Company Introduction

Allfavor Group

CONTENTS

01 About Us

02 Quality Control

03 Engineering & Production

04 Product Introduction

05 Company Customers

About Us

Group Profile

Established: May 2005

HK Allfavor: **Allfavor Technology (Hong Kong) Limited**

Factory Locations:

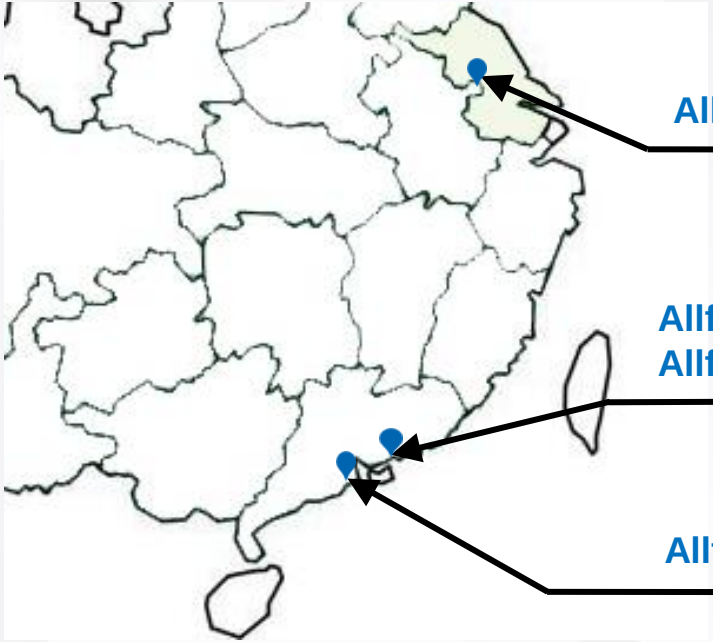
Rigid PC Board Manufacturer

- Nanjing Plant **Jiangsu Allfavor Intelligent Circuits Technology Co., Ltd.**
  Focused on medium to high volume orders
- Shenzhen Plant **Allfavor Circuits (Shenzhen) Co., Ltd.**
  Allfavor Junling Circuits (Shenzhen) Co., Ltd.
  Focused on high mix, low to Medium volume with a quick turn delivery with Prototype capabilities

Flex PC Board Manufacturer

- Zhuhai Plant **Zhuhai Allfavor Electronic Co., Ltd.**
  Focused on Flex and Flex/Rigid PCB's

Group Location



Allfavor Nanjing Plant

Allfavor Shenzhen Plant
Allfavor Junling Plant

Allfavor Zhuhai Plant

3 Factories
1 Office

850 Employees

Sales 102M USD

Group Location

Allfavor Technology
USA

1 Office
1 Warehouse

9 Employees

Sales 102M USD

Allfavor USA

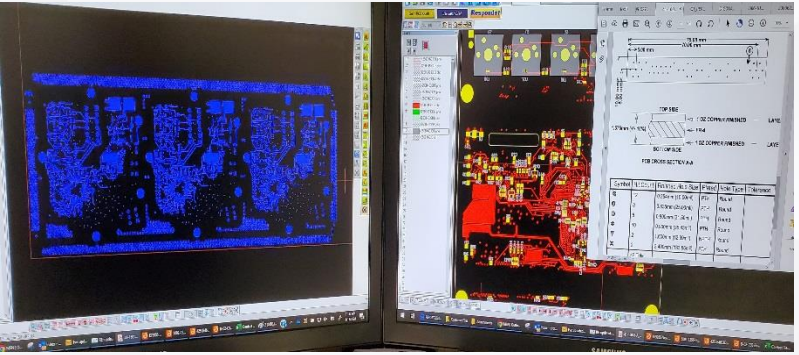
Established: December 2016

Allfavor Technology (USA) Inc.

Location: Schaumburg, Illinois

Benefits of Allfavor USA:

- The Offshore Manufacturer with a State Side Feel
- Centrally located in the US
- 100+ Years Combined PCB Experience
- Stateside Engineering
  - Reviewing all Engineering Questions
- Stateside Quality Review
  - The Ability to Cross Section and Analyze
- Realtime Customer Service
  - Same Day Quotes
  - Open order review
- 5,000 sq ft of Warehouse Space
  - Local Stocking Programs



Company Culture

1

Mission

To identify customers' needs and fulfill customers' expectations and demands with respect to competitive price, quality products, engineering solution and on time delivery.

