

# Kinwong Company Profile

To become the most reliable PCB manufacturer in the world

Stock code: 603228  
[www.kinwong.com](http://www.kinwong.com)

## Dedicated to PCB for 29 Years



Automotive, Communications,  
Consumer Electronics, Server,  
Power Supply, Industrial Control & Medical

## Employees

14000+



## Sales Revenue

2021 USD 1,451M

2022E: USD 1,846M



## 5 Manufacturing Sites

SZ Shenzhen LC Longchuan  
JX Jiangxi ZH Fushan  
ZH Jinwan



## 3 Product Lines

PCB Flexible PCB(FPC)  
Metal Base PCB(MPCB)



## Technical Center

- Established in 2006
- 373 Patents
- Central lab - ISO17025/CNAS Certification





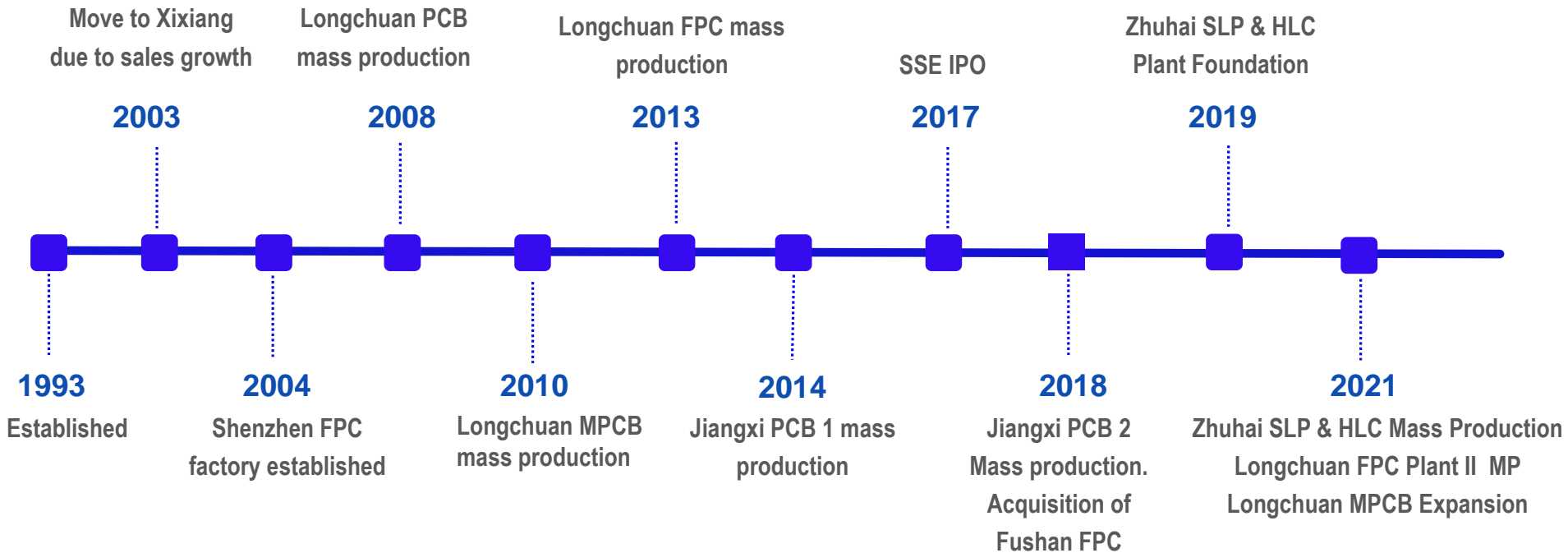
2021 COVID-19 remains severe and we suffer from chip shortages. Kinwong keeps moving forward, promoting technological upgrading and high-end capacity expansion, and has made technological breakthroughs in semiconductor packaging substrate, millimeter wave radar HF board, base station high-speed PCB, satellite communication a high-speed board, Mini-LED board and automotive electronic FPCA (radar, pressure sensor), new energy etc.

Meanwhile, several factories were built and upgraded: HLC factory, SLP factory, Longchuan FPC II, Longchuan MPCB.

2022 is the very year that Kinwong to achieve the scale of 10 billion RMB. We take "innovation, technology-driven, high-quality development" as the general tone of annual work, continue to focus on quality customer service, and become the most reliable circuit board supplier of the world's leading brands.



# Milestones



FPC: Flexible Printed Circuit Board  
HLC: High Layer Count

MPCB: Metal Printed Circuit Board  
SLP: Substrate like PCB

## Circuit Connects the World, Internet of Everything

### HQ SZ

#### Manufacturing Sites

- SZ Shenzhen
- LC Longchuan
- JX Jiangxi
- JW Jinwan
- FS Fushan

#### Sales Office

- HK Hongkong
- KS Kunshan
- SH Shanghai
- FZ Fuzhou
- TW Taiwan
- EA Korea-Incheon

