

C.C.P.

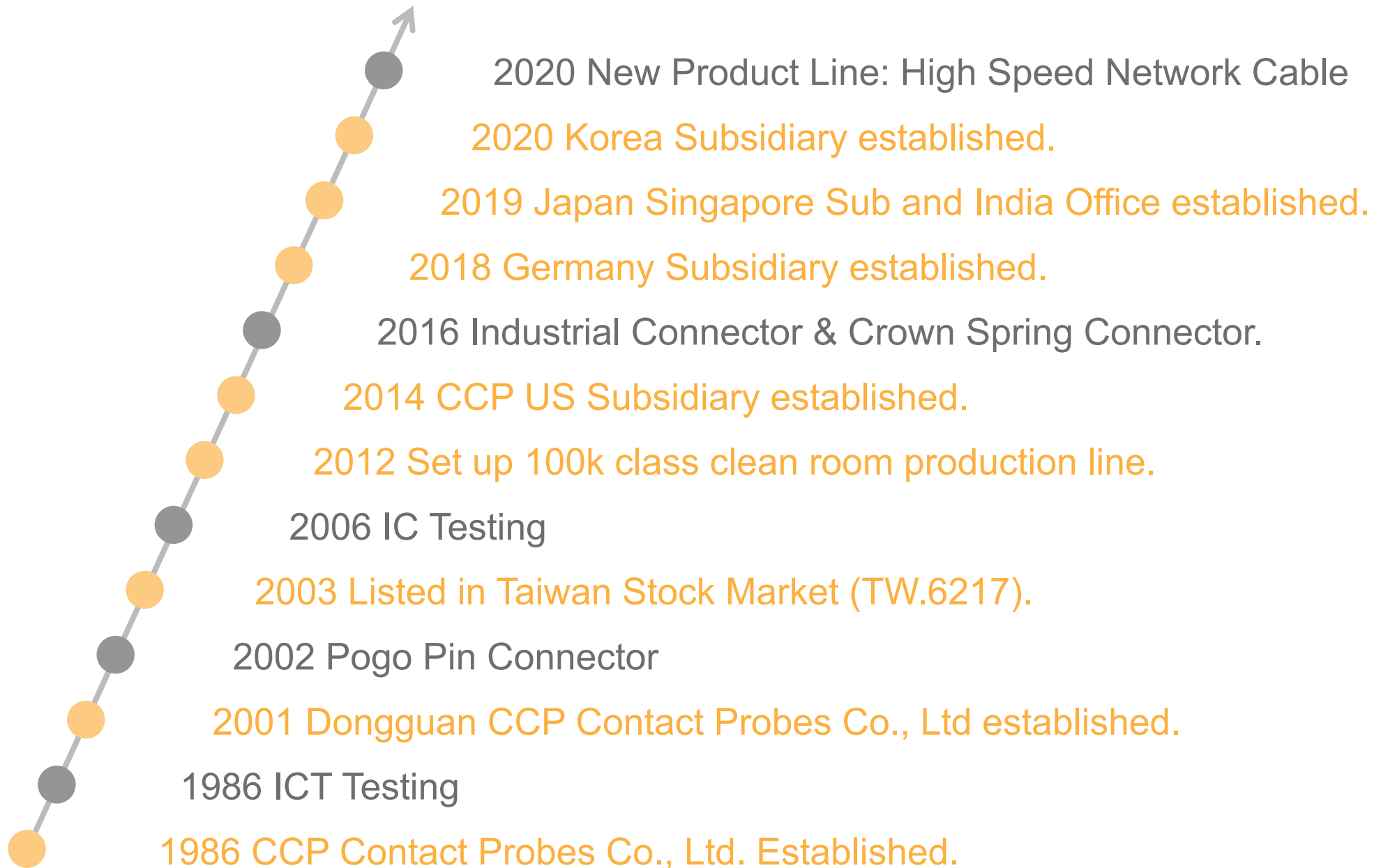


CCP Contact Probes

Testing Solution



CCP Contact Probes - History





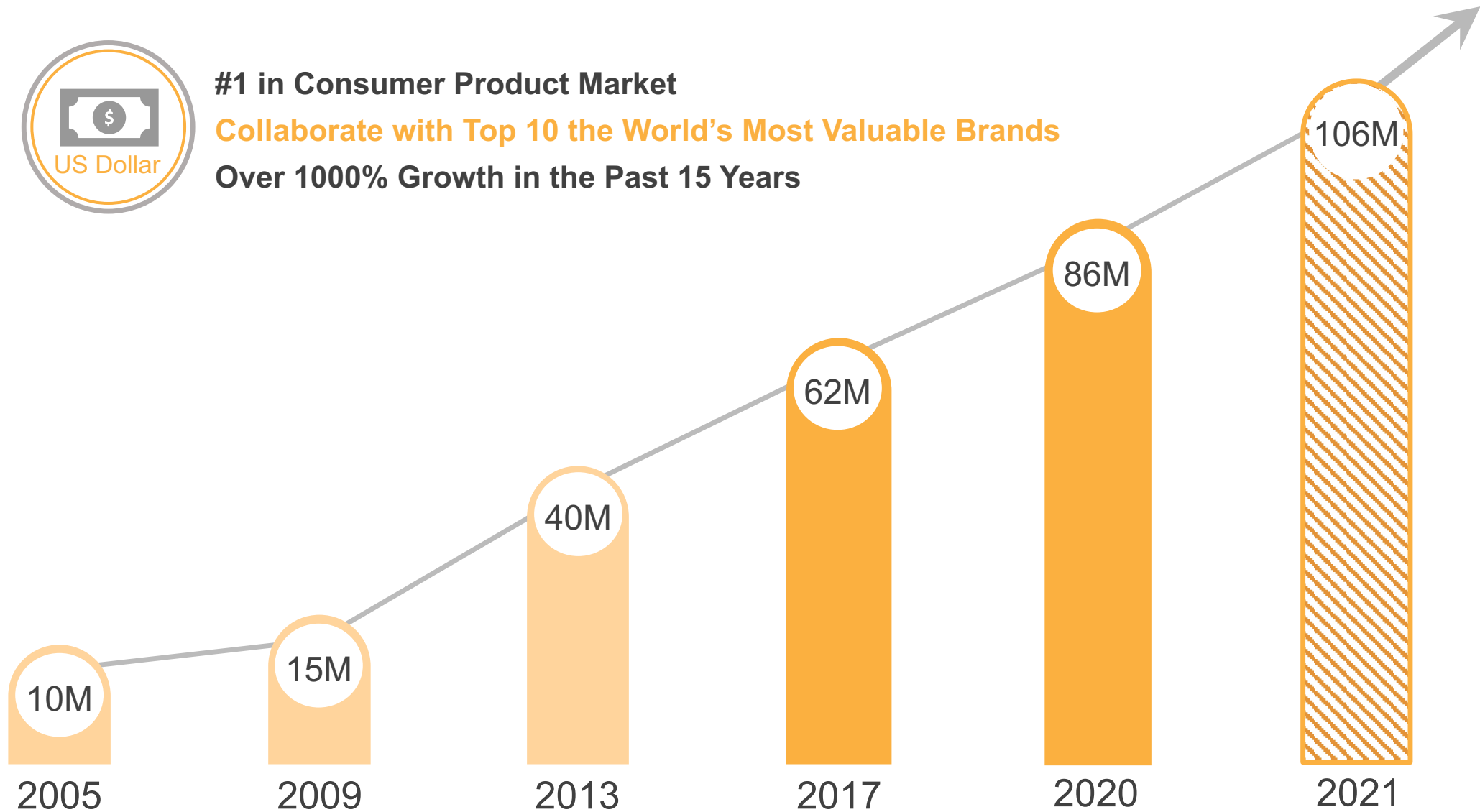
CCP Contact Probes - Growth



#1 in Consumer Product Market

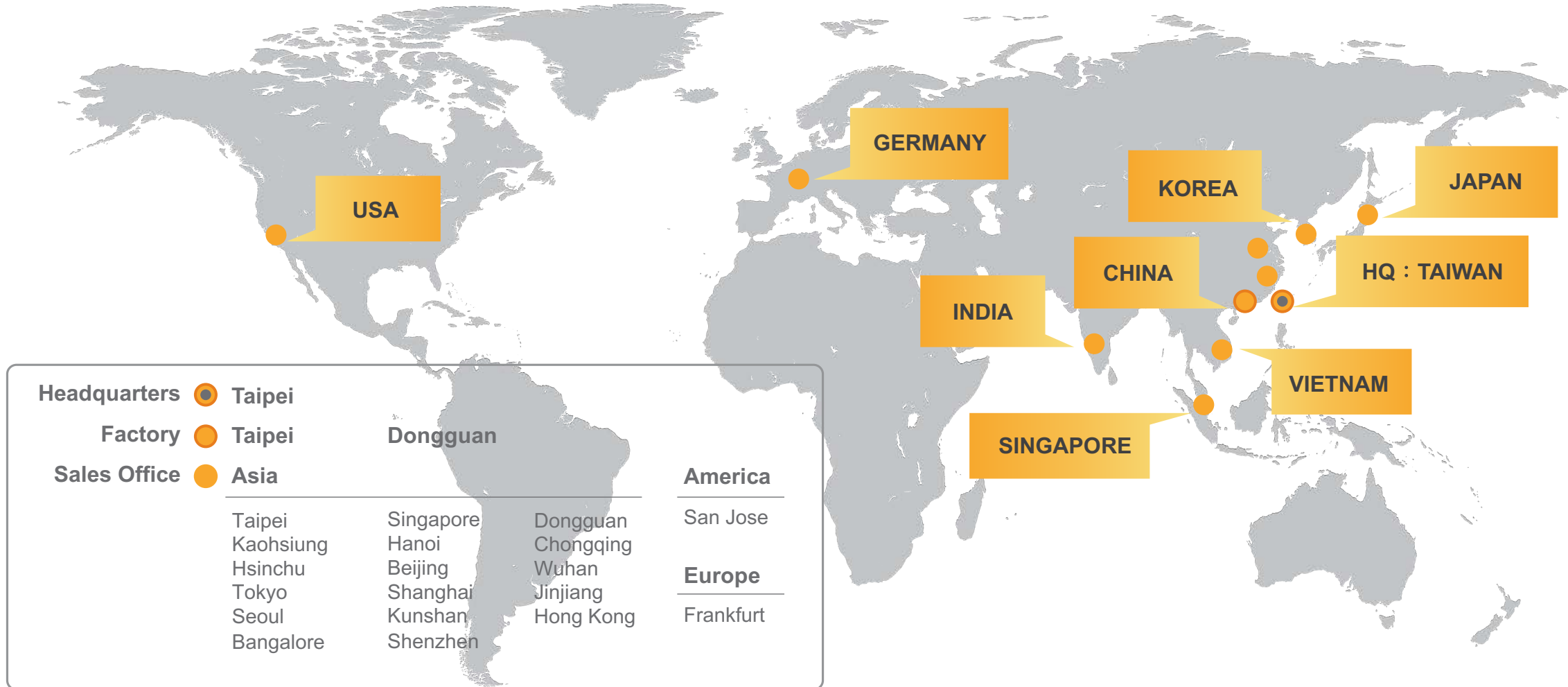
Collaborate with Top 10 the World's Most Valuable Brands

Over 1000% Growth in the Past 15 Years





CCP Contact Probes - Worldwide



Western
Digita



Google

amazon

ADVANTEST

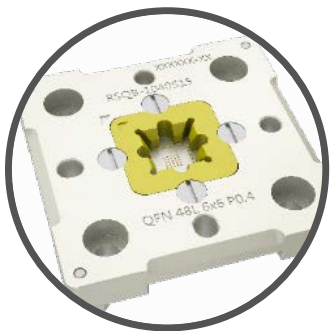
flex



FOXCONN



CCP Contact Probes - Product Portfolio



