided with the purchase order must be addressed with 603 Manufacturing prior to acceptance of the PO.

2. Delivery of Goods

No packages will be accepted that are delivered more than 1 week in advance of the due date unless authorized by 603 Manufacturing personnel. Do not insure any shipments unless instructed to do so by a 603 Manufacturing representative.

3. Quality Management System (QMS)

Supplier shall maintain a QMS which conforms to the requirements of AS9100 or ISO 9001 or equivalent. If the supplier has not been certified to AS9100 or ISO9001 it is still expected to have a QMS which meets the requirements of this standard where it relates to items being supplied.

4. Flow Down

The supplier shall ensure that all applicable requirements of the Purchase Order, documents/drawings and quality requirements are flowed down to sub-tier suppliers and continuing to all of their sub-tier suppliers if applicable.

5. Right of Access

603 Manufacturing, its customers and regulatory authorities reserve the right to visit, audit and inspect the applicable manufacturing areas and applicable documented information where product is being built on our behalf as well as audit and inspect documentation within all levels of the supply chain.

6. Document Retention

603 Manufacturing requires that the supplier is to retain all documentation associated with our purchase order for a minimum of 10 years unless otherwise specified. The data/records shall remain legible, readily identifiable, and retrievable for review during reasonable business hours. The supplier shall provide advanced notice to 603 Manufacturing regarding the intent to destroy any records prior to the end of the specified record retention period.

7. Counterfeit Parts

This purchase order is subject to the specifications, terms and conditions stipulated and/or referenced by 603 Manufacturing's *Supplier Counterfeit Parts Prevention Agreement* located at:

https://603manufacturing.com/wp-content/uploads/2022/01/QF015-Counterfeit_Parts_Prevention_Clause-Purchased_Parts.pdf

8. Conflict Minerals

This purchase order is subject to the specifications, terms and conditions stipulated and/or referenced by 603 Manufacturing's *Conflict Minerals Policy Statement* located at:

https://603manufacturing.com/wp-content/uploads/2022/01/QF0153-Conflict_Minerals_Policy_Statement-1.pdf

9. Build to Print and Custom Products

9.1. Notification of changes

The supplier must notify 603 Manufacturing for any major organizational changes, changes to processes, products or services, including changes of the suppliers' external providers or location of manufacture, and obtain our approval prior to acceptance of our purchase order. If any changes have occurred after PO acceptance notification and approval is required prior to shipment.

9.2. Acceptance of Printed Circuit Boards [IPC-A-600]

Acceptance of Printed Circuit Boards received from suppliers will be associated with these guidelines. Any missing or incomplete documentation or failure to meet purchase order or IPC-A-600 (current revision) as well as IPC-6012 specification could be cause for rejection of partial or entire lot.

- Boards to be manufactured per IPC-6012 Class (as defined on the purchase order), unless otherwise specified Class II.
- Boards to be inspected and accepted per IPC-A-600 Class (as defined on the purchase order), unless otherwise specified Class II.
- Circuit boards should be accompanied by the following documents:
 - o Material Certificates (materials used in the manufacturing of the finished product)
 - o Evidence of Inspection and/or Testing
 - o Proof cross section analysis was completed, photograph or actual cross section acceptable.
 - o XRF or acceptable means of providing surface plating thickness.
- Boards to have the manufactures identification or logo.
- Boards to have date code
- Boards rails must contain the Purchas Order Number, Part Number and Revision, as stated on the Purchase Order.
- Boards to meet UL 94-V0 certification

9.3. Acceptance of Printed Circuit Assemblies [IPC-A-610]

Acceptance of Printed Circuit Assemblies received from suppliers will be associated with these guidelines. Any missing or incomplete documentation or failure to meet purchase order or IPC-A-610 (current revision) as well as J-STD-001 specification (if instructed on the purchase order) could be cause for rejection of partial or entire lot.

- Boards to be assembled per IPC-A-610 current revision, Class (as defined on the purchase order), unless otherwise specified Class 2.
- Soldering process in conjunction with J-STD-001 process guidelines, unless otherwise specified Class II.
- Certificate of Compliance for each shipment.
- If electrically tested and electrical test certificate is required.
- It is expected that the supplier has a full understanding of the assembly when generating the process, 603 Manufacturing will flag known process concerns but fully expects the contracted service to expert to provide sufficient review.