2

Goal

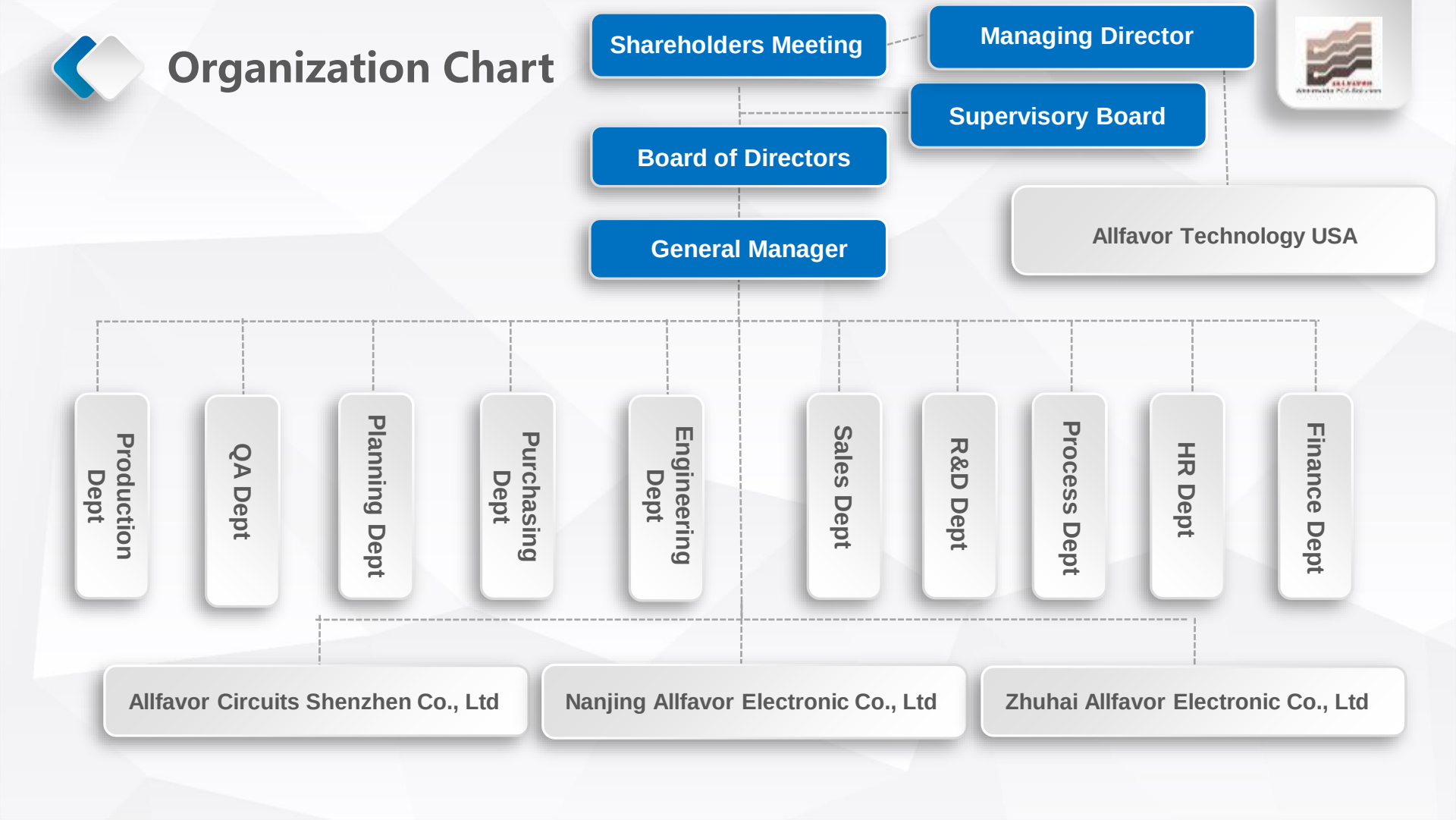
To satisfy customer by being pro-active and flexible; focused on continuous improvement to produce quality products and shorten lead time.

