



# **C.C.P. Group Introduction**

**C.C.P. Contact Probes Co., Ltd.**

<https://www.ccpcontactprobes.com>

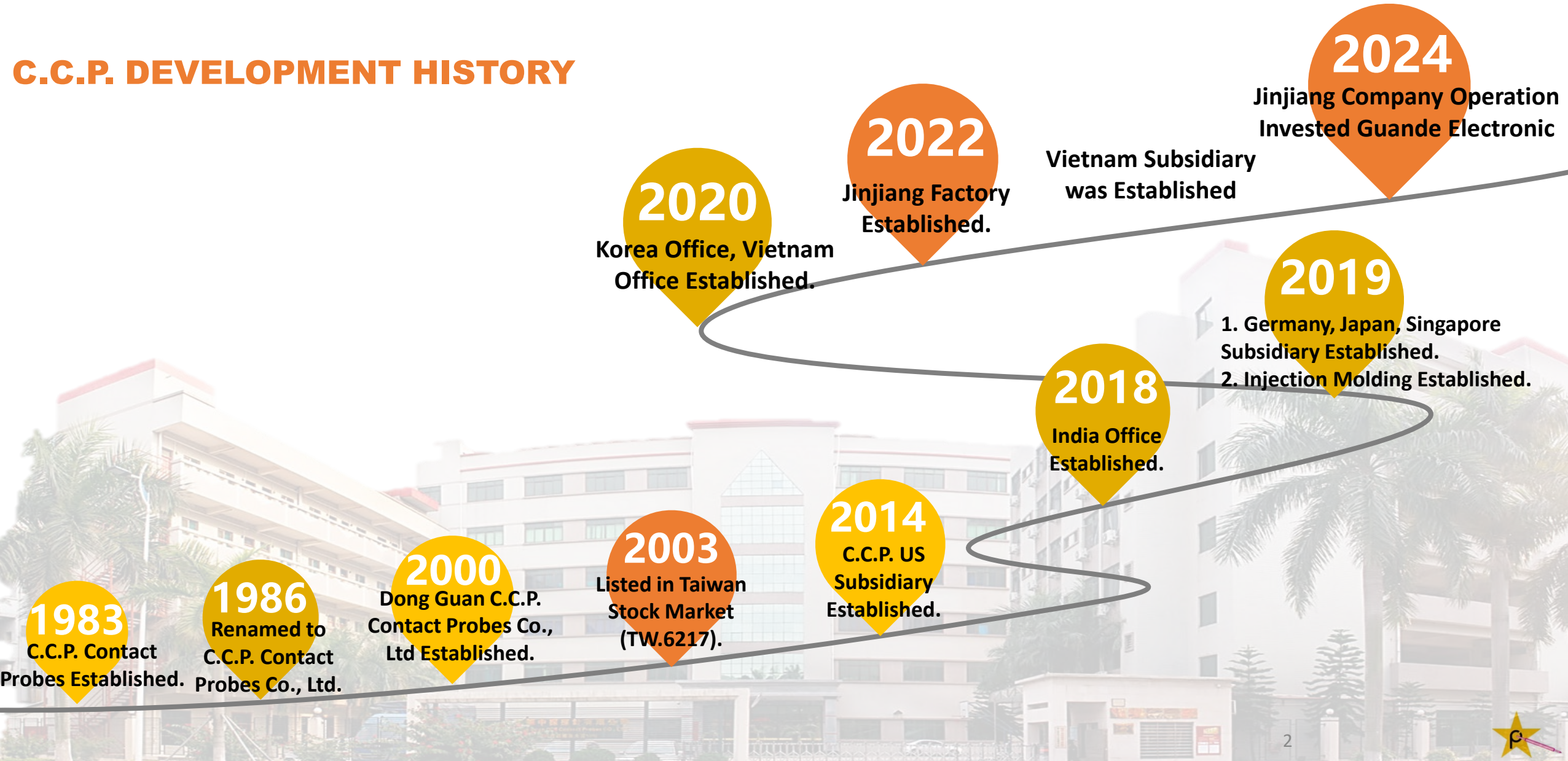
393 Jianxing Road, Jinjiang City, Fujian Province

No.10 Nanmian Ave. Humen Town, Dongguan, GuangDong Province

No.8 Lane 24, He ping Road, Banqiao Dist., New Taipei City 220, Taiwan

# DEVELOPMENT HISTORY

## C.C.P. DEVELOPMENT HISTORY



# Company Overview | Footprint



## Service Localization

Headquarters  
Factory  
Sales Office



Taipei  
Taipei  
Asia

Jinjiang  
Jinjiang  
Asia

Dongguan  
Dongguan  
Asia

America  
Ma'anshan  
Vietnam  
San Jose

Taipei  
Kaohsiung  
Hsinchu  
Tokyo  
Seoul  
Gurugram

Singapore  
Vietnam  
Beijing  
Shanghai  
Kunshan  
Shenzhen

Dongguan  
Chongqing  
Wuhan  
Hong Kong

Europe  
Frankfurt

*C.C.P. has been supporting tier one businesses and companies globally.*



# Factory Dongguan Overview

## C.C.P. CONTACT PROBES ( DONGGUAN ) CO., LTD.



### Overview

It was established in 2001

Product Type	R&D Center; POGO PIN Product
<b>Production Capacity</b>	POGO PIN: <b>30 Mil</b> pins/month
Factory Area	12000 m <sup>2</sup>
Factory employees	350 employees
Location	No.10 Avenue, Humen Town, Dongguan City, Guangdong Province

