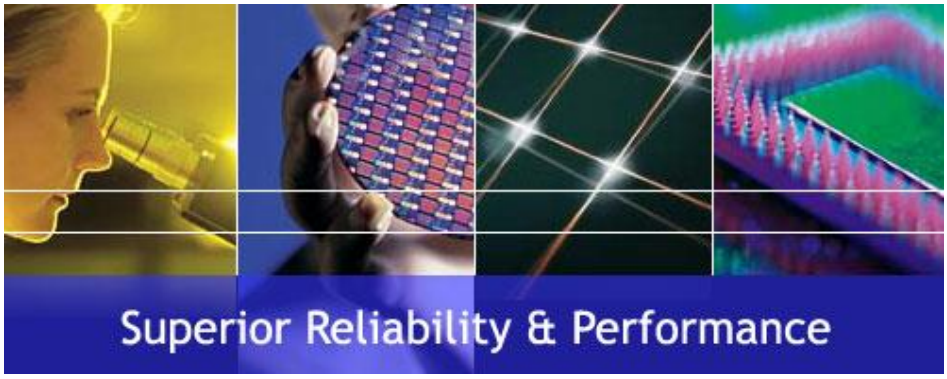
COHERENT

Worldwide Operations

Supplier Quality Requirements Document (SQRD)

D127135 Rev. AD



1.0 SCOPE

This document applies to all worldwide production suppliers of Coherent, Inc. and Coherent's subsidiaries. The term "Supplier", widely used herein, includes contract manufacturers unless otherwise differentiated. Due to the variety of products and suppliers to Coherent, additional product-specific requirements may be included on the Coherent drawing or Purchase Order (PO). Contract manufacturers (CM's) may also be required to enter into a supplemental contractual agreement. The contract, drawing or PO take precedence over this document. If a conflict is discovered between the contract, drawing or PO, the supplier should contact the Coherent Buyer immediately to resolve the conflict.

2.0 REFERENCES

D126566, Coherent Supplier Self-Assessment Survey (SSAS)
D134162, Approved Supplier Management for Contract Manufacturers
D138327, Component Buys, non-approved supply channels
D136306, Supplier Value Engineering Proposal (SVEP) - form
Coherent "Supplier Portal" located at http://www.coherent.com

3.0 SUPPLIER QUALITY SYSTEM

3.1 System Requirements
As a minimum, all suppliers must maintain production and quality records of product from raw material through shipment and implement a basic quality system that follows the intent of ISO 9001or equivalent standard. Suppliers that expect to grow their position with Coherent should have a Quality Management System (QMS) that is registered to ISO 9001 or equivalent standard.

3.2 System Surveys
All suppliers will be required to conduct a self-assessment survey of their quality system, which will be evaluated by Coherent for approval (Reference: D126566). Survey can be requested from the Coherent Buyer and once completed, returned in accordance with included instructions. Suppliers of more critical processes and components, and those suppliers with a poor quality history, may be subjected to an on-site audit of their quality system and/or processes by Coherent personnel.

3.3 Statistical Process Control (SPC)
Certain critical products or processes may benefit, or require the use of SPC for monitoring and measuring purposes. The supplier is expected to implement such controls when applicable or required.

4.0 SUPPLIER CLASSIFICATION AND PERFORMANCE

4.1 Approved Suppliers
Any potential Supplier to Coherent must, as a minimum, have their quality system approved (See section 3.2.). Once the quality system is approved and

the supplier has submitted and received a First Article Report approval, the supplier will be added to the Approved Supplier List (ASL) for the given part. Only approved suppliers will receive production purchase orders from Coherent. When applicable, the requirements that govern the Coherent Approved Supplier List (ASL) and Approved Manufacturer List (AML) are specified below.

4.2 Disapproved Suppliers
Potential new suppliers that do not meet the minimum quality system requirements will not be approved. Existing suppliers that fail to meet the expected quality and delivery requirements will be notified and expected to improve their performance. Suppliers that fail to improve their performance to an acceptable level within an agreed upon time may be disapproved and removed from the ASL.

