PCB LOOP
ELECTRONIC ENGINEERING SERVICE CLOSED LOOP PROVIDER
PCBLOOP Technology Company Profile
Aug. 2022
https://www.pcbloop.com

PCB LOOP
ELECTRONIC ENGINEERING SERVICE CLOSED LOOP PROVIDER

Brief Introduction

PCBLOOP Technology Co.,Ltd. is a national-level high-tech enterprise specializing in providing customers with high-tech custom electronics design and manufacturing services.Our services include Electronics Hardware Development Firmware development,3D Structure Design(UI) and Prototyping, PCB Fabrication,PCB Assembly, Components Sourcing, and Plastic Moulding,etc.

Our products are widely used in industrial control, medical equipment, telecommunications, environmental protection equipment, instrumentation, security, smart equipment, automotive electronics, consumer electronics and energy fields.

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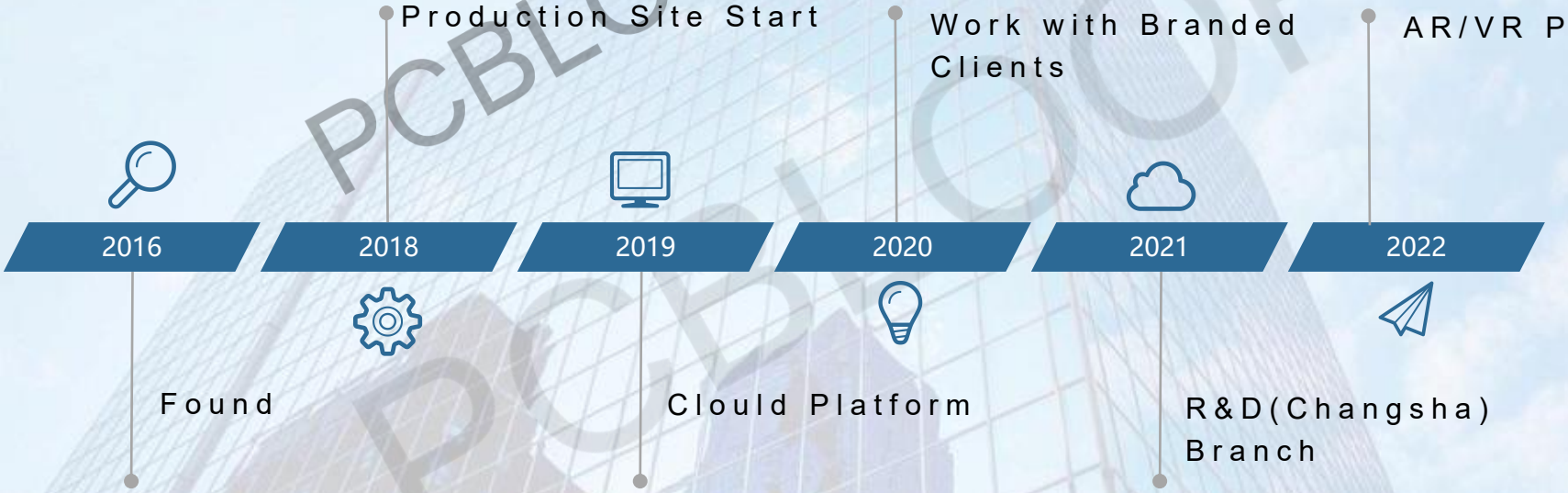
Our History