#### Floor info #1 Building

1 <sup>st</sup> Floor	Lathing Production Line
2 <sup>nd</sup> Floor	Office and RD Center
3 <sup>rd</sup> Floor	High Speed Cable Production Line
4 <sup>th</sup> Floor	High Speed Cable Production Line
5 <sup>th</sup> Floor	POGO PIN Clean room Automatic Production Line
6 <sup>th</sup> Floor	Lab

#### Certifications

IATF 16949:2016、ISO 45001、ISO 14001:2015、IECQ QC080000  
ISO 13485、ISO14064、ISO 9001:2015



# Factory Ma'anshan Overview

## Ma'anshan Guande Electronic Technology Co., Ltd.



### Overview

It was established in 2020.

Product Type	Magnesium Alloy Products	
<b>Production Capacity</b>	Laptop Housings: 13,300 pcs/month Vehicle Center Control Panels: 21,500 pcs/month	
Factory Area	22,637 m <sup>2</sup>	
Factory employees	350 employees	
Location	No. 369 Changzhou Middle Road, Niandou Town, Dangtu County, Ma'anshan City, Anhui Province	
Floor info	<b>#1 Building</b>	<b>#2 Building</b>
1 <sup>st</sup> Floor	Polishing Production Line	
2 <sup>nd</sup> Floor	Warehouse	
3 <sup>rd</sup> Floor	Assembly Line	CNC Machining Line Die Casting Line
4 <sup>th</sup> Floor	Coating Line	

#### Certifications

IATF 16949:2016、ISO 45001、ISO 14001:2015、IECQ QC080000  
ISO14064、ISO 9001:2015



# Factory Fujian Overview

## C.C.P. CONTACT PROBES ( FUJIAN ) CO., LTD.



### Overview

Started: 2022/7/1

Product Type	POGO PIN; Testing Probes; High Current; Medical & Industrial Application	
Production Capacity	POGO PIN: <b>150 Mil</b> pins/month; TESTING PROBES: <b>4 Mil</b> pins/month; High Current: <b>1.3Mil</b> pins/month	
Factory Area	27000 m <sup>2</sup>	
Factory employees	<b>Now 650</b> employees	
Location	393 Jianxing Road, Jinjiang City, Fujian Province	
Floor info	<b>#1 Building</b>	<b>#2 Building</b>
1 <sup>st</sup> Floor	IQC, Warehouse	Injection Production Line
2 <sup>nd</sup> Floor	CNC Production Line	Lathing Production Line
3 <sup>rd</sup> Floor	High Current Application Production Line	Connector module Assembly
4 <sup>th</sup> Floor	Testing Probe production Line	Stretching & Secondary Processing
5 <sup>th</sup> Floor	Pogo Pin Assembly Line	Reserved

#### Certifications

IATF 16949:2016、ISO 45001、ISO 14001:2015、IECQ QC080000  
ISO 13485、ISO14064、ISO 9001:2015





Benevolence and Dedicating Oneself

无我利他

Prioritize filial piety

以孝为先

休戚相關 共生 和諧 共存 利國 共榮 共享 和諧 共贏 和諧 共進

中探探針 (福建) 有限責任公司

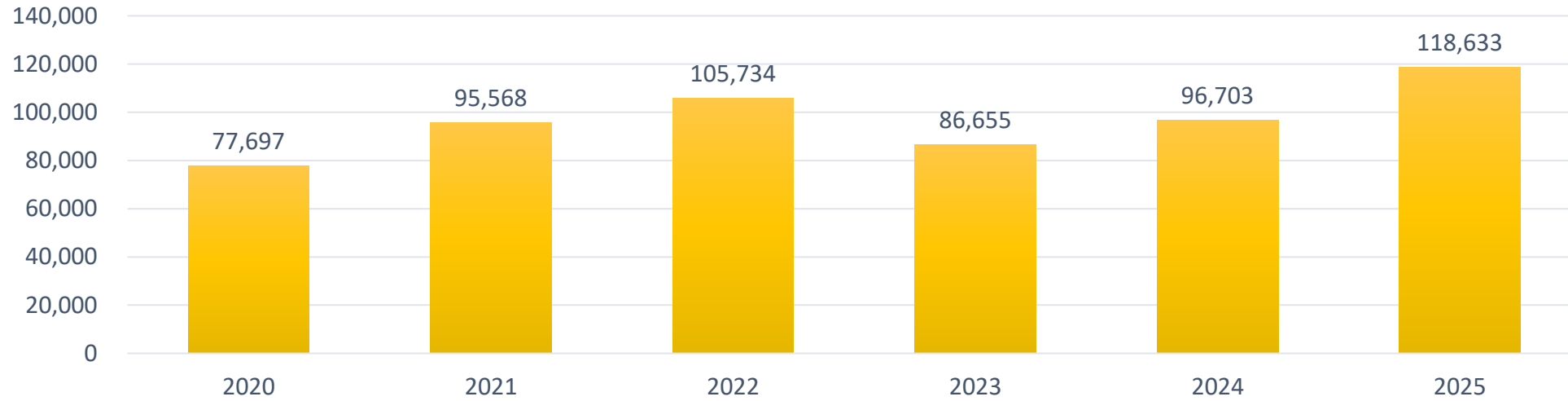
G.P. CONTACT PROBES (FUJIAN) CO., LTD.



