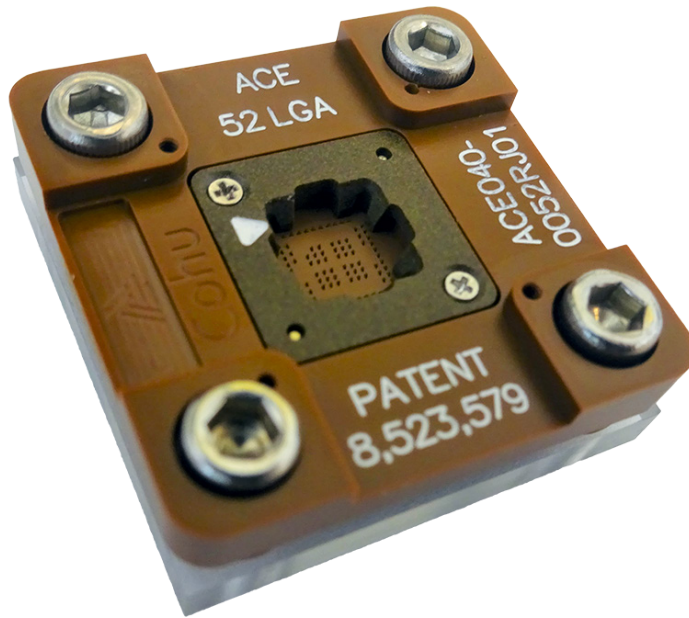


ACE Contactor/Probe Head

Cost efficient RF contactor for FBGA and wafer-level packages



Automotive / Power



Mobility



Precision Analog / Sensors

Benefits

- Compatible with all device types, plating, and pitches
- Consistent electrical performance
- Long life and lower cost of test

Key Features

- High frequency >40 GHz @ -1 dB
- Exceptional DC and RF performance
- Revolutionary barrel-less architecture
- HyperCore - homogeneous DUT side plunger material
- Large contact surface between top and bottom plungers
- Singulated devices and strip test
- BGA, LGA, NiPd QFN and fine pitch WLCSP
- Pitches down to 0.4 mm



High End Digital



RF

- Temperature range: -55°C to +155°C
- Short signal path, sharp tips
- Current carrying capacity up to 1.9 A continuous
- Life cycle 500k

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Specifications

Packages and Applications

- BGA, LGA, NiPd QFN and fine pitch WLCSP
- Singulated devices
- Pitch down to 0.4 mm

Environmental

- Temperature Range: -55°C to +155°C

Reliability*

- Typical probe Life: 500,000 cycles

Electrical

- Bandwidth @ -1 dB Insertion Loss
 - 0.4 mm pitch: 40 GHz, GSG
- Loop Inductance
 - 0.4 mm pitch: 0.56 nH, GSG
- Current Carrying Capacity
 - 20°C Temperature Rise
 - 2.3 A
- Maximum @ 1% duty cycle
 - >11 A

Mechanical

- DUT Side Compliance
 - 200 µm
- Contact Length at Test Height
 - 1.51 mm (R-tip: QFN)
 - 1.71 mm (Y-tip: BGA)
- Contact Spring Force at Test Height
 - 0.18 N

- DUT Tip Style
 - Single point for QFNs, dual for BGAs

- PCB Tip Style
 - Radius

Materials

- Housing Material
 - Vespel® SP-1 (others available on request)
- Contact Spring Material
 - Stainless steel
- Probe Material
 - HyperCore
 - 600 Knoop hardness
- Contact Spring Coating
 - Hard gold (board-side only)

Configurations / Interface Options

- Automated test
 - Handler specific design / configuration
 - Singulated packages
- Manual test
 - Manual actuators available

* Actual values are dependent on the application (DUT materials, handler kit, maintenance, etc.)

All specifications are subject to change without notification and are for reference only. Use contactor drawing to design interface hardware. For detailed performance specifications, please contact Cohu.