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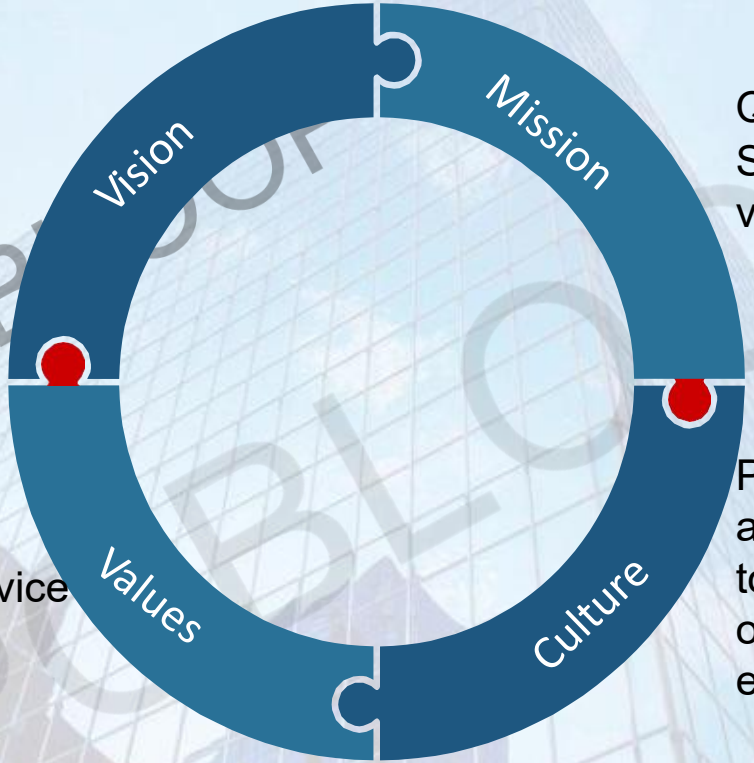
Company Culture

Pragmatic innovation
Collaborative efficient
Become a world-renowned
EMS manufacturing factory



Quality first, reputation first
Serve customers, achieve
value

Customer first, attentive service
Simpleness, Speediness,
Smartness

Pirate spirit, individuality, freedom, adventure, perseverance, desire to explore the unknown, tolerance of failure, and only one success is enough.

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Our Development Services

Hardware and Electronics design

Power electronics, analog electronics design, digital and high-speed electronics design, RF designs

Industrial and Mechanical design

Industrial design, thermal calculation, 3D printing, injection molding

Precertification testing

EMC, UL, FCC, CE

Firmware design C/C++

Bar metal, RTOS, platforms, wireless protocols, security, interfaces, libs, frameworks

UI/UX design

Embedded devices GUI, mobile apps GUI, desktop apps GUI, web apps GUI

Software design

Mobile apps, desktop apps

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Tech Stack

Wireless

- NB-IoT, LTE M, GPRS, GPS, LTE, UWB, WiFi, Bluetooth LE, ZigBee, Z-Wave, LoRa, Thread, 6LoWPAN, CAT1, Sub 1GHz, NFC (13,6 MHz), RFID 433 MHZ and 128 kHz

Security

- AES, SSL/TLS, custom algorithms

Frameworks and Libs

- TouchGFX (GUI lib for MCU), LVGL (GUI lib for MCU),Mbed TLS(SSL/TLS), MQTT (MQTT protocol), FreeRTOS (RTOS for MCU/MPU), Zephyr OS (RTOS for MCU/MPU), lwIP (TCP/IP stack), WICED (Wifi stack)

Power electronics design

- PFC, solar charging controller, chargers, high voltage control, motor controllers DC/AC/BLDC

Radio frequency design

- 50 GHz, 6 GHz, 2,4 GHz, 1GHz, 433 MH, 13,6 MHz, 128 kHz

Programming languages

- C, C++, Assembler, C#, ASP.NET, Python

Operating systems

- FreeRTOS, ZephyrOs, Linux user/kernel, Embedded Linux, Android, ROS, Yocto, Windows,

Digital and high-speed electronics design

- High-speed memories DDRx/LPDDRx, high-speed interfaces

Interfaces

- I2S, SAI, MIPI-DSI, MIPI-CSI, USB 2/3.x, LTDC, parallel DDR3/DDR4/LPDDR4, I2C, SPI/QSPI, UART, CAN, -8080/6080, 1-Wire

Protocols/Standards

- MQTT, HTTP, FTP, Modbus TCP/RTU, SNMP, TCP/IP, UDP/IP, DLMS, ARP, Ethernet, POP3, IMAP, HART, FTP, custom protocols