Testing Solution

Fine Pitch

IC Testing Probe
PCB Testing Probe
Testing Socket



Pogo Pin Connector

1A~13A

Pogo Pin Conn.
Waterproof Conn.
Magnetic Conn.



High Current Connector

13A~250A

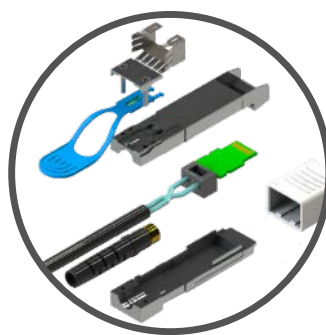
Electronic Vehicle
High Current Conn.



Medical Connector

Environmental Sensitivity

Circular Conn.
Endoscope Conn.



High Speed Cable

25Gbps~100Gbps

Server
Switch
Telecom



Industrial Solution

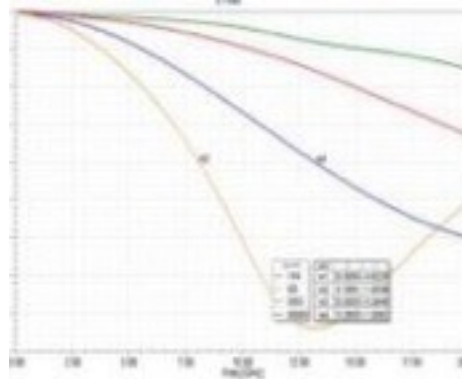
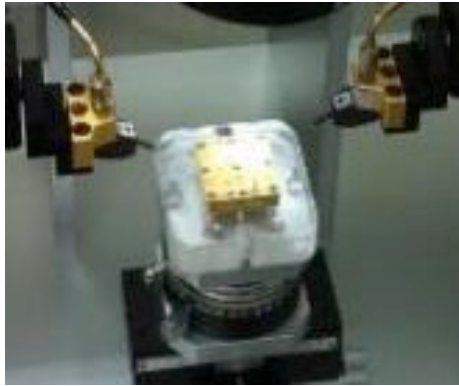
Extreme Environment

