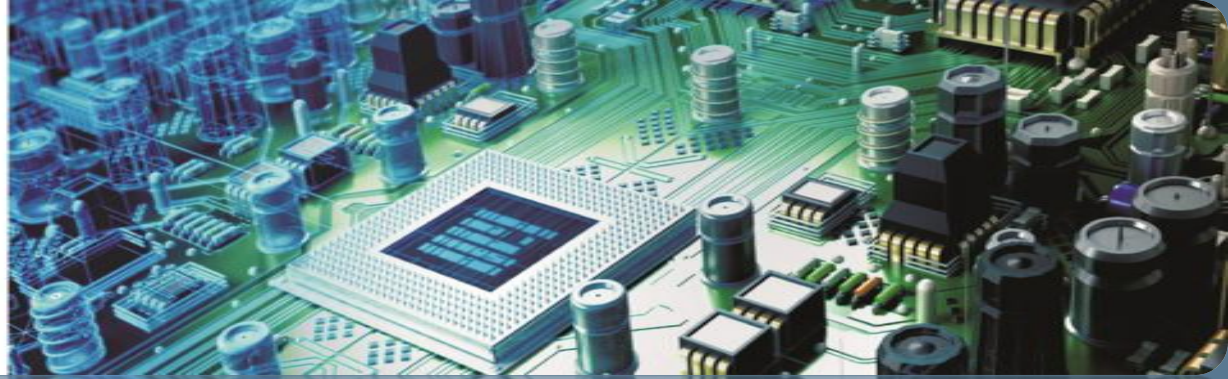




MPN TECH PTE. LTD.

One-stop PCBA Solutions in Singapore

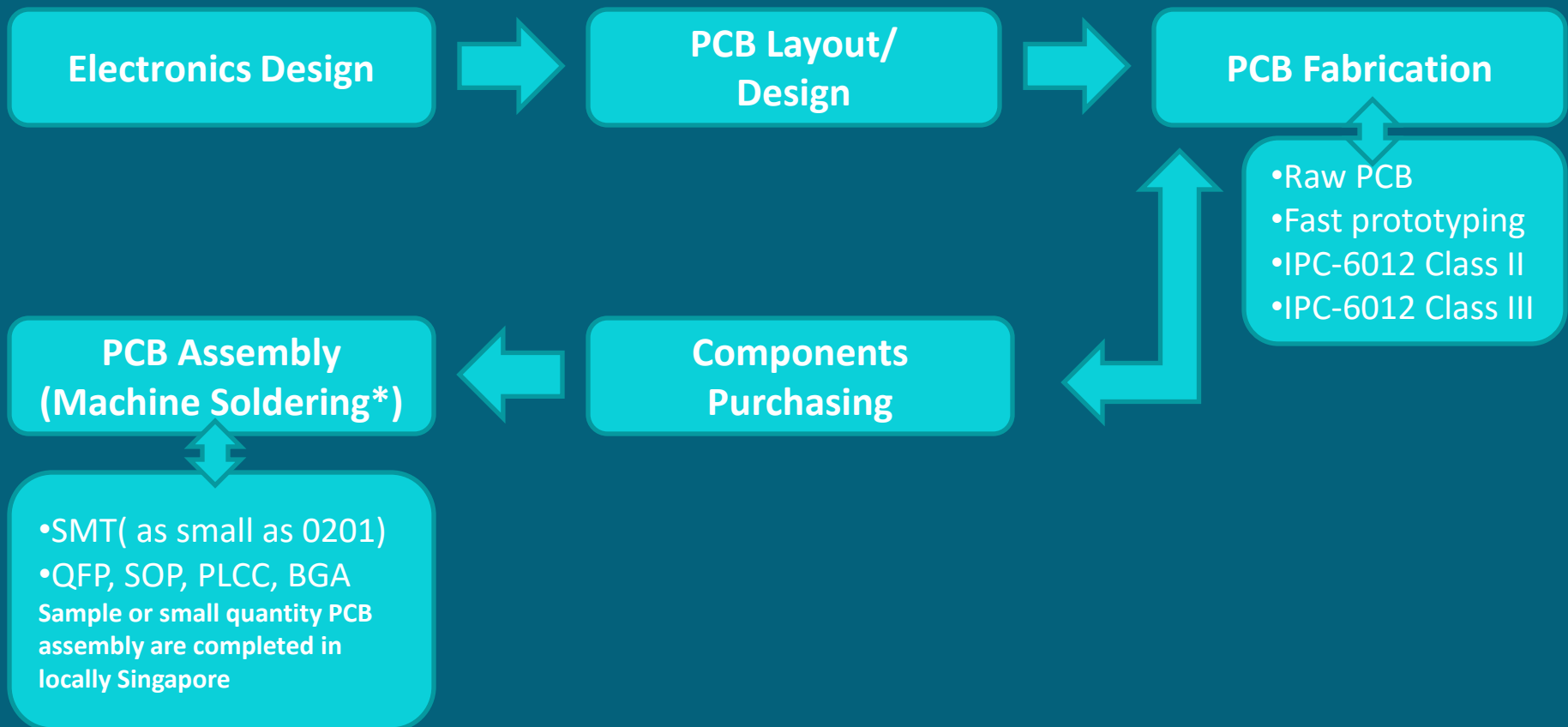


**Welcome to
MPN TECH**

**One-Stop Electronic Solutions
Provider in Singapore**



Our Services





Why choose us?

