

## ABOUT US



Founded in 2005, King Credie Technology Ltd mainly provided PCB sample production for the world's famous universities and research institutes, including MIT, University of California, New York University, University of Singapore, University of Tokyo and many domestic military research institutes.

The company is established in the Pearl River Delta cities of Shenzhen and Dongguan, which have the most complete hardware industry service chain in China. Relying on our strong professional manufacturing capabilities and professional services, it will be a firm foundation for our continuous development with our customers.

# ITEM

- 1 Factory profile
- 2 One-Stop Solution
- 3 Quality Products
- 4 Manufacturing Capacity
- 5 Warehouse Management
- 6 Quality Management
- 7 Qualifications & Honours
- 8 Enterprise Culture

# 1. Factory introduction

## PCB Factory:

It was formally established in Shenzhen in 2005 and expanded to Huangjiang, Dongguan in 2015. The factory covers an area of 8,000 square meters and has a registered capital of RMB 15 million. It currently has more than 180 employees and an annual production capacity of nearly 30,000 types of PCBs, 5 million square feet. The factory also has various system certifications such as ULE357163, ISO9001, ISO13485, ISO14001, IAF16949.

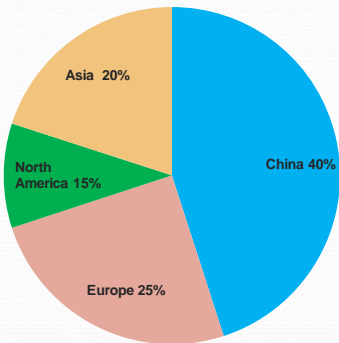
## PCBA Factory:

It was established in Shenzhen in 2011, with a factory area of 6,000 square meters and a registered capital of RMB 12.18 million. In 2020, it was awarded the title of China's National High-tech Enterprise, specializing in SMT & PCBA & OEM foundry services. It currently has more than 200 employees! The company has complete hardware supporting facilities and currently has 10 YAMAHA mounting lines, as well as supporting testing equipment (such as SPI/X-Ray inspection /AOI/ICT/ROHS, etc.), 2 wave soldering production lines + 2 post-welding lines + 2 test lines + 1 conformal coating line, and are equipped with functional analysis stations. The company has passed ISO9001, ISO14001, ISO13485 and IATF16949, and introduced and implement ERP and MES system production operations.



# Target Market

## Market distribution

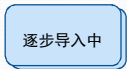


## Target market

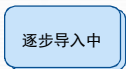
1. Auto products
2. Medical products
3. Industrial control products
4. New Energy products
5. Video conversion
6. Consumer Electronics

# Major customers

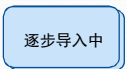
## Auto products



## Industrial control



## Medical



## New Energy



## Video conversion



## Consumer Electronics



## 2. One-Stop Solution

### ● Technical services

Professional engineer team, provide technical support for customers product design and manufacturability

### ● Production service

We have the top equipment in PCB and PCBA industry, and have experienced professional production and quality control team

### ● Customer service

24/7 professional customer service

### ● Industrial chain service

Has a stable, reliable, professional components and PCB material procurement supply chain

# PCB SERVICE:

## Lead Time:

### Type:

- 2 Layer
- 4-6 Layer
- 8-10 Layer
- 12 Layer+
- HDI PCB

### Sample lead time

24 hours  
48 hours  
96 hours  
168 hours  
168 hours

### Production lead time

3-5 days  
7-8 days  
9-10 days  
12-14 days  
12-14 days

## Capacity:

### Type:

- Rigid PCB
- Flex PCB
- Rigid-Flex PCB
- Metal core PCB
- High frequency PCB

### Capacity

2-32 Layer (Including blind/buried hole HDI design)  
1-8 Layer  
2-18 Layer  
1-12 Layer (Containing aluminum & copper substrate, Mixed Dielectric)  
2-24 Layer (Ceramic, Teflon)

# PCBA SERVICE:

## Quick turn Lead Time

### Type/Lead time:

- Prototype: 24-48 hours
- Small volumes: 48-72 hours
- Large volumes: 48-96 hours

## Value-added services

### Type:

- Purchase of components(Genuine products guarantee)
- PCBA(SMT/DIP)
- OEM
- Assembly and testing



