

Nadcap Content - Check with Quality Systems Group before making changes

Rev	Date	Originator(s)	Summary of Changes
P	3/19/19	Debra Kidder	Edited verbiage to reference. Added Supplier Acknowledgement form for new Suppliers. Added 6.1.1 waived exceptions. Added refence to AS6174 for non-electronic product. Updated 6.3.6. Added reference standards 9.7 AS6174, 9.8 AS5553 and 9.9 AS9149

1.0 PURPOSE

- 1.1 This document is a supplement to the standard Purchase Order Terms and Conditions and the Jabil Global Supplier Requirements Manual, 00-MT60-1000-00605.

2.0 SCOPE

- 2.1 These requirements apply to all production purchase orders for Jabil Defense and Aerospace, St. Petersburg, Florida.

3.0 DEFINITIONS/TERMINOLOGY

- 3.1 PCB: Printed Circuit Board
- 3.2 JDAS: Jabil Defense & Aerospace Services, LLC
- 3.3 PO: Purchase Order
- 3.4 ET: Electrical Testing
- 3.5 GIDEP: Government-Industry Data Exchange Program
- 3.6 COUNTERFEIT: A fraudulent part that has been confirmed to be a copy, imitation, or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive, or defraud.

4.0 TRAINING

- 4.1 The functions that need to be trained to this document:
 - 4.1.1 Purchasing (All)
 - 4.1.2 Quality (All)
 - 4.1.3 CM/CE (All)
 - 4.1.4 Receiving (All)

5.0 RESPONSIBILITIES

- 5.1 It is the responsibility of the Purchasing Manager to approve and maintain this specification.
 - 5.1.1 The Purchasing Manager is responsible for ensuring that FL04 referenced documents on website <https://www.jabil.com/solutions/by-industry/enterprise/defense-and-aerospace/supplier> for supply chain are updated when new revisions are released from GDC (Global Document Control) and STP Document Control.
- 5.2 It is the responsibility of the Quality Engineering Manager to approve this specification.
- 5.3 It is the responsibility of the Purchasing Supervisors to communicate this specification to the buyers and ensure it is flowed down to suppliers.
 - 5.3.1 It is the responsibility of the Purchasing Team to ensure that all suppliers comply with the requirements of this specification.
- 5.4 It is the responsibility of the Jabil Purchasing team to ensure that every production PO references this document.

6.0 PROCESS

- 6.1 SUPPLIER MUST CONFIRM WITH JABIL BUYER IF REQUIREMENTS CAN BE WAIVED AND ATTAIN APPROVAL OTHERWISE, REQUIREMENTS APPLY TO EACH PO ISSUED.
 - 6.1.1 Clauses thus waived should be clearly indicated (e.g., marked / redlined in this manual) and the corresponding exceptions section clearly referenced in the Supplier Acknowledgement Form.
- 6.2 Electronic Component Counterfeit Prevention

Any components supplied to Jabil and found to be counterfeit will be considered forfeit by supplier. Jabil will destroy components after analysis has been completed. Any payments due supplier on this material will be cancelled. Jabil will expect refund of any payments already received.

 - 6.2.1 The seller shall maintain a Counterfeit Item risk mitigation process internally using SAE AS5553 for electronic components and AS6174 for non-electronic product as a guide and shall flow down to with its sub-tier supplier the requirements of this document.
 - 6.2.2 The seller and its sub-tier suppliers shall maintain subscriptions to the Government Industry Data Exchange Program (GIDEP) for monitoring and acting on alerts and reports which affect product delivered to the buyer.
 - 6.2.3 The seller and its sub-tier suppliers shall report suspect or confirmed counterfeit items associated with this purchase order and issue a GIDEP report and shall ensure suspect counterfeit items are not delivered to Jabil. Seller shall immediately notify Jabil in the event it has become aware of suspect or counterfeit items that may have or were delivered to Jabil in the performance of this purchase order.
 - 6.2.4 The seller shall provide evidence of the seller counterfeit risk mitigation process to Jabil upon request.
- 6.3 Traceability and General Requirements
 - 6.3.1 Date Code and/or Lot Code- Maximum of two date/lot codes per Reel/Package/Tray, Inner Pack.