Our Core Value

We strive to establish long-term, stable relationships with our customers

Our Core Competitiveness

Faster

High Quality

Save Cost

One Stop Service



Certifications (Production)

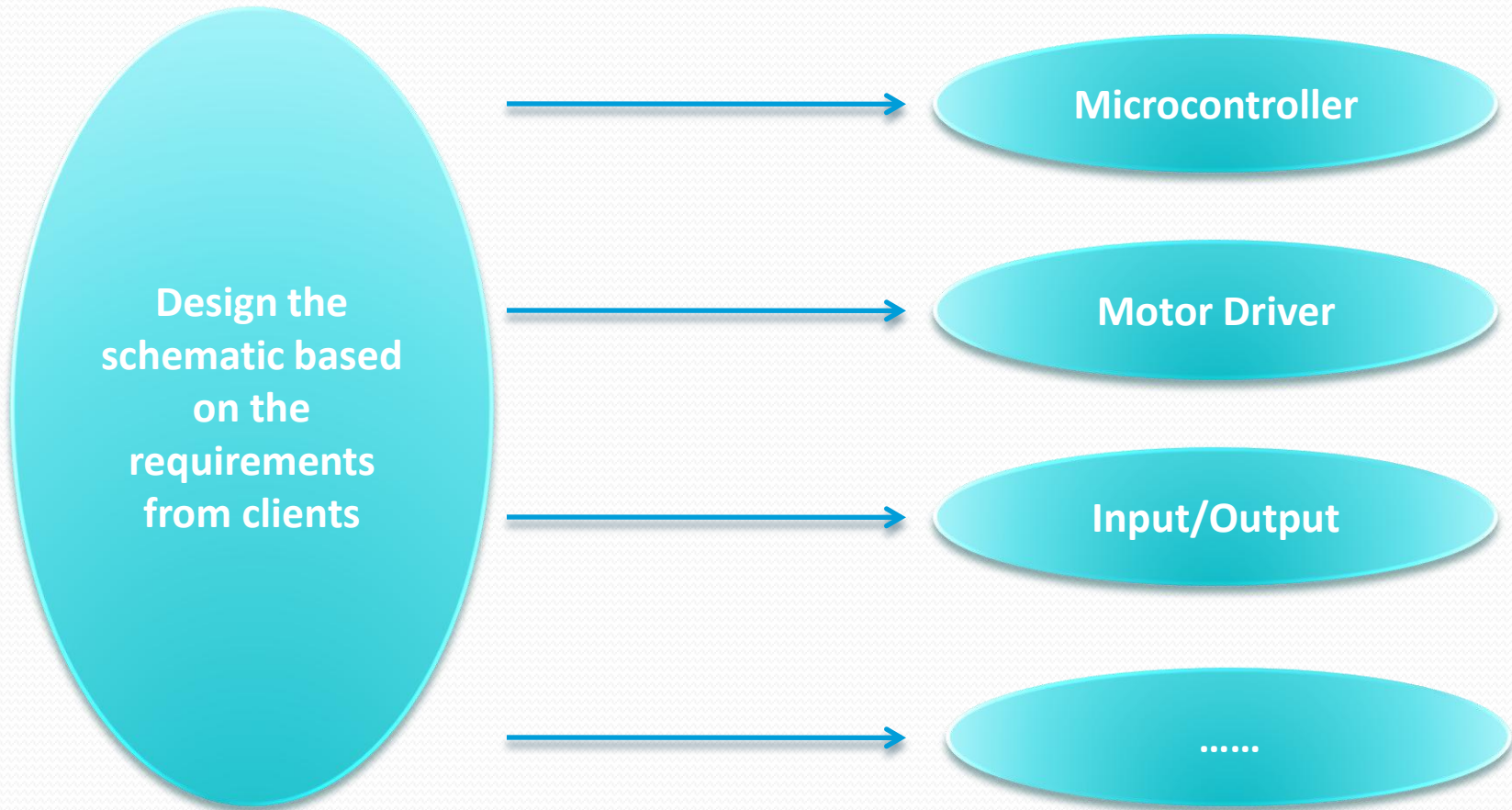
SGS; UL; ISO 9000 Quality System

Main Collaborators



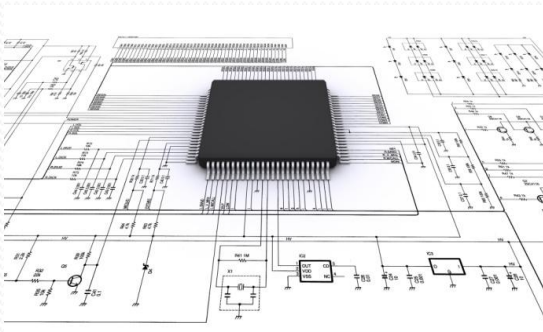
And we provide One-Stop Electronics Service for more than 300 SMEs.....

