

TAU eSEE

SETTING THE STANDARD FOR SINGLE EVENT EFFECTS TESTING

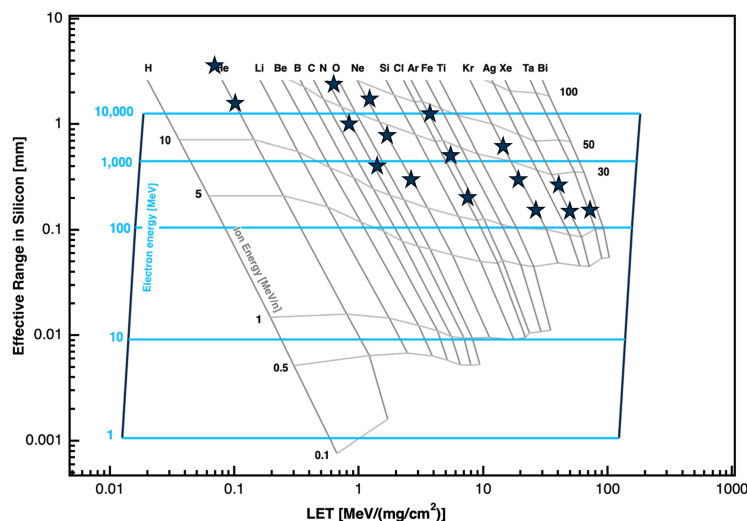
TAU eSEE is the game-changing compact particle accelerator for radiation testing of space-bound electronics.

Developed to meet the demands of the Defense Advanced Research Projects Agency, TAU eSEE offers ultrafast electron beams for reliable testing with independently tunable LET and testing depth.

This novel approach meets the demand for high LET testing while scaling to high penetration depth. Precise control of beam size and position allows for testing with unprecedented lateral resolution - ideal for identifying SEE-induced failure sites and accelerating your design cycles.

Experience the benefits of TAU eSEE firsthand by reserving beamtime at TAU Labs in Carlsbad, CA, or getting the system for your own facility.

RELEVANT RANGE / LET FOR IONS & ELECTRONS



RELATIVISTIC ELECTRON BUNCHES ARE THE PREFERABLE ALTERNATIVE TO IONS

Ultrafast electrons are accelerated with TAU's compact laser-powered accelerator

The Linear Energy Transfer (LET) is proportional to the electron bunch charge

The depth of testing inside the device is proportional to the electron kinetic energy

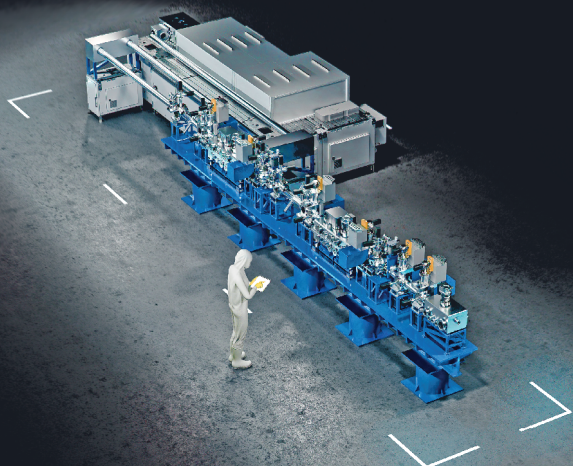
RADIATION TESTING - FASTER, EASIER, COMPACT & AFFORDABLE

HI Alternative

Pre-Screening

Post-Screening

When Pulsed Lasers Fail



USE CASES

COMPREHENSIVE SCREENING

Identify potential failures on an accelerated timeline and precisely locate problem circuits leading to SEUs.

HI ALTERNATIVE

Test devices for non-government applications.

WHEN PULSED LASERS FAIL

Penetrate through front-side metal layers and have confidence in your LET.

FEATURES

NO LONG WAIT TIMES

TAU eSEE gives you immediate access to beamtime when your project demands it, eliminating long wait times that are typical at traditional test facilities.