9.3.1.PCB panel layout and associated guidelines

The following guidelines are meant to enhance, clarify or identify the most practical panel layout both economical and point of use. It is expected the PCB will be analyzed enough to understand locations where components are too close to the edges and or actually overhang where v-score would not be practical. The following elements should be monitored to avoid complication during and after assembly.

Guidelines:

- Panelized stencil data needs to be sent to our Documentation group minimum 24 hours before order placement.
- All Customer specification will supersede these guidelines.
- These guidelines are meant to aid our customers or complement the customer's specific information if necessary.
- One solder sample and certificate of compliance is required with each manufacturing lot.
- All orders should be packaged and ship in such a way to protect the PCB during transit.
- PCB should be packaged to control moisture and preserve the surface finish.
- Packaging should be completed without the use of Styrofoam peanuts.
- All requested deviation should be forwarded to the appropriate buyer at 603 Manufacturing.
- For more in depth guidelines on panel design and the direct effect of the PCB design see 603 Manufacturing's document (QI051) **Panel Design Guidelines**.

ALLOWANCE:

No more than one for panels of five or less circuits.

No more than two or one per row on panels of 6-10.

Any more than 3 x-outs per panel array needs to root cause analysis to determine the remaining boards are not outside tolerances specified in IPC-6012.

X-out panels shall not exceed 3% of the purchase order quantity without authorization.

MARKING:

X-outs will be marked on both sides with a large X in permanent black ink on both sides. SMT fiducials shall be removed from defective PCB's to mitigate the potential unintended use of the non-conforming product.

PACKAGING:

X-outs shall be segregated from panels without X-outs and packaged in separately so that are clearly identifiable as product with X-outs.

9.4. Acceptance of Plastics

Acceptance of procured plastic products must be accompanied by the following documents as a minimum.

- Material certificates of all of the materials used to fabricate the finished product.
- Dimensional report indicating the lot manufactured meets the data as presented. A dimensional report should accompany each new lot manufactured and the lot and date should be clearly identifiable on the document.

9.5. Acceptance of Fabricated Metal

Acceptance of procured metal products must be accompanied by the following documents as a minimum.

- Material certificates of all of the materials used to fabricate the finished product.
- Dimensional report indicating the lot manufactured meets the data as presented. A dimensional report should accompany each new lot manufactured and the lot and date should be clearly identifiable on the document.
- Plating certificate of compliance if the base metal is coated/covered by any additional material.
- XFR report stating the thickness of the outer coating/covered material.

10. Suppliers & Supplier's Employees

603 Manufacturing's suppliers are a critical part of our success. To supply top quality products and services responsibly, we require that our suppliers and their employees will:

- Maintain a high standard of ethical conduct
- Comply with all laws and regulations applicable to your operation of business
- Understand their contribution to product safety
- Understand their contribution to product or service conformity

603 Manufacturing reserves the right to request evidence to the above requirements.

11. Statistical Techniques

The use of statistical techniques for product acceptance will not be allowed or accepted by 603 Manufacturing.

12. Special Process

Special processes such as, but not limited to, chemical processing, surface treatment, painting, coating, welding, soldering, etc.

Supplier may use any applicable special process source that is NADCAP certified/approved without the consent of 603 Manufacturing unless otherwise stated on the purchase order or associated documentation. All other sources must be approved, in writing, by 603 Manufacturing prior to their use.

The supplier shall be responsible for conformance of their outside manufacturer and/or processes to the applicable specifications.



603 Manufacturing
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Document Name: Terms and Conditions of
Purchase
Form (Level 3)
Rev: D

Doc # QF106

13. Nonconforming Material and Processes

The supplier shall notify 603 Manufacturing of any nonconforming product or processes and shall not ship any nonconforming product without prior written approval from the 603 Manufacturing Buyer or Management. The defective material/product must be clearly identified and tagged if such item is approved for shipment.