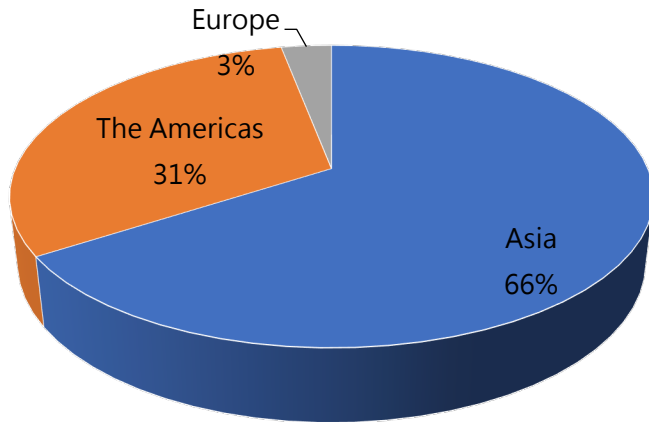


# Revenue

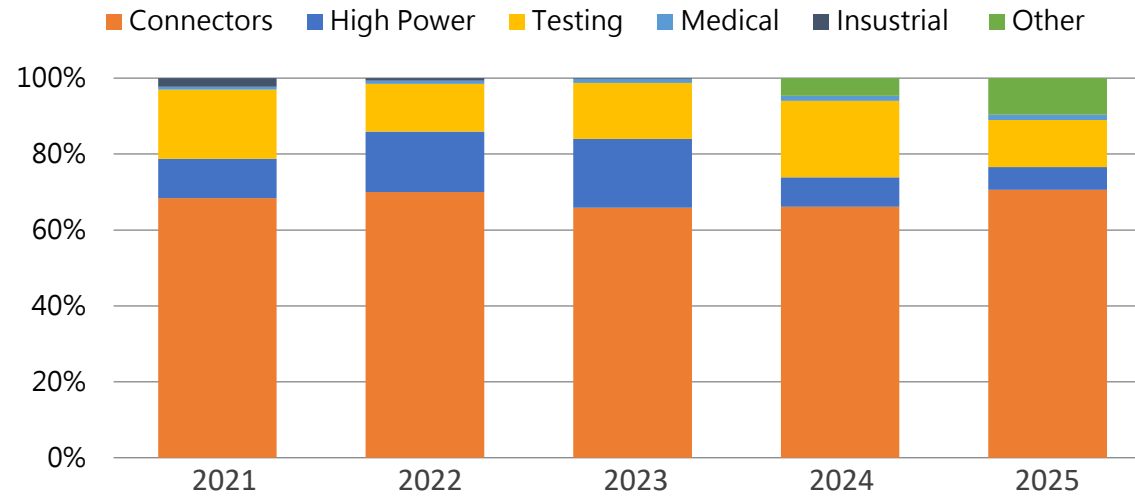
### Revenue (\$USD, K)



### Revenue by Region



### Revenue by Product Line





# Product Lines

# Product Lines



## Consumer

1A~13A

Pogo Pin Conn.  
Waterproof Conn.  
Magnetic Conn.



## Testing

Fine Pitch

IC Testing Probe  
PCB Testing Probe  
Testing Socket



## High Current

13A~250A

Electronic Vehicle  
High Current Conn.



