

▶ Ur Hongxin Testing Technology (Shenzhen)Co.,Ltd.



■ Impartial ■ Professional ■ Accurate ■ High-tech
<http://www.urhongxin.com>

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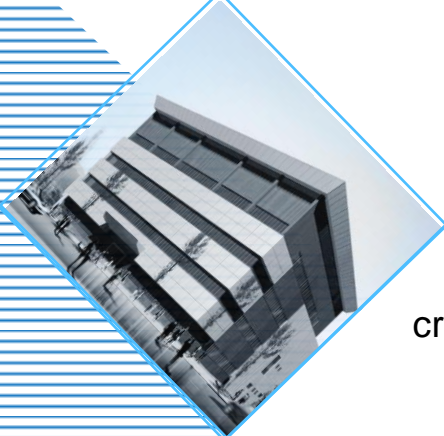
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Abstract

About Ur Hongxin

Ur Hongxin Testing Technology (Shenzhen) co., Ltd. (Foxconn China Measurement Center) is a professional integrated laboratory with worldwide presences and strong R&D capabilities.



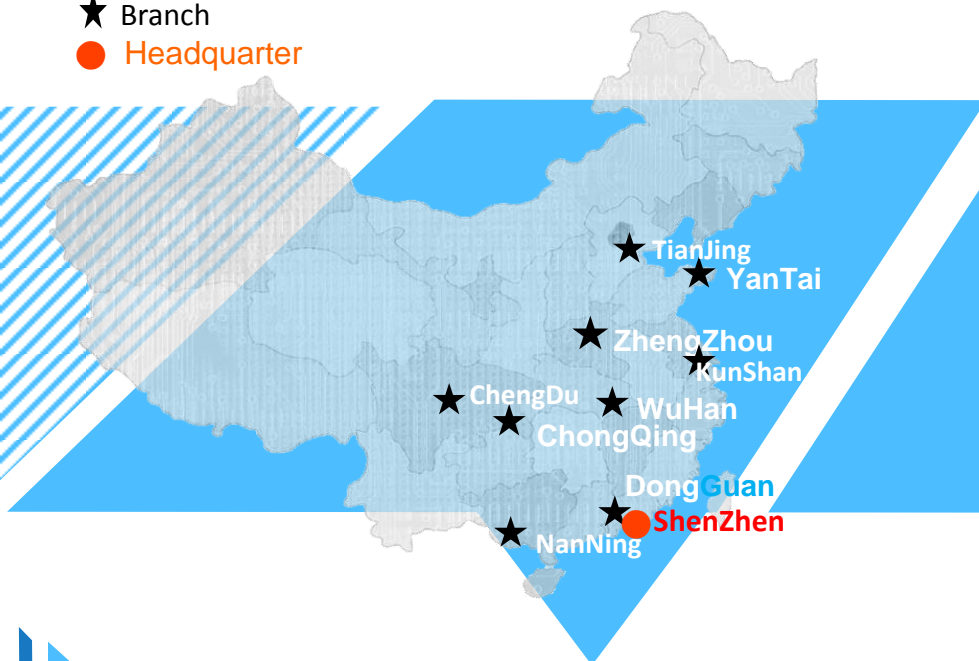
It provides fast, consistent, and accurate testing and measurement services for high-tech products design, development, and manufacturing. A nationwide network system: laboratories have been established in Shenzhen, Dongguan, Kunshan, Wuhan, Zhengzhou, Yantai, Chengdu, Chongqing, Nanning and offices have been set up in major cities across the country; Provide customers with cross regional and high-quality testing technical services and product solutions.

Its goal is to assist the growth of Foxconn enterprise group into a highly competitive global technology company in the world.