Aerospace
Military
Transportation



Core Advantages

High Frequency Simulation



HFSS

Material Development

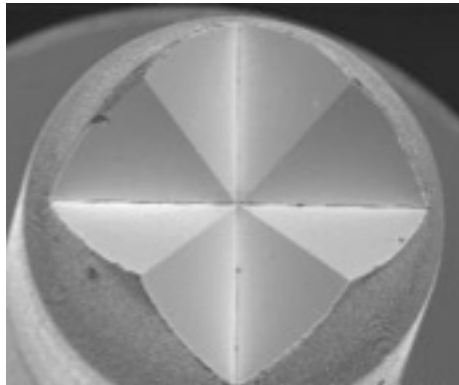


Plating Lab

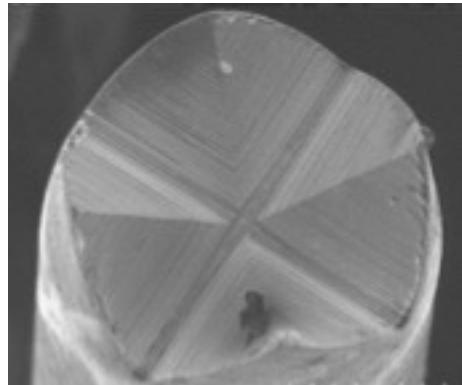


Self-owned Plating Factory

Mirror Process

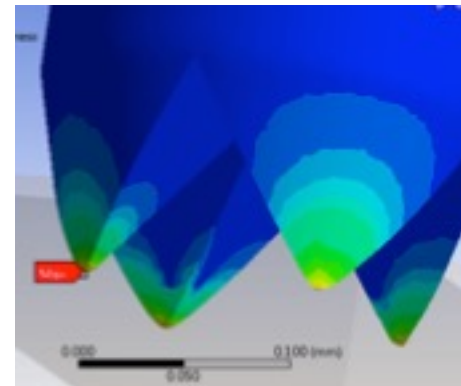


CCP's Product



Other Provider

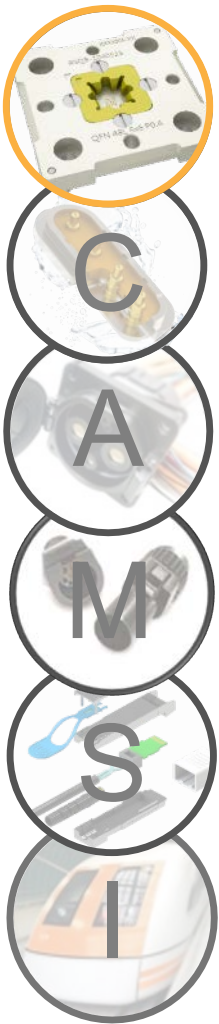
Finite Element Analysis



ANSYS



Testing Solution Product Line



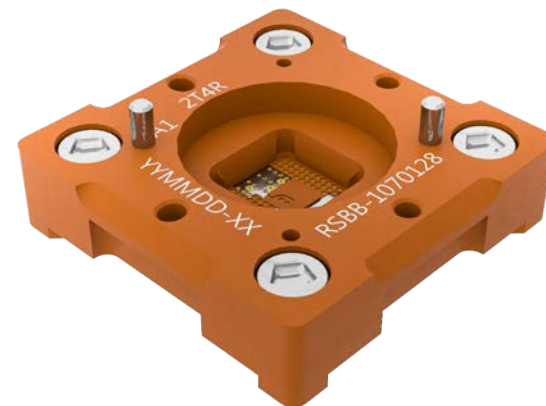
IC Package Test



Burn-In Test



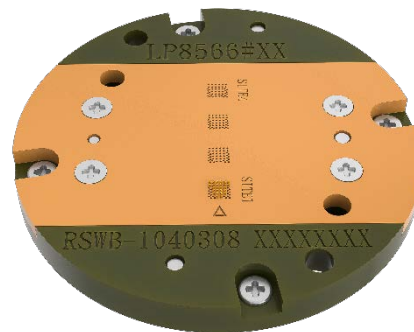
High Frequency Test



Memory Test



WLCSP Test



Battery Test





Testing Solution - IC Test Probe

General Final Test



Burn-In Test



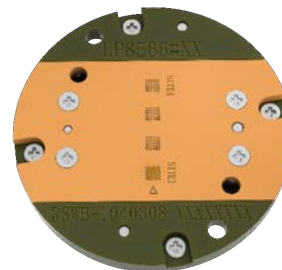
Memory Test



High Frequency Test



Wafer Level Test

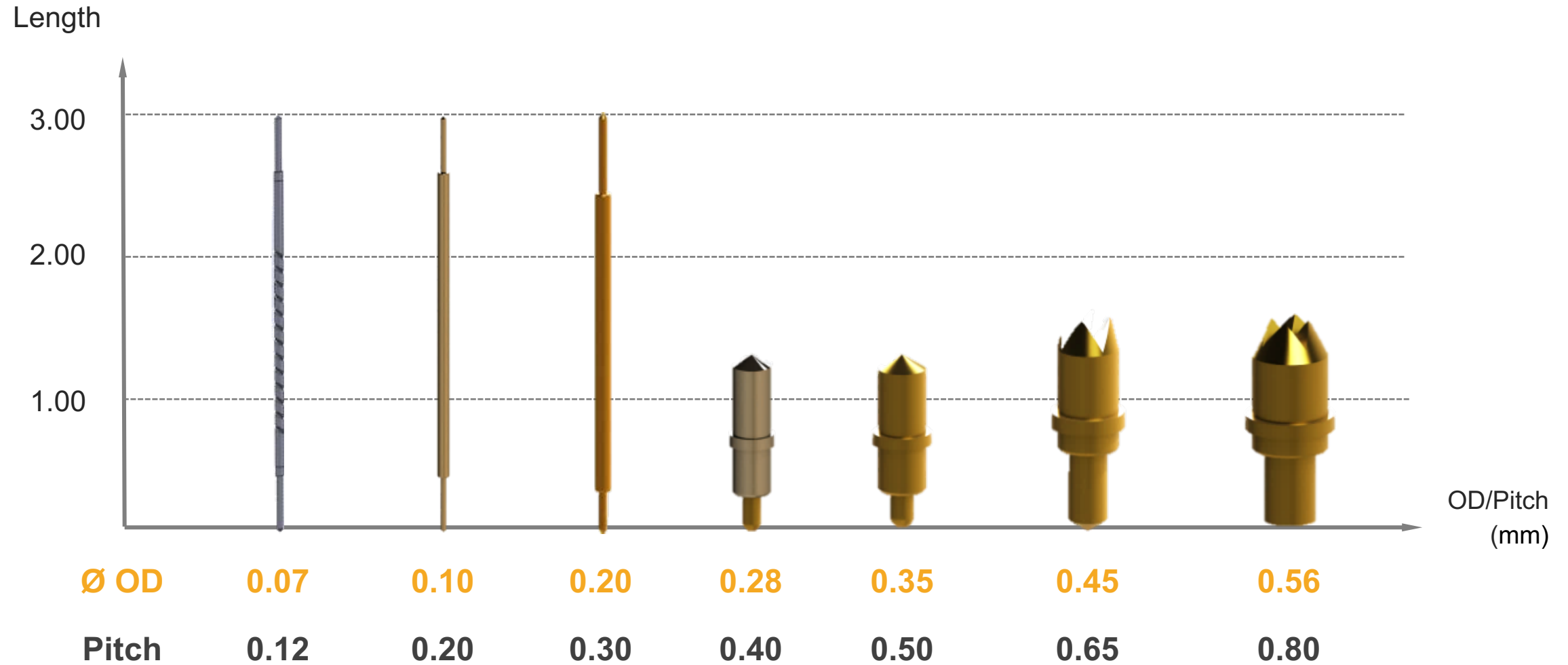


Fine Pitch Test





Testing Solution - Testing Probe

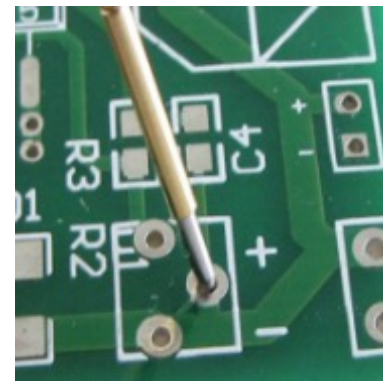