## Magnesium

Cosmetic and  
Structural part

Laptop Frame  
Projector Housing  
Vehicle Center  
Control Frame



## Cable

25Gbps~100Gbps

Server  
Pogo Cable  
Medical

# Connector | Material & Structure Design



## Plunger

**Brass(Standard)**  
Beryllium Copper  
Phosphor Bronze  
SK4

## Housing

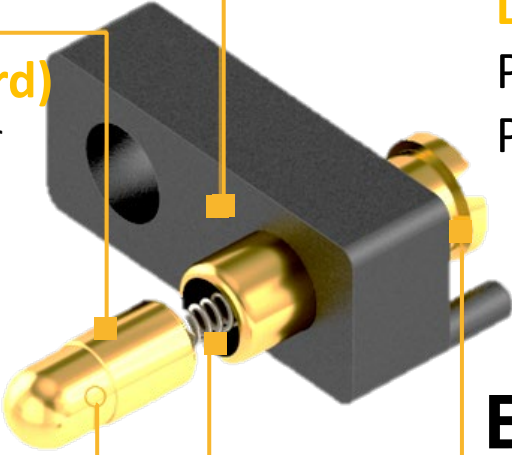
**LCP&HTN (Standard)**  
PA  
PC



**Ru (Black)**



**PdNi , Pt , Ag (Silver)**



## Ball

Stainless Steel

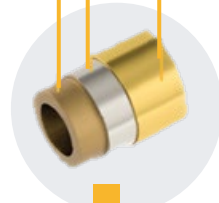
## Spring

Stainless Steel  
SWPB

## Barrel

**Brass(Standard)**  
Beryllium Copper  
Phosphor Bronze

Stainless Steel  
Base Plating  
Base



## Color Choose

**PdNi , Pt , Ag (Silver)**  
**Ru (Black)**  
**Cu (Gold)**



# Connector | Waterproof & Magnetic

**Magnetic Connector**



**Mobile Phone**



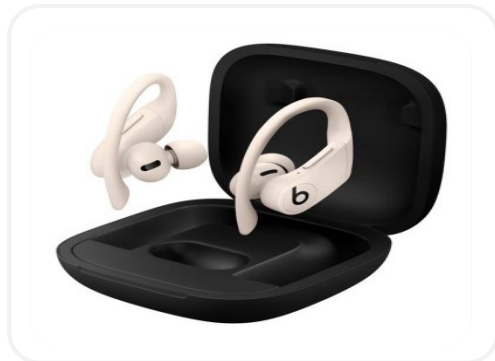
**Tablet Connector**



**Pencil**



**TWS Earbuds**



**Wearable Device**



**E-cigarettes**



**Handheld Device**



# Connector | Waterproof & Magnetic



**Walkie Talkie**



**Industrial Computer**



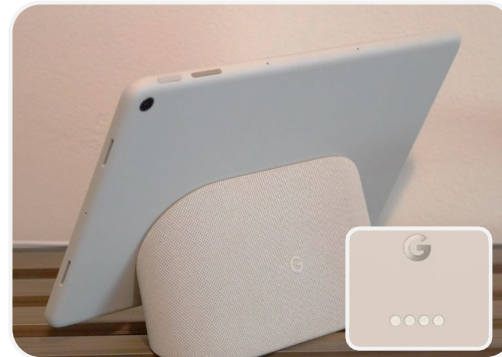
**Monitor**



**Astro Home Robots**



**Pixel Tablet**

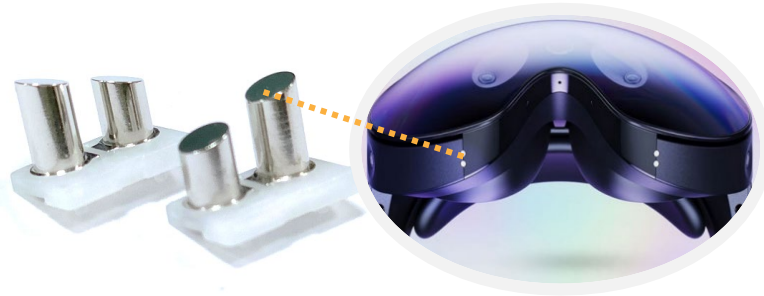


**Ring Smart Doorbell**



# Connector for AR&VR

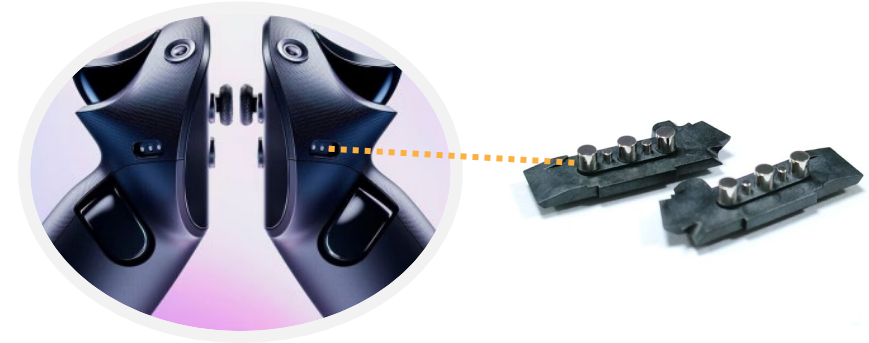
## The HMDs



### Insert molding & Assembly

- Sweat **240h** resistant design

## The Hand Held Accessories

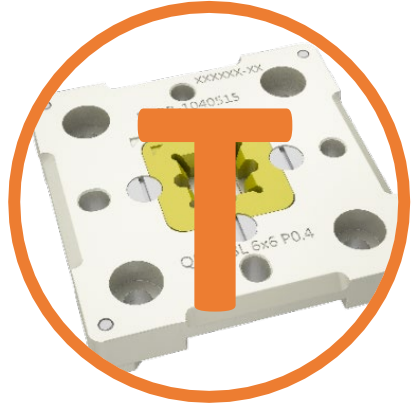


### Insert molding

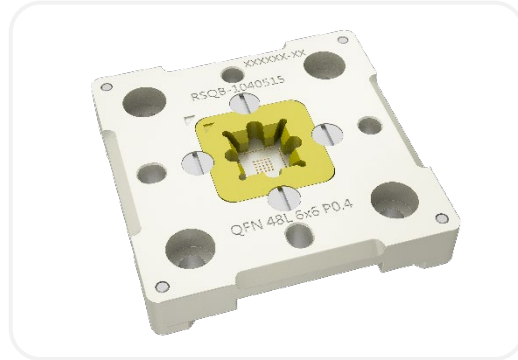