Electronics Design-----From Idea To Product

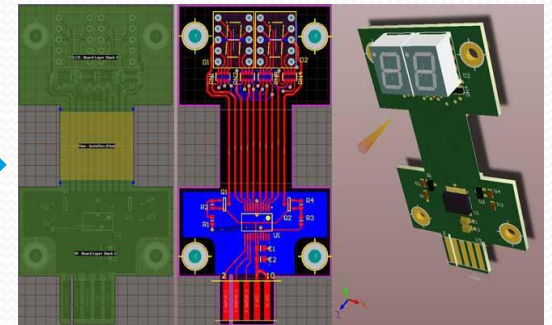


Electronics Design Process (Full structure)

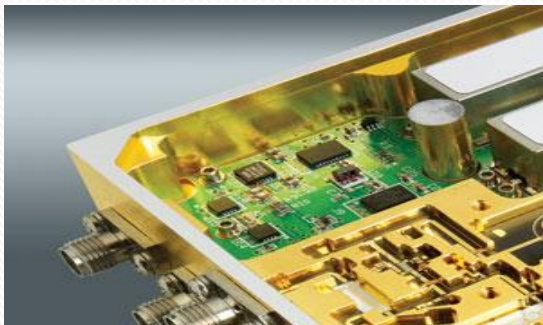
Schematic Capture



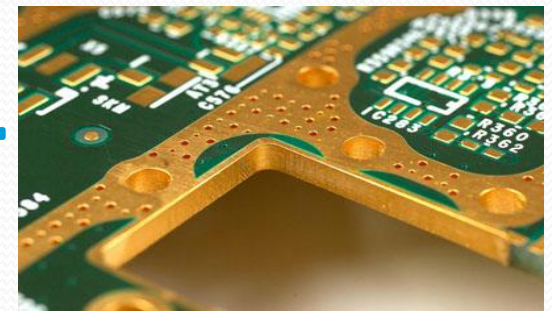
PCB Layout/Design



PCB Assembly



PCB Fabrication



Component Purchasing

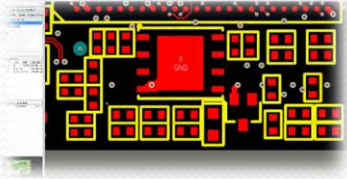
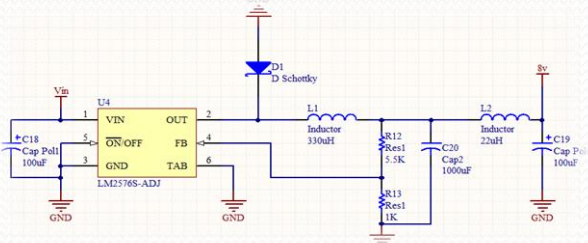


Electronics Design Process (Design)

Step 1. Schematic Capture

datasheet

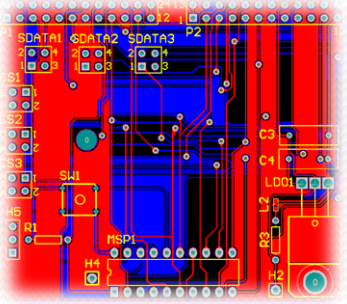
Step 2. PCB Placement



Step 4. Generate the Output files (Gerber etc)

Step 3. PCB Routing

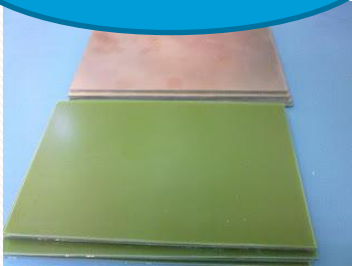
- All Gerber files present
- Top Copper Layer
- Bottom Copper Layer
- Aperture Information*
- Top Overlay
- Bottom Overlay
- Top Soldermask
- Bottom Soldermask
- Mechanical (Outline)*
- NC Drill*
- Drill Tool List*