3

Service Concept

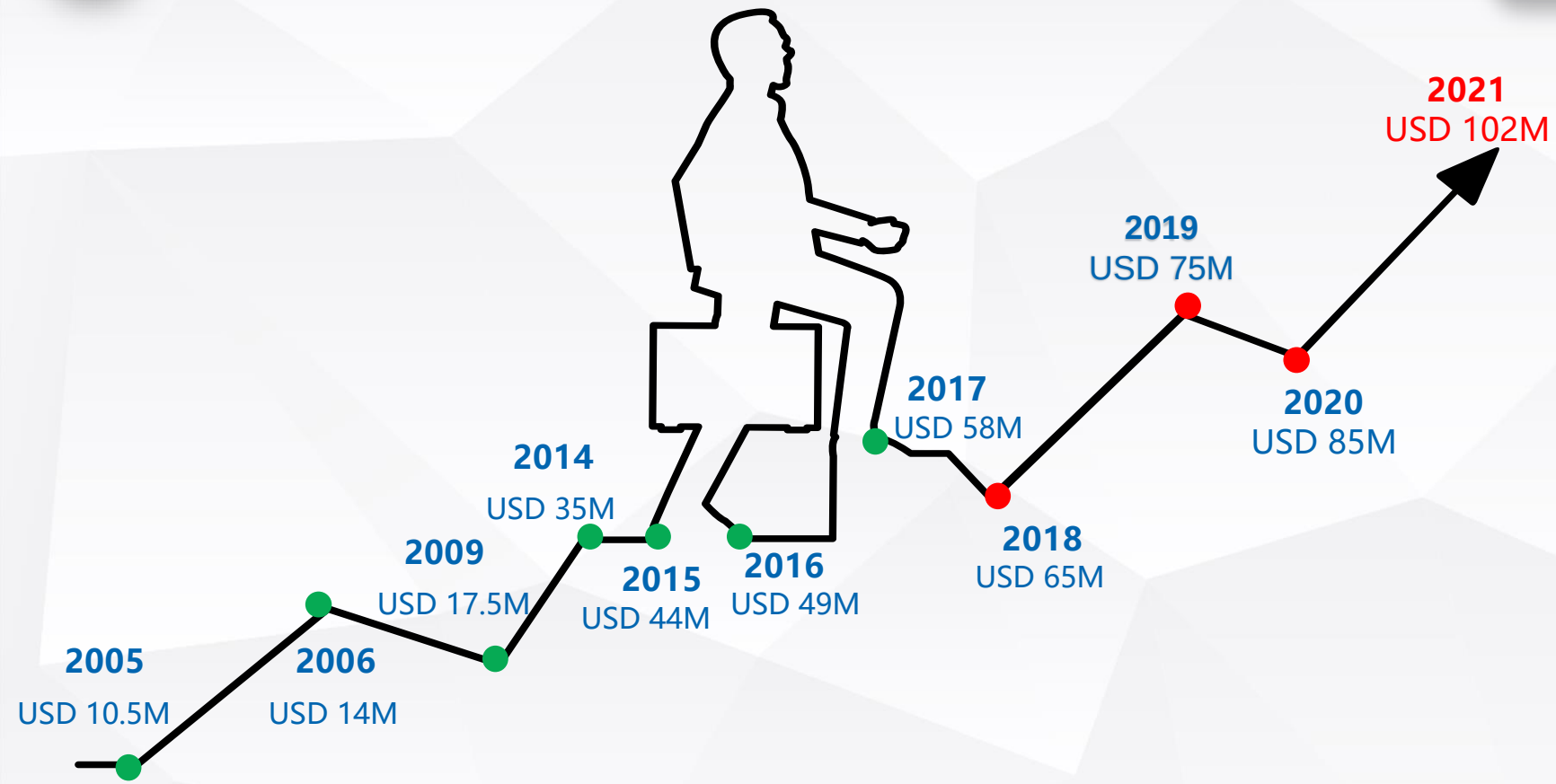
Service Beyond Expectation

Organization Chart



Company Milestone

Group Sales History



Quality Control

Quality Policy

01 Producing High Quality Products

02 On Time Delivery With Accurate Quantity

03 Continually Improving QMS

04 Complete Customer Satisfaction

Quality System

Shenzhen

- ISO9001： 2015
  - 2007-04 SGS
- IATF16949 & IS014001
  - 2015-06 SGS
- UL
  - E301546

Nanjing

- ISO9001 & IATF16949
  - 2012-08 SGS
- ISO14001:2015
  - 2013-03 SGS
- UL
  - E301546

Zhuhai

- ISO9001:2015
  - 2015-07 SGS
- ISO14001:2015
  - 2017-07 SGS
- IATF16949:2016
  - 2019-10 SGS
- UL
  - E473221

Quality Test System

AOI Inspection

Final Finish Thickness Test

Metallographic Microscopic Analysis

Plating Thickness Test

DVW Test