- 6.3.2 Each Certificate of Compliance shall have a statement that certifies that items delivered to Jabil are part of shipment covered by the Manufacturer's documentation. Results of all substantiating tests and other evidence supporting such documentation are either on file with Seller or will be requested from the Manufacturer of the product if requested by the buyer.
- 6.3.3 Traceability back to the OEM for components/parts must be maintained and available upon request.
- 6.3.4 Parts should be labeled per 04-PR20-0001-002 General Requirements for Bar Code Labels.
- 6.3.5 Supplier does not have MRB authority to accept or repair nonconforming product associated with the performance of the order. Supplier must notify Jabil of nonconforming product and arrange for Jabil's approval of said nonconforming product prior to shipment.
- 6.3.6 The Buyer, Buyer's customer, and cognizant government agencies shall have access to all applicable areas of Seller's facilities at any level of the supply chain involved in the order and to all applicable records. This right shall also extend to the Seller's subcontractors. Supplier will be given a minimum of 48 hours notification prior to right of entry. Failure to meet Schedule, Program or Quality requirements may **initiate a request for a corrective action**, cause long term visitation plans to be put in place, **controlled level shipping or potentially be subject to a request for cost recovery as a result of impact**.
- 6.3.7 Supplier must notify Jabil of product and/or process definition changes and, for Jabil custom product, obtain Jabil's approval.
- 6.3.8 Supplier must flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including Special Requirements, Critical Items and key characteristics where required while performing work involving this purchase order.
- 6.3.9 Polarized components tape and reel should follow EIA-481.
- 6.3.10 For suppliers and distributors of electrical and electronic parts, assemblies, and equipment, susceptible to damage from Electrostatic Discharge (ESD), the supplier shall establish and implement an ESD Control Program that is compliant with the latest revision of ANSI/ESD S20.20 and/or JESD625.
- 6.3.11 Lead free components should not be shipped to JDAS unless the PO specifically requests a lead-free manufacturer's part number.
- 6.3.12 Specialty Metals: As applicable, supplier agrees that materials and/or finished parts conform and meet DFARS 252.225-7008 Restriction on Acquisition of Specialty Metals, DFARS 252.225-7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals

6.4 Record Retention Requirements

- 6.4.1 Supplier shall maintain and control records required within the product realization process. The Supplier's Control of Records Procedures shall meet the requirements of ISO Section 4.2.4. The requirements apply to records listed in Appendix 1, which are generated in compliance with the Purchase Order, the Drawing and related documents.
- 6.4.2 The types of records and retention requirements for documenting manufacturing activities related to Monitoring and Measurement of Processes/ Product and Acceptance/Test are listed in Appendix I – Record Retention Requirements.
- 6.4.3 In the event of a conflict between a customer's special request for record retention time limits and of that which is listed in Appendix I, the customer's Purchase Order requirement shall take precedence.

6.5 FOD (Foreign Object Debris)

6.5.1 The Supplier shall assure that the devices, components and materials delivered under this contract are free of Foreign Object Debris (FOD). The supplier shall employ general prevention practices to keep FOD, large or small, from the product and packaging. Presence of FOD contamination shall result in the rejection of material. Supplier FOD program shall be based on AS9146,, Foreign Object Damage/Foreign Object Debris (FOD) Prevention as a guideline for the prevention of FOD.

6.6 Deliverables**6.6.1 Required Documentation with Each Shipment.**

6.6.1.1 The Receiving Documentation shall contain at a minimum, Packing Slip and Certificate of Compliance, part number and revision as listed on the PO, lot/date code or Serial Number from the manufacturing batch or lot.

6.6.2 PCB Repeat production additional requirements

6.6.2.1 Certificate of Electrical Test

6.6.2.2 All PCB's marked/stamped showing ET pass.

6.6.2.3 PCB Test Coupons. Coupons may be stored at supplier's facility with prior agreement from Jabil.

6.6.2.4 If solder samples shipped, they must be packaged separately from product, and clearly identified as solder sample.

6.6.3 PCB First Production or Revision change shipped to Jabil (Includes CFM), additional requirements

6.6.3.1 First Article Inspection Report, in AS9102 format (latest revision), ballooned drawing included.

Note: Actual diameters of buried/filled/blocked vias must be included in report.

