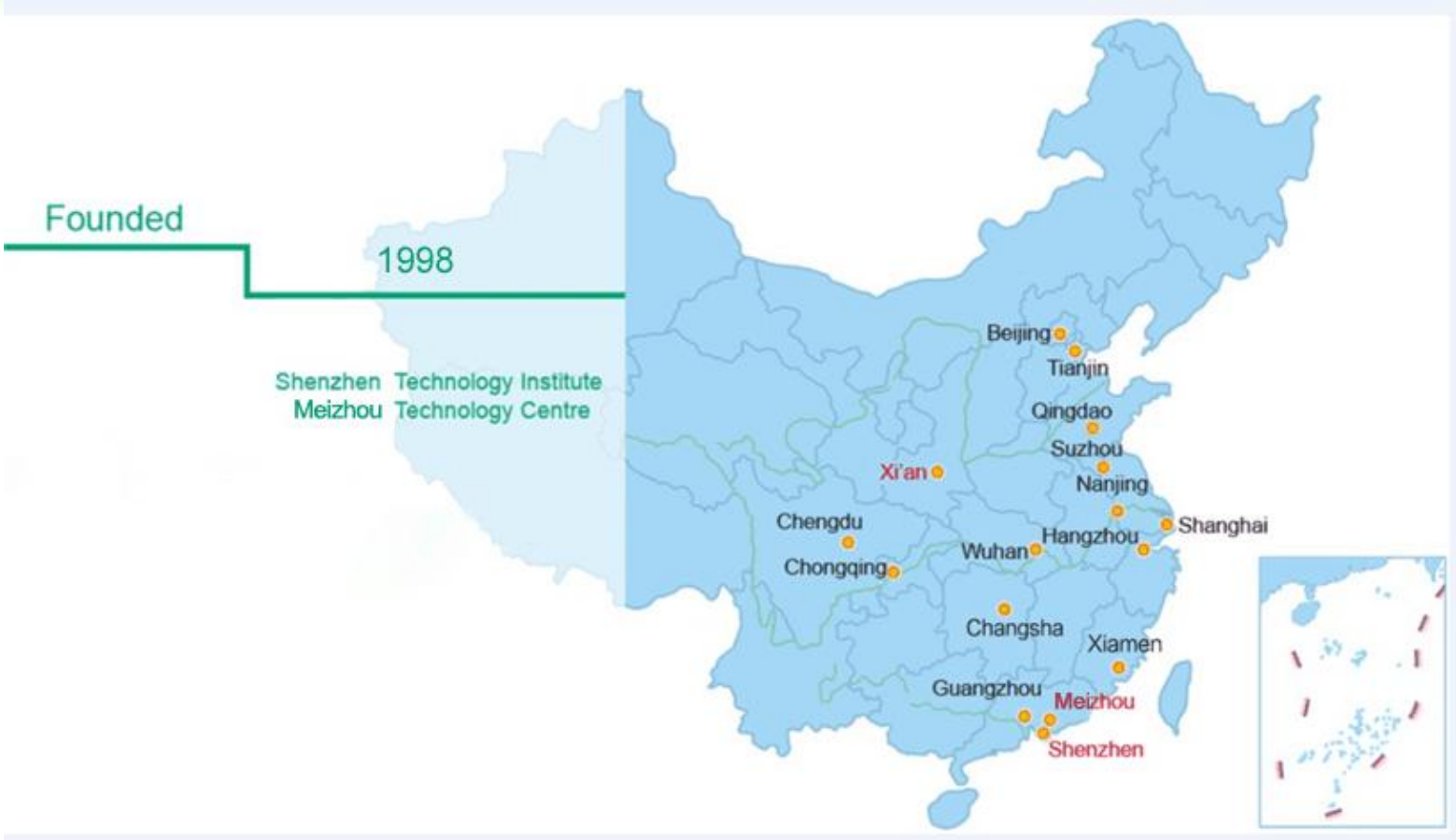
MV Circuit Technology Co.,LTD

MV Circuit at a Glance…



Factory

PCB Plant 1: PCB prototype and High Density PCB

PCB Plant 2: Middle and Mass volume

Global Markets

More than 1000 customers worldwide, covered Asia Pacific, Europe, North America, Australia and Africa.