4.3 Performance Measurement, Tracking, and Reporting
All Suppliers are objectively monitored and evaluated for quality and on-time delivery (OTD) performance. Scorecards are generated that are used to work with selected suppliers to improve their performance. In general, 3 consecutive months of negative performance constitutes a trend and supplier may be requested to take formal corrective action.

4.4 Ship-to-Stock Program
Preferred suppliers may be asked to participate in the Ship-to-Stock Program. This allows product to bypass routine Receiving Inspection. In order to qualify for the Ship-to-Stock Program, the supplier must have an approved quality system, acceptable quality history, approved First Article on file, and provide a Quality Control Plan for approval.

5.0 FIRST ARTICLE REPORTING

Prior to authorization to ship production product to Coherent, supplier must have on file an approved First Article Inspection Report (FAIR) that reflects 100% verification of all requirements - by inspection and/or test (as applicable). The quantity of parts used for First Article Inspection shall be agreed between the supplier and Coherent's Buyer. First Article Inspections must be repeated for any portion of the product that is impacted by a design, process, or tooling change. A process change is any activity that affects the form, fit, function, or safety of the product. Any deviation to Coherent requirements must be approved in writing by Coherent and included as part of the submittal of FAIR.

Suppliers may use Coherent FAIR Form or equivalent (subject to Coherent approval). At minimum, FAIR must include the following parameters:

- part number & revision level
- clear indication of each specific requirement inspected or tested with results and pass/fail status
- reference to any deviations preapproved by Coherent (if applicable)
- overall indication of first article pass/fail status

- record of the date and responsible person performing task
- record of first article acceptance by supplier's Quality Manager or designee
- marked-up drawing indicating all inspection points

When applicable, FAIR must also include:

- test data sheet with all recorded values
- material test or certification reports and data from sub-tier suppliers

Copy of the FAIR must be sent to Coherent, along with the corresponding first article sample(s), with the original report retained by supplier as a quality record. Coherent may sample or perform a duplicate 100% first article to verify the product, inspection and/or test methods.

If key characteristics are identified on either the drawing or by the Coherent Buyer, a process capability study may be required for each of the key characteristics.

6.0 PRODUCT AND PROCESS VERIFICATION

6.1 Inspection & Test by the Supplier

Suppliers are expected to be self-sufficient in the control of their processes and must objectively verify the quality and conformance of deliverable product by means of inspection and/or test – as applicable. Suppliers should not rely upon Coherent to perform any inspections and/or tests to verify the quality and conformance of deliverable product. Quality records should be kept for a minimum of 3 years that indicate the inspections and/or tests that were performed and the acceptance or rejection of the product.

6.2 Independent Verification, Proprietary Process & Right of Entry

Coherent, and any of Coherents' customers, may require independent inspection and/or test of product or verification of processes at the supplier. In this case, Coherent will normally provide minimum of 48 hours advance notice and the supplier should identify proprietary processes before entry. When applicable, an arrangement will be made to execute a mutual nondisclosure agreement to protect from disclosure to unauthorized individuals.

7.0 SUPPLIER REQUESTED ENGINEERING CHANGES

Suppliers may propose any mechanical, electrical, process or documentary design change to the product that potentially or actually affects form, fit, function, reliability, safety, cost or maintainability. This is accomplished by the supplier submitting to Coherent, an Engineering Change Request (ECR) or Supplier Value Engineering Proposal (SVEP) for formal evaluation and approval prior to implementation (Reference: D136306).

8.0 CERTIFICATES OF CONFORMANCE

If required, shipments to Coherent must be accompanied by a Certificate of Conformance (CoC) that contains the part number, date code and/or serialization, shipment quantity, shipment date, packing slip number, and a statement of conformance to the purchase order requirements. If required, raw material should be accompanied by a Certificate of Analysis (CoA). The supplier is fully responsible to flow down these requirements, as necessary, to sub-tier suppliers and also to maintain records of such sub-tier supplier material certifications.

9.0 PRODUCT NONCONFORMANCES

9.1 Nonconformances after Delivery
Any product nonconformance(s) found at Coherent may be cause for rejection of the entire shipment and will count against the quality rating for the supplier. The supplier will be informed of the nonconformance(s) to allow for future corrections.