COMPACT & FLEXIBLE

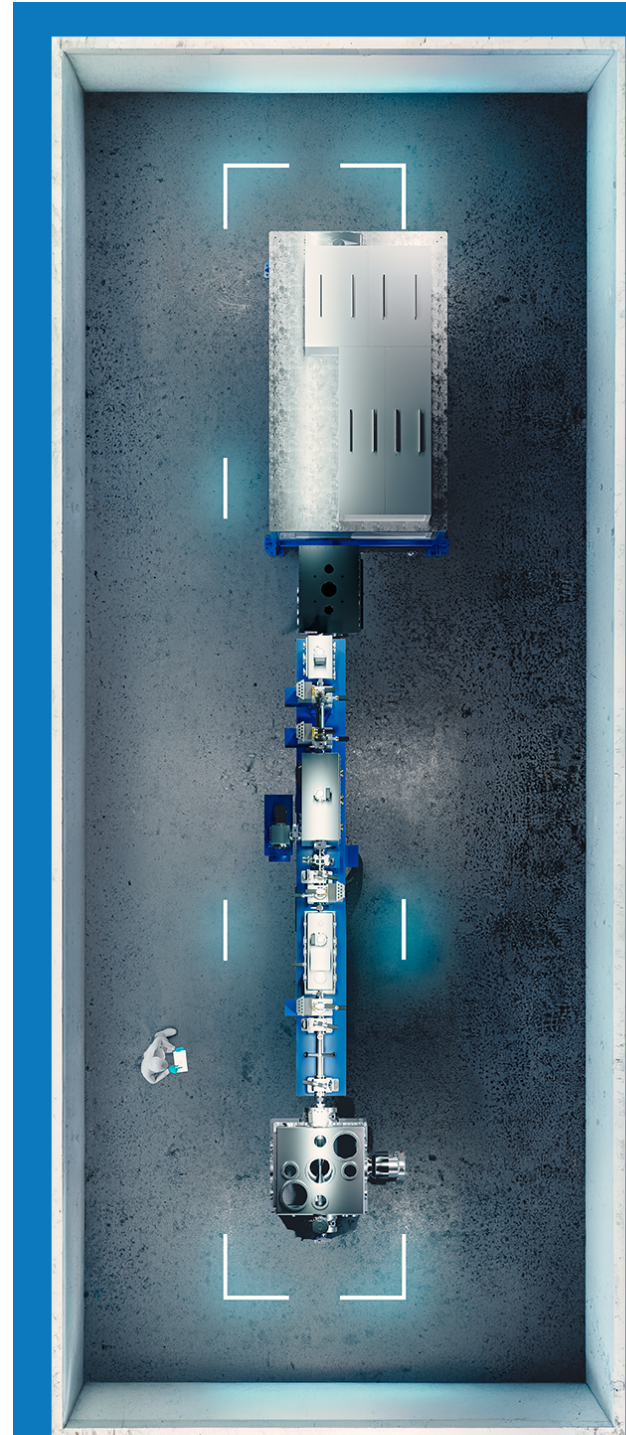
TAU eSEE is a compact and flexible platform that easily integrates into existing infrastructure to support SEE testing at your facility.

LOWER OVERALL COSTS

TAU eSEE is a cost-effective solution for radiation testing of COTS or custom parts by leveraging compact laser-powered electron accelerators.

BEAMTIME CLOSE TO YOU - OR IN YOUR OWN FACILITY

TAU Labs is conveniently located between Los Angeles and San Diego. For even greater convenience, bring the unique, cutting edge technology to your own facility.



SPECIFICATIONS

LET	Tunable up to ~ 50 MeV-cm ² /mg
Range	100 μm in Si
Electron Energy	Up to 70 MeV
Beam Size	Down to 1 μm (diam.)
Exposure Rate	100 Hz

Continuous developments underway, specifications subject to change without notice | © July 2026