#### FAE&BD Office

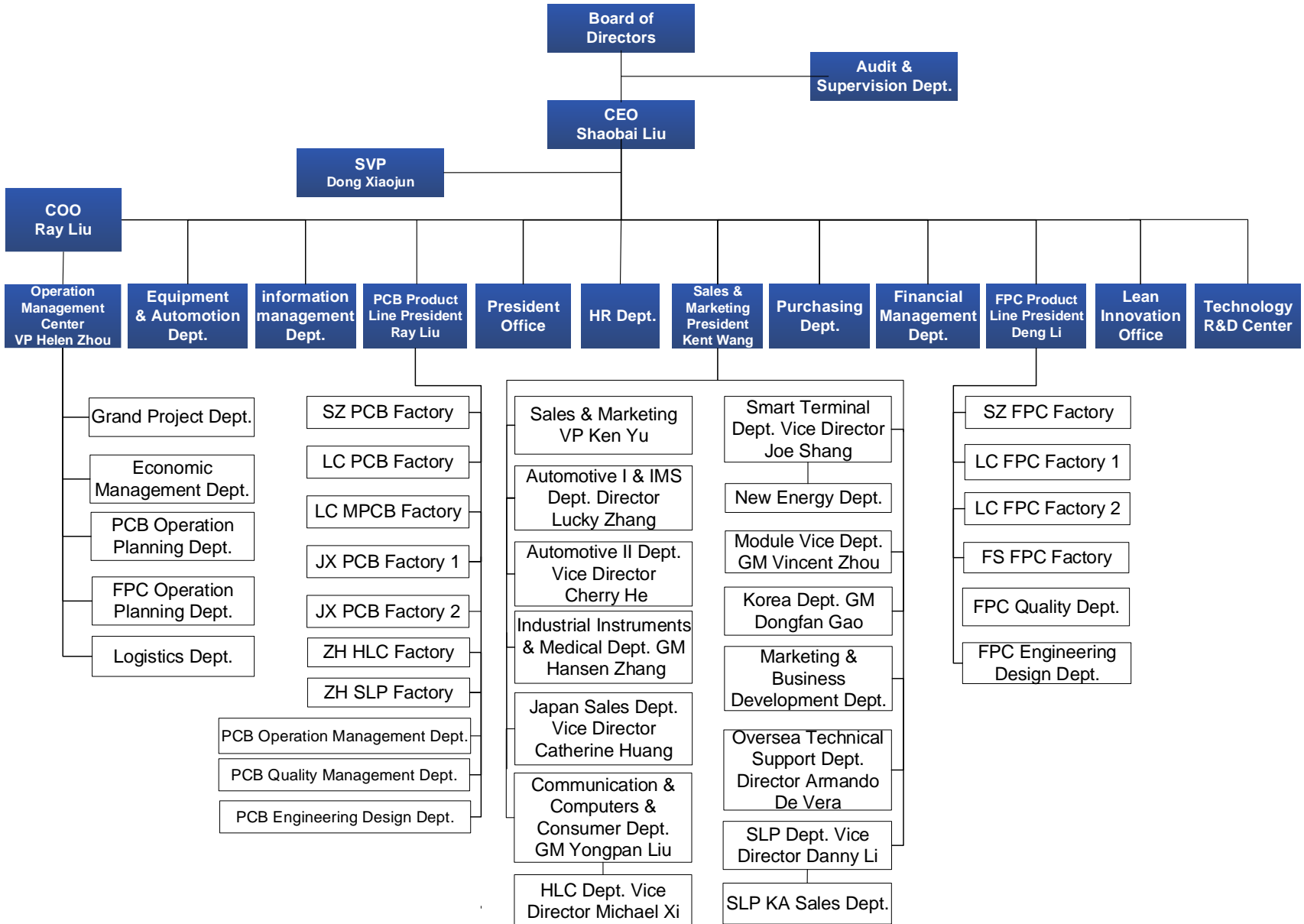
- EA Japan-Tokyo
- EU Germany-Munich
- NA US -Los Angeles
- US -Virginia
- MX-Guadalajara





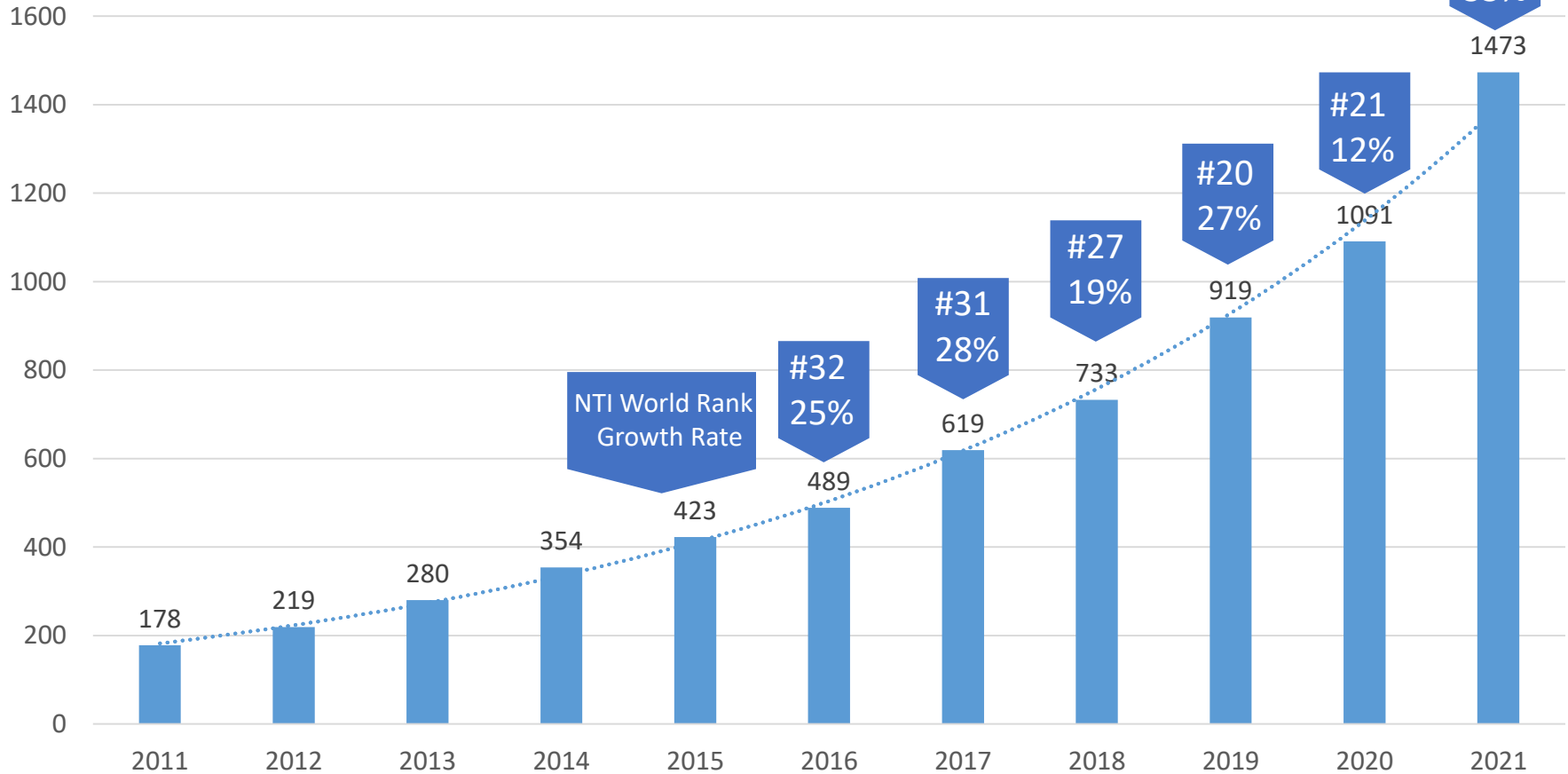
# Corporate Organization Chart

KINWONG



# Sales Revenue

Million USD



\* CAGR over **20%+** in the past 10 years, growth achieved by stable quality, competitive price and passion to service.