9.2 Corrective Action Requests
Whenever the nonconformance is considered serious or repetitive, the supplier will be issued a Supplier Corrective Action Request (SCAR). The supplier is expected to take immediate action to contain the problem and then provide root cause analysis and corrective action within the specified time period.

9.3 Pre-Approval of Nonconformances
Suppliers are not authorized to accept product nonconformance to Coherent's requirements – which includes sub-tier supplier material nonconformance. In the case of a known product nonconformance issue that cannot be reworked to specification, the supplier should immediately request Coherent approval in advance - by completing the form contained in Appendix A. The completed form should be submitted to the Coherent Buyer or site Quality Representative for subsequent approval.

9.4 Return Material Authorization (RMA)
Suppliers are expected to provide a Return Material Authorization (RMA), within a maximum of 3 working days after notification of rejected material at Coherent.

10.0 PACKAGING AND LABELING

When any special packaging and/or labeling requirements apply, they will be specified on the Coherent drawing or purchase order. Otherwise, product must be shipped to Coherent in a consistent manner that assures proper protection from damage during shipment and proper identification of each shipment container. All packaging should be capable of meeting the test requirements of ISTA 1A or 1B. International shipments may require meeting ISTA 2A or 2B packaging test requirements. Individual containers must be clearly marked/labeled with the appropriate purchase order, (Coherent) part number, serial number (if applicable) and any necessary lifting and/or

handling instructions. If the product shipped is destined for any “special activity” (e.g. qualification, first article inspection, etc.) – the outside marking/label must also clearly reflect this designation.

11.0 COHERENT-OWNED TOOLING and MEASURING & TEST EQUIPMENT.

Coherent may provide specialized tooling and/or measuring & test equipment to the supplier. If so, such tooling and equipment can ONLY be used to manufacture product for Coherent and must be properly labeled, stored and controlled to prevent misuse, damage and deterioration. Except for normal wear, the supplier is required to maintain Coherent-owned tooling in original condition and when applicable, perform preventative maintenance on a recurring basis. The supplier is responsible for calibration of Coherent-owned equipment at pre-defined intervals – unless the equipment has been designated by Coherent as “No CAL Required”.

12.0 SHELF LIFE

Components that will be subject to soldering must have been stored in a controlled environment for no more than two (2) years and be able to pass an accepted solderability test. Chemical compounds that may suffer degradation in their characteristics must have no less than 75% of their expected life upon receipt at Coherent.

13.0 ESD SENSITIVE DEVICES AND ASSEMBLIES

Any components, materials, or assemblies that are susceptible to Electrostatic Discharge (ESD) damage must be controlled and processed at the supplier within an acceptable ESD program consistent with ANSI/ESD S20.20. Antistatic or static dissipative packaging material must be used for all ESD sensitive components and assemblies. The packaging must be clearly identified as containing ESD sensitive material.

14.0 CHANGE IN MANUFACTURING LOCATION

In the event the supplier intends to change the location of manufacture of any product the supplier shall provide at least 6 months prior written notice to Coherent. Any proposed change in design or manufacturing process falls into the category of section 6.0. All changes are subject to approval by Coherent in writing prior to implementation.

APPENDIX A
(Electronic version of form is available upon request)

SUPPLIER NOTIFICATION OF NONCONFORMANCE AND REQUEST FOR APPROVAL

Coherent Part No. _____ Request Date: _____
Coherent P.O. No. _____ Submitter's Name: _____
Supplier: _____ Submitter's Tel. No.: _____
Lot Size: _____ Submitter's Fax No.: _____
Submitter's E-Mail: _____

Description of Nonconformance (clearly include "specified" and "actual" conditions):

*** Send completed Form to the Coherent Buyer with copy to Site Quality Manager ***
(Information below this line to be completed by Coherent)

Coherent Disposition:

- ☐ Approved. Deviation # & Expiration Date _____
- ☐ Denied. Please correct.

Comments:

_____

_____

_____ Date: _____
Coherent Site Quality Representative

*** **A copy of this approved form must accompany the shipment to Coherent** ***