6.6.3.2 Raw material Mfr. certificates of compliance

6.6.3.3 Microsection report

6.6.3.4 Contamination report/certificate

6.6.3.5 Solder sample(s) required, packaged separately and clearly identified.

6.6.3.6 Plating validation report, if applicable

6.6.3.7 Impedance test report (TDR), if applicable

6.6.4 Additional PCB Requirement**6.6.4.1 Packaging**

Prior to packaging, PCB's shall be sufficiently dry to allow for normal assembly processing without a need to pre-bake. Reference IPC-1601 section 3.3.6 for recommended moisture levels. PCBs shall be packaged flat and in a manner that prevents abrasion, contamination, corrosion, deterioration, moisture absorption, and physical damage.

Rigid PCB: Vacuum sealed Moisture Barrier Bag (MBB) with desiccant and Humidity Indicator Card (HIC). MBB shall meet MIL-PRF-81705, Type I requirements. Desiccant shall meet MIL-D-3464, Type II requirements. Reference IPC-1601 (Appendix B) for desiccant quantity. HIC shall comply with IPC/JEDEC J-STD-033, having 3 color spots with sensitivity levels of 5%, 10% and 60% and be sulfur-free. Boards shall be packaged in a manner to ensure relative humidity level inside of bag does not exceed 10% as indicated by the HIC, in order to avoid unnecessary baking.

Desiccant and HIC should not be placed directly on top of PCB's, nor should desiccant be placed directly on top of HIC. Desiccant and HIC should be placed along edges of PCB's whenever possible. 100% vacuum sealing should be avoided to allow desiccant to perform its function.

Rigid-Flex and Flex PCB: MBB, desiccant and HIC are not required. Boards shall be packaged in a manner to preserve integrity during shipment.

Small boards of 25 sq in or less may be stacked up to 25 high with slip sheets in same bag. Larger boards limit to 10 high with slip sheets and bagged.

Immersion silver finish boards shall include sulfur absorbent, pH neutral material (Silver Saver® paper)

Date codes shall not be mixed in packaging. Unique date codes must be packaged and marked separately.

- 6.6.4.2** X-Outs shall not exceed 10% per lot without written Engineering Approval. X-Outs must be clearly identified and packaged separately. Minimum markings must include a large permanent "X" on both sides of the PCB spanning a majority of the board surface.

6.6.5 Custom Mechanical First Production or Revision Change additional Requirements:

- 6.6.5.1** First Article Inspection Report, in AS9102 format (latest revision), ballooned drawing included.
- 6.6.5.2** Raw material Mfr certificates of compliance.
- 6.6.5.3** Special Process Certificates (as indicated in the PO and/or Customer Req.)
- 6.6.5.4** Test results data, if applicable.

7.0 RECORDS

- 7.1 Acceptance of Purchase Order Terms and Conditions
Certificates of Compliance

8.0 APPENDICES

- 8.1 **Appendix I – Record Retention Requirements**

9.0 DOCUMENTS

- 9.1 00-MT60-1000-00605 Jabil Global Supplier Requirements Manual
- 9.2 00-MT60-1000-001: Printed Circuit Board Fabrication Specifications
- 9.3 04-PR20-0001-002: General Requirements for Barcode Labels
- 9.4 AS9100: Aerospace Quality System Requirements
- 9.5 00-LL10-1000-001, Jabil Records Management Policy
- 9.6 ANSI/EIA-481 8 mm Through 200 mm Embossed Carrier Taping and 8 mm & 12 mm Punched Carrier Taping of Surface Mount Components for Automatic Handling
- 9.7 AS6174, Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
- 9.8 AS5553, Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition
- 9.9 AS9146, Foreign Object Damage (FOD) Prevention Program - Requirements for Aviation, Space, and Defense Organizations

10.0 SAFETY REQUIREMENTS

- 10.1 No Safety Requirements for this process

Supplier Acknowledgement Form

By signing below, we acknowledge that we have received the Jabil Florida Supplier Requirements. We also acknowledge that we have thoroughly read, understood, and agree to make all reasonable efforts to comply with the requirements specified within the Jabil Florida Supplier Requirements 02-PR60-1000-005.

Supplier Name				
Supplier Location				
Supplier's Authorized Representative	Printed Name:		Signature	
	Title:			
	Email Address:		Date	

Item (a): List of additional associated documents, if any

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***Item (b): List of exceptions w/ section and details (use additional sheets if necessary)**

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***Jabil Authorized Representative for approval of exceptions**

Name;		Signature;		Date;	
*Exceptions valid until:		or Qty:			

* Refer Section 6.1 regarding waived requirement exceptions. **ALL** exceptions must be Approved by Jabil Authorized Rep. otherwise these requirements apply to every PO issued.