PCB Fabrication

PCB Materials

FR-4



Ceramic Board



Rogers



FPC



Cu-Based



Al-Based



PCB Production Testing Devices



ROHS Tester



Gold Thickness Tester

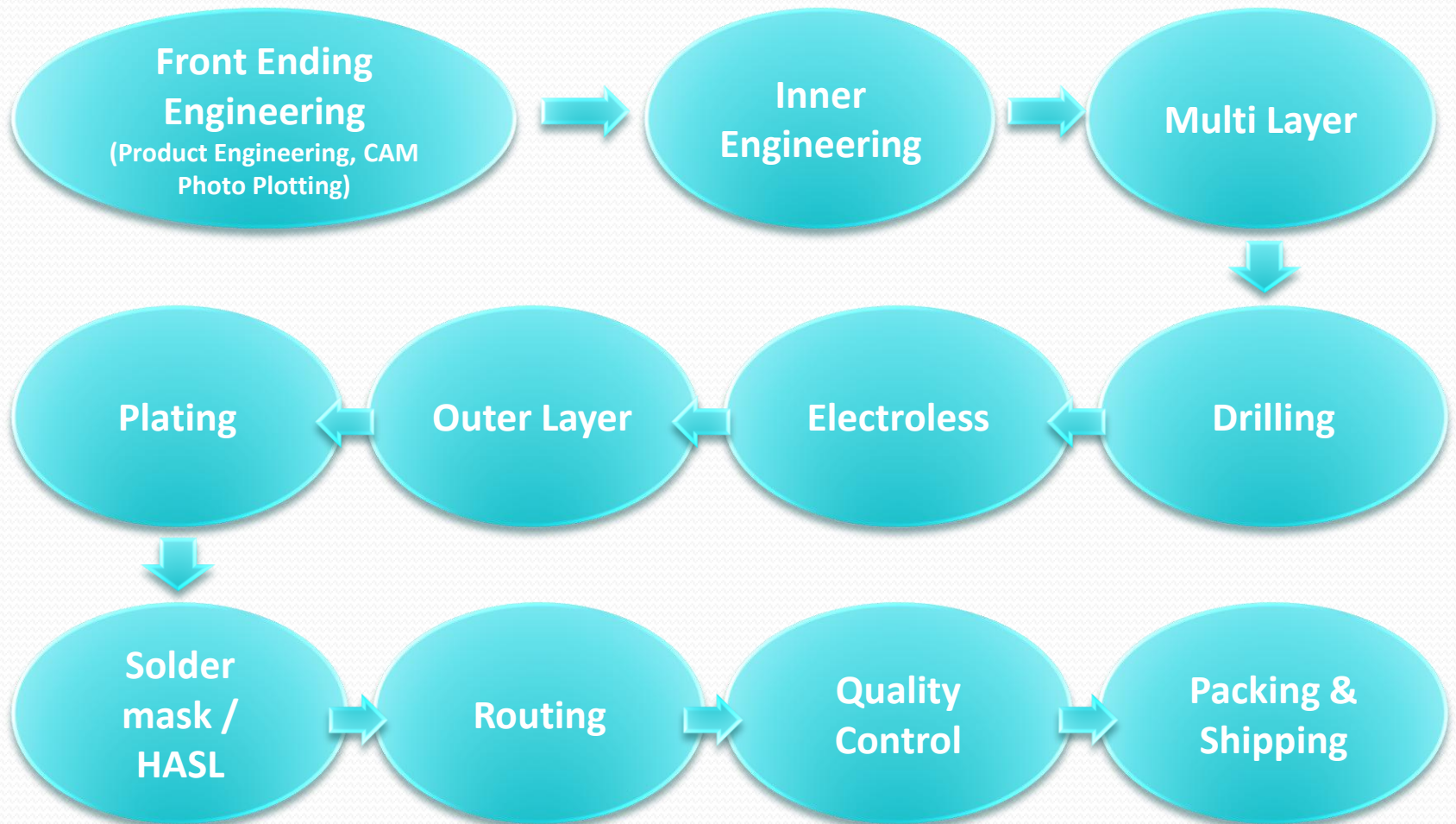


Ionic Contamination Tester



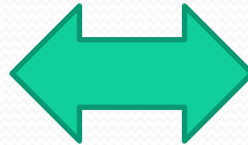
Impedance Tester

PCB Fabrication Process



PCB Fabrication Reliability Test Items of Physical Laboratory

Testing Items
1. Micro-Section Test
2. Solder Mask Hardness Test
3. Dielectric Strength Test (Solder Mask)
4. Adhesion Test
5. Chemical Resistance Test
6. Solder ability Test
7. Peel Strength of Conductor Test
8. Dielectric Withstanding Voltage Test
9. Bow and Twist Test
10. Ionic Contamination Test
11. Thermal stress Test
12. Au/Ni/Sn/Pb/Ag Thickness Test
13. Impedance Test
14. Material ROHS Test
15. Conductor Resistance Test
16. Solder Mask gloss Level Test

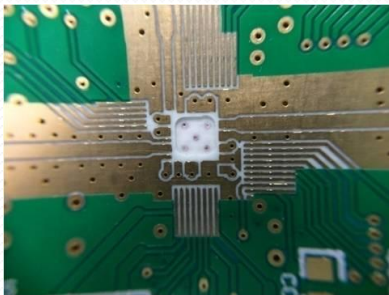


Reference Standard
IPC-TM-650 2.1.1
IPC-TM-650 2.4.27.2
IPC-TM-650 2.5.6.1 & IPC-SM-840 3.8.1
IPC-TM-6502.4.28.1
IPC-TM-655. Chemical Resistance Test 0 2.3.4
J-STD-003
IPC-TM-650 2.4.8
IPC-TM6502.5.7
IPC-TM-650-2.4.22
IPC-TM-650 2.3.25
IPC-TM-650 2.6.8
OXFORD CMI900 User Manual
IPC-TM-650.2.5.5.7
IEC 62321 & Machine Operation Manual
HG2810B Us9. Bow and Twist Tester Manual
According to Customer Requirement