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★ Branch

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Service Network

Employees : 1,500

Equipments: >4,300 sets

Areas : >66,000 m²

Quality Certificate

- Obtained CMA certificate in June 2018, Certificate NO. 201819123247.
- Accredited by CNAS (China National Accreditation Service for Conformity Assessment) via the ISO/IEC 17025:2005 (The General requirements for the competence of testing and calibration laboratories) since Feb 2003.
- Since 2002, Ur Hongxin continue to participate in the capability validation organized by the CNAS, IIS, ASTM and other international and domestic authorities. Obtained CNAS PTP certificate in 2016, Certificate NO. PT0053. Fully ensure our technology to reach the international advanced level.
- We have won recognition of many international customers, Our professional technical ability, detection ability, the results of accuracy, fairness and confidentiality have won praise of the customers!



中国认可
国际互认
检测
TESTING
CNAS L0273



中国认可
国际互认
校准
CALIBRATION
CNAS L0273



Our Customers



HUAWEI

inspur 浪潮

Honeywell



Microsoft



lenovo



PHILIPS

vivo



中航光电
JONHON



MiSUMi

logitech

SONY



CIG



四方光电

QIKU 奇酷

ASKPCB
奥士康



Valeo
法雷奥



长城汽车
Great Wall Motors



东风小康

长安汽车
CHANGAN



YEMA
野马汽车

蔚来汽车
NEXTEV



吉利汽车
GEELY AUTO

mindray 迈瑞



Haier

Hisense

Our Tenet

Customer satisfaction is our mission

Our Advantages

- ◆ Professional technical team
- ◆ Years of experience of testing and failure analysis in manufacturing industry
- ◆ Advanced equipment
- ◆ Comprehensive test solution
- ◆ Advanced testing equipment and materials technology development capability
- ◆ Master the core technology and have patents
- ◆ Service around the country
- ◆ Customer first



Our Service



Environmental, Mechanical, Packaging Material Reliability Testing

The first laboratory in China to be Accredited by Dell for Vibration, Shock, Drop, and Packaging Material testing

■ Environment Test Laboratory

- High/Cold Storage Test
- Temp. and Humidity Cyclic Test
- Temperature Shock Test
- ESS Test
- Perspiration Resistance Test
- Salt Spray Test
- Dust Test
- Accelerated Weathering Test
- Xenon Exposure Test
- Altitude Test
- Temp. and Humidity Storage Test
- Thermal Profile Test
- Infrared Thermal Imaging
- HAST Test



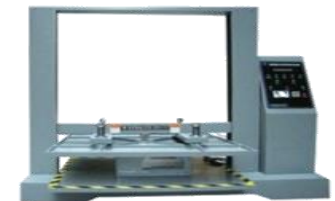
■ Vibration and Shock Test Laboratory

- Vibration Test
- Shock Test
- Drop Test
- Drop-G Test
- Measure and Analysis of Vibration
- Pallet Package Drop Test
- Pallet Package Vibration Test
- Floor Vibration Measure



■ Package Test Laboratory

- Container Compression Test
- Container Stacking Test
- Bursting Strength Test
- Pallet Test
- 90°/180° Peel Adhesion Test
- Corner (Edge) Protector Test



Our Service



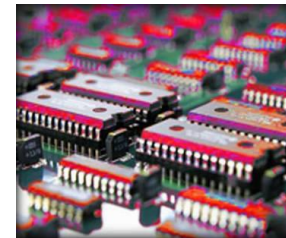
Mobile Product Test

- **Cosmetic Test**
 - Chemical Resistance Test
 - Linear Abrasion Test
 - Adhesion Test
 - Pencil Hardness Test
- **Torque Test**
- **Force Test**
- **Ball Drop Test**
- **Static Pressure Test**
- **Twist Test**
- **Life Test**
 - Keypad/Flip Lifecycle
 - Connector Lifecycle
 - Insert & Withdraw Test
- **Drop Test**
 - Free Fall Drop
 - Random Drop
 - Repetitive Drop



Highly Accelerated Life Test

- **Highly Accelerated Life Test**
 - AC/DC Voltage Test
 - Temperature Margin Test
 - Rapid Thermal Transition Test
 - Tri-Axial Random Vibration Test
 - Combined Test
- **Highly Accelerated Stress Screen**
- **Highly Accelerated Stress Audit**

