Digital Test System

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- Electrical Engineering
- NSWC Crane

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- Electronic Equipment Testing
- Radiation

The U.S. Navy seeks a partner for licensing and collaboration on a portable, highly flexible, compact, lightweight testing system for use with radiation testing activities.

Currently, testing of digital components is performed with large, expensive machines that are heavy and not easily portable. Electronics that need to operate in radiation rich environments, such as space, need to be tested while being exposed to radiation. In order to do this properly, the test system itself cannot be exposed to the effects of radiation. Digital test systems that are currently available are not suitable for radiation environment testing because they are expensive, heavy, large, difficult to ship, and cannot be exposed to radiation.

NSWC Crane has developed and patented a digital test system for use in radiation testing activities. The digital test system is coupled to a device under test and exposed to a radiation source, such as an ion beam. The radiation source can be placed on either side of the digital test system in order for the device under test to be directly exposed to the radiation source. The digital test system can include sensors to monitor, display, and record various environmental factors as well as use programmable features.

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