### 3. Quality Products



# PCB Product

## Rigid PCB

Layer Count: 1-24L

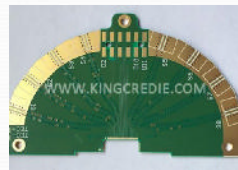
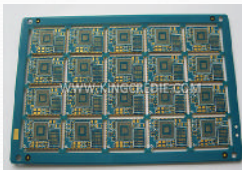
Board Thickness: 0.4mm~5.0mm

Impedance:  $\pm 10\%$ ( $\geq 50\Omega$ )

Trace/Space: 3MIL/3MIL

HDI: N+N+N

Copper Thickness: 1/3OZ ~ 1 2OZ



## Flexible PCB

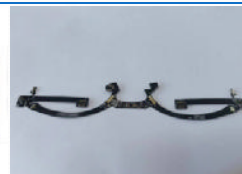
Layer Count : 1-8L

Dimensions: 230\*330mm

Copper Thickness: 1/3OZ; 1/2OZ ; 1OZ

Min Trace/Space: 3MIL/3MIL

Min Drilling: 0.15mm



## Rigid-Flex PCB

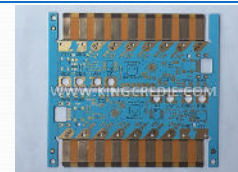
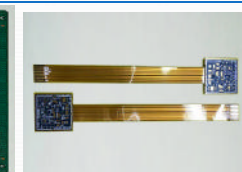
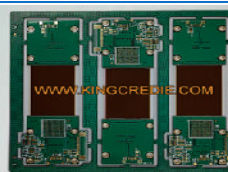
Layer Count: 2-10L

Aspect Ratio: 12:01

Min distance Via to Cu: 0.25mm

Impedance:  $\pm 5\Omega$ ( $< 50\Omega$ ),  $\pm 10\%$ ( $\geq 50\Omega$ )

Min Trace/Space: 3MIL/3MIL



# PCB Product

## Metal Core PCB

Thermal Conductivity:

Standard materials: 1-3W/m.k ;

Specified materials: 4-12W/m.k

PCB Type:

Metal Core PCB, Direct Thermal Path MCPCB,  
Embed Copper Core PCB

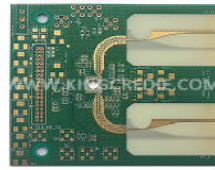
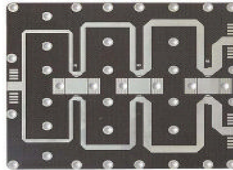
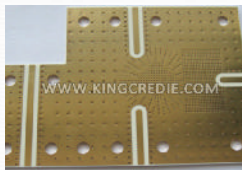


## High Frequency PCB

Material: Rogers, Arlon, Taconic, Teflon, F4b

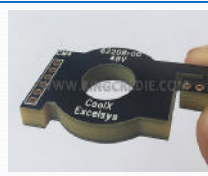
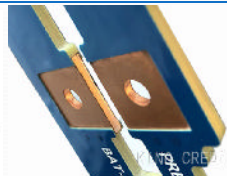
Impedance:  $\pm 10\%$ ( $\geq 50\Omega$ )

Min Trace/Space: 3MIL/3MIL



## Custom PCB

Allow customization, such as shape, material,  
board thickness, copper thickness, color and  
others.

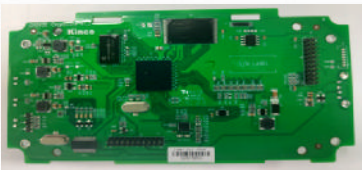


# PCBA Product

## Industrial control product

Min CHIP Size: 0603

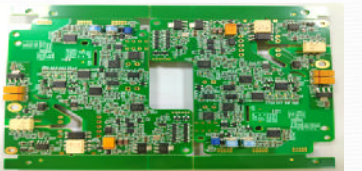
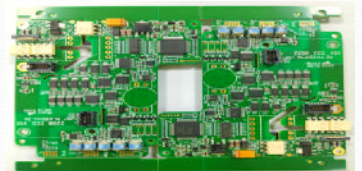
Min QFP Pin Spacing: 0.40 MM



