## **RadICS Instrumentation & Control Platform**

Fully Qualified Safety-Related Digital Platform







## **About**

The RadICS Platform is robust, flexible, and scalable. It delivers state-of-the-art functions, services, and safeguards for safety applications in the nuclear industry. The RadICS Platform components are designed to the latest IEC standards for safety-critical service in the highest classified nuclear systems, meeting or exceeding NRC requirements. The RadICS Platform consists of a Logic Module, basic input/output modules, and specialty modules all housed in a seismically qualified chassis.

In 2014, the RadICS I&C Platform was certified by exida as "Safety Integrity Level" SIL 3 Capable in a single channel per the requirements of the IEC 61508:2010 Certification Process.

## **RadICS Digital Instrumentation and Control Platform**

- Equipment fully qualified to NRC requirements for use in US safety-related applications.
- Inherent on-board diverse watchdog technological and self-diagnostic functional diversity eliminates common cause failure vulnerabilities.
- Flexible and scalable system design architecture for any size and type of I&C system.
- Fast and deterministic performance using modern FPGA technology. Response times as fast as 5 milliseconds!
- IEC 61508 SIL 3 compliant FPGA-based platform specifically designed for nuclear safety applications. SIL 3 even in a single channel configuration!
- Comprehensive self-diagnostics ensure safety-critical functions, with fail safe design features.
- Test optimization and maintenance cost reductions achieved using overlapping automatic and semi-automatic surveillance capabilities.
- Quality built-in from day one through design, manufacturing, verification and testing capabilities and processes.
- Delivers the high reliability required for the most demanding nuclear safety applications, such as reactor trip and engineered safety feature actuation systems.



