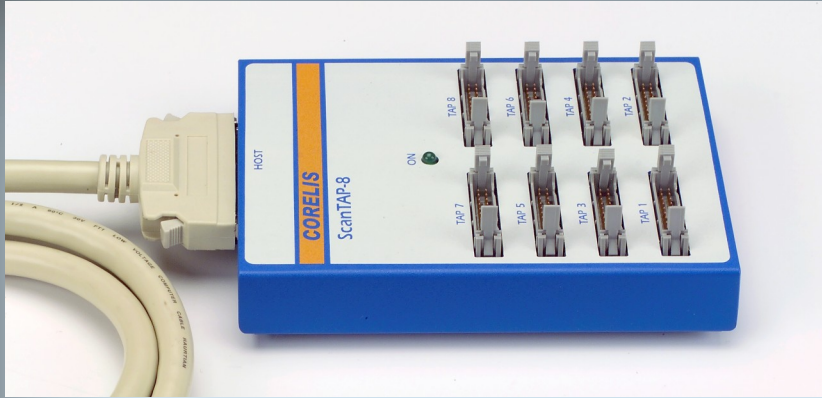


# ScanTAP™

High-Performance Intelligent Pod  
for Corelis Boundary-Scan Controllers

**CORELIS**  
An EWA Company

Preferred JTAG Solutions—Acclaimed Technical Support



## Features

- High-performance intelligent JTAG pod.
- Multi-TAP and/or concurrent (GANG) testing and In-System Programming (ISP) on up to 32 UUTs for high volume test.
- 4, 8, or 32 TAP connections for UUT designs with multiple scan chains.
- User programmable JTAG TCK rate up to 80 MHz for up to 2,560 Mb/sec sustained effective throughput in gang mode.
- I<sup>2</sup>C and SPI programming interfaces (ScanTAP-4 only).
- Independently configurable output voltage and input voltage threshold.
- Automatic signal delay compensation for long cable lengths.
- Up to eight ±50V analog voltage measurement channels.
- Compatible with PCI-1149.1/Turbo, CPXI-1149.1/Turbo, and PCIe-1149.1 high speed JTAG controllers.

## Benefits

- **Save time** at test stations with high performance—up to 80 MHz on all TAPs for lightning fast test and in-system-programming.
- **Increase programming rate** for in-system-programming; the advanced architecture provides persistent scan vector output and extraction, ensuring that throughput remains high at all times.
- **Reduce costs** associated with fixtures; ScanTAP intelligent pods can connect to up to 32 TAPs for multi-TAP and/or gang operation.
- **Compatible** with the complete ScanExpress™ family of boundary-scan and JTAG embedded test products.

Boundary-scan has proven itself time and again to be a truly versatile interface for structural test, embedded functional test, built-in self test (BIST), software debug, and in-system programming. Supporting such diverse applications requires equipment with high performance specifications and extended features.

Corelis **ScanTAP** pods are designed for use with PCI-1149.1/Turbo, PCIe-1149.1, and CPXI-1149.1/Turbo high speed JTAG controllers. Featuring 4, 8, or 32 independent Test Access Ports (TAPs), up to 80 MHz clock rates, and advanced TAP capabilities such as analog voltage measurement, the ScanTAP family of intelligent pods is the ideal JTAG interface for high performance environments.

