

QINETIQ

LABORATORY SUITABILITY CERTIFICATION

Date Of Issue
OCTOBER 1989

Date Of Expiry
OCTOBER 2011



Certificate Number
QINETIQ/LS/009/001

Issue Number
FOURTEEN

QinetiQ Reference
BCC/06/003/009/001

LABORATORY SUITABILITY CERTIFICATE

to

MIL-STD-883 (MIL-PRF-38534)

This Certificate is issued by QinetiQ in confirmation of the Independent Test Laboratory satisfying the requirements of the identified specification. It is issued by QinetiQ subject to the conditions specified by the relevant standards or specifications and is subject to withdrawal at the discretion of the qualification approval authority acting for the Defense Supply Center Columbus.

Laboratory's name and registered address

C-MAC MICROTECHNOLOGY
SOUTH DENES, GREAT YARMOUTH, NORFOLK NR30 3PX

Specification against which approval is granted

MIL-STD-883

Test report date

OCTOBER 2008

Scope of Approval

INDEPENDENT LABORATORY SUITABILITY FOR TESTING PERFORMED IN ACCORDANCE
WITH MIL-STD-883 ON MILITARY DEVICES
AS SPECIFIED IN MIL-PRF-38534

QinetiQ

Approved by

QinetiQ/EE&S/BCC

QinetiQ, Fort Halstead, Sevenoaks, Kent TN14 7BP

Statement of Independent Laboratory Suitability Status for Class B Testing MIL-STD-883

Mr. D. Bridge – Head of Test House
 C-MAC MicroTechnology
 Test House
 South Denes
 Great Yarmouth
 Norfolk NR30 3PX

Dear Mr Bridge,

As a result of maintained compliance to the requirements of the standards and specification referenced in the scope, your South Denes facility is considered suitably equipped to perform tests prescribed in MIL-STD-883 as identified in the following table:-

| MIL-STD-883 | | |
|------------------------------|---------|--|
| TEST | METHOD | CONDITION |
| Insulation Resistance | 1003.0 | 600V 100nA & A - F |
| Moisture Resistance | 1004.7 | |
| Steady State Life | 1005.8 | A & C |
| Salt Atmosphere | 1009.8 | |
| Temperature Cycling | 1010.8 | A - C |
| Thermal Shock | 1011.9 | A - C |
| Burn-In | 1015.9 | A & C |
| Constant Acceleration | 2001.2 | A - E |
| Mechanical Shock | 2002.3 | A - G |
| Solderability | 2003.7 | |
| Lead Integrity | 2004.5 | A ₁ B ₁ B ₂ D |
| Vibration Variable Frequency | 2007.2 | A - C |
| Resistance to Solvents | 2015.11 | |

The identified facilities may be used to perform tests on military devices / components being qualified in accordance with MIL-PRF-385534 and other specifications invoking these test methods. The use of your laboratory for performing testing is subject to conditions as stated in DoD 4120.3M and SD-6.

Any changes, modifications, or replacement of equipment covered by this suitability authorization shall be reported to QinetiQ immediately who will monitor the US Department of Defense Conditions.

This letter of suitability is issued by QinetiQ under the delegated authority of the United States Military Qualifying Activity and is valid until terminated by written notification from the issuing authority. The normal period of suitability is two years and if warranted, may be withdrawn by the Qualifying Activity at any time. Your laboratory may be re-audited on a 'drop-in' basis at any time, as well as routine surveillance as deemed necessary by QinetiQ or the equivalent US authorities.

Maintenance of this suitability status prohibits your company from removing or altering the device markings. Any device which fails testing conditions shall be identified as a reject and returned to the device manufacturer for verification of failure mode, or the device(s) shall be destroyed with the manufacturer's approval, under surveillance of QinetiQ, the Quality Assurance representative.

Electrostatic discharge sensitivity (ESDS) requirements for MIL-PRF-38534 devices will be handled as ESD sensitive (Category A) unless otherwise notified by the device manufacturer. Consequently all processing procedures will incorporate the handling, testing and packaging requirements according to the guidelines in DoD-HDBK-263 and JEDEC Publication 108.

Maintenance Requirements

To maintain Laboratory Suitability Status for the above listed test methods, you are required to compile a summary of all MIL-PRF-38534 devices class B tested to the requirements of MIL-STD-883, every 12 months and your self audit test results.

The report shall include the following:

Summary of testing:

- a. Part number
- b. Date code
- c. Quantity tested
- d. Date test completed
- e. Device manufacturer
- f. Manufacturing lot number
- g. Qualification test report number (if applicable)

Together with a completed self audit checklist and any corrective action(s) required if appropriate.

The summary shall be co-ordinated with your Quality Assurance Representative and be submitted to QinetiQ no later than 31 October. If no summary is received by that date, it will be concluded that no MIL-PRF-38534 device testing was performed, consequently your laboratory suitability may be cancelled.

The maintenance requirements applicable to this laboratory suitability will be subject to a periodic review and audit by either QinetiQ or United States Authority (Defense Supply Center Columbus) in accordance with the requirements of MIL-PRF-38534. Approval will not normally be extended beyond a two year period without a reaudit.

Monitoring of the facility between audits will be accomplished by QinetiQ.



S.D. Barker
BCC Qualification Approvals Manager