## Medical products – control board of energy healing equipment

Min CHIP Size: 0402

Min QFP Pin Spacing: 0.40 MM

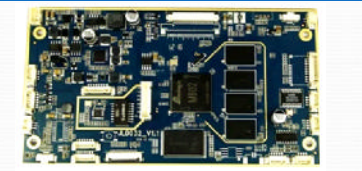


## Automotive central control module and control module motherboard

Min CHIP Size: 0201

Min BGA Pin Spacing: 0.40 MM

Min QFP Pin Spacing: 0.40 MM

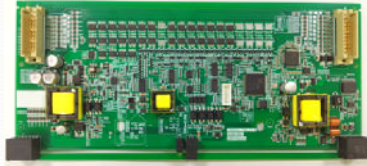


# PCBA Product

## Energy storage products

Min CHIP Size: 0402

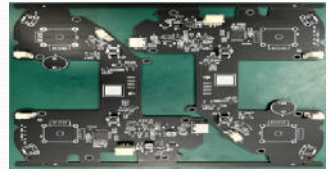
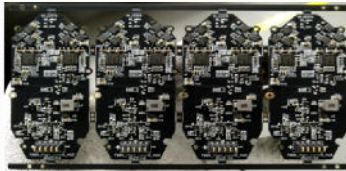
Min QFP Pin Spacing: 0.40MM



## Unmanned aerial vehicle

Min CHIP Size: 0402

Min QFP Pin Spacing: 0.40 MM



## Video conversion

Min CHIP Size: 0201

Min BGA Pin Spacing: 0.40MM

Max Ball Spacing: 13mm





## 4. Manufacturing Capacity

### PCB: List of Equipment & Main Technical Parameters

| No. | Equipments Name     | QTY |
|-----|---------------------|-----|
| 1   | Drilling            | 8   |
| 2   | Scrubbing machine   | 2   |
| 3   | Auto PTH line       | 1   |
| 4   | Exposure            | 3   |
| 5   | Auto pattern line   | 1   |
| 6   | Etching machine     | 1   |
| 7   | Auto printing       | 5   |
| 8   | Oven                | 4   |
| 9   | Circuit developing  | 1   |
| 10  | S/M developing      | 1   |
| 11  | Punching machine    | 4   |
| 12  | Routing machine     | 10  |
| 13  | E-Test machine      | 5   |
| 14  | Flying Probe Tester | 3   |
| 15  | AOI                 | 4   |



| No. | Item                      | Capability  |
|-----|---------------------------|---|
| 1   | Layer Count               | 1-24L   |
| 2   | Material                  | FR4, FR4 HIGH-TG, High Frequency Material, Metal Substrate Board                                    |
| 3   | Max Board Size            | 22.5*30inch(<6Layer), 16.5*22.5inch(≥6Layer)  |
| 4   | Routing Tolerance         | +/-0.10mm   |
| 5   | Board Thickness           | 0.4mm-5.0mm   |
| 6   | Board Thickness Tolerance | ±10%(>1.0mm); ±0.1mm(≤1.0mm)  |
| 7   | Min BGA Size              | 0.2mm(Flash Gold), 0.3mm(Lead Free HASL), 0.25mm(Other)   |
| 8   | Trace Width Tolerance     | +/-20%  |
| 9   | Max Copper Thickness      | 8OZ(Outer) 7OZ(Inter)   |
| 10  | Mechanical Drilling       | 0.15mm-6.50mm   |
| 11  | Hole Size Tolerance       | PTH: +/-0.075; NPTH: +/-0.05  |
| 12  | Laser Drilling            | 0.1-0.15mm  |
| 13  | Aspect Ratio              | 1:0.8(Laser), 12:1(Mechanical)  |
| 14  | Solder Mask               | Green, Yellow, Black, White, Blue, Red  |
| 15  | Legend Height             | ≥ 0.6mm   |
| 16  | Twisting and Bending      | ≤0.75% Min0.5%  |
| 17  | HDI                       | 1+N+1, 1+1+N+1+1, 2+N+2, 3+N+3  |
| 18  | Metal Substrate Board     | Aluminum substrate, Copper substrate  |
| 19  | Surface Treatment         | ENIG, ENEPIG, Immersion Silver, Immersion Tin, Flash Gold, Golden Finger, OSP, Lead Free HASL, etc. |

# Major Equipment of PCB



Drill



PTH Line



Electrical test

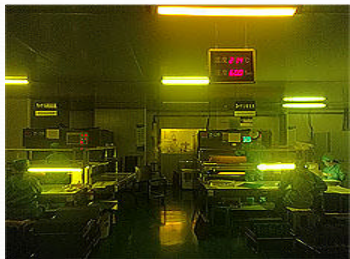


Image Transfer



Outline



AOI

# Major Equipment of PCB



Laboratory



Etch line



Laminate



Laser Drill



V-cut Machine



2D Measuring Projector



# SMT Workshop



Workshop area 3500 m<sup>2</sup>

Management of IT 、 MES

SMT production line:

