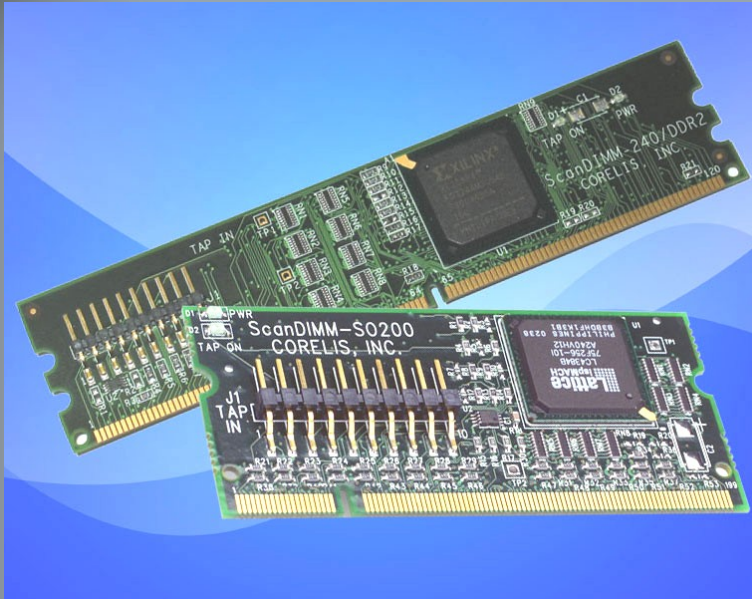


# ScanDIMM™

**CORELIS**  
An EWA Company

## Boundary-Scan DIMM Socket Tester

Preferred Boundary-Scan Solutions—Acclaimed Technical Support



### Features

- Support for DIMM and SODIMM form factors for SDRAM, DDR, DDR2, and DDR3 type memory modules
- Tests for opens on power and ground pins
- Each pin is independently controllable for drive, sense, bi-directional, and tri-state operation
- Keyed connector for voltage compatibility
- Fully compliant JTAG/IEEE 1149.1 Test Access Port (TAP)
- Daisy chain up to 8 ScanDIMM modules
- TAP input and TAP output connectors with auto-detection
- Up to 25MHz TCK frequency
- Power on and TAP connection LED indicators
- JEDEC standard compliant form factors: MO-161, MO-206, MO-224, MO-237D, MO-268C, and MO-269F
- Multi-layer, low noise PCB construction with ground and power planes
- BSDL file provided for compatibility with all boundary-scan automatic test pattern generation tools
- Self-test included for use with ScanExpress Runner™

Maximizing test coverage is an important piece in test procedure development. Unfortunately, not all designs have the necessary requirements in place to accommodate boundary-scan test methods on memory devices. ScanDIMM digital socket test modules are designed to overcome such limitations when testing DIMM sockets utilizing boundary-scan test techniques.

ScanDIMM modules provide the capability to instantly turn any DIMM socket into a fully compliant IEEE-1149.1 device. Integration is as simple as assigning the included BSDL file to the reference designator of the target socket and compiling test vectors.

In multi-socket systems, multiple ScanDIMM modules can be linked to provide even greater boundary-scan test depth.

### Applications

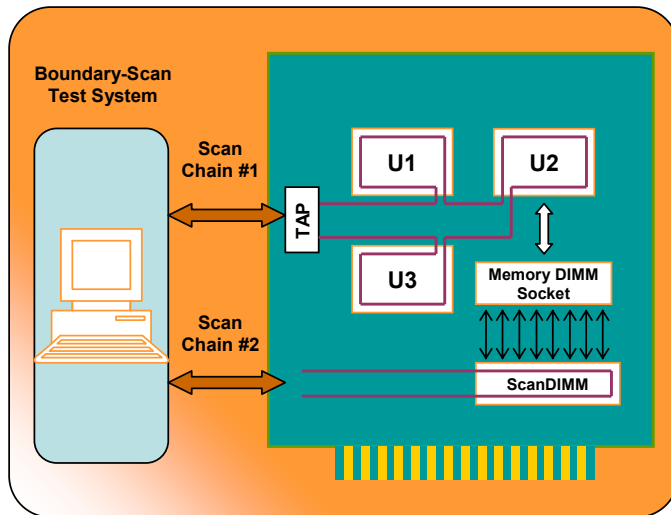
- Advanced interconnect tests on DIMM sockets
- Able to detect and diagnose difficult failure modes such as an open clock signal
- Allows testability on sockets that have not been properly designed for boundary-scan testing