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Key Platforms & Development Tools

- NXP
- Nordic
- MTK
- Rockchip
- Espressif
- ST
- Atmel
- Microchip
- Analog Devices
- Qualcomm
- Allwinner

Firmware design

- ST CubeIDE
- Eclipse IDE for Espressif
- Simplicity Studio
- Atmel/Microchip Studio for AVR® and SAM Devices
- MCUXpresso IDE
- CrossCore® Embedded Studio
- GCC (bare metal programming)
- Arduino
- Holtek ht-ide3000

UX/UI design

- Figma
- Adobe XD
- Adobe Photoshop
- Adobe Illustrator

Hardware design

- Altium designer
- LTSpice

Software design (Linux, Windows, IOS, Android)

- QT
- Visual Studio
- GCC (Linux and Windows)
- Android Studio
- Xamarin for Visual Studio

Management and source control

- Jira
- GitHub
- Bitbucket

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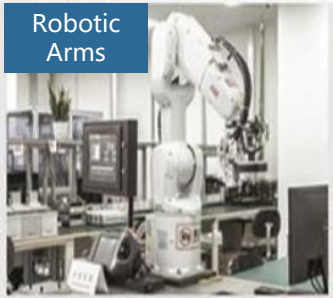
Advanced Laboratory Equipment

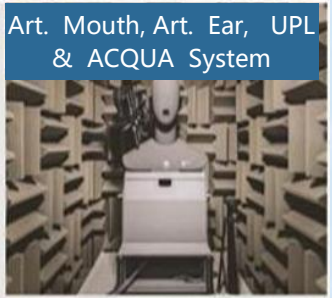
We have advanced laboratory equipment, which can effectively guarantee the reliability of modules, and at the same time provide testing services for our customers' equipment, helping customers save costs and speed up product launch.

Lab

Robotic Arms



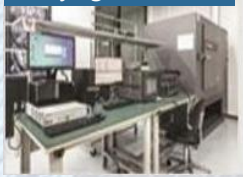
Art. Mouth, Art. Ear, UPL & ACQUA System



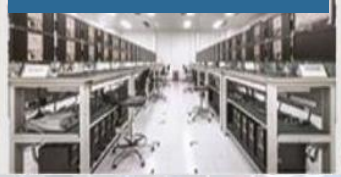
OTA System

Millimeter Wave Test System

Keysight UXM



Automatic Test Cluster



RF Conformance Test

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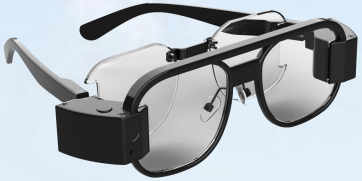
Product Showcase

