

Comprehensive Radiation Test Services

Cobham RAD Solutions (formerly Aeroflex RAD) has obtained Lab Suitability by DLA (Defense Logistics Agency) for radiation testing to both MIL-STD-750 and MIL-STD-883 and own and operate a full suite of radiation and electrical test equipment. Cobham RAD Solutions operates as an independent division to maintain the integrity for customers that may have company sensitive products and information. By joining Cobham, the Cobham RAD Solutions Division now has the added advantage of Cobham's corporate infrastructure to further assist customers in meeting the demanding and increasing requirements of HiRel, Military, and Space Flight programs.

MIL-STD Radiation Effects Test Services

Cobham RAD Solutions offers comprehensive, cost effective and timely, MIL-STD-883/750 radiation effects testing services that include turnkey engineering to complete all phases of testing from design to final test reporting. Our experience in testing thousands of components combined with the extensive knowledge of our engineering staff, enables Cobham RAD Solutions to design and develop the hardware and software to test, analyze and report on the components our customers need in today's demanding space or military environments. The following list highlights some of the test capabilities Cobham RAD Solutions offers:

- Total Ionizing Dose (TID) RLAT (50 to 300 rads/sec)
 - MIL-STD-883 TM 1019, Cond. A
- TID ELDRS (10 to 100 mrads/sec)
 - MIL-STD-883 TM 1019, Cond. D, ESA/SCC22900
- Prompt Dose / Flash X-Ray Tests
 - MIL-STD-883 TM 1020 and 1021
- Neutron Displacement Damage Tests TM1017
- Heavy Ion SEE Tests (SEL, SET, SEGR, SEU, SEB, SEFI)
- Proton SEE and Displacement Damage Tests
- 1 MeV Pelletron
- Cryogenic FPA testing (25 K)

Single Event Effects (SEE) Testing

Cobham RAD Solutions has extensive experience in performing Single Event Effect tests. Many of our staff have over 25+ years of experience in the relatively unique and specialized field of single event effects in electronics. This experience, combined with the many hundreds of tests we have performed, has led to the development of a library of hardware and software techniques which help reduce the cost and time required to successfully complete an SEE test.

We offer turnkey solutions to efficiently determine heavy ion cross sections for a given component or system from diodes to FPGAs and DSPs. Our services include:

- Device Preparation — thinning, back side thinning and packaging if required
- Design and Development of test hardware & software
- Optimized test planning and management for efficient use of the cyclotron
- Comprehensive SEE test reports and data collection

Tests can be designed to evaluate:

- Single Event Latch Up (SEL)
- Single Event Upset (SEU)
- Single Event Transients (SET)
- Single Event Burnout (SEB)
- Single Event Functional Interrupts (SEFI)
- Single Event Gate Rapture (SEGR)
 - EIA/JESD 57
 - ASTM F1192

SEE Testing of memory devices, including NAND, SDRAM and DDR, is efficiently performed using our FPGA based test solutions. The majority of SEE tests are conducted using cyclotrons at either Lawrence Berkeley National Laboratory (LBNL) or at Texas A&M University (TAMU) and on occasion at Brookhaven National Laboratory (BNL).

Quality

- DLA Lab Suitability for radiation and screening test methods listed
- ISO 9001:2008 Certification

Comprehensive radiation effects experience
~36,000 sq feet GTRI compliant test facility
www.aeroflex.com/RAD

For further information please contact:

Cobham RAD Solutions
5030 Centennial Blvd.
Colorado Springs,
Colorado 80919 USA
Tel: 1-719-531-0800
info-ams@aeroflex.com

