



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
POST OFFICE BOX 3990
COLUMBUS, OH 43218-3990

November 28, 2016

Mr. Ruben Perez
VPT Radiation Laboratory
101 Brick Kiln Road, Building 2, Unit 3
Chelmsford, MA 01824

Dear Mr. Perez:

Re: Commercial Laboratory Suitability Status, MIL-STD-750 & MIL-STD-883,
FSC 5961 & 5962; VQE-17-030893, CN: 053243

This office has received e-mails with objective evidence showing completion of corrective actions regarding the deficiencies from your most recent facilities audit. Based on this information and the audit by Mr. Edward Raybould (DLA-VQH) and Mr. Carl DelloStritto (DLA-VQE) of this Center on September 6-9, 2016, your facility at the above address is considered suitably equipped to provide ionizing dose irradiation testing (unless noted herein) on military devices for the following test methods of MIL-STD-883 and MIL-STD-750:

<u>TEST</u>	<u>METHOD</u>	<u>CONDITION</u>	<u>MILITARY STANDARD</u>
Neutron irradiation *	1017		750 & 883
Steady-State Total Dose Irradiation	1019	A, C A, C, D	750 883
Single-event burnout and single-event gate rupture**	1080		750
Breakdown voltage, collector to base	3001		750
Breakdown voltage, collector to emitter	3011		750
Breakdown voltage, emitter to base	3026		750
Collector to base cutoff current	3036		750
Collector to emitter cutoff current	3041		750
Emitter to base cutoff current	3061		750
Base emitter voltage (saturated or non-saturated)	3066		750
Saturation voltage and resistance	3071		750
Forward-current transfer ratio	3076		750
Breakdown voltage, gate to source	3401		750
Gate to source voltage or current	3403		750
MOSFET threshold voltage	3404		750
Drain to source on-state voltage	3405		750
Breakdown voltage, drain to source	3407		750
Gate reverse current	3411		750
Drain current	3413		750
Drain reverse current	3415		750
Static drain to source on-state resistance	3421		750
Small-signal, drain to source on state resistance	3423		750
Forward voltage	4011		750
Reverse current leakage	4016		750
Breakdown voltage (diodes)	4021		750



NOTES: * Testing source is located at University of Massachusetts, Lowell
** Testing source is located at Texas A & M University

The approved dosimetry procedure shall be used for all military testing. Any time the test method is specified in a contract or purchase order, etc., you must comply fully with the specified test method. Whenever the military standard is specified, the radiation conditions must be performed in accordance with the DLA Land and Maritime approved procedure, to all the military standard requirements, and in accordance with what was demonstrated during the DLA Land and Maritime audit. Any exceptions to the DLA Land and Maritime approved method must be clearly stated in the contract. However, under no circumstances can changes, exceptions, waivers, etc., be applied when a test is done on a QML product unless the test method is officially amended or revised by the preparing activity of the military document.

Electrostatic discharge sensitivity (ESDS) requirements as stated in MIL-PRF-38534 and MIL-PRF-19500 are enforced by this Center. Therefore, all electronic devices will be handled as ESD sensitive (category 1), unless otherwise notified by the device manufacturer. Consequently, all processing procedures will incorporate the handling, testing, and packaging requirements according to the guidelines in MIL-HDBK-263 and JESD625.

To maintain radiation source suitability status for the above listed test methods, you are required to compile a summary of all hybrid/monolithic microcircuits, and semiconductor electronic devices irradiated to the requirements of the above test methods. This summary and other information described below shall be submitted every twelve months and submitted to DLA-VQE for semiconductors and DLA-VQH for hybrid/monolithic microcircuits devices.

You are required to submit an annual retention report annually to cover the period January 1 through December 31. Your next retention report shall be submitted to DLA Land and Maritime by March 1, 2017. The retention report shall include the items in section IV of DLA Land and Maritime's Laboratory Suitability Information booklet.

The use of your laboratory for performing testing is subject to conditions stated in 4120.24-M and SD-6.

This suitability is valid until terminated by written notification from this Center. If warranted, laboratory suitability status may be withdrawn by this Center at any time. If you have any questions, please contact Mr. DelloStritto at 614-692-0616.

Sincerely,

RAYMOND L. KOLONCHUK
Chief
Electronic Devices Branch