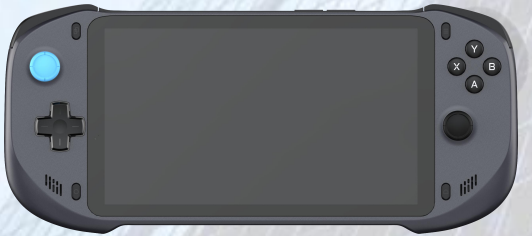


Monocular Smart AR Glasses

Smart Helmet

Smart ECG Health Wearable Watch

Intelligent UHFHandheld Terminal



Cloud GameController

Smart Electronic Wallet/Cold Wallet

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Product Showcase

Smart Telemedicine Handheld Device

Intelligent all-in-one Handheld Ultrasound Equipment

Intelligent Multi-Function Handheld

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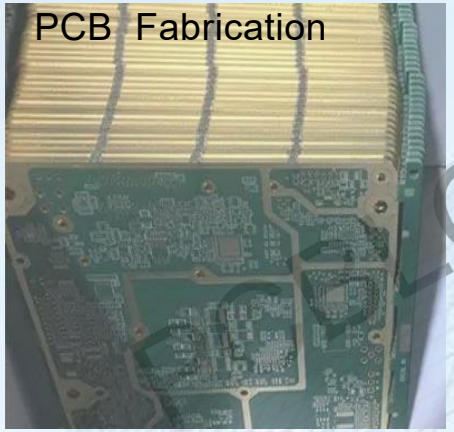
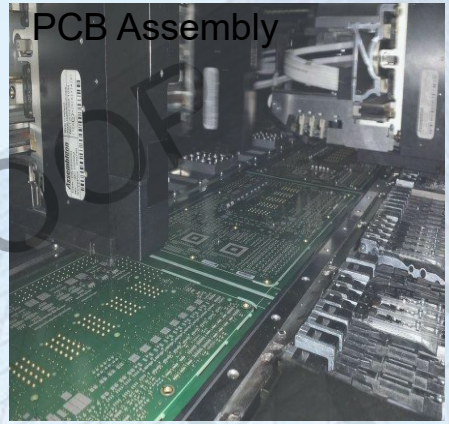
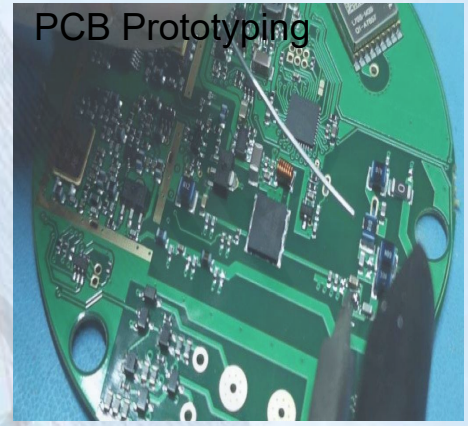
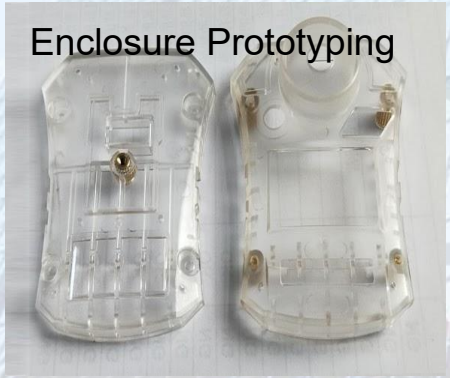
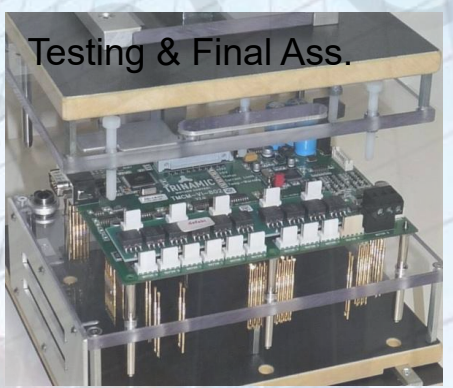
Our Manufacturing Services











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PCB Production Line

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PCBA Manufacture Facility

Automatic SMT Machine

Reflow Oven

AOI

SMT Line

DIP Line

De-panel Machine

Wave-Soldering

First Artical Inspection

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Production Site Introduction(1)

SMT line: 6 lines (4 Yamaha, 2 Samsung), 100,000 class dust-free production workshop;
DIP lines: 3 lines, (2 conventional wave soldering lines, 1 selective wave soldering line);
Workshop two-shift management.

SMT Workshop

DIP Workshop

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Production Site Introduction(2)

- Normal assembly line in new workshop: 4 lines, with a daily production capacity of 800~1000 sets;
- New energy workshop assembly line: 2 lines and 5 packaging lines, with a daily production capacity of 1,000 to 1,200 units;;
- Workshop two-shift management.