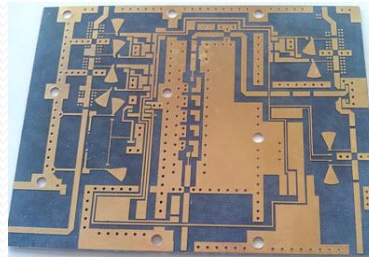
Fabrication Capability

Products:

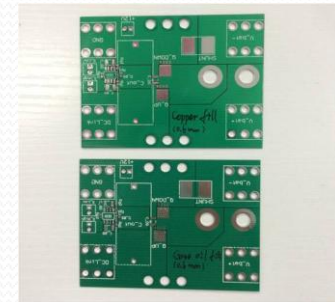
- 1-30 layer PCB (HDI, blind/ buried hole, high frequency, metal substrate (Aluminum, Cu))



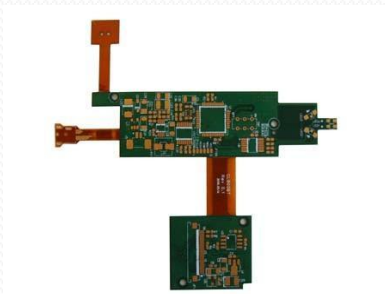
Half Slot



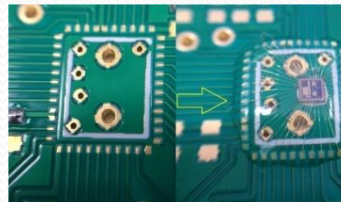
Rogers



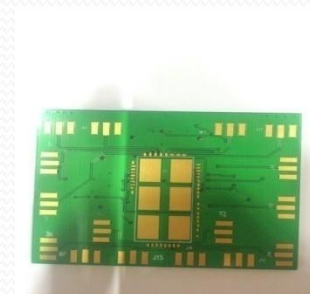
Resin Plugged PCB



Rigid Flex PCB



Gold Wire Bonding



Soft Bonding Gold

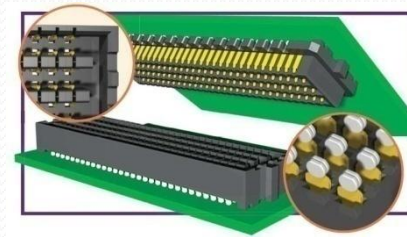
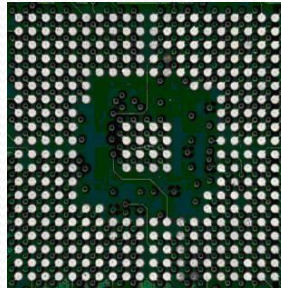


PCB Assembly

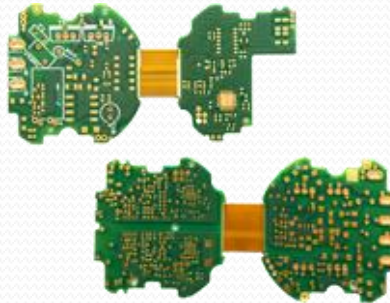
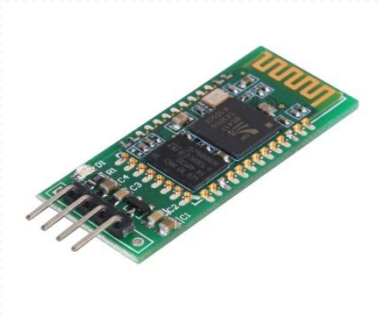
Machines, Working Process &
Operation Activity