Thermal Stress Test

Ionic Contamination Test

Short & Open Test

Inductance Test

Surface Peelable Test

Impedance Test

Bond Strength Test

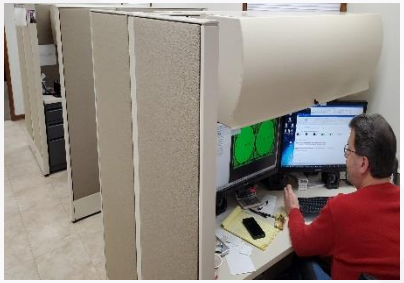
Engineering & Production

Engineering Team

Zhuhai

Shenzhen

Nanjing



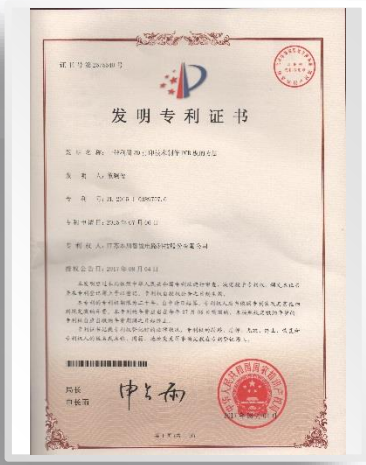
US Office

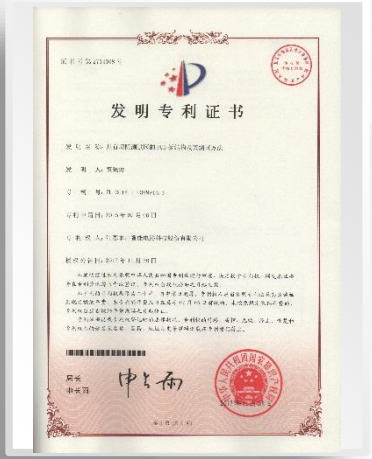
4 Engineering Teams

More Than 50 Engineers with Extensive Knowledge and Experience

Working Software : Genesis 2000; CAM350; Protel

Technical Patent





- Overlength PCB antenna board （patent for invention)
- PTFE high frequency 2-layer PCB board (patent for invention)
- 180 degree counterbore PCB board （patent for invention)
- PCB board with intelligent device （patent for invention)

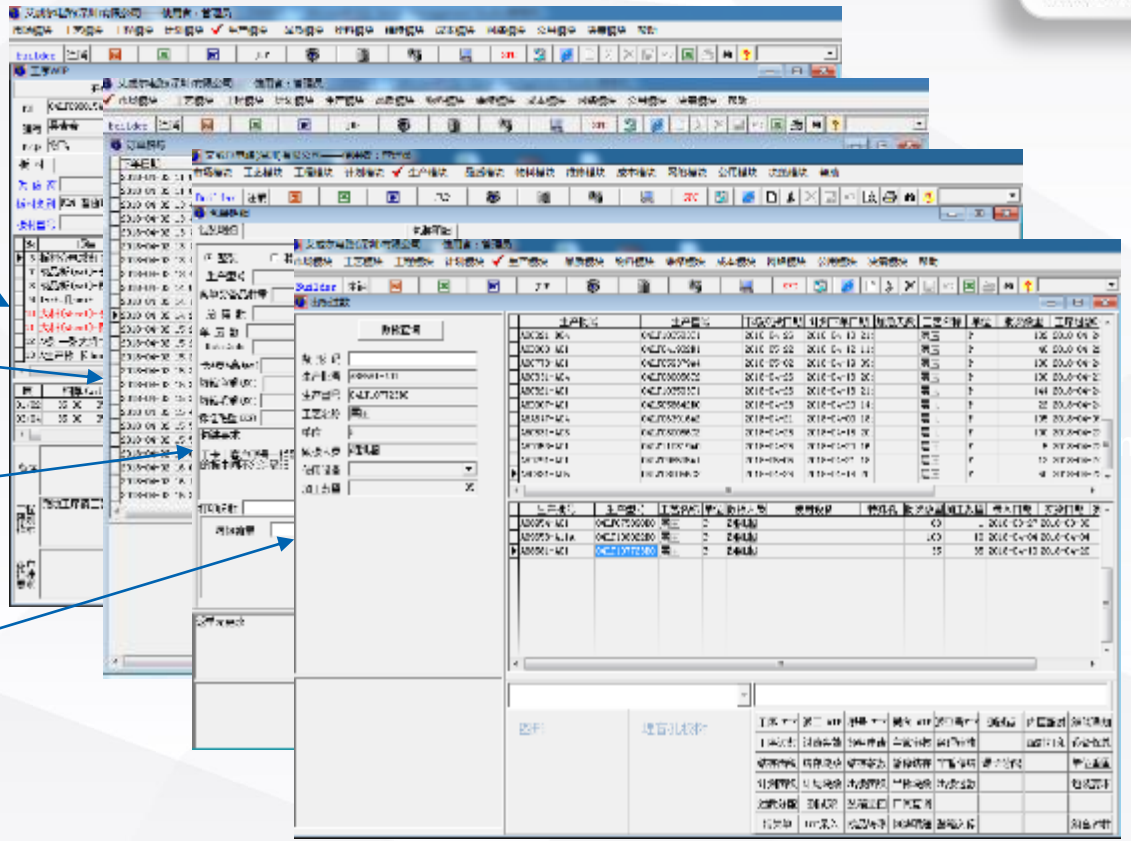
… etc., total 35 technical patents.