Aging room

Assembly line

Battery wire packing

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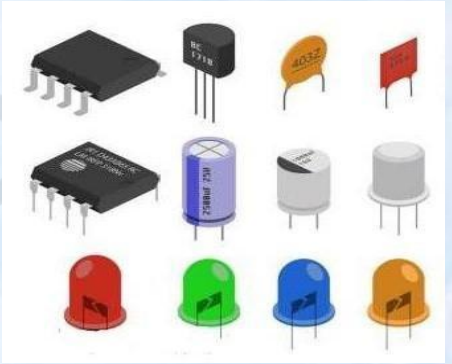
Supply Chain Management

Our professional sourcing team can acquire inventory information of rare and short materials, thus to provide the best purchasing solution.



The strategic partner relationship with multiple local plastic, metal suppliers, which allows us to offer high quality, fast delivery, and competitive price for our customer

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Component Sourcing

Semiconductors

Connectors

A sound supplier introduction and evaluation mechanism ensure that we could offer customers with excellent quality. We are working with the well-known international suppliers and the first class distributor. All the components are original binding and sourcing traceable.

We can provide you variety of components with high quality and competitive prices through various channels. From the resistor, capacitor, and inductor, diode and triode, rectifier bridge, IC to each type of connector, shell, wire/cable and button, we can help you to sourcing all of them.

Our goal is to save your money and time, so that you can fully engage your work but do not need to worry about the sourcing issues.

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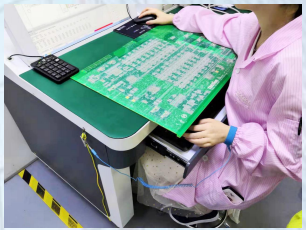
Quality Control



PCBLOOP Technology provides high-quality products by following the ISO production procedure and adopting the IPC class 2 and 3 quality surveillance standards.

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Manufacture Capability

In terms of production capacity, our facility is able to process 10 million SMT soldering points/day, 2.5 million THT points /day. Our electronics assembly is 5000 units/day.

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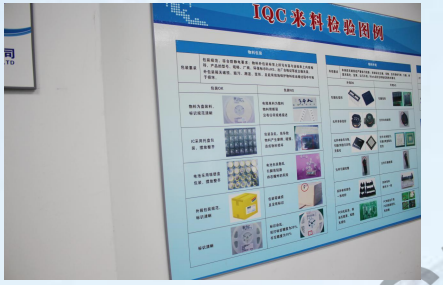
Services Standard



PCBLOOP Technology provides fast, professional and high-quality services, including minimum of 6 hours quotation releasing and 2 hours engineering query releasing. We are able to achieve the minimum 72 hours lead time, and provide 48 hours express shipment globally. Professional DFM report will be offered after production. For our after sales service, any product issues can be response in 2 hours with 24 hours online customer service.

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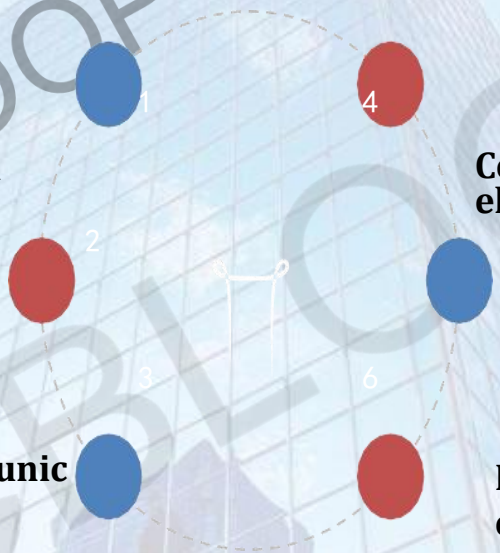
Product Applications

Transportation

Industrial control

Telecommunications



Intelligent equipment

Consumer electronics

Medical equipment

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Thank You!

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