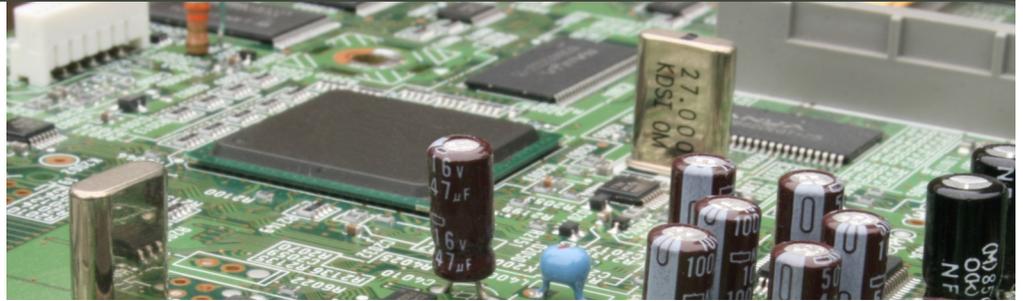


# Boundary-scan Tools from Corelis Reduce Development Cost at Spectral Systems, Inc. (SSI)



**Testing prototype boards before designs are even functional**

*"The Corelis boundary scan equipment we purchased has been extremely helpful in getting our boards up and running."*

## **CORELIS**

13100 Alondra Blvd.  
Cerritos, CA 90703  
Phone: 888-808-2380  
Fax: 562-404-6196  
E-mail:  
sales@corelis.com  
[www.corelis.com](http://www.corelis.com)

Ben Steele is a Program Manager at Spectral Systems responsible for the design and development of state-of-the-art, multi-channel, multi-function digital receiver subsystems. Ben came to Corelis looking for a more effective method for bringing up complex prototype assemblies. The diminishing access of test points on these complex board assemblies, due to fine pitch components and restrictive packaging types such as BGA, often prevented the use of traditional probing methods and was making board bring-up a costly and time consuming process.

Design engineers are often faced with a confounding problem when bringing up new prototype assemblies. Detecting a manufacturing defect before a design has been verified as "functional" can be a frustrating task. When this problem is multiplied by the inability to access crucial test points, the initial debug process can become a huge bottleneck that slips the entire development schedule. Aware of these potential pitfalls, Ben was seeking for a more effective solution to help streamline this initial debug process.

Using the Corelis boundary-scan system, SSI was able to create test vectors and have a test plan in place prior to receiving their first prototype boards from assembly. When the

## Boundary-Scan Without Boundaries™



boards arrived, they connected the Corelis boundary-scan equipment to their prototype boards through a single ribbon cable to a header connector on their target boards. Before their embedded processor fetched its first opcode, they were able to execute a complete board level interconnect test, test on-board memory devices, program CPLDs and Flash memory devices, and test system logic clusters.

"The Corelis boundary-scan equipment we purchased has been extremely helpful in getting our boards up and running. We've been able to identify manufacturing defects and have them repaired prior to trying to make the board functional. I'm sure this has saved countless troubleshooting hours", said Ben, "We had spent several weeks working on a previous board to find the defects which could have been detected right away with the Corelis boundary-scan equipment. We are very pleased with the Corelis Tools and their ease-of-use."

**Spectral Systems, Inc. (SSI)** is a leading-edge aerospace engineering and product development company located in southwestern Ohio, the birthplace of manned flight. SSI was founded in 1995 and has grown very rapidly from an engineering service provider to a developer and integrator of advanced Intelligence, Surveillance and Reconnaissance (ISR) and Electronic Warfare (EW) systems, sensors, and embedded processors.

### **About Corelis**

Corelis, Inc., a subsidiary of Electronic Warfare Associates, Inc., offers bus analysis tools, embedded test tools, and the industry's broadest line of JTAG/boundary-scan software and hardware products combining exceptional ease-of-use with advanced technical innovation and unmatched customer service. Corelis' development and test tools are used by companies such as Agilent, Dell, IBM, Intel, Microsoft, Lockheed Martin, Rockwell Collins, Hewlett-Packard, Motorola, Qualcomm, Nokia, Panasonic, TI, Ford, Broadcom, Ericsson, and many others. Corelis products are found globally in every industry developing or manufacturing electronic products.

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