Manufacturing Capabilities

- Volume: 1-12 layers • Sample: 20 layers
- Maximum Board Thickness: 4.0mm
- Material: FR4, HTG FR4, halogen free FR4, PTFE, FPC, Rogers, metal clad based, RF/HF and FR4 mixed material
- Alignment Capability: +/- 2mil
- Min Hole Size: 0.15mm
- Max Production Size: 1200*600mm
- Max Aspect Ratio:10:1
- Surface Finishing: HASL, lead free HASL, flash gold, immersion gold, immersion tin, immersion silver, OSP, plating tin ,carbon ink, hard gold
- Special Technical: Countersink hole, counterbore hole, blind and buried hole, VIP design
- Impedance Control: +/- 10%

ERP System

- WIP
- Order
- Packing
- Tracking



Full traceability of production planning/materials and planning/MI/Shipping /Invoicing

Major Suppliers

- **Laminate Suppliers**

  Shengyi and KB

- **Metal Clad Suppliers**

  DuPont USA

  Bergquist USA

  Shengyi China

- **Dry Film**

  Hitachi Japan

- **Soldermask**

  Taiyo Japan

  Greencure Taiwan

Why We Can Be Faster

1. Excellent Management System
2. Strong Engineering Team Support
3. A Variety of Raw Materials in Our Stock
4. Reasonable Equipment Setup
5. On Time Service

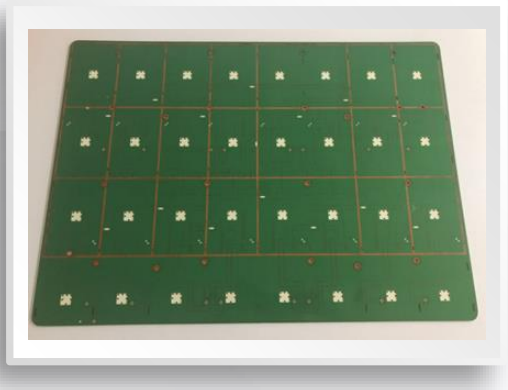
04

Product Introduction

Product Category

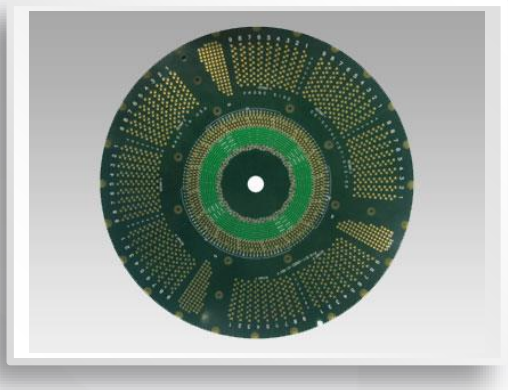
1. RF/HF PCBs with Rogers, Arlon & Taconic
2. Metal Clad PCBs
   a. Al Based PCBs
   b. Copper Based PCBs
3. Heavy Copper PCBs (2-6 OZ)
4. Blind/Buried Via PCBs/Via In Pad (VIP) PCBs/Depth Control PCBs
5. Flex PCBs & Rigid-flex PCBs

Product Presentation



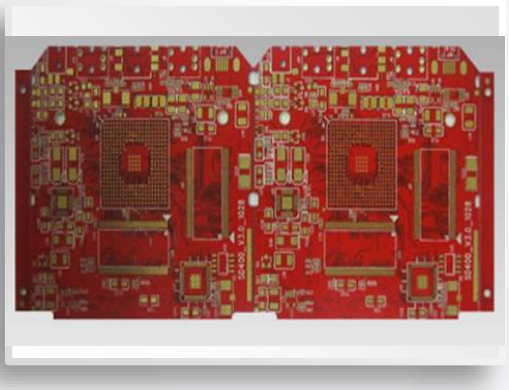
Rogers Blind Slot PCBs

Layers: 10 layers
Max aspect ratio: 9:1
Min blind slot: 20*20mm
Min blind hole: 0.8mm
Min via hole: 0.8mm
Surface finishing: Immersion tin + OSP
Phase difference: 2 degree
Range difference: +/-0.5 degree