2022: Exchange 6.47

## Kinwong Group No.17

## Kinwong FPC No.14

### Top 100 PCB Companies in 2021 -By Prismark

### Estimated Top FPC Makers in 2020 (\$ Million)

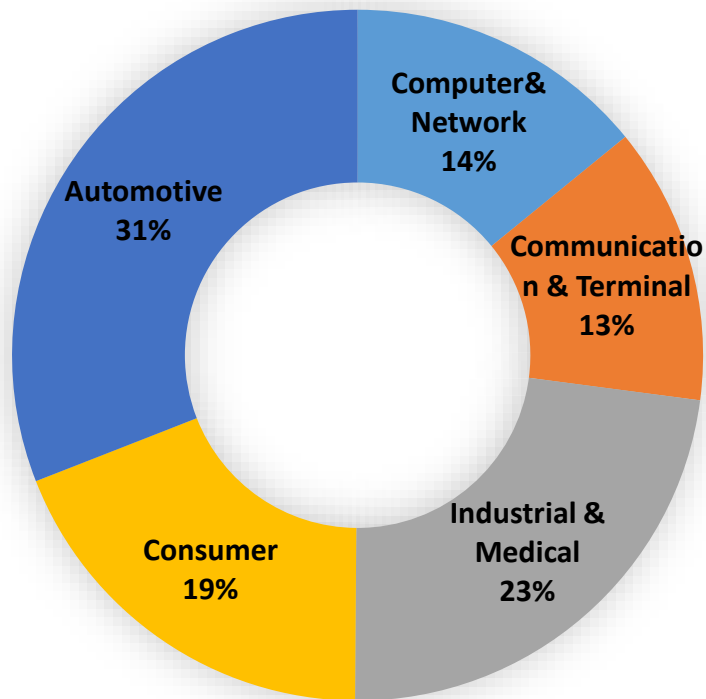
Company (\$M)	HQ	2020	2021
1 Zhen Ding	Taiwan	\$4,442	\$5,534
2 Unimicron (inc. Subtron)	Taiwan	\$3,117	\$3,920
3 Dongshan Precision (inc MFLEX & Multek)	China	\$2,731	\$3,181
4 Nippon Mektron	Japan	\$2,594	\$2,795
5 Compeq	Taiwan	\$2,063	\$2,260
6 Tripod	Taiwan	\$1,891	\$2,257
7 TTM	US	\$2,105	\$2,249
8 Shennan Circuits	China	\$1,679	\$2,163
9 Ibiden	Japan	\$1,444	\$2,055
10 HannStar Board	Taiwan	\$1,557	\$2,042
11 Nan Ya PCB	Taiwan	\$1,312	\$1,871
12 Kingboard Group	China	\$1,356	\$1,750
13 Samsung Electro-Mechanics	Korea	\$1,504	\$1,719
14 AT&S	Austria	\$1,290	\$1,712
15 Young Poong Group	Korea	\$1,408	\$1,574
16 Shinko Denki	Japan	\$1,085	\$1,531
17 Kinwong	China	\$1,027	\$1,479

Maker	2020 Revenue	2020 FPC Revenue	Note
ZDT	4,454	3,560	Apple
Nippon Mektron	2,636	2,636	Apple
DSBJ	2,719	2,240	Apple
Fujikura	1,073	1,073	Apple
Flexium Technology	1,014	1,014	Apple
Young Poon Group	1,206	830	Apple & Samsung
BHFlex	611	611	Apple
Career Technology	544	544	Apple small
Compeq	2,054	510	RFC, Apple
Murata	450	450	Apple
Nitto Denko	429	429	Expanding
SI Flex	391	391	Samsung
Xiamen Hongxin	382	382	
SEMCO	1,493	340	\$250 to Apple
Kinwong Electronics	1,023	340	
STEMCO	289	289	COF
Unitech	488	240	Apple
AKM/AKM Meadville	756	200	
Ichia	187	187	
Leader Tech	174	174	
MFS	241	170	
Unimicron	2,982	150	
<b>Top Total</b>	<b>25,596</b>	<b>16,760</b>	

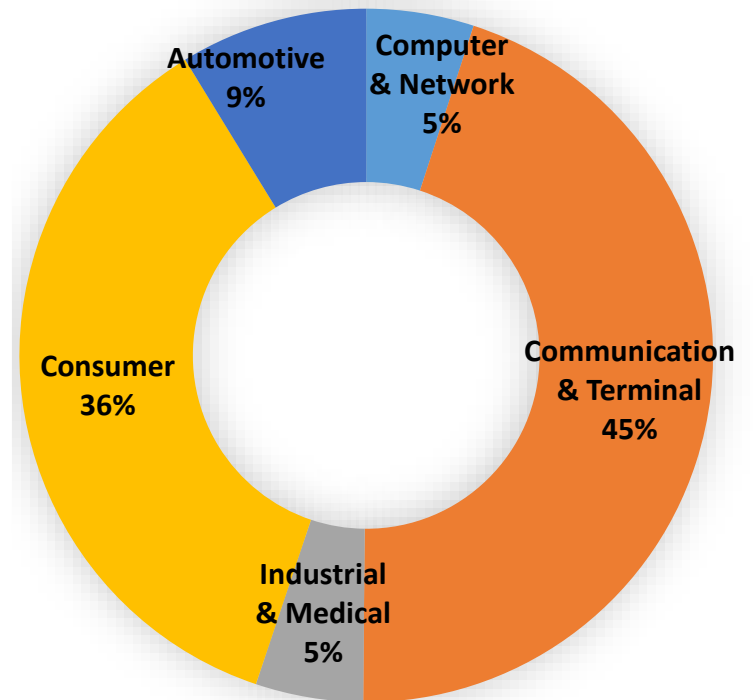
(N.T. Information Ltd)