- Sweat **240h** resistant design



# Product Lines | Testing



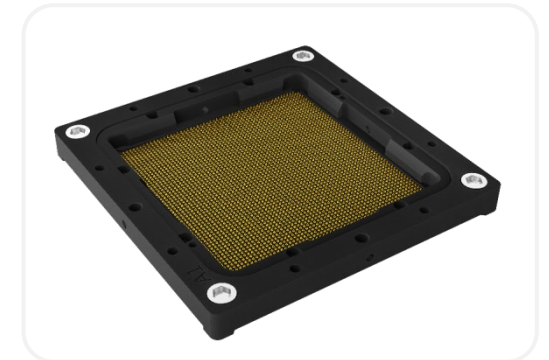
**IC Package Testing**



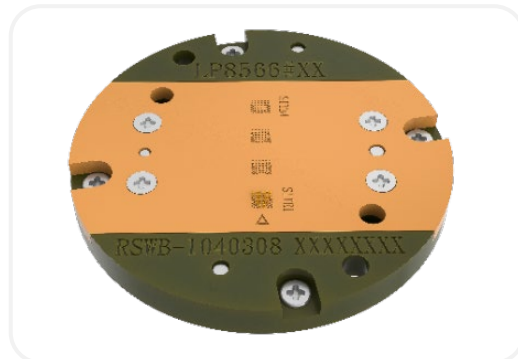
**Burn-In Testing**



**High Frequency Testing**



**Wafer Level Package Testing**



**Battery Testing**



**Memory Testing**



# Product Lines | High Power



## EV Charging



## Scooter Battery Exchange System



## Photovoltaic Terminal and Inner Ports



# Product Lines | Magnesium Product



**Laptop Housing Case**



**Frame**



**VR Frame**



**Projector Housing**



**Vehicle Center Control Frame**



**Medical Frame**



# Connector | Pogo-Pin Cable & Cable Adapter



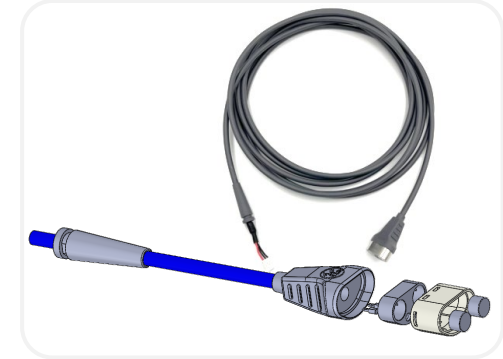
**VR Glass  
Charging Cable**



**SMART Watch  
Charging Cable**



**Medical Cable  
Adapter**



**Medical Device  
Adapter Cable**



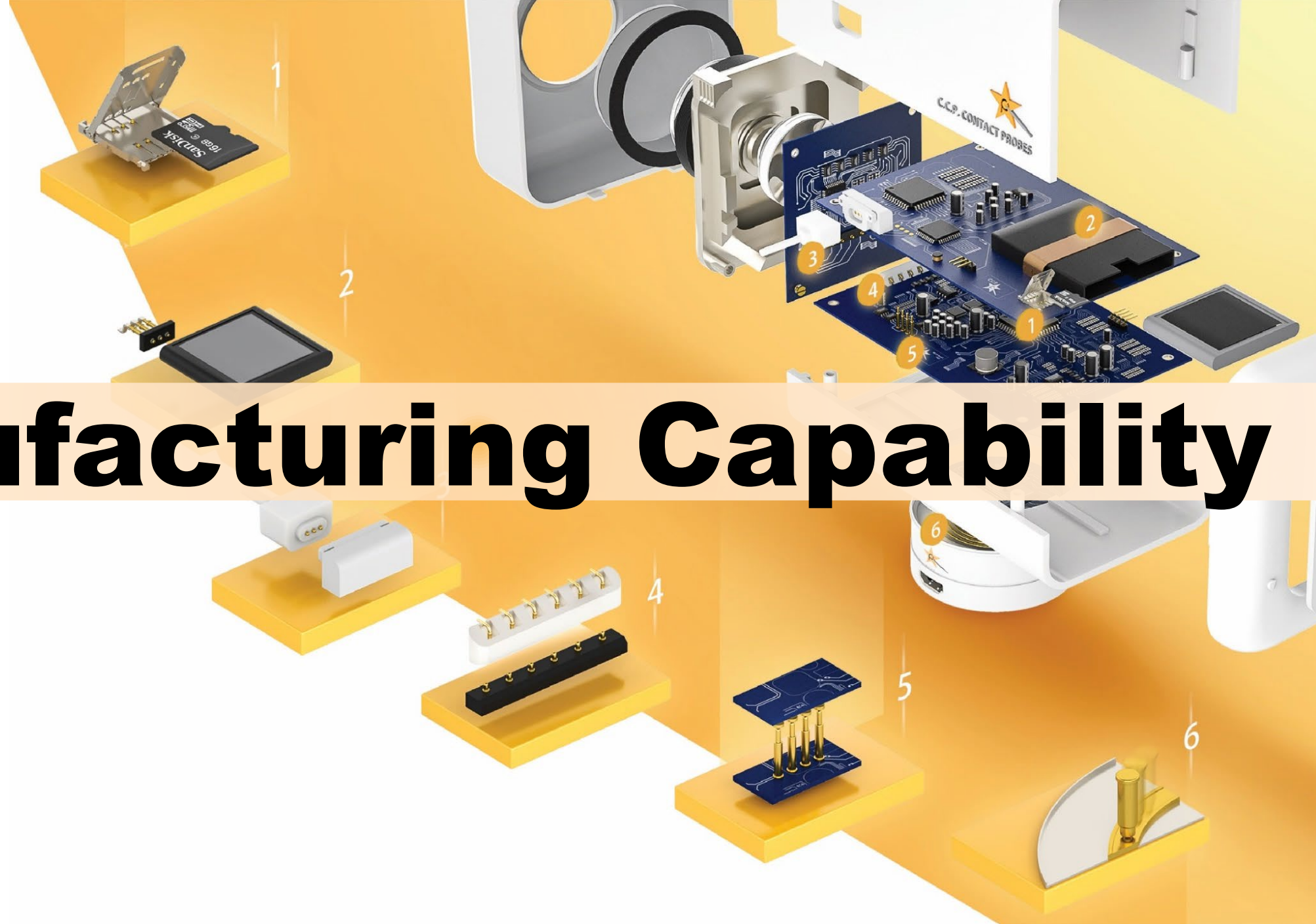
**Medical Device  
Battery Cable**



**High Frequency  
Adapter**



# Manufacturing Capability



# 1-Manufacturing Capability | Turning

## CNC Workshop Overview



## CAM Workshop Overview



### Jinjiang Factory

No.	Equipment	Accuracy (mm)	Quantity	Capacity (pcs)
1	CAM	0.005	100	26.0M/month
2	CNC	0.001	48	3.12M/month
3	Mikron	0.001	1	10.4M/month

### Dongguan Factory

No.	Equipment	Accuracy (mm)	Quantity	Capacity (pcs)
1	CAM	0.005	30	7.8M/month
2	CNC	0.001	11	1.36M/month

Total 190



Mikron

Multi Task Machine