Testing Solution - ICT Test Probe



PCB



FPC



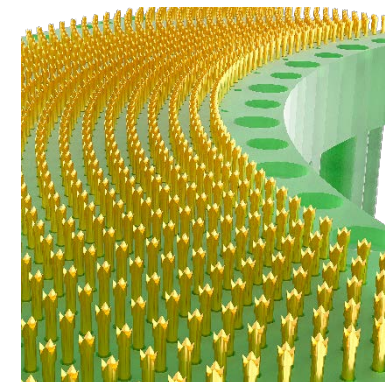
Battery



LED



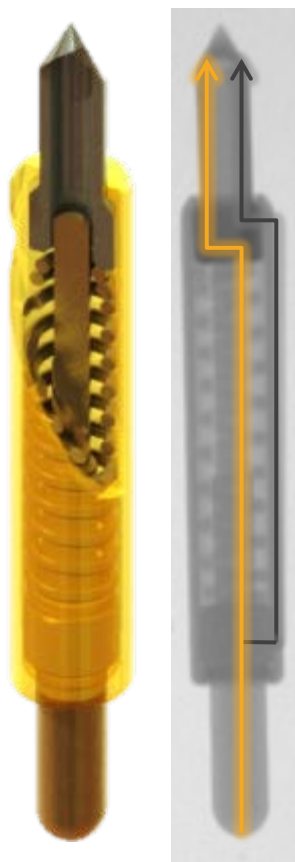
Pogo Tower



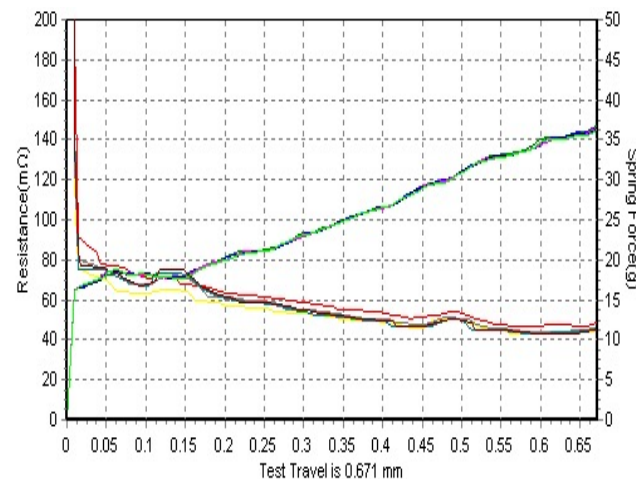


Testing Solution - High Current Probe

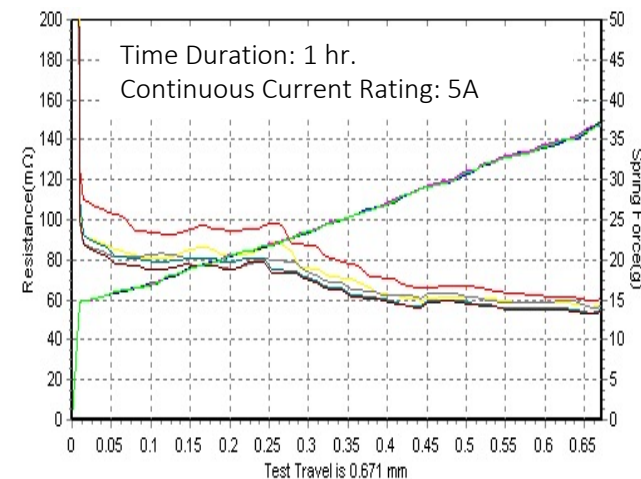
Patent No. **M453149**



Normal Testing



High Current Testing



CCP Concentric Pin

Stroke	0.60mm
Contact force	30 g (Adjustable)
Durability	Contacts : >30k
Pitch	0.650mm
DC resistance	< 60mΩ
Current Rating	5A



Temperature Record



Testing Solution - High Frequency Probes



Ø 0.65mm



Ø 0.54mm



Ø 0.43mm



Ø 0.33mm

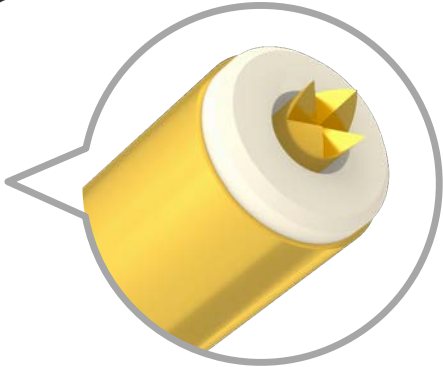
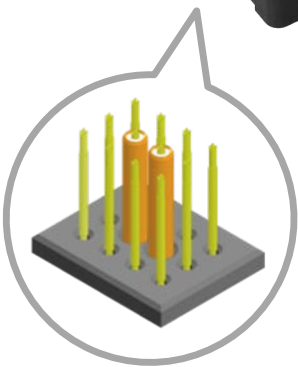
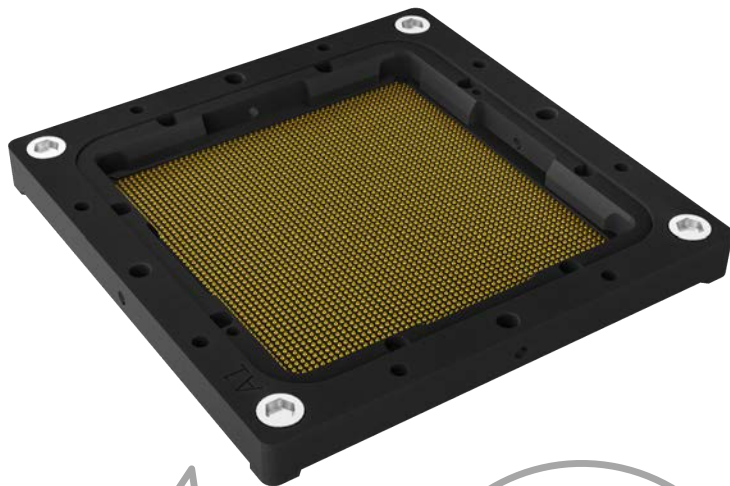
Spring Force	30g \pm 20% @ 0.40mm	30g \pm 20% @ 0.4mm	12~19g \pm 20% @ 0.18mm	15g \pm 20% @ 0.18mm
Insertion Loss	-1dB>20GHz	-1dB>20GHz	-1dB>20GHz	-1dB>20GHz
Pitch	>0.80mm	0.65mm	0.50mm	0.40mm