PCB Assembly Capability

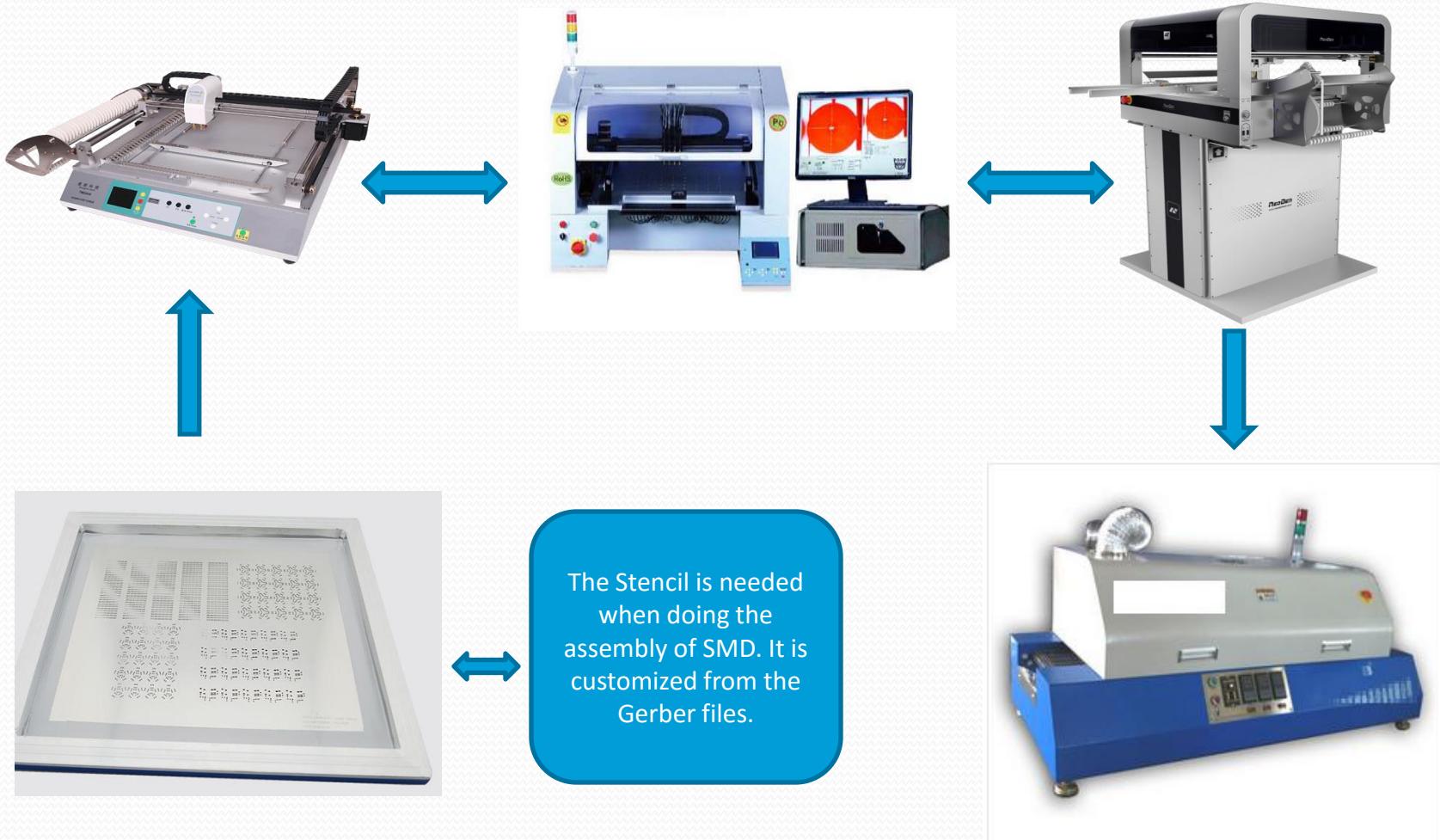
- As small as 0201, BGA , Fine pitch connector assembly



- High Density, Double Sides, Mix Components assembly



PCB Pick and Place Machines and Reflow Machine



SMD Machine(for surface mount components)

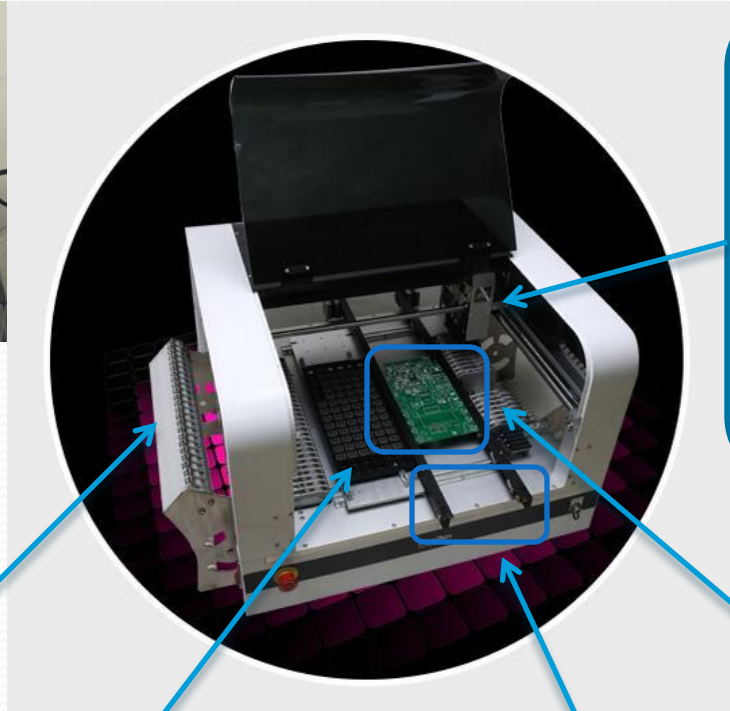
Control PC

Vision system (an up-looking camera and a down-looking camera) identifies and calibrates the different components simultaneously, and tremendously improves the accuracy of placement from 0201 to BGA.