Note: Apple requires PCBA by FPC makers

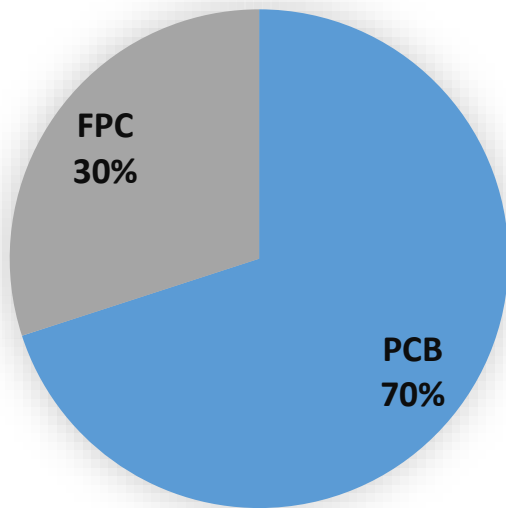
## PCB Application



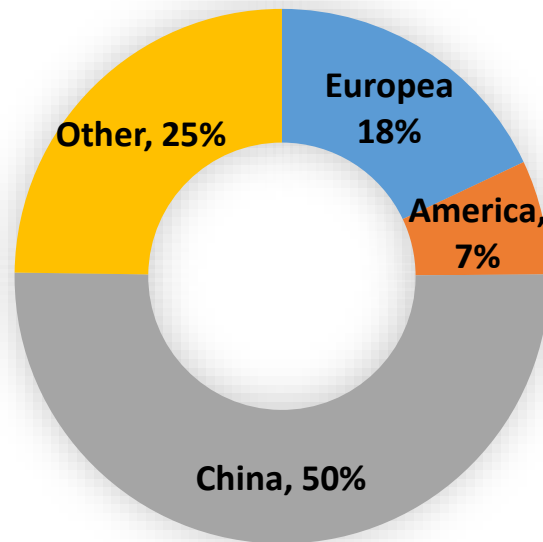
## FPC Application



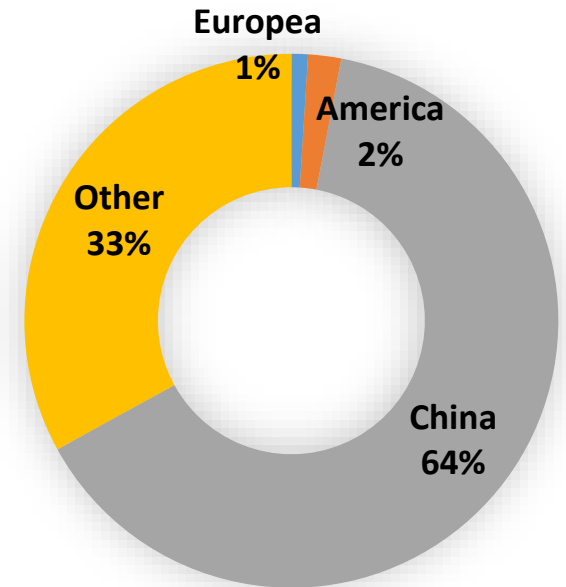
Sales Revenue  
USD1451M



PCB Ship-to Region



FPC Ship-to Region



Exchange:1 USD= 6.5672 CNY



# Profile of 5 Manufacturing Sites

**KINWONG**

20,000 m<sup>2</sup>



## F1 Shenzhen (headquarters)

- PCB Division & FPC Division
- Monthly capacity: PCB: **63,000m<sup>2</sup>**, FPC: **25,000m<sup>2</sup>**
- Employee: **2,300+**

230,000 m<sup>2</sup>



## F2 Longchuan

- 3 product lines: PCB, FPC, MPCB
- Monthly capacity: PCB: **100,000m<sup>2</sup>**, FPC: **140,000m<sup>2</sup>**, MPCB: **60,000m<sup>2</sup>**
- Employee: **6,100+**

240,000 m<sup>2</sup>



## F3 Jiangxi – Smart Factory

- World-leading intelligent PCB factory
- Monthly capacity: PCB: **390,000m<sup>2</sup>**
- Employee: **3,000+**

150,000 m<sup>2</sup>



## F4 Jinwan – High Tech Factory

- High Layer Count & SLP factory
- Monthly capacity: PCB (High Layer Count ): **100,000m<sup>2</sup>**  
SLP: **60,000m<sup>2</sup>**
- Employee: **1600+**

85,000 m<sup>2</sup>



## F5 Fushan

- Monthly capacity: FPC: **65,000m<sup>2</sup>** (Including new energy:50,000m<sup>2</sup>)
- Employee: **1,300+**

# Location of 5 Manufacturing Sites

## JX Site (On the North of SZ)

- 630km to SZ site, takes 8 hours by car.
- 76km to Jingtangshan Airport, takes 1 hour by car.

Ji'an



## LC Site (On the North of SZ)

- 290km to SZ site, takes 4 hours by car.

Longchuan



## ZH Site (On the West of SZ)

- Fushan:** 170km to SZ site and takes 2.6 hours.
- Jinwan:** 192km to SZ site, takes 2 hours and 50 mins.

Jiangxi



Longchuan



Shenzhen

Zhuhai

## SZ Site

- 18km to SZ airport, takes 20 mins by car.
- 70km to HK airport, takes 2 hours by car.

Shenzhen



Fushan



Jinwan



# Five Production Sites Product Types



Location	Products	Monthly Capacity	PCB	FPC	M-PCB	R-Flex	HDI	HLC	HF	Copper Inlay	Module/Substrate/SIP	FPCA	Factory Specialty
SZ	PCB	63,000m <sup>2</sup>	✓			✓	✓	✓	✓				Low Volume, various product technology, special base material, unique processing; Rigid-flex, High Frequency, high layer count heavy copper and HDI covers application field of automotive, telecommunication, industry control, power supply and medical products etc.
	FPC	FPC: 25,000m <sup>2</sup> FPCA: 10KK		✓		✓						✓	Use for Display Module, Touch Screen, Automobile, Industrial Control, UAV, Electronic Cigarette, Smart Home, Medical Industry.
LC	PCB	100,000m <sup>2</sup>	✓					✓	✓	✓			Middle & Large Volume; Multi-layer board, applied in telecommunication, power supply, automotive and industrial.
	FPC	FPC: 140,000m <sup>2</sup> FPCA: 80KK		✓		✓						✓	Middle & Large Volume; Use for Automobile, Display Module, Touch Screen, Smartphone, LED backlight, Electronic Cigarette, TWS.
	MPCB	60,000m <sup>2</sup>			✓					✓			Middle& Large Volume, Dedicated to thermal management solutions applied in new energy automotive, automotive lighting, power module and other lighting.
JX	PCB	390,000m <sup>2</sup>	✓						✓		✓		Large volume normal FR-4 boards; Widely applied in automotive, consumer and telecommunication and etc.,.
ZH 2	Fu Shan FPC	FPC: 45,000m <sup>2</sup> FPCA: 40KK		✓		✓						✓	Middle& Large volume; Use for New Energy Vehicles & Energy Storage, Wireless Charging, Touch Screen, Automobile, TWS, Smart Home, Display Module, 5G etc.
	Jinwan HLC	100,000m <sup>2</sup>					✓	✓	✓	✓			Large Volume; Dedicated on high layer count, widely applied in telecommunication, network, server, storage and automobiles.
	Jinwan SLP	60,000m <sup>2</sup>					✓				✓		High Volume; Dedicated to SLP, applied in telecommunication, consumer products.