Note: Supplier must send a copy of the signed acknowledgement form to the requester and Quality POC for retention.

11.0 REVISION HISTORY

<i>REV</i>	<i>DATE</i>	<i>ORIGINATORS</i>	<i>SUMMARY OF CHANGES</i>
A	8/14/06	L. O'Neil G. Herrera	Initial Release
B	11/14/06	L. O'Neil	Updated format, corrected doc reference, clarified 10.3.8
C	7/13/07	G. Herrera	Added responsibility 3.4
D	6/1/10	B. Belzel	Updated format, added 5.2, Definition 3.5, updated responsibilities.
E	11/14/11	B. Jurena	Updated 5.3.4 Right of Access Definition. Added 5.4 Record Retention Requirements
F	10/6/14	M. Young	Added sec 5.0 Training, Revised sec 6.3.4, 6.3.6 and added sec 6.5. Updated Record Retention times in Appendix 1
G	10/9/14	M. Young	Revised section 6.3.2 for MRB Authority to add clarity
H	1/15/16	W. Rhodes	Updated 6.6.1.1 & 6.7.1 to include C of C minimum requirements. Added additional Supplier req. in 6.6
I	4/02/16	R. Rhym	Added Counterfeit definition sec 3.6, Added sec 5.1.1 for Purchasing Mgr Resp., Expanded counterfeit section 6.2.1 - 6.2.4, added additional traceability requirement sec 6.3.1, Re- Added Records Retention Table – Appendix I
J	11/28/16	N. Holton	6.6.1 Cof C requirements & 6.3 one lot code per inner pack
K	2/13/17	R. Rhym	Revised traceability requirements for section 6.3 for Traceability; added 6.3.7 ESD S20 control, referenced NAS 412 for section 6.5.1; added sec 6.6.1.1 for required minimum receiving documentation; added sec 7.2 (C of C) and 9.6, Records Control
L	8/9/17	N. Holton	6.6.1 Allowing MFG PN or JPN on receiving documents as

			long as traceability is maintained.
M	1/12/18	FOBrien	6.6.4.1 Update PCB packaging requirements 6.6.3.1 Added note on FAIR requirements
N	3/30/18	J. Witek	6.6.4.2 Update X-Out requirements.
O	8/6/2018	FOBrien	Clarify Purpose and Scope. 5.1.1 Updated to reference website in place of JBC.6.3.3 added for trace to OEM. 6.3.8 Replace Jabil spec with EIA. 6.6.2.4 Clarify solder sample requirement. 6.3.11 Move and update Specialty metals.

APPENDIX I – RECORD RETENTION REQUIREMENTS

Jabil Circuit/JDAS (Jabil Defense and Aerospace Services) - Supply Chain	
RECORD TYPE NAME	RETENTION
<p>QUALITY RECORDS working papers, checklists used to verify product and monitor production processes used in the manufacturing of Jabil product. Corrective Action Requests (Written records of a problem identified throughout the process based on audits to find any errors); Customer Vendor Files (Records pertaining to internal and external suppliers and customers including supplier evaluation selection and action resulting); Inspection Records & Reports (Receiving inspection documents, logs, service, purchase orders, confirm certifications, traceability related records and quality history reports and records); Internal and Lab Test Data; ISO Information; Machine Downtime Records (including daily downtime reporting); Monthly & Quarterly Quality Reports (including QA snapshots, scorecards, metrics, manager reports); Preventative Action Records (including activities to prevent occurrence of a problem); Production History Metrics; Procedure Change Requests (including descriptions of procedure change requests); Product Quality Assurance Records (Product assurance specification files, process validation records, Process FMEA, Control Plans, PPAPA, Inspection Plans, etc.); Product Recall & Safety Records (including maintenance and inspection records); Quality Control Records (including equipment and instrument calibration records, specification sheets and test reports); Quality Reports (Quality and Supplier Rating Reports, Supplier Quality Data Records, records of customer property lost, damaged or otherwise unsuitable for use); and Quality System Records (including quality manuals, training records, quality procedures).</p>	15 years
<p>ENGINEERING CHANGE ORDER Engineering change request from Customer related to product.</p>	15 years
<p>REGULATORY AND STATUTORY REPORTS Records of adherence to various regulatory issues.</p>	7 years