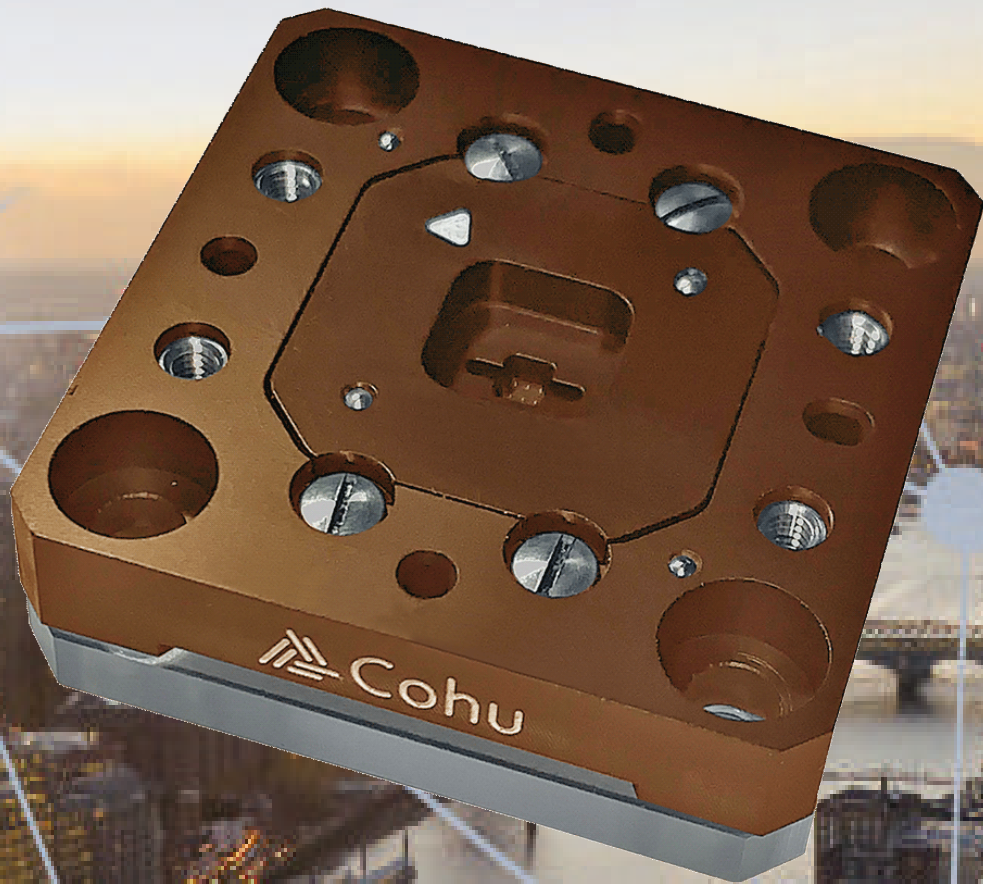




HYDRA RF

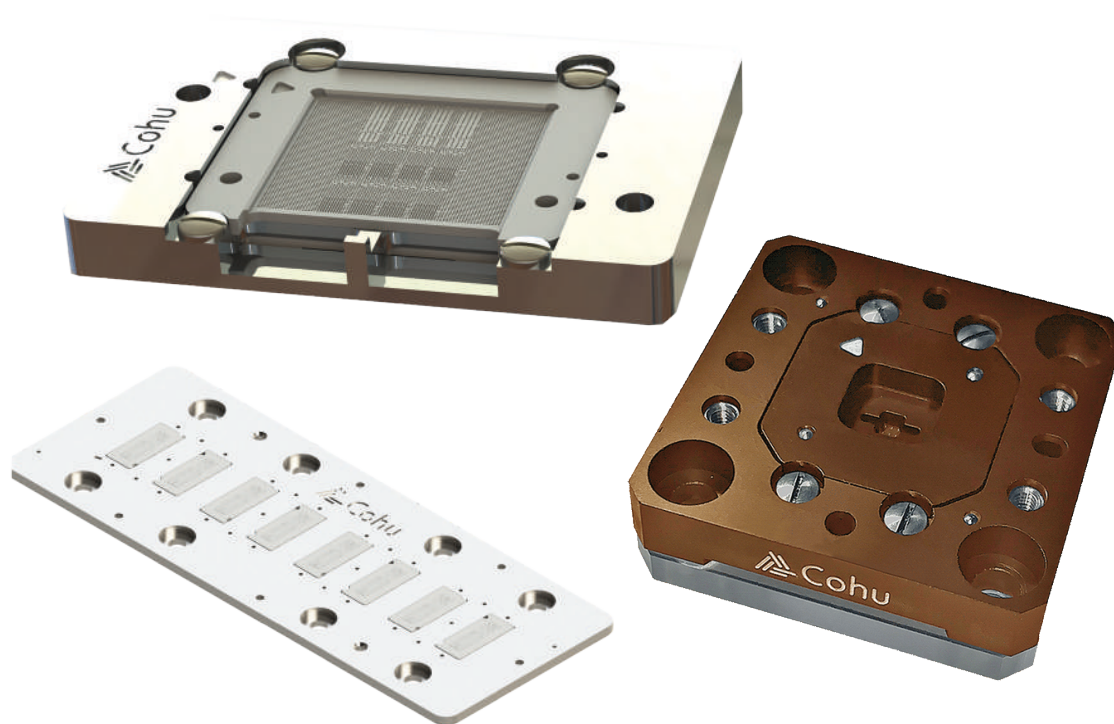
Test Contactor / Probe Head

HYDRA RF



Test Contactor / Probe Head

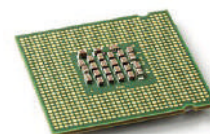
Lower Cost of Test for Next-Generation
5G mmWave FR2 up to 56+ GHz