## Why Kinwong?



Kinwong  
Core Values

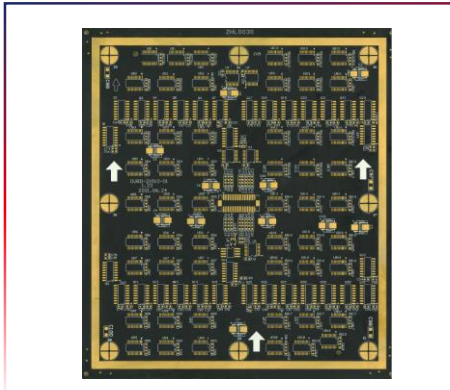
Strong financial  
management

Real time technical  
and quality support

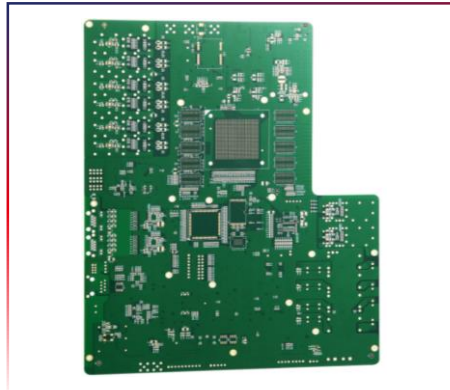
Received many  
outstanding awards  
from major customers