**L1-L4:**

YSM20 + YSM10 + SPI + On-line AOI (N2 reflow)

**L5-L6:**

YSM20 + YSM10 + SPI + On-line AOI

**L7-L8:**

YSM20 + YSM10 + On-line

**L9-L10:**

YSM20 + YSM10 + SPI + On-line AOI (N2 reflow)

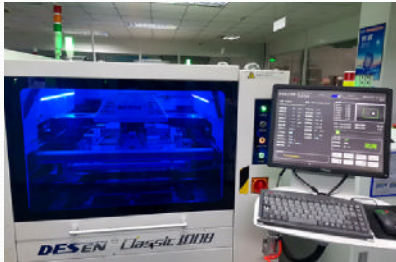
# Major Equipment of SMT



Yamaha



Yamaha



SPI



AOI

# Major Equipment of SMT



**Reflow welding**



**X-RAY Check**



**AOI Check**

# Systematic management



IT-based management of stencil/tools

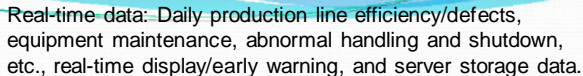


IT-based management of equipment maintenance/  
overdue system lockout/Feeder material  
preparation



Equipment maintenance/stencil/solder paste are included in the IT management of the MES system, and the automatic locking function is set when maintenance expires.

MES system for production related processes



## Line Productivity

| Line capacity (24H)  |                  | Per month                 | Per Year              | Remark                   |
|--|------------------|---------------------------|-----------------------|--------------------------|
| SMT<br>(10 Lines)  | PCBA/piece       | 2 million/month           | 26 million/year       | Depends on actual design |
|  | Machining points | 600 million points /month | 8 billion points/year |                          |
| DIP/Test/Wave soldering<br>/Conformal coating<br>(2+2+2+1) | PCBA/piece       | 0.7 million/month         | 8 million/year        | Depends on actual design |



## PCBA: List of Equipment & Main Technical Parameters

| 序号 | 名称 Name                                  | 数量 Set |
|----|--|--------|
| 1  | 高速贴片机<br>High Speed Patch Machine        | 20     |
| 2  | 回流焊<br>Reflow Welding                    | 5      |
| 3  | 全自动印刷机<br>Fully Automatic Printing Press | 10     |
| 4  | 锡膏检测<br>Solder Paste Detector            | 8      |
| 5  | AOI测试<br>AOI Test machine                | 6      |
| 6  | X-RAY测试仪<br>X-RAY Test machine           | 2      |
| 7  | 首件检测仪<br>First Piece Tester              | 1      |
| 8  | 波峰焊<br>Wave Peak Welding                 | 4      |
| 9  | 三防漆设备<br>Coating line                    | 1      |



| NO. | 内容 ITEM                   | 技术参数 Technical Data          |
|-----|---------------------------|------------------------------|
| 1   | 最小空间 Min Assembly Space   | 0.1mm                        |
| 2   | 最小QFP空间 Min QFP Space     | pitch 0.3mm                  |
| 3   | 最小贴装 Min Package          | 0201                         |
| 4   | 最小板大小 Min Board Size      | 50mm*50mm                    |
| 5   | 最大板大小 Max Board Size      | 350mm*550mm                  |
| 6   | 公差 Tolerance              | ±0.01mm                      |
| 7   | 可贴装 Assembly Sort         | QFP, SOP, PLCC, BGA          |
| 8   | 可贴装型号 Assembly Capability | 0805, 0603, 0402, 1206, 0201 |

## DIP Workshop



**DIP workshop area 2500 m<sup>2</sup>**

**Technical Engineer(Junior):10**

**Management of IT 、 MES**

**Pipeline: 7 lines**

**Soldering line 2+testing 2+ Wave**

**Soldering line 2+ Conformal Coating line 1**



# Major Equipment of DIP

▲ Wave soldering line: 2



▲ Soldering line: 2



▲ Testing line:2



## Conformal Coating Line



Conformal Coating Line: 1

## 5. Warehouse Management



### Management of IT MES

1. Smart Shelf 10
2. Implementation of material bar code storage
3. Mes System Management and control first-in-first-out, automatic system locking