Testing Solution - High Frequency Socket

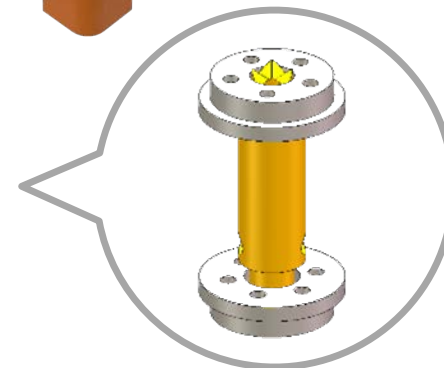
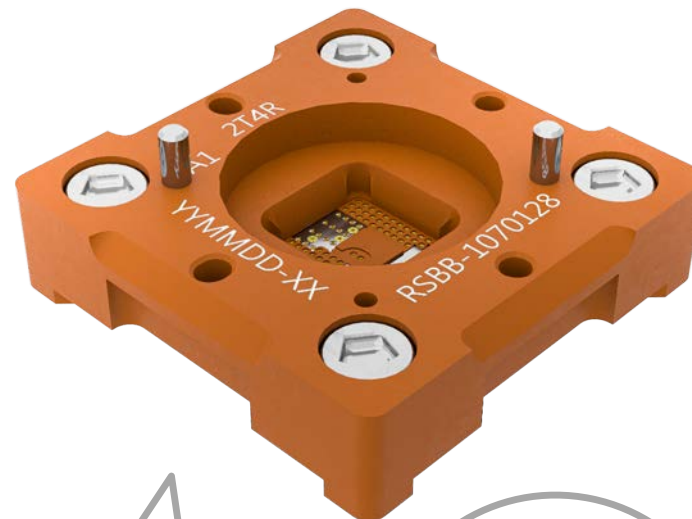
5G IC

Coaxial Probe Socket



ADAS

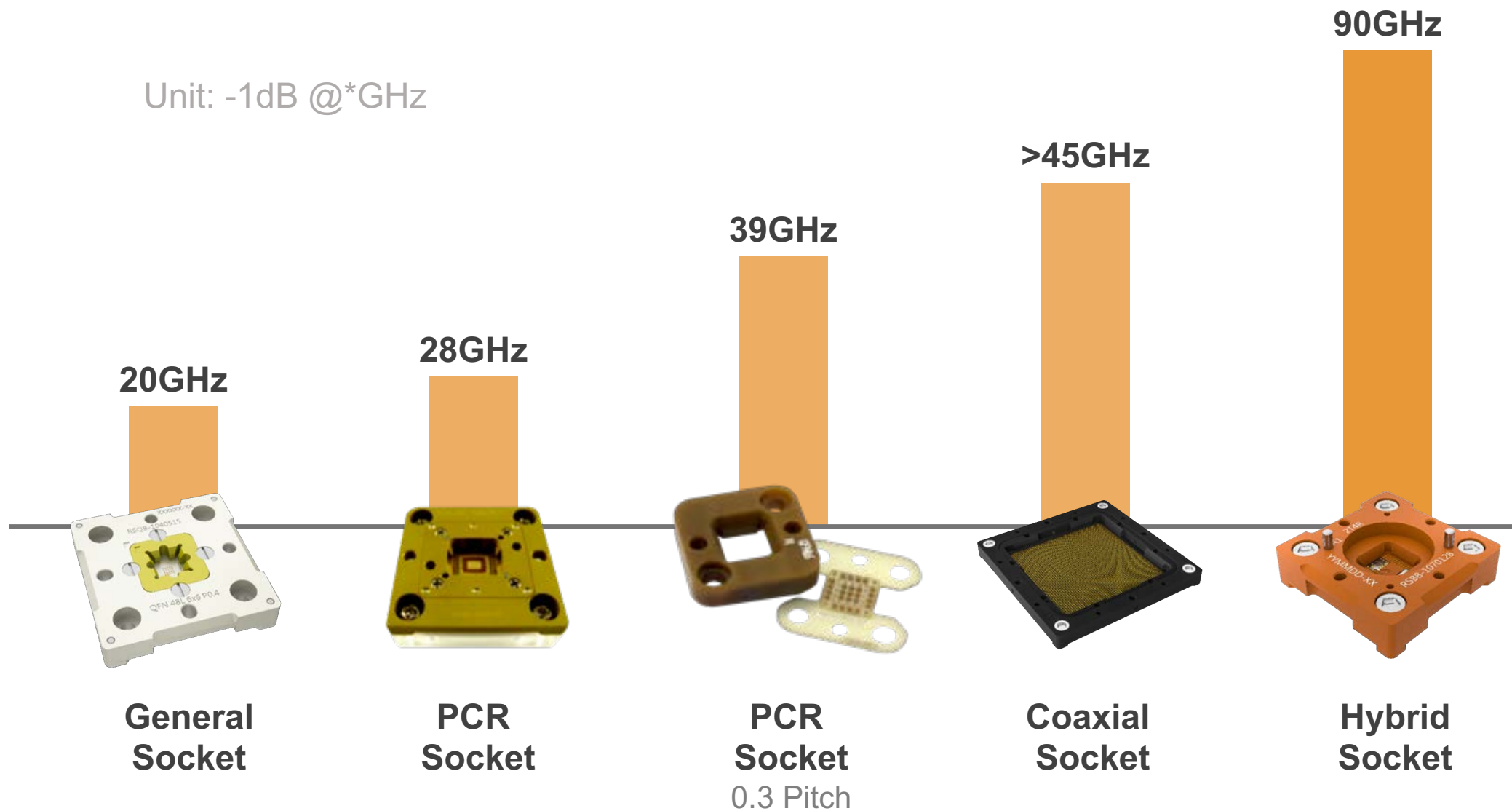
Hybrid Coaxial Socket





Testing Solution - High Frequency Socket

Unit: -1dB @*GHz



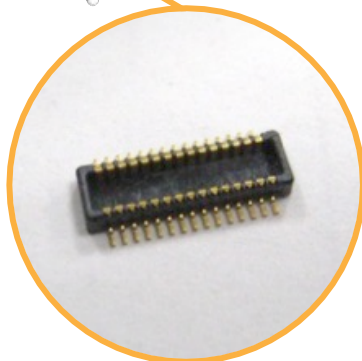
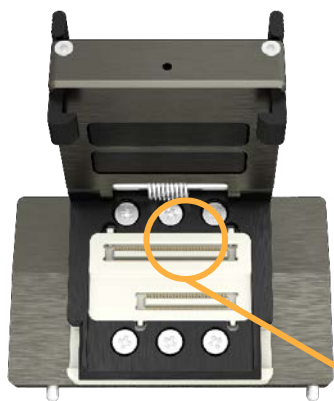