11 Facilities in 5  
Manufacturing sites

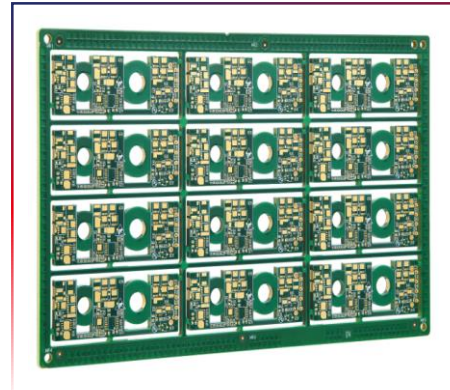
# PCB Product Examples



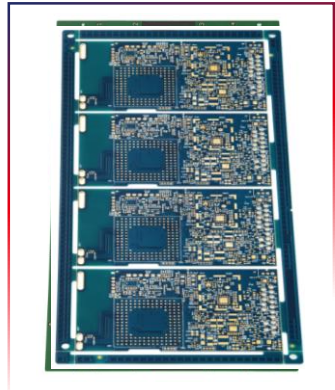
Mini LED



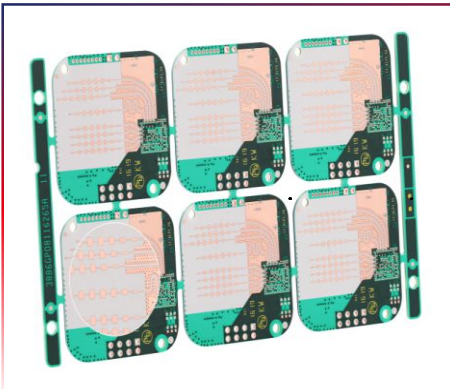
HLC+High Speed+HDI  
-Telecom



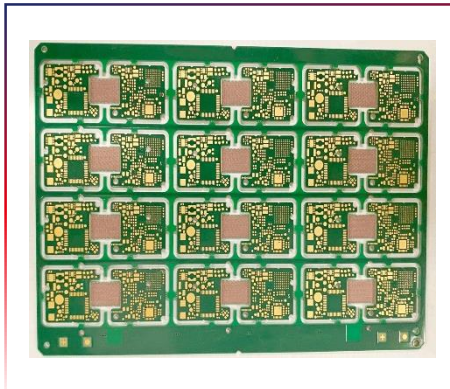
HLC+Heavy Copper  
-Industrial Control



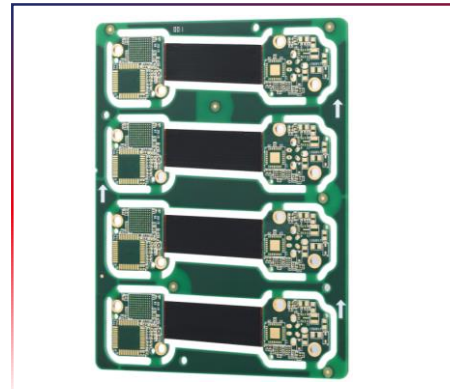
Multilayer  
- Computer



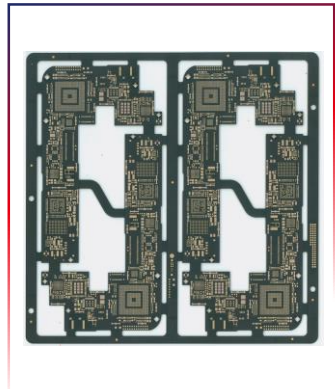
High Frequency  
-ADAS



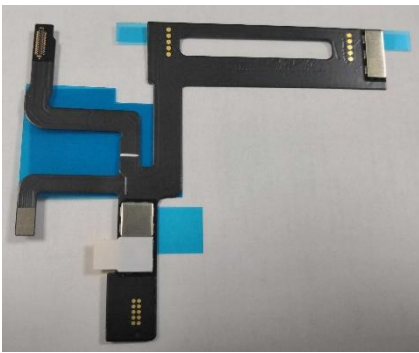
8L Semi-flex Board  
-Industrial



Rigid-flex Board  
-Medical



Any Layer Board  
-Consumer



OLED FPC



Blind Via 6 Layer  
OLED FPC



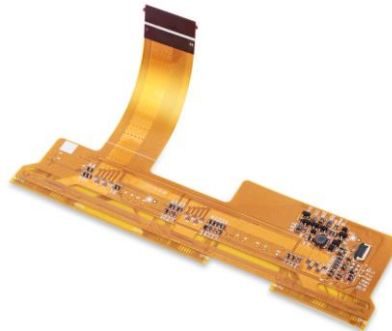
5G Transmission Line  
FPC



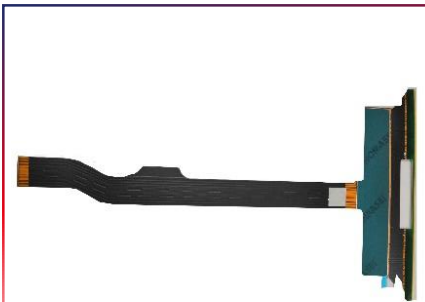
Folding Screen  
Multilayer FPC



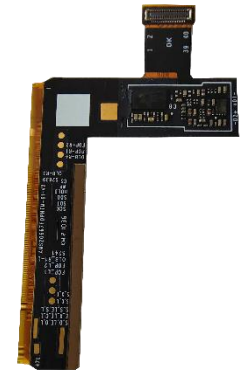
EV Battery



Automotive TFT

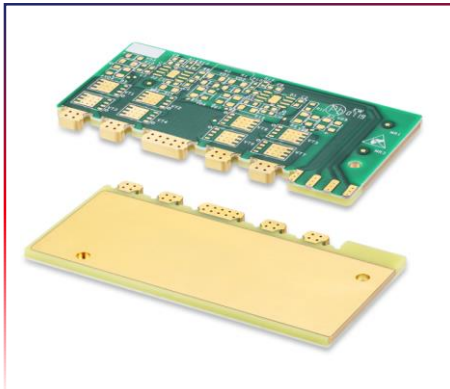


Tablet TFT

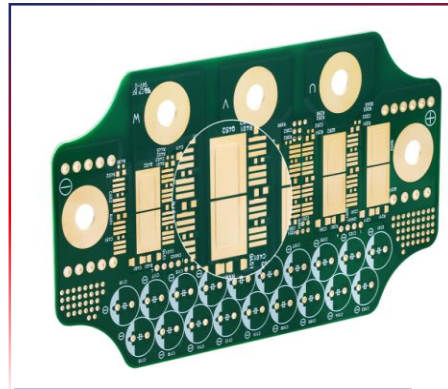


Cellphone 6 Layer  
Rigid-flex

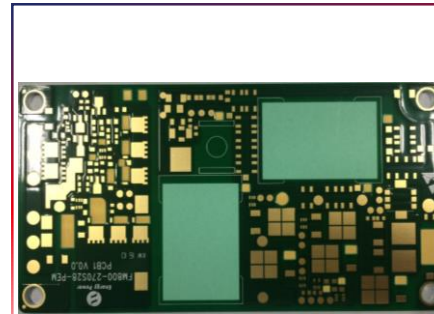
# MPCB Product Examples



Cu Inlay, Side Metallization  
Large Power - Telecom



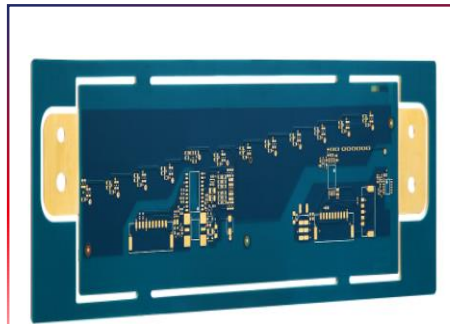
Cu Inlay  
-Automotive Lighting



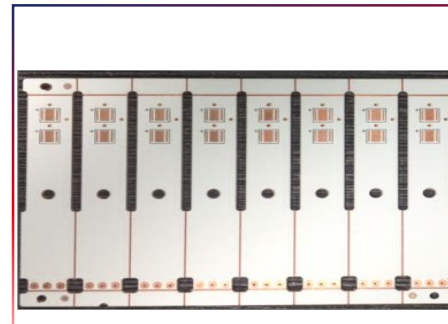
2L Al-Base ,Laser Blind Via -  
Power



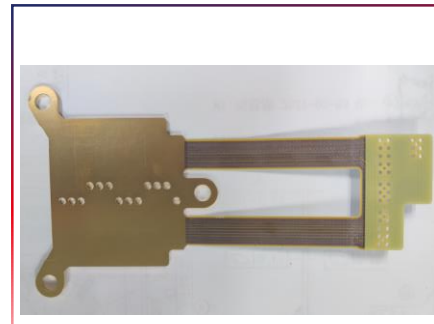
8L Double Side Al-Core  
- Lighting Bar



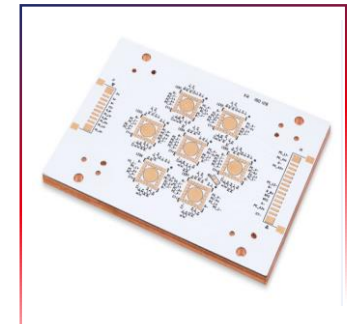
Double Side Cu Core with  
Thermal Conductive Resin  
- Automotive Lighting/ Power



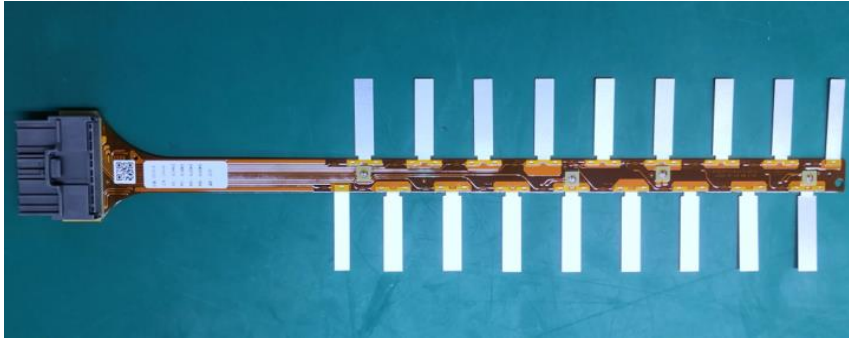
Double Side Cu Pedestal  
-Automotive Lamp