## Warehouse Management

Check the pass, into the bar code management



Month label/material identification  
card traceability management



Intelligent Mobile Shelf, error-proof,  
leak-proof management



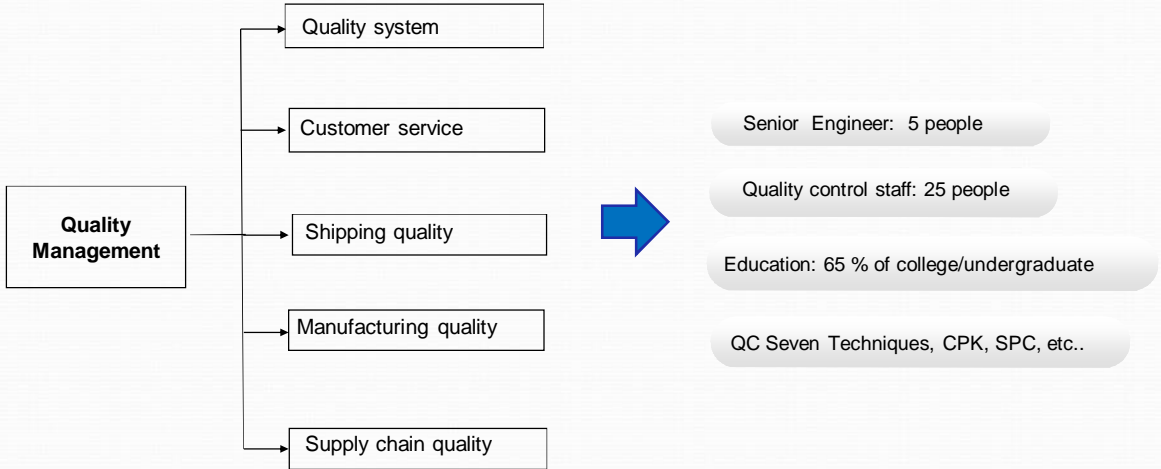
# Warehouse Management

Specialist/area management of precious materials



Moisture-proof cabinet temperature and humidity monitoring, automatic control

## 6. Quality Management Centre



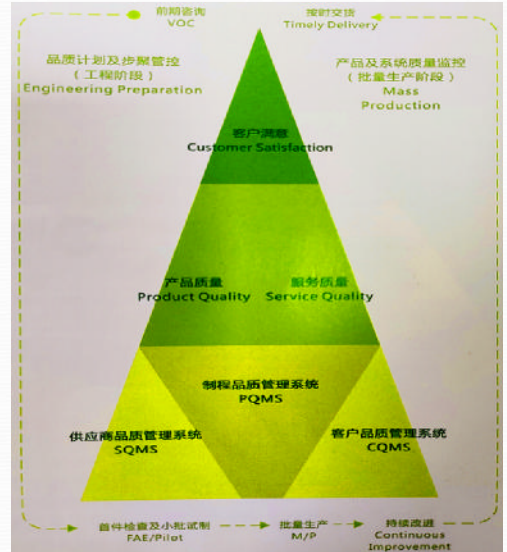


# Quality System

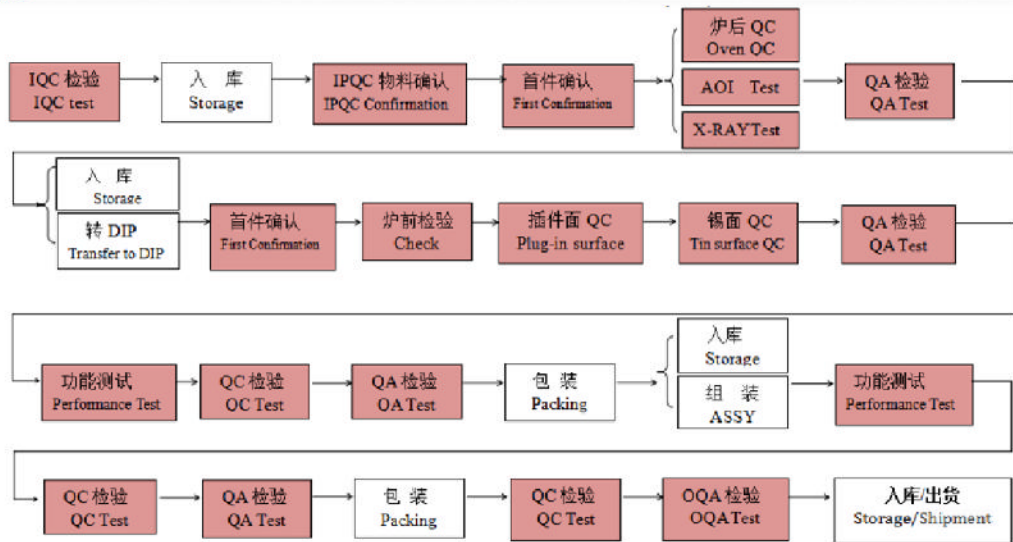
1. Implement ISO 9001, 14001, 13485, 16949 system, as well as industry-related standards, from the input, output and other aspects of strict implementation.
2. We have a professional, stable quality team of more than 20 people, from the incoming material/process/delivery/customer service and other comprehensive monitoring quality.
3. Equipped with professional and complete quality testing facilities (such as ICT/SPI/ROHS).
4. MES system synchronously includes quality control, quality stop line/unlock function
5. Strictly implement the quality management process.