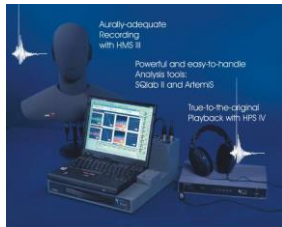


Our Service



Acoustic Measurement & Analysis

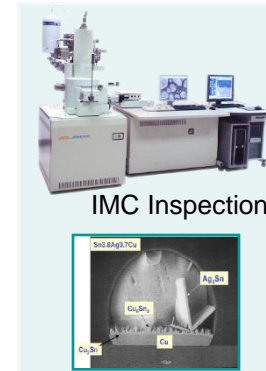
- Sound Power Level Test
- Sound Pressure Level Test
- Sound Quality Evaluation
- System Vibration Test
- Electro-acoustic Test



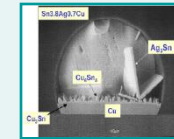
PCBA & PCB & Component Failure Analysis

■ SEM+EDS (Scanning Electron Microscope)

- IMC Inspection
- Element Analysis
- Tin Whisker Inspection

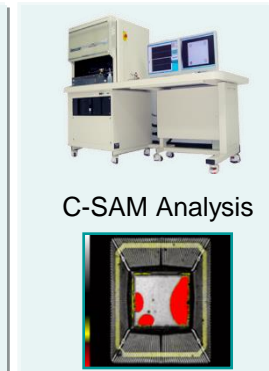


IMC Inspection

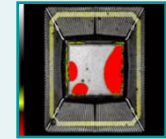


■ C-SAM (C-Type Scanning Acoustic Microscope)

- 3D OM Inspection
- Cross Section
- Dye & Pry
- IC Decapping
- Wetting Balance
- Bonding Test



C-SAM Analysis



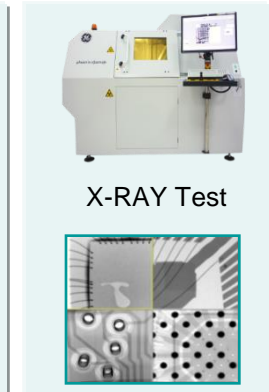
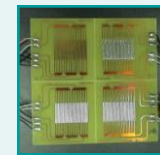
- Shear Test
- Pull Test

■ Solder Paste Properties Test

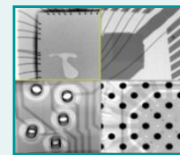
- Viscosity Test
- Solder Tack Test
- Open Life
- Flux Content



SIR Test



X-RAY Test



■ Surface Insulation Resistance Test (SIR)

Our Service



Hazardous Substances Test

- RoHS(Cd/Pb/Hg/Cr(VI)/PBBs/PBDEs)
- Metal Elements Quantification
- Migration Element in Toy
- Halogen(F/Cl/Br)
- Phthalates(DBP/BBP/DEHP/DIBP/DIDP/DINP/DnOP/ DMEP/Dnepr)
- TBBPA
- PAHs
- HBCDD
- SCCP/MCCP
- Cyclosiloxane(D3~D10)
- DMF
- Nickel Release
- PFOS/PFOA
- AZOs

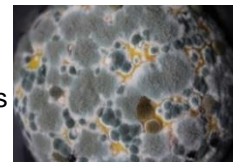


Microbiological Test

- Mold growth Test for Electric and Electronic Products
- Evaluation for Plastic Mouldproof Effects
- Evaluation for Paints Film Mouldproof Effects
- Evaluation for Nonmetallis Gasket Materials Mouldproof Effects

■ Mold Species

- | | |
|-------------------------------|---------------------------|
| ● Aspergillus Niger | ● Aspergillus Flavus |
| ● Aspergillus Terreus | ● Chaetomium Globosum |
| ● Hormoconis Resinae | ● Paecilomyces Varioti |
| ● Penicillium Funiculosum | ● Scopulariopsis |
| ● Trichoderma Longibrachiatum | ● Brevicaulis |
| ● Cladosporium Herbarum | ● Penicillium Citrinum |
| ● Aureobacidium Pullulans | ● Alternaria Alternaria |
| | ● Aureobasidium Pullulans |