### Benefits

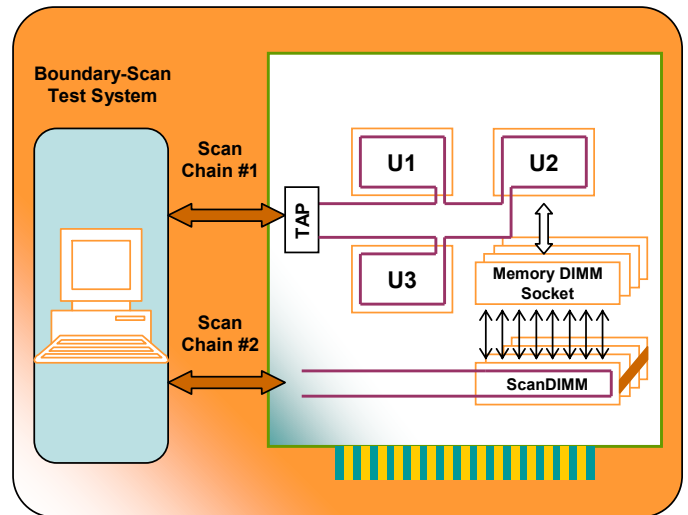
- Removes the necessity to test all compatible memory sizes and depths for a given system
- All data, address, control, power, and ground pins are tested
- Provides pin-point diagnostics when failures occur, even in cases where there are multiple failures
- Significantly faster and more accurate than functional test methods

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

ScanDIMM digital socket test modules provide an easy-to-use, mechanical and electrical solution for interconnect testing of DIMM sockets. Through the use of boundary-scan technology, ScanDIMM socket testers add fully bi-directional test signals to each socket pin. A boundary-scan Test Access Port (TAP) connects to a host computer which provides virtually unlimited memory depth for testing each of the DIMM socket pins. SDRAM, DDR, DDR2, and DDR3 memory types are supported in several different form factors.



Block Diagram of Connection to a Single ScanDIMM Module



Block Diagram of Connection to Multiple ScanDIMM Modules

## ScanDIMM Modules

Model	Part No.	Description
ScanDIMM-168	10323	168-pin DIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-161. 3.3V-compatible connector keying.
ScanDIMM-184	10314	184-pin DIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-206. 2.5V-compatible connector keying.
ScanDIMM-SO200/DDR2	10333	200-pin DDR2 SODIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-224. 1.8V-compatible connector keying.
ScanDIMM-240/DDR2	10334	240-pin DDR2 DIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-237D. 1.8V-compatible connector keying.
ScanDIMM-240/DDR3/R	10407	240-pin DDR3 RDIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-269F. 1.5V-compatible connector keying.
ScanDIMM-SO204/DDR3	10408	204-pin DDR3 SODIMM Tester. TAP access via header. Compatible with JEDEC mechanical specification MO-268C. 1.5V-compatible connector keying.
ScanDIMM-SO204/DDR3/MIRRORED	10409	204-pin DDR3 SODIMM Tester with mirrored pin-out. TAP access via header. Compatible with JEDEC mechanical specification MO-268C. 1.5V-compatible connector keying.

## Ordering Information

The ScanDIMM product includes:

- ScanDIMM Module (see table for part numbers)
- Host Adapter Cable, Corelis P/N 15336
- TAP-Out to TAP-In daisy-chain cable, 2 inch (50.8mm) long, 10-pin 1:1, Corelis P/N 15337 (not included with SODIMM modules)
- User's Manual
- BSDL file and self-test

## Optional Accessories

Additional TAP Adapter Cables (P/N 15336) and 2 inch (50.8mm) 10-Pin 1:1 daisy-chain cables (P/N 15337) can be ordered from Corelis.

## CORELIS

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