Testing Solution - Fine Pitch Test Fixture

Dual-Side Pogo Socket

Min Pitch: 0.2

Mechanical Life: 200k

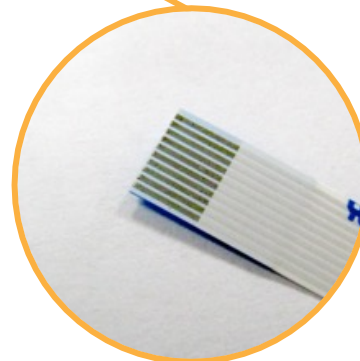
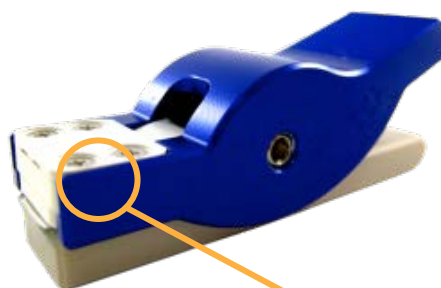


Device Under Test
Fine Pitch Connector

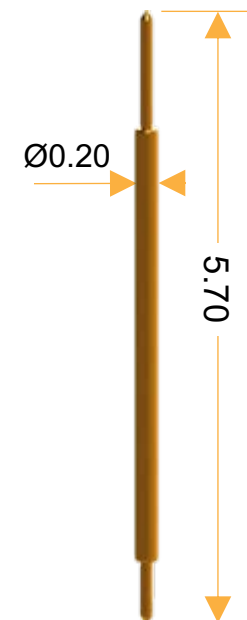
Clip Pogo Socket

Min Pitch: 0.2

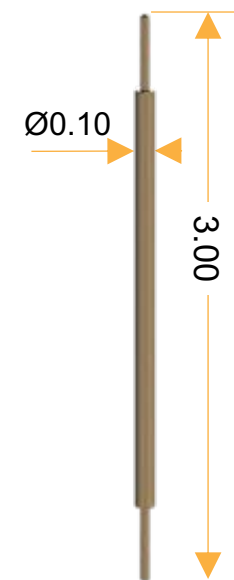
Mechanical Life: 200k



Device Under Test
FPC / FFC Gold Finger



Pitch
0.30mm



Pitch
0.20mm



Testing Solution - IC Final Test Socket

BGA

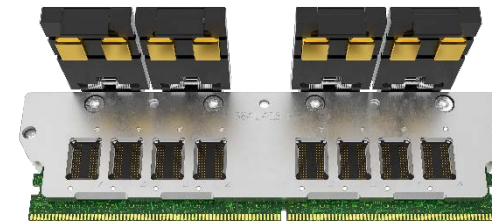


QFN



Memory Test

DDR 1~4
eMCP
Flash



Clamping Lid

QFN QFP
<200 pins

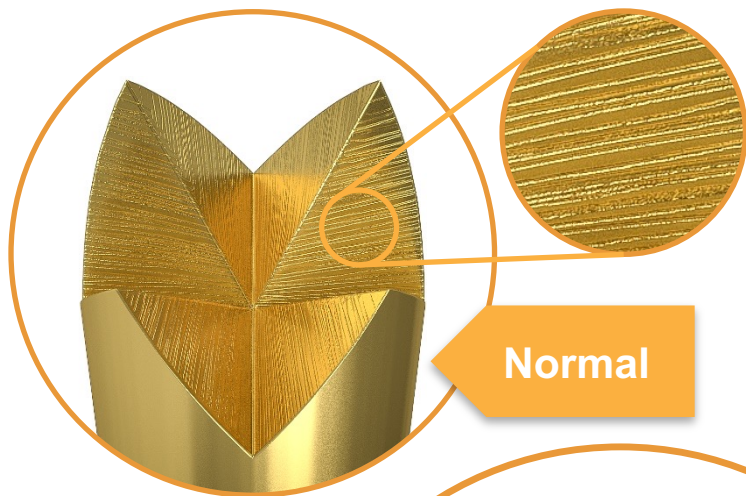


Knob Lid

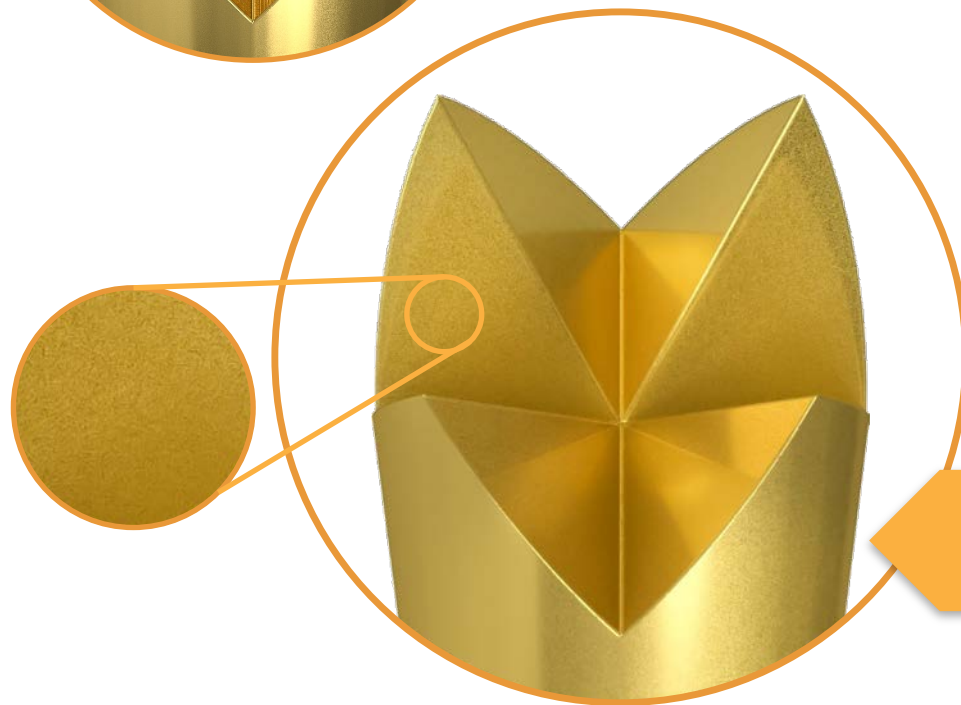
All Kind
>200 pins



Testing Solution - Mirror Process



Normal



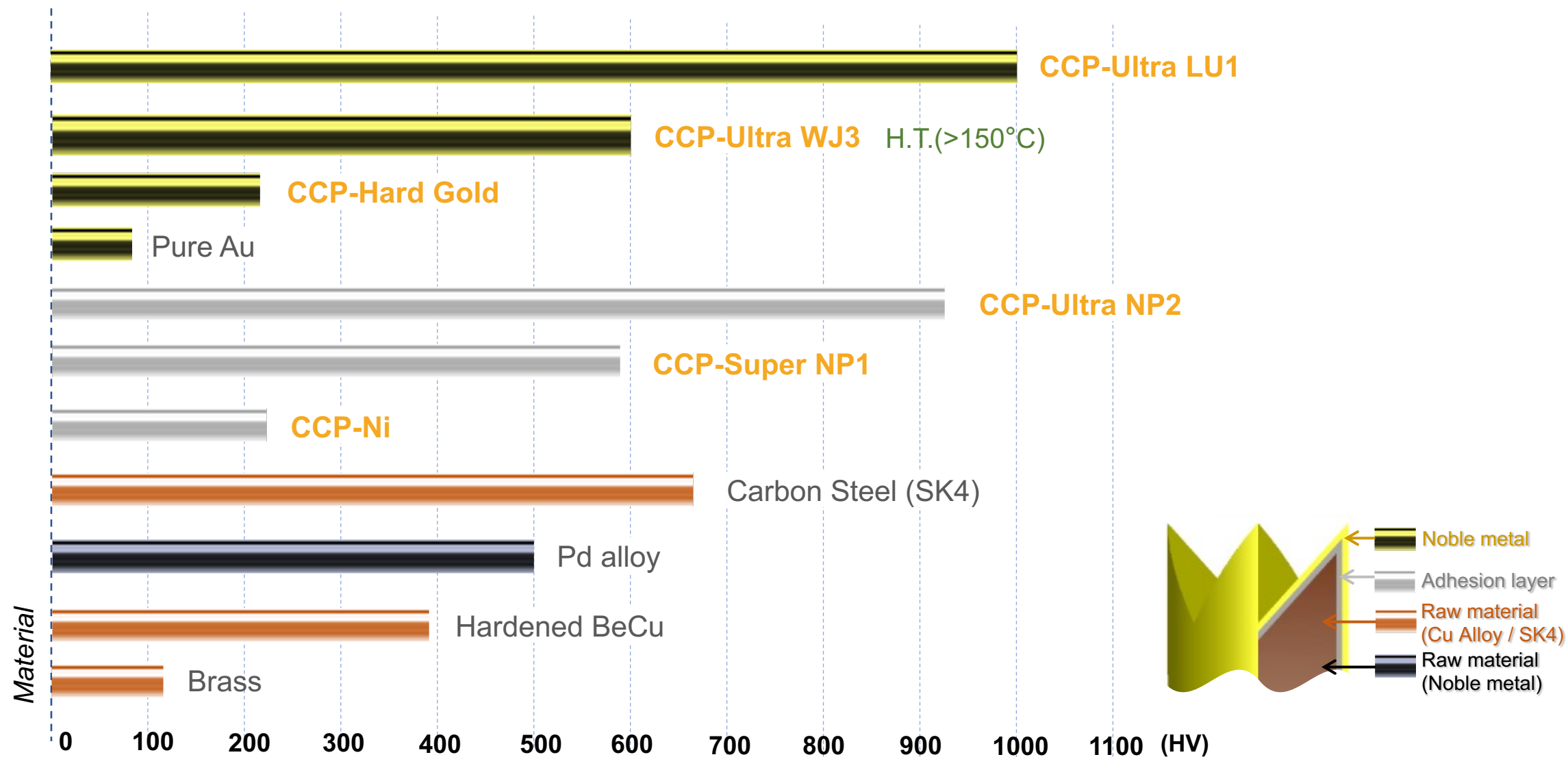
CCP's Mirror Process

Mirror Process – The Best Probe Protector

- The Mirror Process makes the surface as smooth as a mirror so that solder splashes won't attach to the probe tip. This, in turn, decreases your probe cleaning frequency, as well as machine down time significantly.
- Pin durability increases 1.3~1.5 times as compared to the normal process.



Testing Solution - Material Development





Testing Solution - Integrated Manufacturing



Automatic CNC lath



CNC spring coiling machine