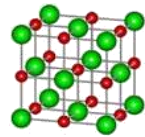
Our Service



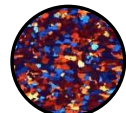
Metal Material Test

■ Microstructure

- Surface Observation
- Grain Size
- Uniformity Analysis of Carbides
- Inclusion Analysis
- Carburized Depth
- Metallographic Structure



Metallographic
Structure
(Brass)



Al5052
(Polarizing)

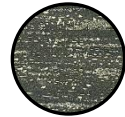
■ Coating Film Thickness

■ Chemical Composition

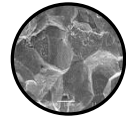
■ Fracture Analysis

■ Hardness

- Material/Surface/Core Vickers Hardness
- Rockwell Hardness



Uniformity
Analysis
of Carbides



Fracture
Morphology

■ Mechanical Properties

- Tensile/Yield Strength, Elongation
- Bend Testing
- Spring Force/Spring Rate
- Pulling/Pushing/Shearing Force
- Torsion



Polymer Material Analysis

■ Mechanical Properties

- Tensile Testing
- Flexural Testing
- Hardness Testing
- Impact Testing

■ Physical Properties

- Specific Gravity
- Ash Content
- Melt Flow Index
- Color Difference

■ Others

- Thermal Analysis
- Flammability Properties
- Optical Properties



Our Service



Test Items of Lithium Battery Materials

- Moisture
- Specific Surface Area
- PH Value (positive and negative electrode materials ,electrolyte)
- Tap Density
- Particle Size Analysis
- IC Gram Capacity
- Discharge Capacity
- Chlorinated Paraffin / CP
- Impurity
- Conductivity
- Density
- Acidity
- Tensile
- Puncture
- Air Permeability
- Porosity
- Areal Density



Failure Analysis

■ Metal Materials and Parts

- Fracture ,Cosmetic Defect, Corrosion, Wear, Crack, Distortion

■ Polymer Materials and Plastic Parts

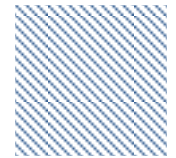
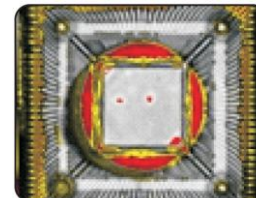
- Injection Black Spots, Plastic Fracture, Cracking, Mixed Color, In Blister, Layered, Coating Falling off, Corrosion

■ PCB/PCBA

- Poor Soldering, Components Defect, Electrochemical Corrosion, PCB Defect

■ Abnormal Composition

- Heterochromatic and Odor Analysis, Nozzle Material Analysis, Organic Residue, Analysis of Industrial Pharmaceutical Composition

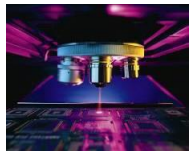
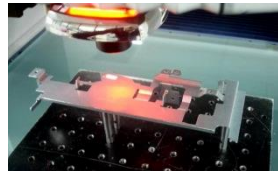


Our Service

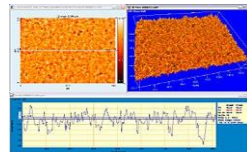


Precision Measurement

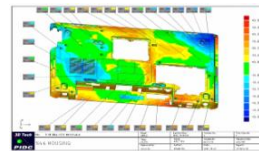
- Dimensional Measure
- Computer Aided Verification (CAV)/Reverse Engineering
- Gear Test
- Geometric Tolerance Analysis
- Surface Roughness Test
- 3D MicroStructure Analysis