Mix Laminating Multilayers PCBs

Max layers: 10 layers
Max board thickness: 4.0mm
Max size: 580*600mm
Max aspect ration : 10:1
Min blind hole: 0.2mm
Copper thickness: 6OZ
Special technical: Countersunk hole
Mix Laminating: Aluminum Matrix +FR4



High Density Multilayers Back PCBS

Max layers: 24 layers
Max board thickness: 5.0mm
Max aspect ratio: 10:1
Min hole size: 0.4mm
Max size: 110*60mm
Min circuit gap/width: 4/4mil
Surface finishing: Immersion gold

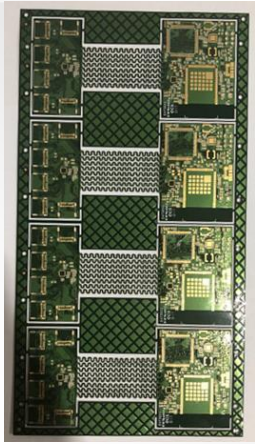
Product Presentation

RF/HF PCBs

Max thickness:4.0mm
Min hole size: 0.4mm
Max size: 580*600mm
Max aspect ratio: 10:1
Surface finishing:
Immersion gold

Gold Finger Multilayers PCB

Max layers: 28 layers
Max aspect ratio: 14:1
Min via hole: 0.2mm
Min circuit gap/width: 3/3mil
Surface finishing: Immersion gold + Flash Gold
Impedance control:+/-10%



Multilayer FPC

Max layers: 12 layers
Max size: 850*310mm
Min via hole:0.15mm
Min circuit gap/width: 3/3mil
Surface finishing:
Immersion gold
Impedance control:+/-10%

Rigid-flex PCBs

Layers: 6 layers
Thickness: 4.0mm
Size: 110*530mm
Max aspect ratio:6:1
Electromagnetic shielding:2L
Aluminum foil shielding: 2L
Min via hole: 0.25mm
Impedance control:+/-10%

Rigid-flex PCBs

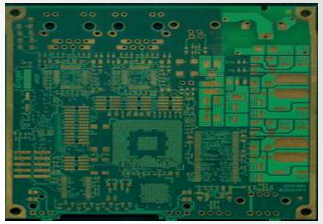
Layers: 12 layers
Thickness: 1.8mm
Size: 50*180mm
Max aspect ratio: 12:1
Circuit gap/width: 3/3mil
Min BGA: 6.4mil
Min via hole::0.15mm
Impedance control:+/-10%

Product Presentation

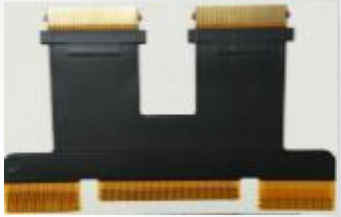
2/L OSP PCB

4/L IMS PCB

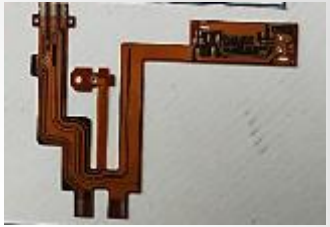
6/L HAL PCB



8/L IMG PCB

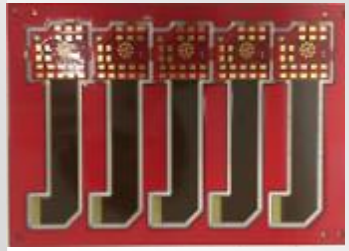


2/L IMG FPCB



2/L IMG FPCB

4/L IMG FPCB



8/L IMG R/FPCB

05

Company Customers

Customers Distribution & Field

- Communication
- Industrial Controls
- Automotive Electronics
- Medical Treatment

Our Customers

Allfavor New Plant

Additional: Nanjing Factory Future Development Plan

Plant 1 (existing building)

Continue to increase the capacity and capabilities for the current manufacturing area

Plant 2

Build a new facility size (20,000SQM) with a capacity of (80,000SQM) available in 2022

- New building will be for high tech rigid PCB including HDI boards

- Trial production to begin in early 2022

Vacant land on our site which is located behind Plant 1.