Surface treatment production line



Semi-automatic assembly machine



Automatic assembly machine



Automatic probe **full inspection**





Testing Capability - Test Equipment

Turning Parts Surface Inspection



Optical Profiler

Surface Roughness Inspection

Plating Layer Inspection



Nanoindenter

- Hardness measurement
- Adhesion Test



FE-SEM and EDS

- Surface profile observation
- Material analysis



Testing Capability - Test Equipment

Electrical Performance



Network Analyzer



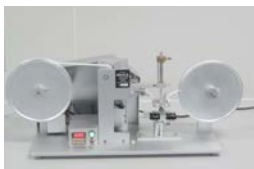
VNA
(Vector Network Analyzer)



High Current
Power Supply &
Electronic Load



Contact
Resistance
Tester



RCA Tape
Abrasion
Tester

Mechanical Performance



Safety
Comprehensive
Analyzer



Mechanical
Vibration/Shock



Automatic
Insertion Force
Tester



Durability
Cycling
Machine

Environmental Testing



Oven



Waterproof test
machine



Flush test
chamber



Thermal shock
test machine



Salt spray test
machine



Temperature &
humidity test
machine

Other



Hot-Air Reflow
machine



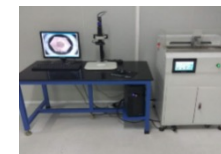
3D laser
scanning
microscope



X-ray



Electrochemical
workstation



Terminal cross
section
analyzer



Create Value for Customers



OUR VALUE

Solution Service
Engineering Service
Design for Manufacturing
Customization
Flexible Production.
Local and Instant Support



