



DEFENSE LOGISTICS AGENCY
DEFENSE SUPPLY CENTER, COLUMBUS
POST OFFICE BOX 3990
COLUMBUS, OH 43216-5000

IN REPLY
REFER TO

DSCC-VQH-00-0026 (Ms. Tonnu/614-692-0586/bt)

SUBJECT: Audit Preparation for MIL-PRF-38534 and ISO 9000, Hybrid Microcircuits and Multi Chip Modules (MCMs), FSC 5962

Dear Sir/Madam:

In order to schedule an audit/validation to MIL-PRF-38534, you should provide a formal request to:

Defense Supply Center Columbus
Attention: DSCC-VQH, Mr. Joseph Gemperline
3990 East Broad Street
Columbus, OH 43213-1199

MIL-PRF-38534 Certification

Before an audit/validation will be scheduled, a sample documentation review is performed by DSCC-VQH. A list of the sample documents is provided below. You are encouraged to come to Columbus to discuss the documentation with us. We can also provide feedback by phone, letter or electronic media. If the documentation indicates that you are likely to succeed in an audit/validation, then an audit date will be arranged. Additionally, prior to a formal audit request you may submit samples or draft documentation to us for comment and feedback.

Sample Documents To Be Submitted

1. A Quality Manual (QM) as described in appendix A (para A.3.2.1) of MIL-PRF-38534 rev D. Please note that the heading "Product Assurance Program Plan" was used in previous revisions of MIL-PRF-38534. The QM may act as a pointer or road map to other controlled procedures, rather than containing detailed information already documented elsewhere.
2. Incoming Inspection procedures including examples of procurement documents and receiving acceptance instructions for active die, packages, adhesives, getter and passive elements. This information should demonstrate how you meet C.3 of MIL-PRF-38534.



3. Procedures and example travelers (in accordance with A.3.12) for screening, and groups A, B, C, D testing as described in C.5 and C.6 of MIL-PRF-38534.
4. An indication of which class levels and product types (D, E, G, H, K of Table I, MIL-PRF-38534) your facility will produce, and facility location(s). Ideally all your hybrid and MCM products will be produced under one or more of the QML class levels. Our intention is to only certify manufacturers who are committed to selling QML products and expanding their QML capability as additional processes/materials are brought into production.
5. A plan to qualify core processes and materials resulting in a QML listing. This may consist of a test plan in accordance with C.7 of MIL-PRF-38534 or a plan showing how existing data will be used as evidence of the quality and reliability of your processes and materials.
6. Indications of military or space business to be maintained or gained as a result of this certification/qualification.
7. Results of a self-audit as described in 4.4.1 and A.3.17 of MIL-PRF-38534 which demonstrate that all aspects of MIL-PRF-38534 have been implemented.
8. Procedures for all MIL-STD-883 test methods performed at your facility and an outside lab procedure for those test methods to be performed at an outside lab. Our records show that Custom Devices Team, DSCC-VQC, audited some of your test methods such as Burn-in, Seal, Centrifuge, Solderability, Die Shear, PIND, Non-Destructive Bond Pull, and Temperature Cycling, so you do not have to send in these procedures. However, procedures specifically applied to hybrids such as Internal Visual (TM 2017), Visual Inspection of Passive Elements (TM 2032) should be provided for review.
9. Some examples of process procedures. Include wirebonding and process control as defined by C.4.2 of MIL-PRF-38534.
10. Procedure for environmental control including clean room practices and particle count (see A.3.15.2 of MIL-PRF-38534). Also include example particle count data.
11. Handling procedure to assure product is not damaged by electro-static discharges (ESD) (see A.3.15.1).
12. Personnel training procedures as described in A.3.18 of MIL-PRF-38534.

ISO 9000 Registration

We can offer you a DSCC ISO 9000 audit in conjunction with a MIL-PRF-38534 audit. As a result of a successful ISO audit we will issue an ISO registration. Our interest in offering ISO 9000 audits is to provide a value-added service to our manufacturers to help them remain globally competitive.

In addition, DSCC has a Memorandum of Understanding (MOU) with another registrar, NSF International, to recognize DSCC ISO 9000 audits. The additional registrar will provide European accreditation whereby you are eligible to receive NSF's ISO 9000 registration (for a reduced fee) based on a successful DSCC ISO 9000 audit. You can contact the above company and follow its program plan for recognition of the DSCC ISO 9000 audit.

In order to obtain an ISO 9000 audit in conjunction with a MIL-PRF-38534 certification audit, you must submit the following information 60 days before your company's MIL-PRF-38534 audit so we can review and approve the information before the audit.

- a. A formal request in writing to this office.
- b. A statement describing the scope of the ISO 9000 audit.
- c. A matrix indicating how your company meets each ISO 9000 element (including subparagraphs).
- d. A self-audit that includes ISO 9000 requirements.
- e. Method and results of management review of the quality system.
- f. Controlled copy of your Quality Manual. (The ISO requirements and the MIL-PRF-38534 Appendix A or B quality plan requirements can be met by one document.)
- g. A milestone outline of your present and future ISO activities.
- h. Other information as requested by DSCC-VQH.

As with the MIL-PRF-38534 certification, your company must maintain and use your joint ISO 9000/MIL-PRF-38534 system. This is to ensure that continuous capability to meet these requirements is maintained.

As stated above, our intent in offering ISO 9000 audits in conjunction with the "QML" audits is to provide a value-added service to our manufacturers, and help them remain globally competitive. It is not a requirement of our military specifications to obtain ISO 9000 registration. DSCC ISO registration audits are only performed in conjunction with regularly scheduled audits and reaudits.

Additional information

Additional information can be obtained at the DSCC-VQ home page <http://www.dsc.dla.mil/offices/VQ>. Some items you may wish to download include:

- Qualified Manufacturers List Certification and Qualification Procedures for MIL-PRF-38534 Hybrids and MCM Microcircuits
- Quality Manual for DSCC Sourcing & Qualifications Unit (DSCC-VQ)
- Newsletters
- Example Conversion of Customer Requirements checklist
- Example Design and Construction Baseline form 42H
- Example Authorization to conduct Qualification Testing form 19H

The following DSCC-VQH personnel can be contacted to answer questions or to provide paper copies of any of the suggested materials.

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|-------------------|--------------|
| Rick Barker | 614-692-0596 |
| Joe Buben | 614-692-0592 |
| Ray Crothers | 614-692-0583 |
| Jackie Cunningham | 614-692-0584 |
| Brad Delish | 614-692-0593 |
| Bruce Dickerson | 614-692-0595 |
| Jim Eschmeyer | 614-692-0591 |
| Ned Raybould | 614-692-0582 |
| Jonnie Schneider | 614-692-0585 |
| Binh Tonnu | 614-692-0586 |

Thank you for your interest in the MIL-PRF-38534 program.

Sincerely,

JOSEPH GEMPERLINE
Chief
Hybrid Devices Team