01

Product Position

Application Field	PCB Type	Capability	Surface Finishing
1. Telecom; 2. Industry; 3. Auto Power; 4. Data Storage; 5. Military; 6. Mobile Wear;	1. Multi-Line Card; 2. Option module; 3. Heavy Copper; 4. HDI; 5. Hi-Frequency Antenna; 6. Rigid-flex;	1. L2~L20; 2. Buried Copper; 3. Cu: 0.5OZ~5OZ; 4. HDI: 3 plus; 5. Hi-Frequency & Hi-Speed; 6. Rigid-Flex+HDI;	1. ENEPIG; 2. Gold Finger; 3. Plating Gold; 4. HASL LF; 5. OSP 6. Im-Sn+

1.3 Technology Roadmap

No.	Item	Normal	Advanced	Over Tech	Remark
1	Layer count	2～20	30	Assessment	
2	Raw material	FR-4、BT、PTFE		Assessment	
3	Finished Board Thickness （mm）	0.4--3.2	3.5	Assessment	No VCP in phase 2
4	Delivery Max. Size （mm）	75×75--660×560		Assessment	
5	Min. Core thickness （mm）	0.1	0.075	Assessment	
6	Tolerance of finished board thickness（mm）	Board Thickness:≥1.0 ： ±10% 0.4 ≤Board Tk< 1.0 ： ±0.08	Board Thickness≥1.6 ： ±8% 0.4 ≤Board Tk< 1.0 ： ±0.06	Assessment	
7	Min. Finished hole zie（mm）	0.15	0.1	NA	
8	Min. drill bit size（mm）	0.2	0.15	NA	Drill bit: 0.05mm
9	Min. laser drill size（mil）	4	3.5	Assessment	LBMV1：1
10	Max. Aspect Ratio (MVTH)	16：1	18：1	Assessment	0.2(2.0mm)
11	Space tolerance btw pad to pad	±2mil		Assessment	
12	Space tolerance btw pad to profile （mil）	±4.5mil	±3mil	Assessment	
13	Tolerance of depth controlled drill （mm）	±0.075	±0.05		
14	Tolerance of depth controlled routing (mm)	±0.075	±0.05		
15	Hole roughness（um）	≤38	≤25.4	Assessment	
16	Tolerance of NPTH （mm）	±0.05	±0.025(Special bit of diameter)	Assessment	0.20≤Φ≤6.50mm
17	Tolerance of PTH （mm）	±0.076	±0.05，HASL:+0.076/-0.05	NA	0.20≤Φ≤6.50mm
18	Layer to layer registration（mm）	≤0.075mm	≤0.005mm	Assessment	

1.4 Technology Roadmap

No.	Item	Normal	Advanced	Over Tech	Remark
19	Warpage	≤0.75%	≤0.5%	Assessment	
20	Min. Inner layer line width/line space (mil)	3/3mil	2.5/2.5mil	Assessment	
21	Inner layer line width tolerance (mil)	±20%	±10%	Assessment	
22	Inner layer PAD tolerance (mil)	±20%	±10%	±10%	
23	Outer layer Min. line width/line space (mil)	3.8/3.8mil	3.0/3.0mil	Assessment	
24	Min. depth drill controlled	65% (PT)	75% (PT)	Assessment	Base on the aspect ratio by 12：1
25	ENIG (Ni) (μm)	1.25～6.25		Assessment	≤1.25μm
26	ENIG (Au) (μm)	0.025～0.05	0.05~0.10	Assessment	
27	OSP (μm)	0.15~0.5μm		Assessment	≥0.1 μm
28	Imm-Sn (μm)	0.9～1.3μm	Assessment more than 1.35um	Assessment	
29	HASL (μm)	0.5～40μm	Min. tin thickness: >=1μm	Assessment	
30	Min. SM bridge (mm)	≥3.5	≥3.0		
31	Min. Legend Height (mil)	≥30mil	≥28mil		No Over Tech
32	Min. Legend width (mil)	≥5mil	≥4mil		No Over Tech
33	Ion contamination test requirement	≤6.4ug NaCl/sq.inch	≤2.5ug NaCl/sq.inch	≤1.0 ug NaCl/sq.inch	Overtech capability was available for a trial run, not for mass production;
34	Impedance control (Inner layer)	±10%	Diff signal: ±8%, <50±4.0Ω; Single signal:±6%, <50±3.0Ω	Assessment	
35	Impedance control (Outer layer)	±10%	Diff signal: ±8%, <50±5.0Ω; Single signal: ±7%, <50±4.0Ω	Assessment	