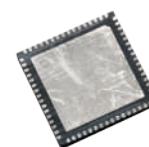
Packages



BGA



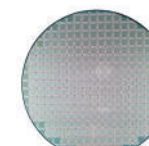
LGA



QFN



QFP



WLCSP

End Product Markets



Automotive and Power



High End Digital



Mobility

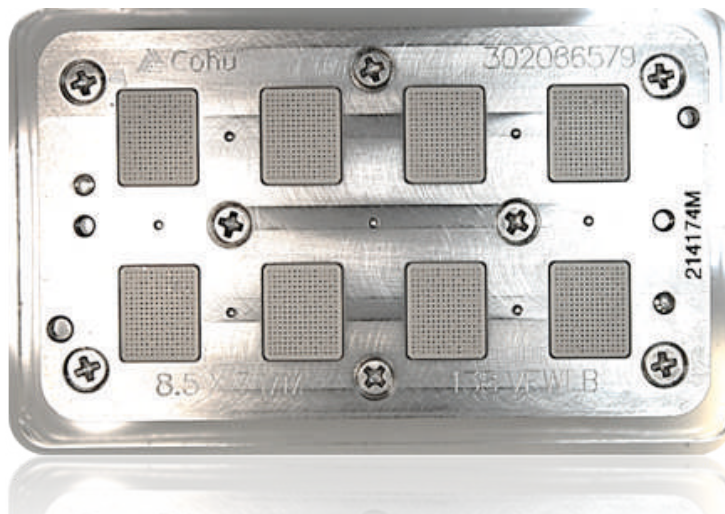


RF

High Signal Integrity and Power Delivery for RF Devices

Key Features

- **Optimized Contact Materials.** A wide selection of contact materials enables optimization for specific DUT interconnect requirements and applications.
- **Low Inductance, High Bandwidth.** Designed with low loop inductance to deliver high bandwidth performance for today's high-speed and RF devices.
- **Ultra-Fine Pitch Support.** Supports pitches down to 150 μm , enabling reliable contact for advanced, high-density package designs.
- **Enhanced Mechanical Compliance.** Optional floating alignment plate and a large compliance window accommodate coplanarity variation and improve contact consistency.
- **High Current Capability.** Excellent current-carrying capacity ensures reliable power delivery for demanding digital and RF applications.
- **Stable, Long-Life Performance.** Exceptional resistance stability delivers prolonged usable life and consistent electrical performance over time.
- **High Signal Integrity.** Provides excellent signal integrity and power delivery, making it an ideal contact solution for RF-intensive devices.
- **Broad Package Compatibility.** Suitable for singulated, strip, and wafer-level test across grid array, leaded, and leadless packages, including BGA, LGA, WLCSP, QFN, and QFP, supporting pitches from 150 μm to 0.3 mm and up.



**Built for Hundreds of Thousands of Insertions / Cycles -
Without Compromising Contact Resistance**

ELECTRICAL SPECIFICATIONS

	0.15 mm	0.30 mm	0.40 mm	0.50 mm
Bandwidth @ -1 dB, RL @ -10 dB	51 GHz, 53 GHz	> 55 GHz, > 55 GHz	43 GHz, 47 GHz	50 GHz, 41 GHz
Loop Inductance	down to 1.15 nH	1.07 - 1.9 nH	0.63 - 0.75 nH	0.89 - 1.94 nH