LED Vision System

Vision system (an up-looking camera and a down-looking camera) identifies and calibrates the different components simultaneously, and tremendously improves the accuracy of placement from 0201 to BGA.



Feeder Area

Left and right side totally 48 feeders, Auto electric feeders greatly reduce the feeding deviation.

IC Tray

The machine will pick the components from the tray and place on the PCB as follow the program.

Auto Rails

General conveyor is supported, so a SMT production line can be setup, which is more time-saving and labor-saving.

PCB Station

All the surface mount components will be picked and placed to the corresponding coordinate.

Professional 3-in-1 Automatic BGA Rework Station

The monitor is used to view the footprint and soldering pad



This lens has a magnification (100x) which can make sure the precision of alignment of components' footprint and soldering pad of circuit board.



Led Lighter

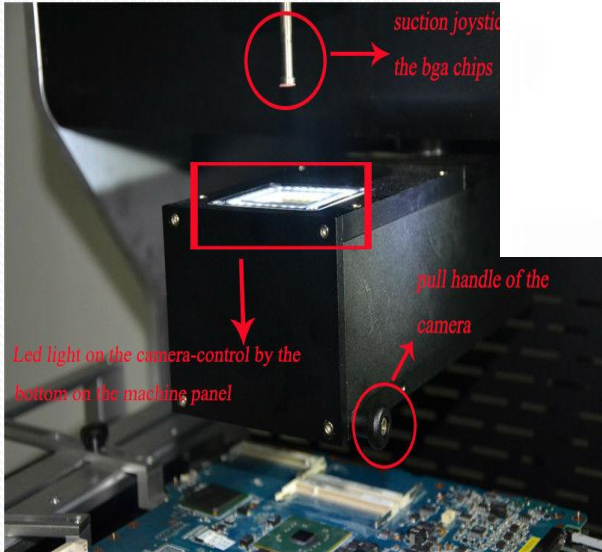
Circuit Board



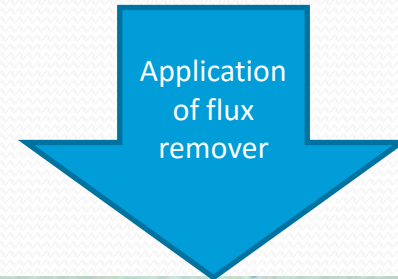
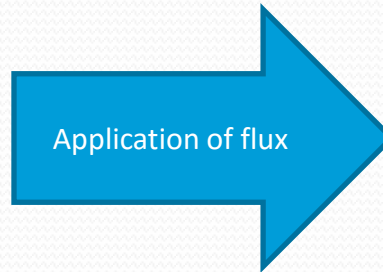
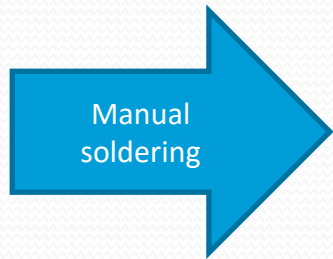
After alignment and temperature profile confirmed, the system will heat up to solder the BGA on the PCB



Touch Screen

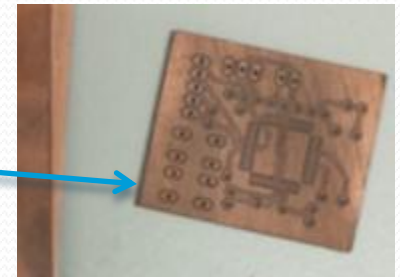
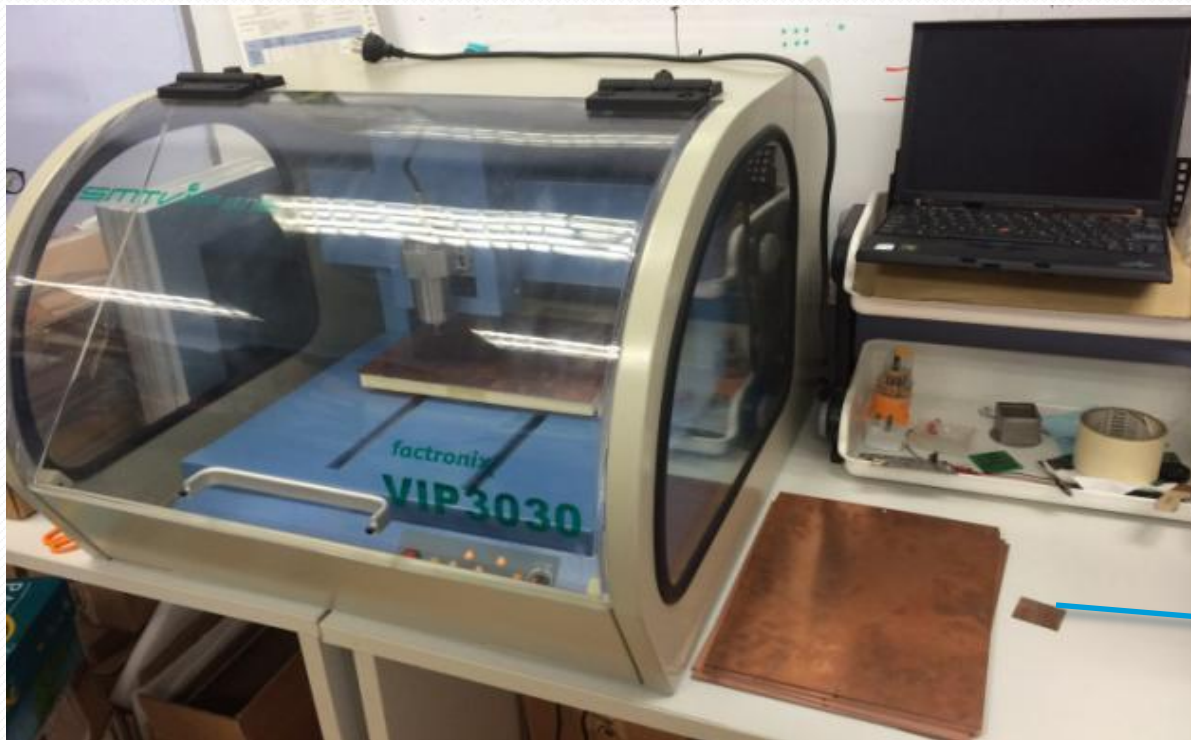