03

Planning Scheme

01 Total Area

02 First Floor

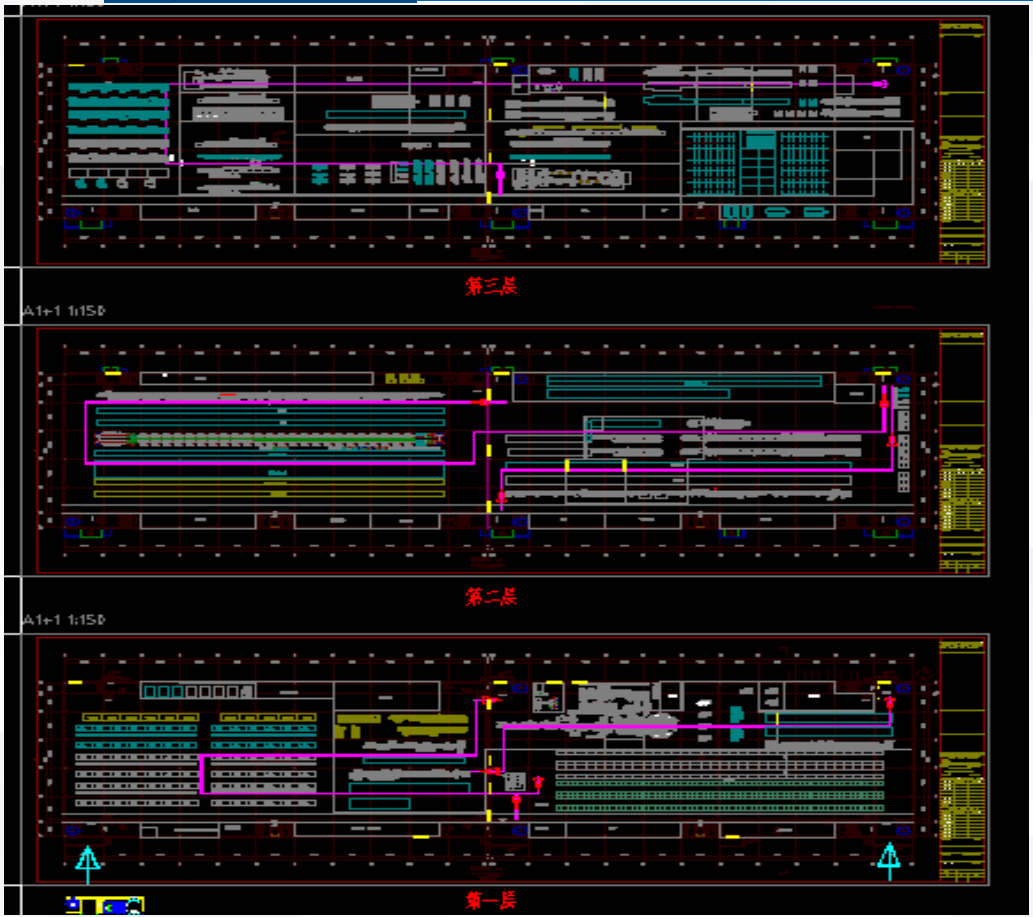
03 Second Floor

04 Third Floor

3.1 Plan View

3.2 Plant View (Layout)

3.3 Layout View (Three Floor)



Remark：

1、Planning rules：Comply with environmental protection、Fire control、crisis、occupation health and safety and other laws and regulations, consider cost, efficiency and aesthetics;

2、Solution of special technology in-house：

- HDI and advance technology；
- High frequency microwave and special materials;
- System HDI, Rigid-flex, and heavy copper in coil;
- HASL LF/HASL、OSP、ENIG、Imm-Ag、Gold plating/Gold finger;

3、 The total length of the main flow is about 1200m;

4、 Staffing is based on mature MES and AGV applications, without considering the number, rotation and other staffing;

04

Project Schedule

01

2020/Nov

Project Approval

02

2021/March

Design

03

2021/Dec

Construction

04

2022/Apr

Trial-Produce

4.2 Key-Point Schedule

Key Point Schedule:

序号	项目	2020年		2021年												2022年			
		11月	12月	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	4月
1	项目立项																		
2	建设规划许可证																		
3	厂房与一次机电设计																		
4	厂房、一次机电造价																		
5	厂房、一次机电招标																		
6	施工许可证																		
7	厂房土建																		
8	二次机电与装修																		
9	室外附属工程																		
10	设备安装与调试																		
11	试生产																		

Corporation
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Worldwide PCB Solution
Win-Win
Innovation

THANK YOU