Flex on Al-Base  
- Lighting



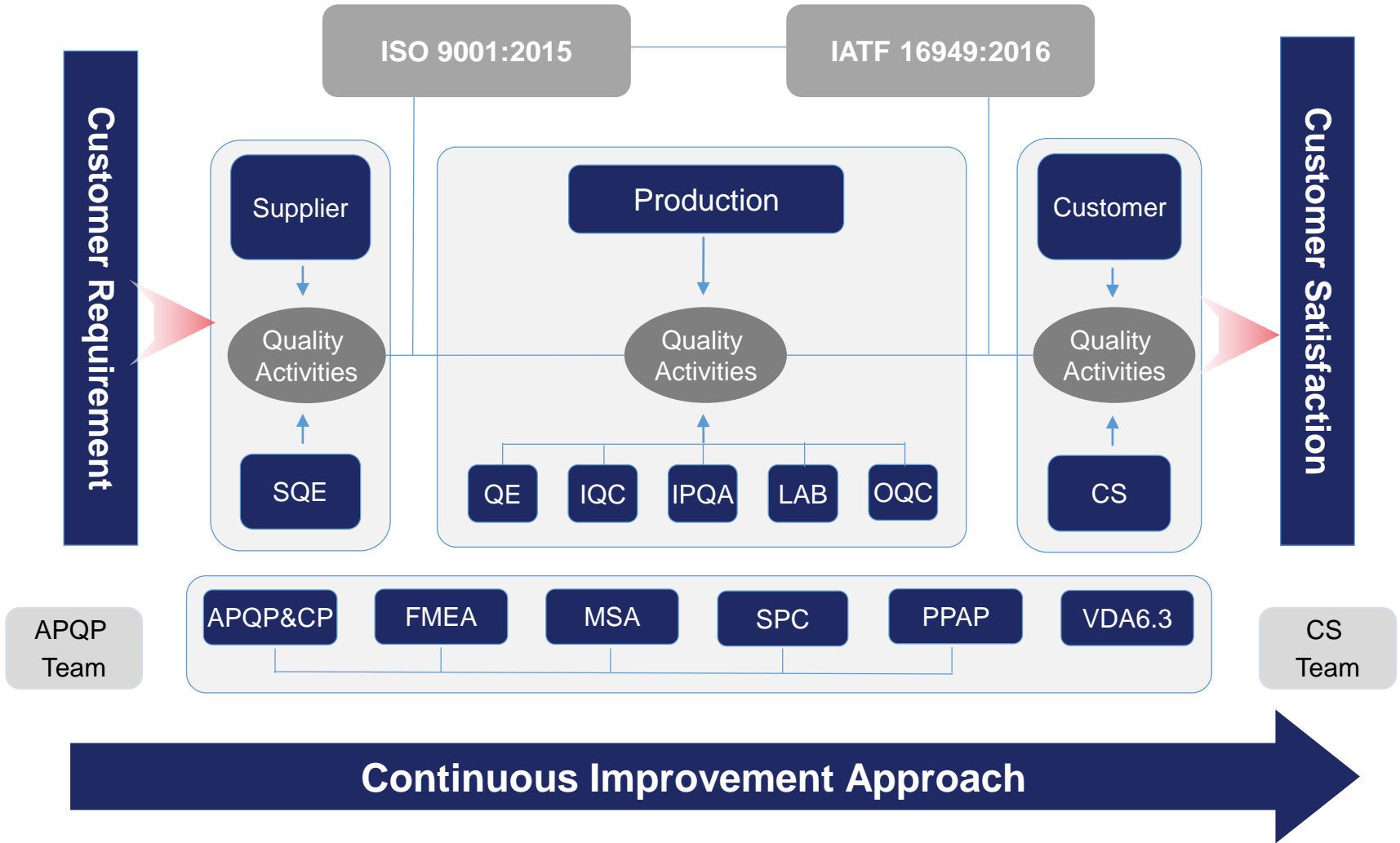
Single Side Cu  
Pedestal  
-Lighting



- High wiring density (double-sided PCB);
- High and low temperature impact resistance;
- High temperature and high humidity resistance;
- Resistant to electrolyte corrosion;
- Salt spray resistance;
- Excellent insulation and withstand voltage performance;



- Vibration resistance;
- Scratch-resistant;
- Bending resistance;
- Board length  $\approx$  1.5 meters;
- High and low temperature impact resistance;
- High temperature and high humidity resistance;
- Resistant to electrolyte corrosion;
- Salt spray resistance;
- Excellent insulation and withstand voltage performance;
- Scratch-resistant;



## Kinwong System Management

### QMS

General  
ISO9001



ISO 9001  
Quality  
Management  
Systems  
CERTIFIED

Automotive  
IATF16949



IATF 16949  
Automotive Quality  
Management  
CERTIFIED

Medical  
ISO13485



### CSR

Environment  
ISO14001



OHS system  
ISO45001



Energy system  
ISO50001



HSPM  
IECQ QC080000



### ISMS

ISMS  
ISO27001



ISO/IEC  
27001  
Information Security  
Management  
CERTIFIED

### Other systems

CNAS  
IEC/ISO17025



Plant	ISO9001: 2015 Quality	IATF16949: 2016 /TS16949 Automotive	ISO13485: 2016 Medical	ISO27001: 2013 ISMS	IECQ QC080000: 2017 HSPM	ISO14001: 2015 EMS	ISO45001: 2018	GB/T23331- 2012 Energy	GB/T23001- 2017 I&I	ISO/IEC17025: 2017 CNAS
Shenzhen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Original Registration Date	2006-5-18	2006-4-20	2015-11-2	2019-12-25	2016-1-5	2008-12-24	2009-10-16	2018-12-20	2019-1-8	2017-1-3
Longchuan	✓	✓	✓	✓	✓	✓	✓	✓		
Original Registration Date	2008-7-6	2008-7-6	2019-5-22	2019-12-25	2014-3-11	2008-7-14	2013-4-22	2021-12-29		
Jiangxi	✓	✓	✓	✓	✓	✓	✓			
Original Registration Date	2014-9-8	2015-6-8	2018-11-1	2019-12-25	2015-7-14	2014-8-29	2016-1-4			
Zhuhai FS	✓	✓			✓	✓				
Original Registration Date	2017-9-14	2017-9-14			2016-5-27	2019-6-29				
Zhuhai Jinwan	✓	✓		✓	✓	✓	✓			
Original Registration Date	2021-6-23	2022-04-24		2022-06 EST	2021-7-08	2021-7-28	2021-7-28			



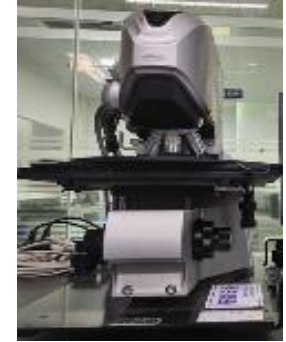
**CAF Test System**



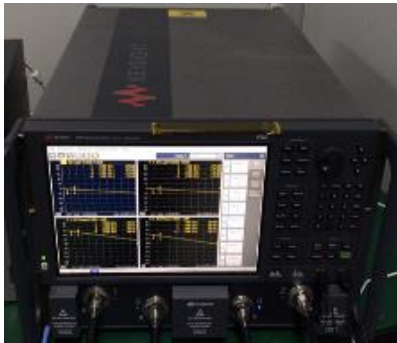
**On-line Thermal Shock**



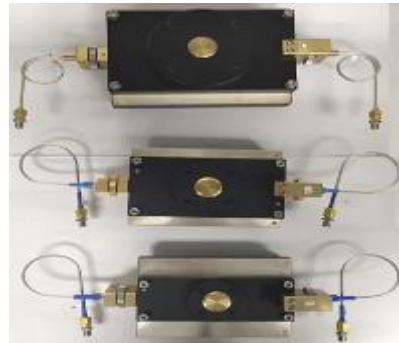
**SEM+EDS**



**Laser Scanning  
Confocal Microscope**



**Vector Netlist Analysis + Dk & Df Test System**



**DMA**



**TMA**

# PCB Customers



Automotive							
Consumer							
Telecom							
EMS							
Industrial & Medical							
Power Supply							
Computing							