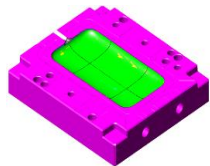
3D Optic Interferometer



3D Surface Roughness



3D Color Plots for Deviation Analysis

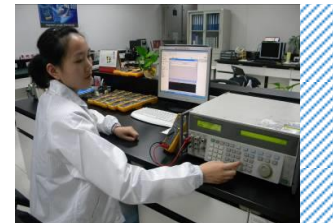


Precision Model Verification



Equipment Calibration

- Length Calibration
- Electrical Calibration
- Mass Calibration
- Force Calibration
- Temperature Calibration
- Physics&Chemistry Calibration
- Maintainance



Our Service



EMC Test

Accredited by NVLAP and VCCI

- Radiated Emission (3m Chamber)
- Radiated Emission (10m Chamber)
- Conducted Emission
- Harmonic Test
- Flicker Test
- ESD Test
- Radiated Susceptibility
- EFT Test
- Surge Test
- Conducted Susceptibility
- PFMF Test
- Dip Test
- Ring Wave Test



10m Chamber



RS Test Setup(743 Chamber)



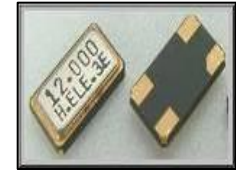
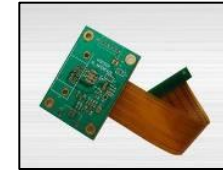
NVLAP

Our Service



Passive & Electromechanical Component Test

- **PCB**
 - R-PCB
 - F-PCB
- **Connector**
 - Inner Connector
 - I/O Connector
- **Protection Device**
 - Thermistor
 - Fuse
 - ESD Protection Device
- **Res./Cap./Ind.**
 - Resistor
 - Capacitor
 - Inductor
 - Bead/filter
 - Transformer
 - RF Component
- **Fre. Component**
 - Crystal
 - Oscillator



Main Service Item

- ▶ Raw Material Analysis
- ▶ Mechanical & Physical Analysis
- ▶ Electrical & Functional Test
- ▶ Life Test
- ▶ Environmental & Reliability Test
- ▶ Failure Analysis
- ▶ Integrated Validation



Our Service



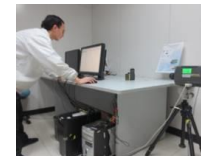
Module Test and SI

- **Signal Integrity Measurement**
 - DDR/PCI/Clock/...
 - DVI/HDMI/DP/...
 - USB/SATA/PCIE/...
 - Power Integrity
- **Power Unit**
 - SPS
 - Adapter/Charger
 - Battery/Power Bank
- **Storage Module**
 - HDD, Optical Disc
 - Memory DIMM
- **Image, Acoustics Module**
 - LCD Module
 - Touch Panel
 - Camera Module
 - Speaker, Microphone
- **Cable, Fan**
 - Power Cord
 - Data Cable
 - Fan
- **Communication**
 - Wi-Fi, Bluetooth
 - TV Tunnel



Service Items

- ▶ Functionality and Electrical
- ▶ Performance Test
- ▶ Compatibility Test
- ▶ Mechanical Test
- ▶ Reliability Test
- ▶ Optical Performance Test
- ▶ RF Performance Test
- ▶ Safety/EMC Test
- ▶ Signal Integrity Measurement
- ▶ Module FA

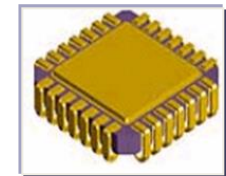
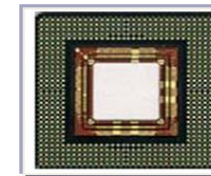
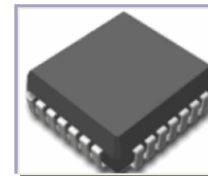
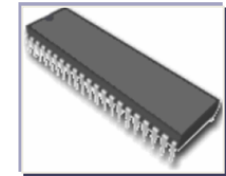
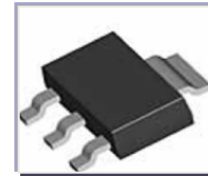