# 2-Manufacturing Capability | Machining

## Post Processing



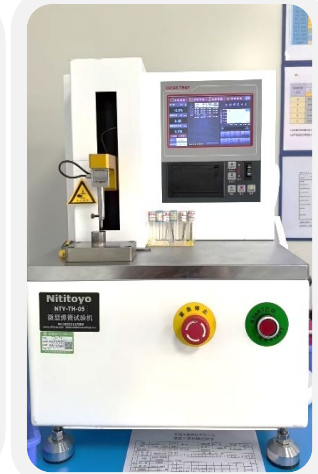
## Heat Treatment



## Spring Machining



## Micro Spring Tester



No.	Equipment	Accuracy (mm)	Quantity	Capacity (pcs)
1	Secondary machine	0.01	98	30KK/Month
2	Quenching furnace	SK4	1	Quenching furnace
3	Vacuum tubular furnace	BeCuPd Alloy	2	Vacuum Tubular Furnace

No.	Equipment	Accuracy (mm)	Quantity	Capacity (pcs)
1	MEC spring machine	0.02	1	520K
2	JD spring machine	0.05	16	80 KK/Month
3	Micro spring tester	0.001	2	/

# 3-Manufacturing Capability | Molding

Injection molding equipment:

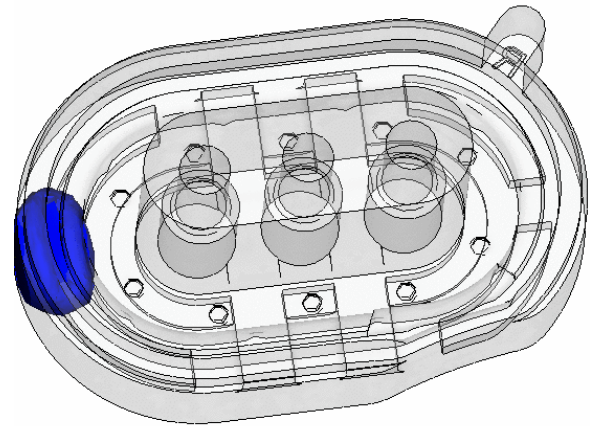


No.	Equipment	Tonnage (T)	Quantity	Capacity
1	Fanuc	50T	x2	338 K/month
2	Toyo	50T&100T	x5&x1	1014 K/month
3	Toyo	130T&230T	x1&x1	338 K/month
4	MultiTech	55T&120T	x4&x1	845 K/month
5	Jieertai	170T&230T&260T	x1&x1&x1	507 K/month
6	Yizhimi	200T	x2	338 K/month
7	Haitian	250T	x2	338 K/month
	Total		22	3.72~7.45KK



# 4-Manufacturing Capability | Tooling

Mold flow analysis



Tooling processing



+GF+ Slow wire



+GF+ CNC



# 5-Manufacturing Capability | Stamping



- Stamping machine 40T - 80T x8 Base in Dongguan Factory
- Stamping machine 160T - 350T x13 Base in Ma'anshan Factory

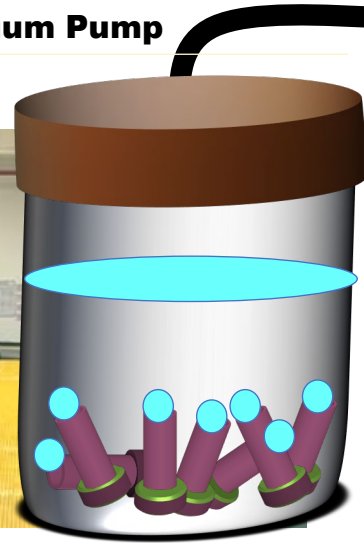
No.	Equipment	Tonnage (T)	Quantity	Capacity
1	Ming-Shiuh	35T	2	K/month
2	Xian-Zhuo	45T	4	K/month
3	Xian-Zhuo	80T	1	K/month
4	SEYI	110T	1	K/month
5	SEYI	250T	1	K/month
6	Bote	110T	5	K/month
7	Wen-chong	160T-200T	6	K/month
Total			22	