PCB Assembly Cleaning



More Machines.....

CNC Engraving and Milling Machine



It's used for making simple circuit board on copper material. The circuit board is only used for evaluating whether the design is correct.

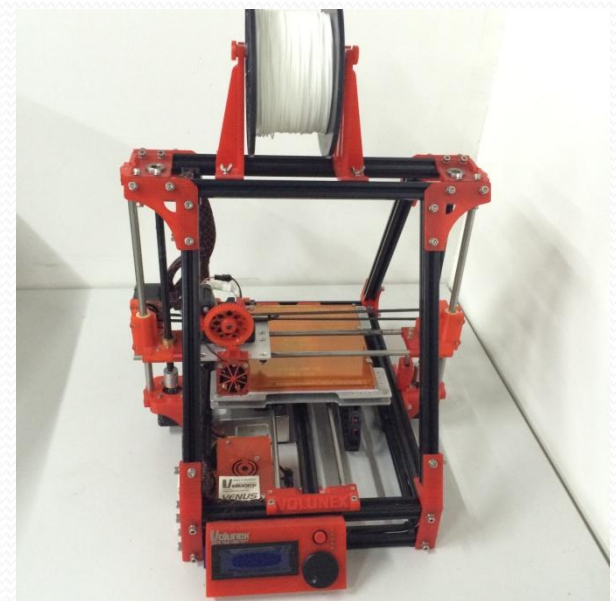
Soldering Robot(For THT)



Air Vacuum



3D Printer

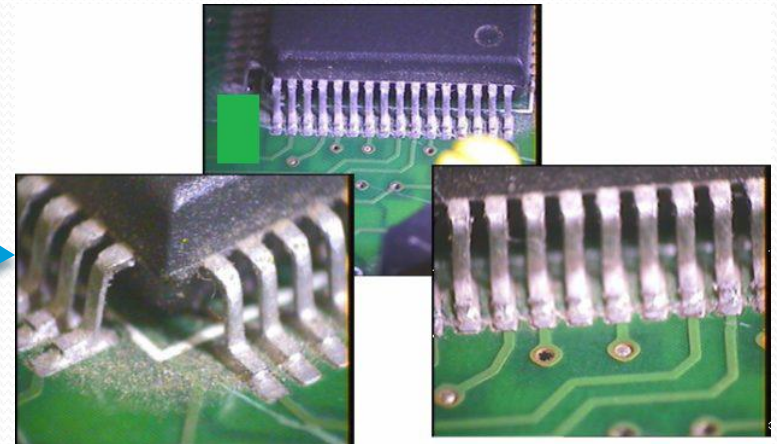


Microscope Check

This machine is used for precision checking and troubleshooting.



The image will be shown on the monitor, for easier checking.





One-stop PCBA Solutions in Singapore



Contact us now to get quotation

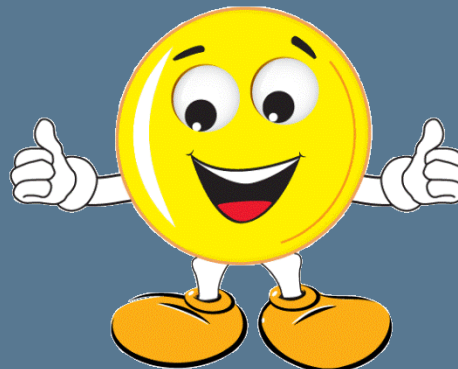
Address: 51 Ayer Rajah Crescent, Unit #04-11/12, Singapore 139948

Email: sales@mpntech.com ; chambers.dong@mpntech.com

Website: www.mpntech.com

Tel: +65-6790 1704 / 6464 0058;

Fax: +65-67901706;



Thank You!