Our Focus

Quality

Product
Process
Quality Assurance
Communication
Certification

Logistics

Lead time
Delivery performance
Handling / Packing
Planning
Transport Network
Warehouse

Layer count / Finish / Material
Rigid / Flex / Flex rigid
Engineering capability
Investment power

Technology

Price
Total cost of owner liability
Payment / Delivery terms
Stability

Cost

Customer Segments

Telecom

Defence

Medical

Computer

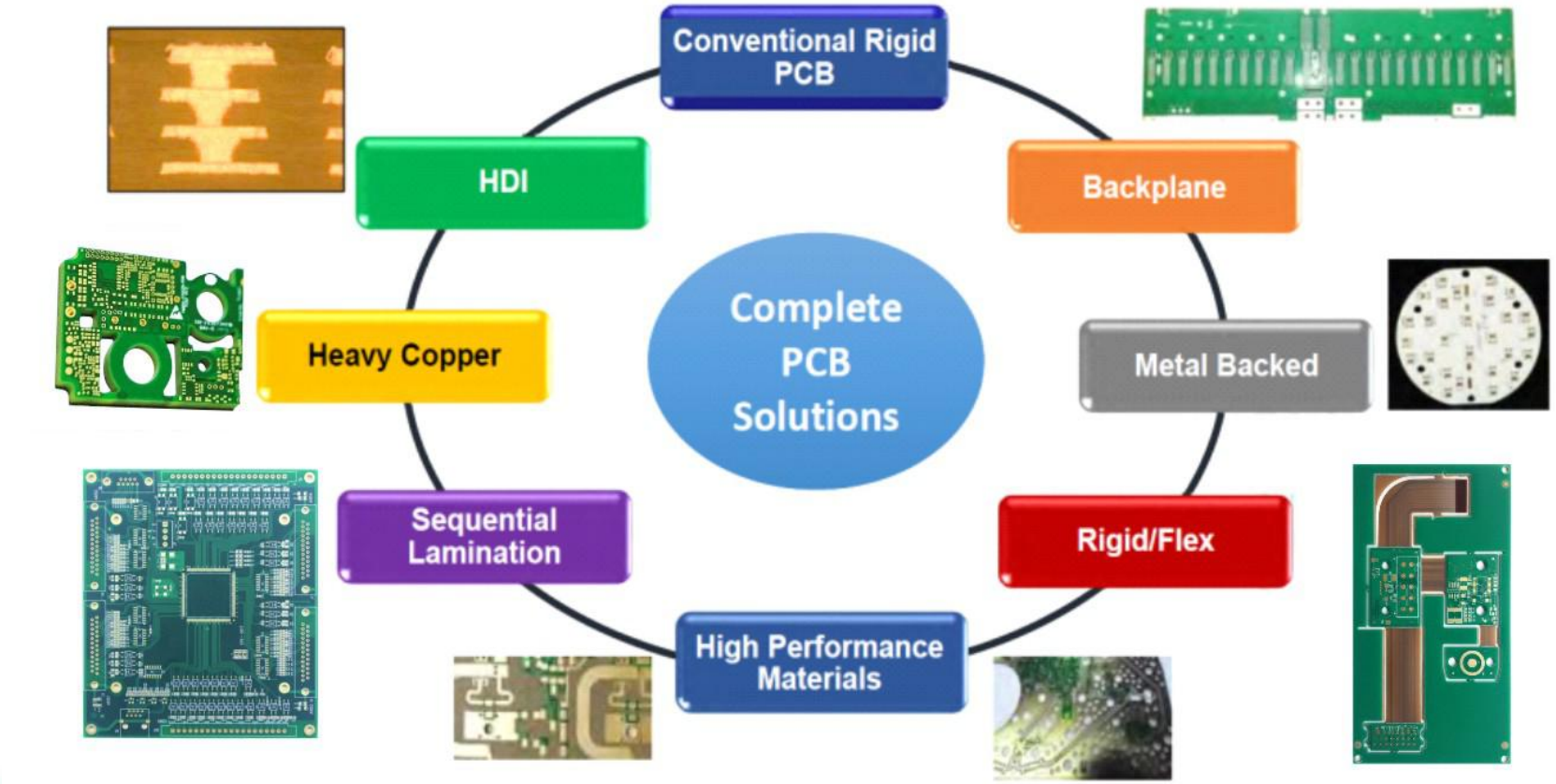
Automotive

Consumer

Aerospace

Industrial

Wide Product Mix



Facility

Drilling

Exposure

Brown Oxide Line

Etch

Photo

PTH

Facility

Lamination Machine

Microscope(Max 1000X)

