



Narda-MITEQ's electronic testing takes a leap forward

“Narda-MITEQ has been using boundary scan extensively to test control boards before assembly into satellite communication systems, however their previous system had been withdrawn. XJTAG's test system was selected for its ease of use and ability to provide better test coverage, while seamlessly supporting legacy netlist file and test fixtures, making it part of Narda-MITEQ next-generation testing solution.”

Based in Hauppauge, New York, Narda-MITEQ is a pioneer in satellite communication solutions for both military and commercial applications and has been operating for over 70 years. The company is known for its technical expertise and its ability to create custom solutions that meet the ever-evolving connectivity challenges of today's world.

Since control boards are often placed underneath multiple other sub-assemblies, thorough and reliable testing before final assembly is critical as any problems can lead to significant downtime and added costs. Boundary scan testing has been a big part of their production procedure for some time, but with their previous platform being deprecated, they needed a replacement. The transition to XJTAG was very smooth as XJTAG came with full support for their existing setup configurations, built up over the last 15 years. “XJTAG's broad support for netlist file formats meant we didn't have to make tough decisions about which test fixtures to retire,” explained Daniel Hernandez, software engineer at Narda-MITEQ. “The support provided by XJTAG was priceless – an engineer quickly helped to resolve a specific technical issue we thought was insurmountable.”

XJTAG's test coverage allowed Narda-MITEQ to identify and resolve previously undetected issues in old test fixtures, including a short circuit which

was causing a pin to remain stuck low. The issue was confirmed through manual testing and corrected swiftly.

Narda-MITEQ's products require extensive testing involving a range of communication protocols, including SPI, I²C, RS485, and RS422 as well as needing to test the functionality of DACs, ADCs, relays, LEDs, clocks, and memory. XJTAG fully supports all of these requirements, providing immediate out-of-the-box functionality

for the systems in use. Additionally, there was a requirement for in-system programming of flash memory which allowed Narda-MITEQ to leverage XJTAG's world leading flash programming speed. This can be another huge saving, allowing flash memory devices to be programmed an order of magnitude faster than other systems as part of the test process.

One of the key benefits Narda-MITEQ engineers noted was the simplicity and intuitiveness of the XJTAG user interface. “Compared to others, the XJTAG user interface just works”, Daniel added. “It's easy to understand and to navigate, and works just as you'd expect.” This ease of use

minimizes training time, reducing both upfront and ongoing costs. “The user guides are all well written and are an invaluable resource for learning about any portion of the XJTAG platform.” Coupled with XJTAG's dedicated project setup service and ongoing support, Narda-MITEQ's engineers found the platform a breeze to use from start to finish.

In summary, Narda-MITEQ found XJTAG to be a complete and effective replacement for their legacy boundary scan system. With enhanced test coverage, a user-friendly interface, and exceptional customer service, XJTAG proved to be an ideal partner for their advanced testing needs.

opinion

Daniel Hernandez
Software Engineer
Narda-MITEQ

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“The support provided by XJTAG was priceless – the engineer we spoke to was able to solve what we thought to be a highly specific and technical issue very quickly.”

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Company	Narda-MITEQ HQ USA
Nature of business	Development and manufacturing of RF/microwave amplifiers, waveguides, IMA and other components
Main product	Satellite communication systems
Customers	Defense, commercial – land, sea, air and space
Founded	1953
Location	Hauppauge, NY, USA
Web site	www.nardamiteq.com