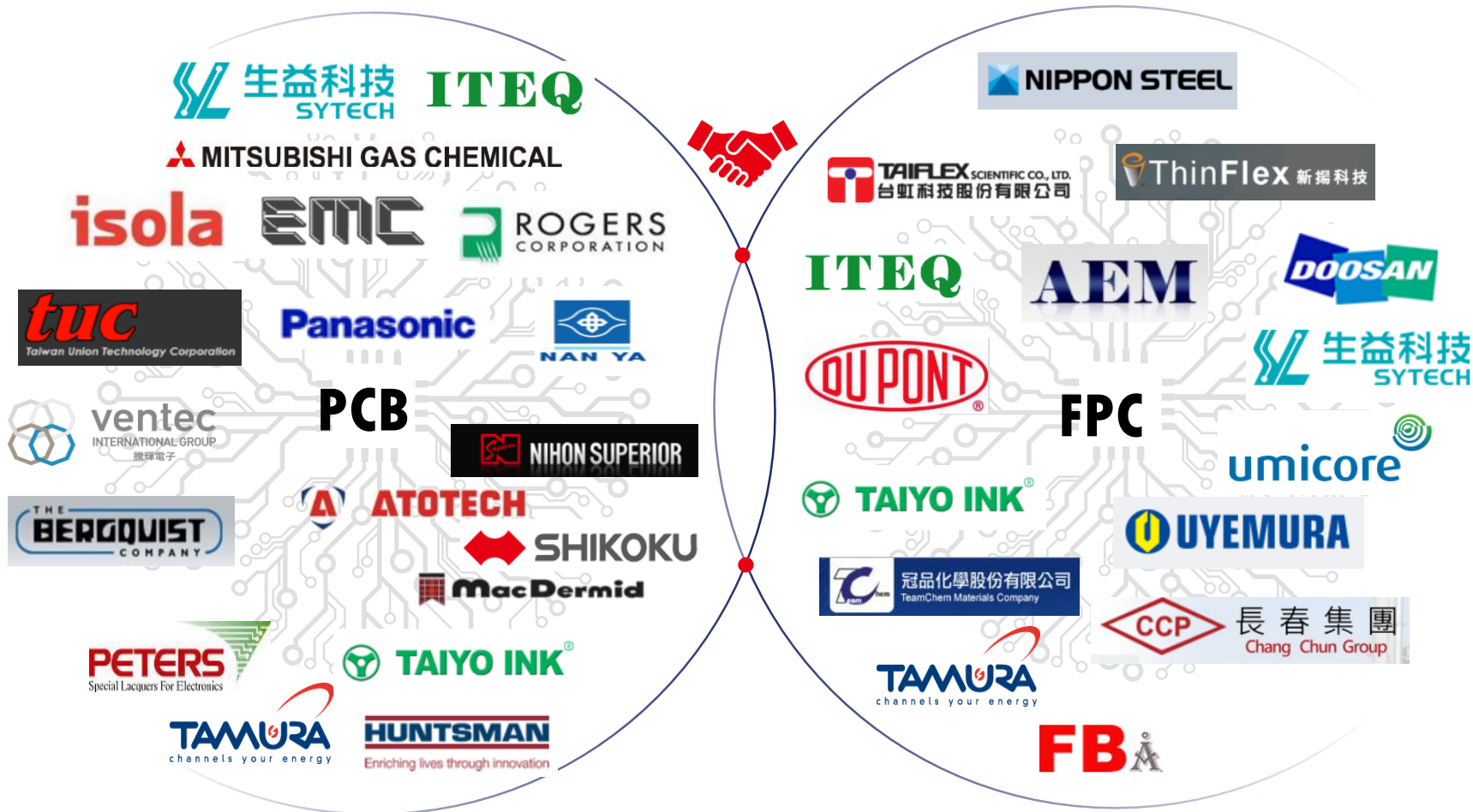
# FPC Customers



Mobile Device							
EMS							
Wireless Charger							
Module							
Others							
Fingerprint							
New Energy							



- 2020-2021 ● ZTE Best Comprehensive Performance Award
- 2020-2021 ● Huawei Best Quality、 Quality Special Award
- 2021 ● Kostal Best Collaboration Award
- 2020 ● OPPO Quality First Award
- 2020-2021 ● TRULYOPTO Best Supplier、 Best Quality Award
- 2020-2021 ● vivo Excellent Quality Award
- 2018-2021 ● Sungrow Best Quality, Best Collaboration
- 2018-2020 ● HiRain Best Supplier
- 2018-2021 ● TCL CSOT Excellent Quality Award
- 2020-2021 ● Visionox Best Quality Award
- 2020 ● Askey Excellent Supplier
- 2020 ● Wingtech Excellent Quality Award
- 2019 ● Plexus Excellent Partner
- 2021 ● DJI Excellent Best supplier
- 2021 ● Wistron Best Partner
- 2019-2021 ● Logitech Sustainability "Torch", Best Service
- 2015~2019 ● Hella Best Supplier
- 2021 ● Foxconn Excellent Supplier





- Environmental rule & law compliance, Reduce cost & waste
- Keep cleanness & safety production
- Continuous improvement on environmental protection



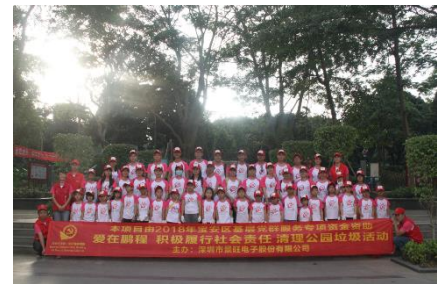
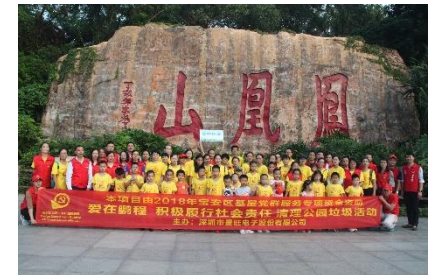
- Contribute to the environmental protection and the sustainable development of human society.



## Kinwong Business Philosophy

- People foremost
- Manufacturing competitive products
- Expanding the enterprise
- Repaying the society.

Kinwong participates in social charities on a routine basis, which ranges from financial donations for education, civil donations that help them build bridges and repair roads, and helping the elderly and children via young people volunteering their time and care.





# THANKS

To become the most reliable PCB manufacturer in the world.

[www.kinwong.com](http://www.kinwong.com)