# 6-Plating

Vacuum Pump

Full view of the production area



We have more than **15 years** of production experience in barrel plating. We are equipped with automated production line and online plating parameters monitoring system for process control. We are expertized in plating development and developed **a series of plating call "AP"** since 2016 to improve anti-electrolysis performance. **Capacity: 3000 lots/month**



Automatic degreasing

Automatic pre & post-treatment

Online monitoring

SEM

X-Ray Plating Thickness Tester

AAS



# 7-Manufacturing Capability | Assembly

## Jinjiang Assembly Workshop Overview



## Dongguan Assembly Workshop Overview



### Semi Automatic Production Line



Crimping machine



Pre-pressing machine



Resistance measuring



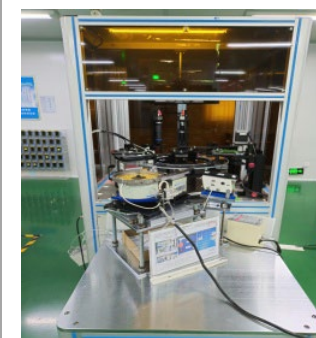
Spring force measuring



NG picking machine



AOI



Auto packing machine

**Assembly Capacity 150KK/month.**



# 8-Manufacturing Capability | Assembly



A line copying plan to implement and replace labor-intensive production lines was launched.



Auto- assembly & inspecting.

Auto- reclaimer

Auto- align components

Auto-Crimping

Fully inspecting the resistance

Spring Force inspected

# 9-Manufacturing Capability | Magnesium Semi-solid Die-casting

Workshop Overview



No.	Equipment	Tonnage (T)	Quantity	Capacity
1	JSW	280T	2	160K/month
2	Haitian	680T	2	80K/month
3	Haitian	700T	1	40K/month
4	Haitian	850T	1	40K/month
Total			6	

# 10-Magnesium Post-process | CNC Machining

## Workshop Overview



No.	Equipment	Accuracy (mm)	Quantity	Note
1	LITZ	0.005	39	4 axis
2	Qiaofeng CNC	0.005	50	3 axis
3	Siborui	0.005	32	3 axis
4	Brother CNC	0.005	30	4 axis
Total			151	

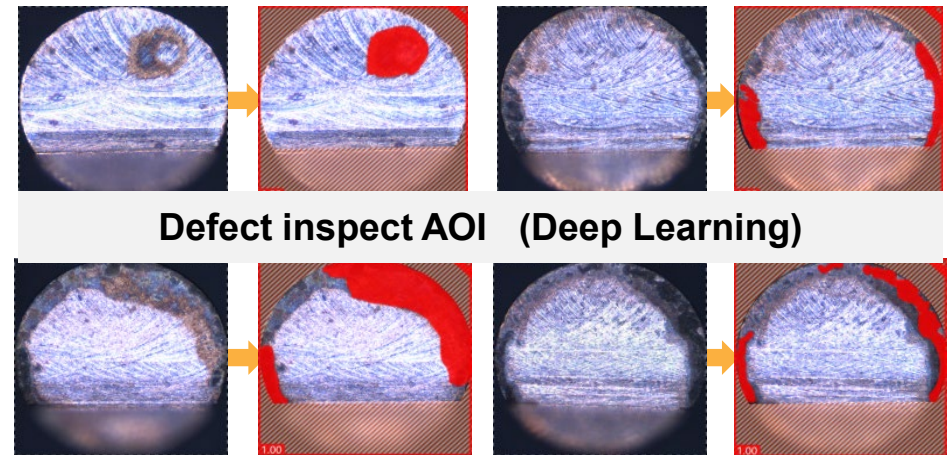
# 11-Manufacturing Capability | Inspection

## Pencil B222 auto assembly line with cosmetic inspection AOI



### AOI Device List

NO.	Equipment	Type/ Spec	Precision	Qty	Detectability
1	AOI	For all product	0.015	6	6k/h
2	AOI	For non-standard product	0.01	19	6~8K/h
3	DL AOI	Appearance defect inspection	0.01	22	10k/h
Total				47	



### For high-quality inspection requirement of product dimension and appearance defect

- I. C.C.P has developed, customized, and implemented AOI for 360° cosmetic inspection.
- II. Deep learning system Co-developed with COGNEX.
- III. C.C.P has the capability to optimize and enhance on-market system.

# Testing Capability



# LAB Approved By CNAS

ISO 17025



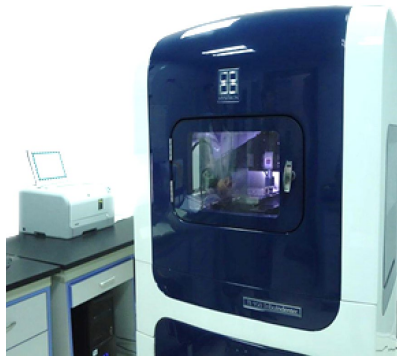
CNAS certification  
in 2018

Renewed  
certificate in 2019

More than 50  
testing equipment



# Testing Capability | Advanced Equipment



**Equipment** Nano indenter

Force sensitivity < 30 nN

Manufacturer Hysitron T950



**Scanning electron microscope (SEM)**

Max. magnification: 800 k X

Hitachi S-4800



**White light interferometers**

600 um\*200 um

0.001 um



CMM

**3 Coordinate measurement machine**

X = 300mm, Y = 200mm, Z = 200 mm

0.001 mm



**X-Ray Machine**

Max. magnification: 150x

Sciencescope View X3000



# Testing Capability | Test Equipment

## Electrical Performance

1. Network analyzer
2. VNA (Vector Network Analyzer)
3. High current power supply & Electronic load
4. Contact resistance tester
5. Safety comprehensive analyzer