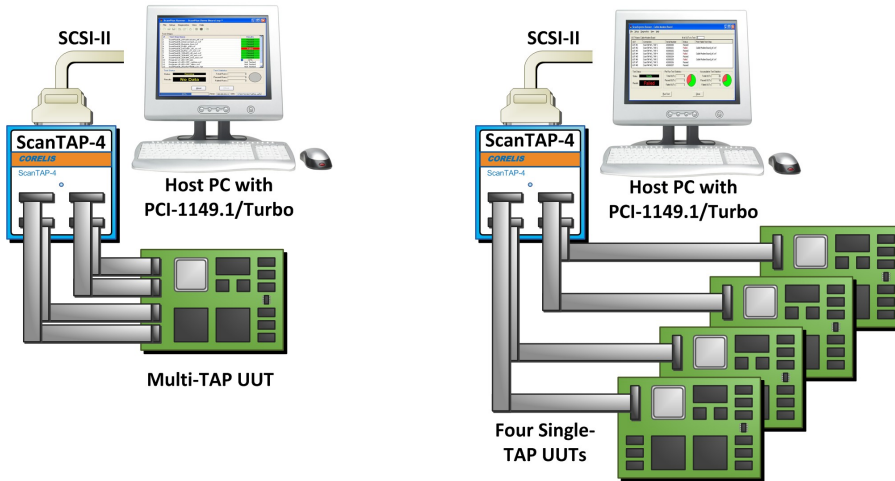
## Applications

- **Boundary-Scan Test** - Use boundary-scan to test, debug, and verify hardware through all phases of a product's life cycle—from development through production and into the field.
- **JTAG Embedded Test** - Control a microprocessor through the JTAG debug port to run functional tests, without requiring boot code.
- **In-System Programming** - Read, erase, program, and verify Flash Memories, serial PROMs, CPLDs, FPGAs, and other programmable devices directly within a circuit or system design.
- **High Volume Production** - Run concurrent tests and ISP on up to 32 UUTs with ScanExpress Runner™ Gang Edition.

**Learn More:** For more information about Corelis products, please visit [www.corelis.com](http://www.corelis.com)

## ScanTAP Intelligent Pods

ScanTAP intelligent pods are fully compliant with the IEEE Standard 1149.1 for test access. The ScanTAP connects to a supported Corelis JTAG controller up to 30 feet away by SCSI-II cable. The ScanTAP provides up to 32 TAP connectors for connecting to any JTAG-based target system. Support for both multi-TAP and concurrent (gang) test execution with in-system programming, voltage measurement capabilities, advanced TAP protection, and integrated serial interfaces on each TAP connector make the ScanTAP ideal for all boundary-scan and serial bus programming applications.



PCI-1149.1/Turbo with ScanTAP-4 Configurations.

### ScanTAP Hardware Specifications<sup>1</sup>

General	ScanTAP-4	ScanTAP-8	ScanTAP-32
Mechanical Dimensions	4.00 in. x 4.60 in. x 0.75 in.	5.20 in. x 6.40 in. x 0.90 in.	16.8 in. x 9.2 in. x 5.0 in. 19" rack compatible (3U)
RoHS Compliant	Yes	Yes	Yes
<b>Host Interface</b>			
Host Connector	68-pin SCSI type (AMP part no. 787171-7 or equivalent)		
Host Cable Length	6 foot (standard), 15 foot (optional), 30 foot (optional)		
<b>Target Interface</b>			
Maximum TCK Clock Rate	80 MHz	80 MHz	80 MHz
Number of TAPs	4	8	32
Analog Voltage Measurement (±50V) Channels	8 (2 per TAP)	8 (1 per TAP)	0
<b>I<sup>2</sup>C Interface</b>			
SCL Clock Rate	100 kHz	N/A	N/A
<b>SPI Interface</b>			
Chip Selects	8 (2 per TAP)	N/A	N/A
SCK Clock Rate	1 MHz	N/A	N/A

<sup>1</sup>For complete specifications, please refer to the individual ScanTAP User's Manuals.

### Ordering Information

#### Part Number—10302A

**ScanTAP-4** for testing and programming up to 4 UUTs. Includes 6' SCSI cable, four 12" 10-pin TAP cables, one 12" 16-pin TAP cable, and one 12" 20-pin TAP cable.

#### Part Number—10329

**ScanTAP-8** for testing and programming up to 8 UUTs. Includes 6' SCSI cable, eight 12" 10-pin TAP cables, one 12" 16-pin TAP cable, and one 12" 20-pin TAP cable.

#### Part Number—10307

**ScanTAP-32** for testing and programming up to 32 UUTs. Includes 6' SCSI cable, 32 12" 10-pin TAP cables, four 36" 10-pin TAP cables, two 12" 16-pin TAP cables, and two 12" 20-pin TAP cables.

For more information about Corelis products, please visit our website at

<http://www.corelis.com/>

### Compatibility

ScanTAP pods require one of the following Corelis JTAG controllers:

- **PCI-1149.1/Turbo** PCI bus boundary-scan controller.
- **PCIe-1149.1** PCIe bus boundary-scan controller.
- **CPXI-1149.1/Turbo** cPCI/PXI boundary-scan controller.

### CORELIS

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