Quality System

ISO 9001:2015

Quality Management Systems

IATF 16949:2016

Automotive Quality Management System

ISO 14001 : 2015

Environment Management Systems

QC 080000

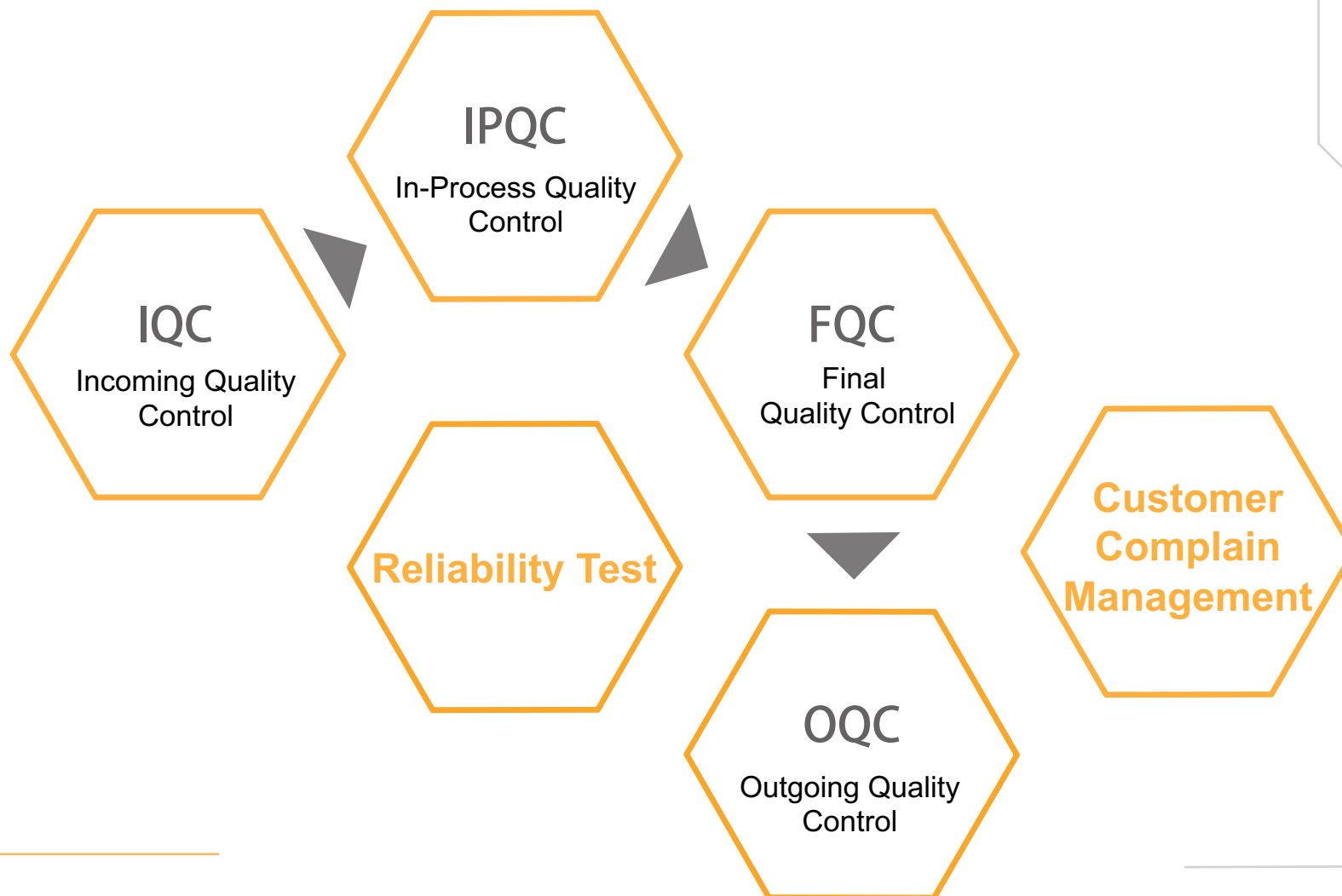
Hazardous Substance Process Management

ISO 13485:2016

Medical Devices Quality Management Systems



Quality Assurance





Verification Ability

Testing Items

Environmental

Waterproof

Humidity Test

Salt Spray

Thermal Impact

Resist. to Solder Heat

Vibration

Electrical

Contact Resistance

Insulation

HIPOT

Rated Current

Mechanical

Retention Force

Life Cycle

Vibration

Mechanical Shock

Other

Drop

Soldering Side Force

Solderability



Testing Equipment

Rated Current

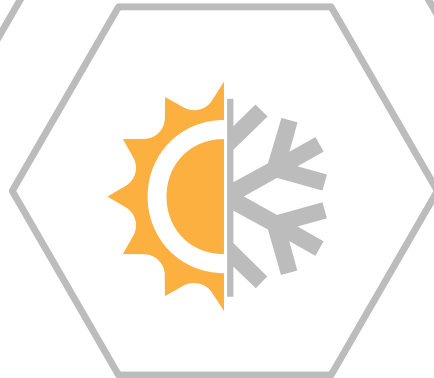
Max Rating :

1000Amp



Waterproof

Test Level : IPX7 Up



Thermal Impact

Range : -60~120°C

Resolution : 0.01°C



Vibration

Frequency : 3500Hz Max.

Acceleration : 50G Max.



Certificate



ISO 9001

ISO 13485

ISO 14001

ISO 14064

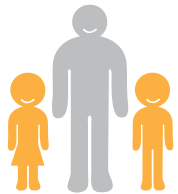
IATF 16949

IECQ QC080000





Social Responsibility



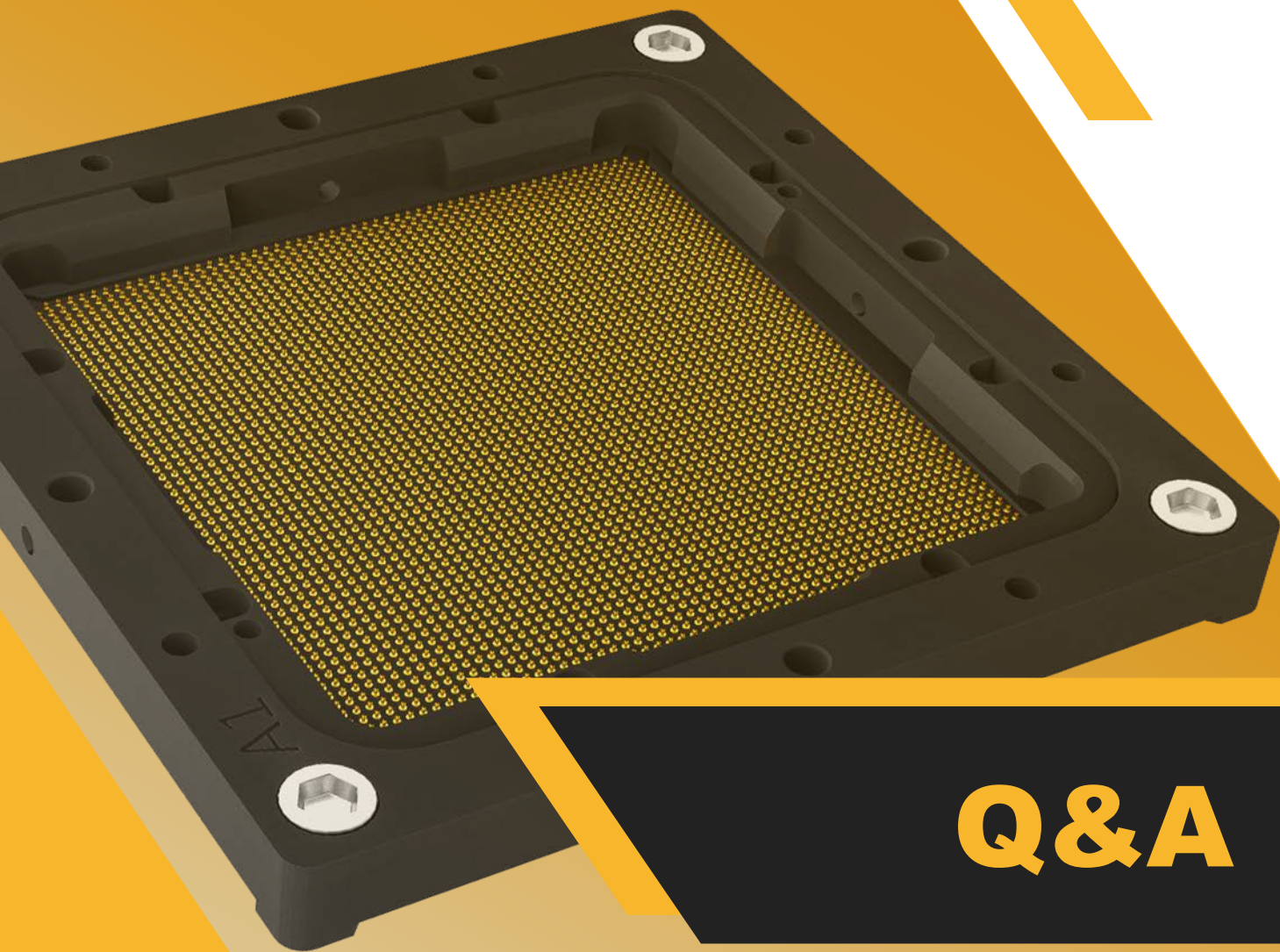
Summer camp for employees' children



Home visit to employees around the world



CCP offers tuition scholarship for employees' children



C.C.P.



CCP Contact Probes

Q&A

info@pccp.com.tw
www.ccpcontactprobes.com