## Quality Management



# Quality Control





## Testing centre -- Regular testing



X-Ray check  
For: BGA/QFN type component  
solder inspection.

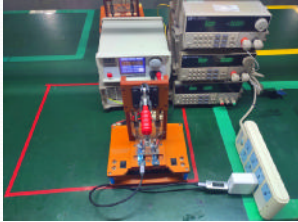


AOI check  
For: Reflux welding PCBA,  
component welding conditions for  
automated testing.



SPI check  
For: Full automatic solder paste  
printing effect inspection.

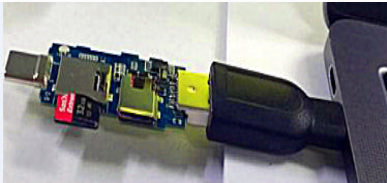
# Testing Center -- Function Detection



Quick charging test



Rapid discharge test /Full compatibility test



High Speed  
Transmission Test



## RoHS / halogen free Testing



RoHS / halogen free



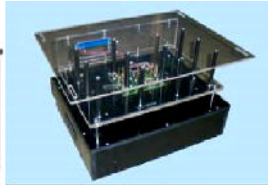
Application scope: RoHS detection of electronic and electrical products

- Halogen detection
- Film analysis

## Testing Center -- Reliability test



**ICT Test + Treatment**



**Thrust Test**

# Work Environment Management



SMT workshop/DIP/warehouse (with alarm)/precious material warehouse (with alarm) and other control areas have implemented automatic temperature and humidity monitoring, digital display devices, and dedicated inspection/follow-up.

MAN-ENG-027 Management  
MAN-HR-006 5S Management



Temperature and humidity digital display



5S outstanding team

# Employee qualification+skill training

## 1. Study of production theory



## 2. Practical operation



## 3. Brainstorming

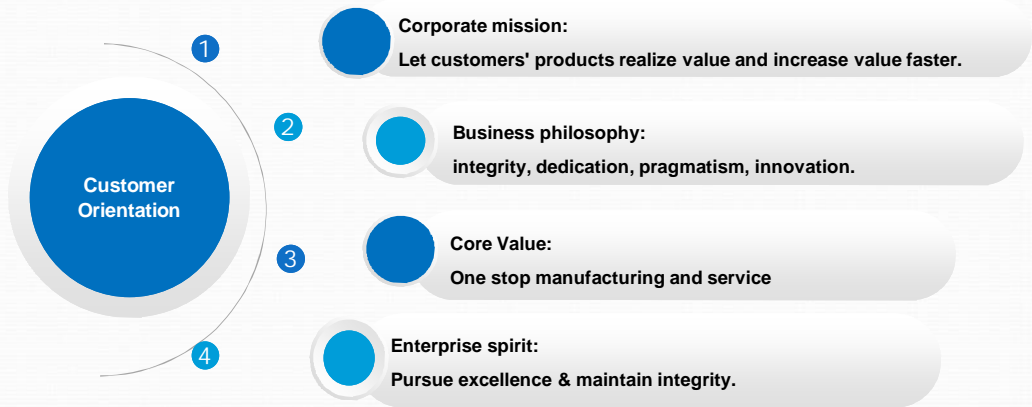




## 7. Qualifications & Honours



## 8. Enterprise Culture





## Contact us

PCBA One-stop Service, We plowed for 10 years, continue to improve, never stop;

Thank you for your support, If necessary, please contact us, sincere service for you.

- Email: [info@kingcredie.com](mailto:info@kingcredie.com)
- Tel: 86-0755-23110700
- Fax: 86-0755-23110701
- Web: [www.kingcredie.com](http://www.kingcredie.com)