## Mechanical Performance

1. Automatic insertion force tester
2. RCA tape abrasion tester
3. Mechanical vibration/shock
4. Durability cycling machine



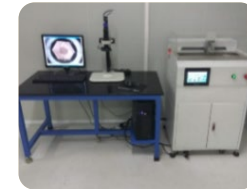
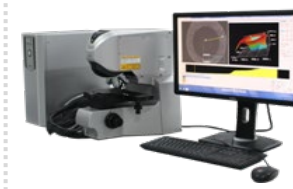
## Environmental Testing

1. Waterproof test machine
2. Flush test chamber
3. Thermal shock test machine
4. Salt spray test machine
5. Temperature & humidity test machine
6. Oven



## Other

1. Hot-Air reflow machine
2. 3D laser scanning microscope
3. X-Ray
4. Electrochemical workstation
5. Terminal cross section analyzer





# Success Stories

# Ultra-Low Profile Pogo Pins



P10789FP1-3

S

Wearable device  
Space  $\leq 1.25$  mm

T

Develop ultra-low pogo pin  
with stable signal

A

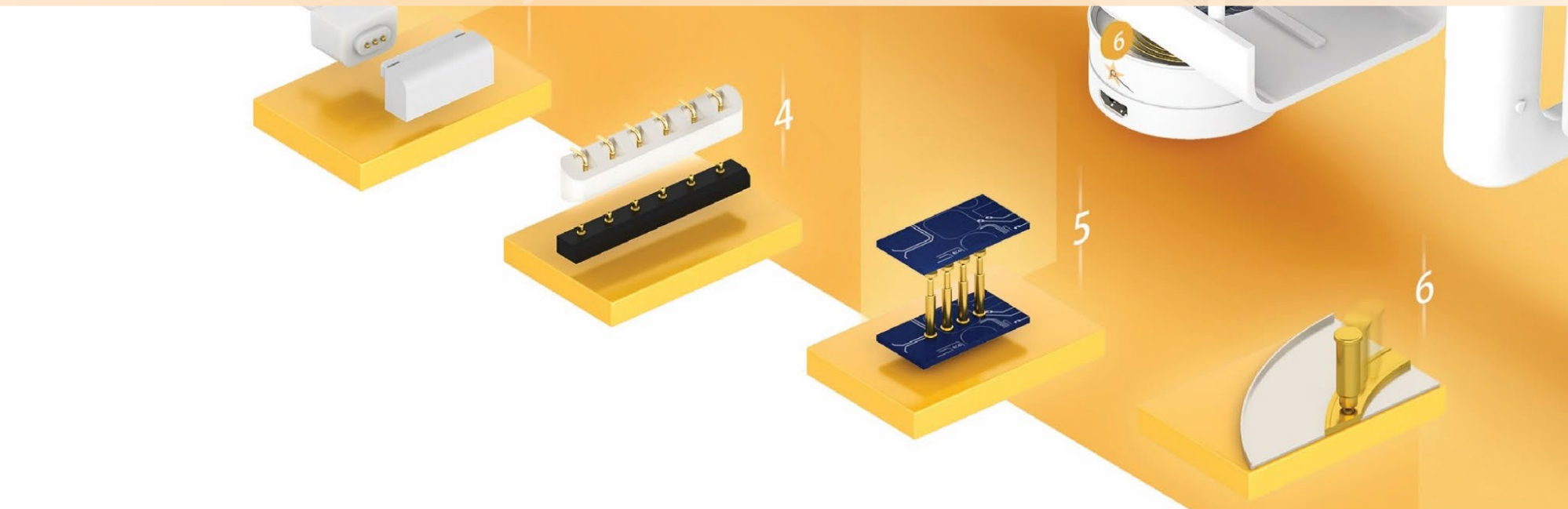
Optimized probe structure  
Au plating + precision control

R

1.25 mm achieved  
Mass production ready



# Important customer



# Important customer



Meta

Google

Microsoft

amazon

HUAWEI

SAMSUNG

SONY

dji  
大疆创新

Lenovo 联想

步步高 | 小天才

mi  
xiaomi

小鹏

VINFAST

OLA

YAMAHA  
雅马哈

gogoro

chargepoint

Star Charge  
星星充电

Panasonic

LG

muRata  
INNOVATOR IN ELECTRONICS





The image is an exploded view diagram of a contact probe assembly, showing various components and their assembly sequence. The components are numbered 1 through 6. The assembly includes a blue printed circuit board (PCB) with various electronic components, a white plastic housing, a lens, a contact probe, and a contact probe holder. The PCB is labeled 'CCP CONTACT PROBES' and features a star logo. The assembly is shown in a disassembled state, with components floating in the air. The background is a light yellow color.

# Corporate Culture

# Corporate Culture

The mission of C.C.P. management team is to make **accomplishment of Educational Fund** for Employees' Children from kindergarten to university.

This is according to the decision by 2015 C.C.P. Board of director meeting.



Employees' home visit



Summer camp for employees' children



The Education Fund for employees' children





THANK YOU!