Contact Resistance ⁽¹⁾	280 mΩ	100 - 140 mΩ	35 - 65 mΩ	35 - 125 mΩ
Current Carrying Capacity 20° Celsius Temperature Rise	0.83 A (ISMI) ⁽²⁾	1.2 - 1.3 A	1.5 - 1.8 A	1.8 - 3.1 A
Maximum @ 1% Duty Cycle	> 5 - > 10 A		> 11 - > 26 A	> 12 - > 26 A

MECHANICAL SPECIFICATIONS

Contact Pitches Supported: 0.15 mm and up

Contact Force at Test Height	0.15 mm	0.30 mm	0.40 mm	0.50 mm
	0.06 N (5.9 gf)	0.1 - 0.17 N (9.8 - 17 gf)	0.18 - 0.31 N (18 - 31 gf)	0.20 - 0.37 N (20 - 40 gf)
Test Height	4.3 mm	3.3 - 4.5 mm	2.85 - 6.45 mm	2.8 - 6.96 mm
DUT Side Compliance	250 μm	150 - 250 μm	265 - 480 μm	250 - 370 μm
DUT Tip Style	L (four-point crown)	B (single point), L (four-point crown)	B, L, U (reduced three-point crown)	B, L, U
PCB Tip Style	J (radius)			
Temperature Range	-55°C to +155°C			
Reliability ⁽³⁾ (Packaged Device)	500K cycles			
Reliability ⁽³⁾ (WLCSP)	1M cycles			
Probe Cleaning	50K to 100K			
Housing Material	Vespel SP-1, Plavis N, MDS-100, Photoveel, Other materials available upon request			
Spring Probe DUT Tip Plating	Homogenous alloy, No1, Gold			
Spring Material	0.15 mm		0.30 mm, 0.40 mm, 0.50 mm	
	Proprietary high-temperature alloy		Stainless steel	
Configurations / Interface Options	Automated Test: Handler specific design / configuration, Optional manual actuator, E-beam probe support, Custom configurations			

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.

(1) Typical resistance measured between Au plated sheets.

(2) ISMI rating is not a current carrying capacity and it is used for comparison purposes.

(3) Cleaning frequency and life specifications are estimates based on customer feedback, Actual values are dependent on the application (DUT materials, handler kit, maintenance, etc.).

REV20260625

Cohu, Inc.
17087 Via Del Campo, San Diego, CA 92127-1711, USA
Tel. +1-858-848-8000 | info@cohu.com | www.cohu.com
© 2026 Cohu, Inc.: All rights reserved.