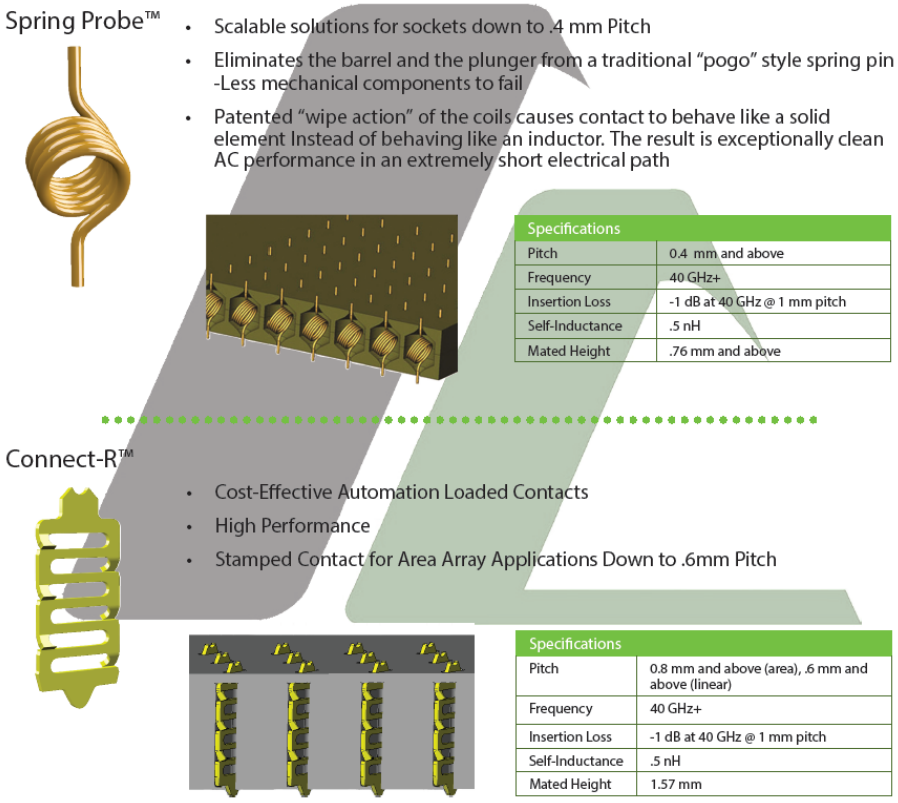
APPLICATION NOTE

Anatomy of a Socket

Purpose:
The purpose of this document is to explain the different pieces that go into an Amphenol Ardent Concepts' Socket with visual aids.

The Contacts:
Below is an image of Amphenol Ardent Concept's two primary contact families, the **RC Spring Probe™** and the **RC Connect-R™**. They are the backbone of our products and are responsible for our industry leading performance. In the SK Series™ Socket they provide the electrical connection between the device under test and the PCB.



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The Anatomy of SK Series Socket:

1. Bail Lever Lid – The bail lever lid is one of many lid styles that are offered at Amphenol Ardent Concepts, but while the styles change, the lid's primary function is to apply compression force to the customer's package. The lid can be outfitted with a heat sink and fan to help with heat dispersion. We are able to customize the design of the lid to conform to many external devices for thermal testing or package cooling.

2. Socket Head Cap Screws – Attach the socket to the board by threading through the Guide Plate, Interposer, and into the threaded holes of the Stiffener Assembly located on the back side of the PCB.

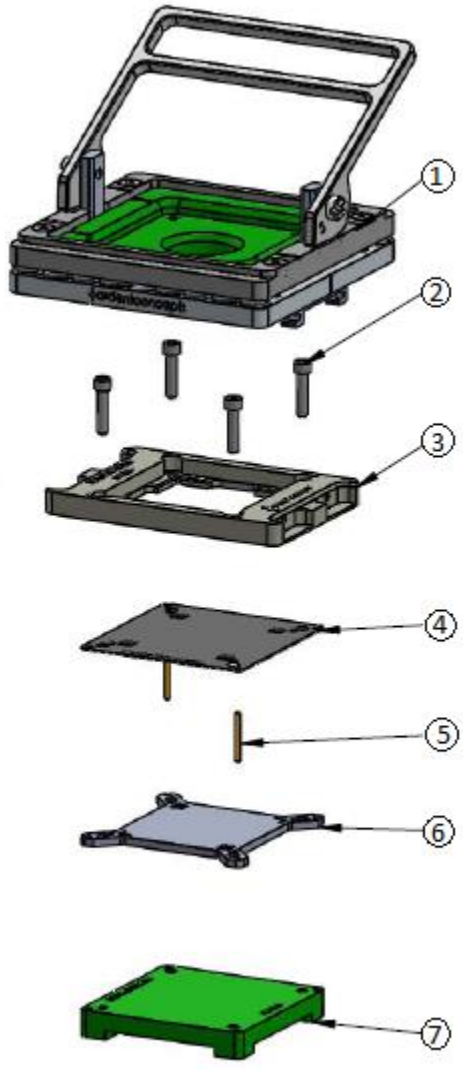
3. Guide Plate – The Guide Plate provides alignment of the package to the contacts below, serves as an anchor for the Lid to attach, and provides additional rigidity to the socket assembly.

4. BGA Alignment Sheet – The BGA alignment sheet is used in BGA packages only and provides proper targeting and alignment to the contacts housed within the interposer below. *

5. Dowel – Used for alignment, to match the centers of each component of the socket.

6. Insulator (Interposer) – The purpose of the interposer is to house our patented contacts that are making the electrical connection between the DUT and PCB.

7. Board Stiffener – This is to help with the planarity and rigidity of the PCB.



*only applies to RC Connect-R™ sockets

Who is Amphenol Ardent Concepts?

Amphenol Ardent Concepts is a leading designer and manufacturer of high performance multicoax and coaxial assemblies, connectors, and sockets used in the development of next generation semiconductors and electronics systems. Our core technology is the smallest, fastest, most electrically efficient compression mount connector technology worldwide. As data rate requirements increase and devices and systems shrink, Ardent's products deliver superior signal integrity in a dense footprint that can be reusable across programs to maximize cost savings.