Our Service



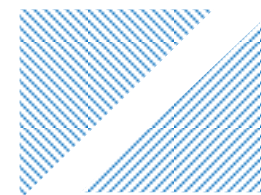
Active Types

- **ASIC/ASSP**
 - CPU/MCU/ Audio/Clock/LAN/I/O
- **Linear IC**
 - Standard Linear ICs
 - Power Controller/ Sensors
- **Digital Logic IC**
 - Standard Logic ICs/PLD
- **Memory**
 - EEPROM/NOR/NAND Flash /SRAM/ DRAM
- **Discrete**
 - MOSFET/Transistor/ Diode/LED



Major Services

- | | |
|-----------------------------|------------------------|
| ▶ Function Test | ▶ Package Quality Test |
| ▶ Electrical Characteristic | ▶ Reliability Test |
| ▶ Parameter Test | ▶ Failure Analysis |
| ▶ ESD Rating Test | ▶ Component Quality |
| ▶ MSL Rating Test | ▶ Verification |



Our Service



Test of Automobile Materials and Parts

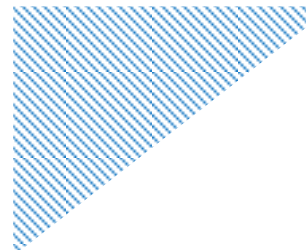
■ Material Test

- Mechanical Properties
- Chemical Composition
- Physical Properties
- Thermal Properties
- Structure Analysis
- Size Measurement
- Plastic Combustion Performance And Electrical Performance Test
- Material Composition Analysis Test



■ Coating Performance Test of Interior and Exterior Trim Parts

- Gravel Impact
- Paint Film Thickness
- Gloss
- Water Resistance
- Paint Film Hardness
- Cross-cut Test
- Bending
- Abrasion Resistance
- Color Difference
- Salt Spray
- Solar Radiation
- Flexibility



■ Wire Harness /Connector Test

- Environmental Stress
- Mechanical Stress
- Mechanical Service Life
- Chemical Stress
- Electrical Strength



■ Cleanliness Test

Our Service



Environment Test

■ Drinking Water Safety Test

- Heavy Elements
- Organics
- Disinfection By-products
- Microbiological Index



■ Industrial Waste Water Test

- Heavy Elements
- COD
- pH
- Turbidity



■ Indoor/Workplace Air Test

- Benzene Series and Formaldehyde
- Other Gaseous Pollution

■ Gaseous Pollution Emission Test

- Sulfur Dioxide and Nitric Oxide
- Non-methane Total Hydrocarbon
- PM10 and PM2.5
- Other VOCs



Our Service



Proficiency Testing(PTP)

Electrical and Electronic Products

- High Temperature (IEC 60068-2-2, GB/T 2423.2)
- Vibration (IEC 60068-2-6, GB/T 2423.10)
- Shock (IEC 60068-2-27, GB/T 2423.5)
- Low Temperature (IEC 60068-2-1, GB/T 2423.1)

Measurement

- Length of Common Parts (ASME Y14.5, GB/T 3177)
- Surface Roughness of Multi Scribed Template (GB/T 10610)
- True Roundness of Common Parts (ASME Y14.5, GB/T 1958)

Plastic Test

- Decabromodiphenyl Ether (IEC62321-6)
- Cr(VI) (EC 62321-7-2)
- Cl, Br(BS EN14582)
- Pb, Cd , Hg(IEC 62321-5)
- Density (GB/T 1033.1, ISO 1183-1, ASTM D 792)
- Tensile Strength (GB/T 1040.1, GB/T 1040.2, ISO 527.1, ISO 527.2, ASTM D 638)



中国认可
能力验证
PROFICIENCY TESTING
CNAS PT0053





Ur Hongxin Testing Technology(Shenzhen) Co.,Ltd.



Looking Forward to Your Cooperation



<http://www.urhongxin.com>