



Client Case Study

The Solution: High Performance BGA Test Socket Systems Replacing Pogo Pins

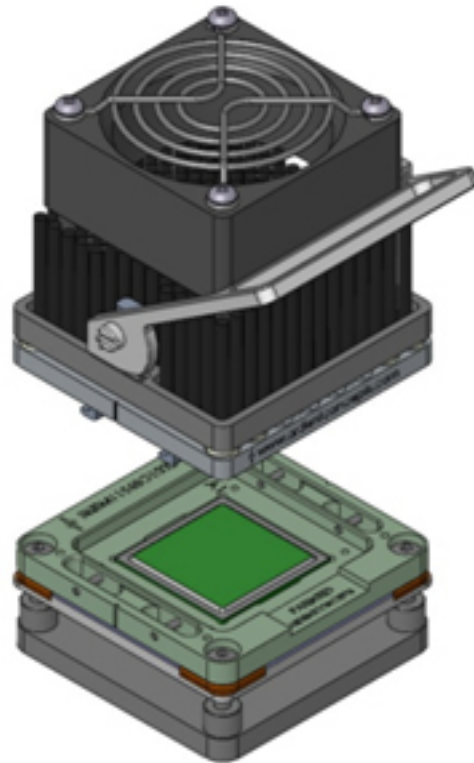
Our Client: a major technology innovator and global leader in semi-conductors for wired and wireless communications; client is one of the world's largest fabless semi-conductor companies.

The Product:

New generation chipsets which provide logic, processing and network switching capabilities for large communications systems

The Challenge:

- ✓ Advanced characterization and system level testing analysis required during development
- ✓ Testing demanded careful AC and DC analysis
- ✓ Testing required significant thermal cycling of the device in situ
- ✓ Any issues with interconnect reliability or thermal management of the device under test could result in poor data for chip design and development which could dramatically impact lead time and reliability of the new chip.



Ardent's Solution:

Technology: [RC Spring Probe™](#)

Using our patented **RC Spring Probe™** technology, Ardent developed well engineered high performance test socket solutions for this client. Working closely with the client's design team, Ardent standardized a number of high AC performance interposer sets and passive thermal management devices which interface the device under test with the complex electronics necessary for high speed test and characterization of the chipsets.



Benefits/Business Impact:

- ✓ Nearly 100% uptime in characterization and system level labs for testing.
- ✓ Nearly flawless electrical functionality for high speed test & characterization of chipsets.
- ✓ Team approach (client and Ardent as US-based partner) ensured mechanical reliability and proper integration of the test socket and thermal management devices within the test system.
- ✓ Standardization enabled reduction of potential issues in mechanical design and resulted in a proven system for socket reliability and electrical performance over extended use on multiple programs.
- ✓ Reliable, consistent results for product development promote faster time to market.