

Enidine by Design

ISMIS Promotes Wide Spread Use of COTS Electronics | Enidine Semi-Active Shock Isolator Application

By: William Shurmatz

Product Overview

The acceleration of technology development and drive to keep costs down has produced significant challenges for electronics manufacturers and system integrators. The combination of outsourcing for electronic components and constant technology upgrades makes it almost impossible for the end user to control their supply or take advantage of the latest technological advances. The fact that a component may be obsolete 6 months after a system has been deployed may disrupt the scheduled tech refreshes for new technologies. By the strict adherence to 901D shock testing, the new component should be shock qualified before it is deployed. This makes the efficient insertion of COTS electronics nearly impossible.

Product Solution

Enidine, in conjunction with NSWC(CD) and NRL, has developed ISMIS - "Intelligent Shock Mitigation Isolation System". This semi-active isolation system has been demonstrated in Navy sponsored tests to provide the Ultra-Low G or "benign" environment required for the survivability of pure "COTS" equipment.

Application Opportunity

The application of ISMIS technology will satisfy two key Navy objectives:

- Ensure the survivability of mission critical systems employing COTS components
- The rapid insertion of the latest technologies

Features and Benefits of ISMIS Deployment

- Potential enabler for wide spread use of COTS electronics, especially with respect to technology refresh cycles
- A "qualified" environment may preclude the need for Navy specific (ie. Mil-S-901D) shock tests
- "Mil Spec" requirements may be replaced by Commercial Standards
- Reduced ship total ownership costs
- Technology is easily scalable to isolate larger components/systems



ISMIS Land-Based Tests Phase 2