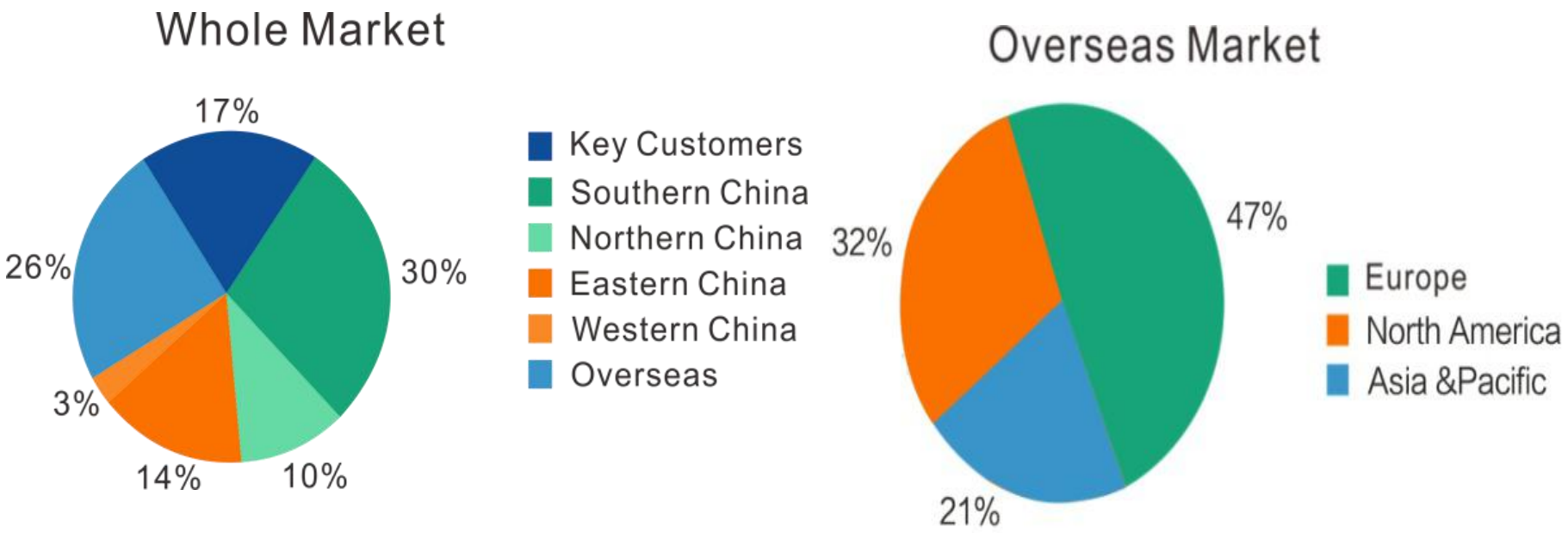
Silkscreen Printer

Laser Direct Image

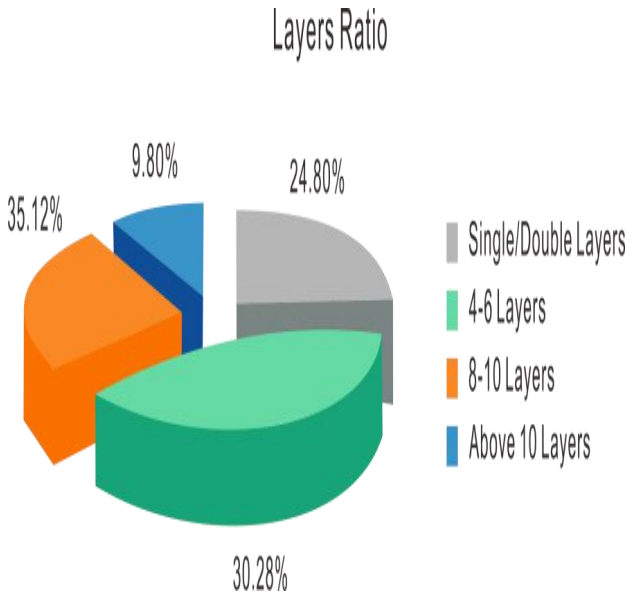
AOI

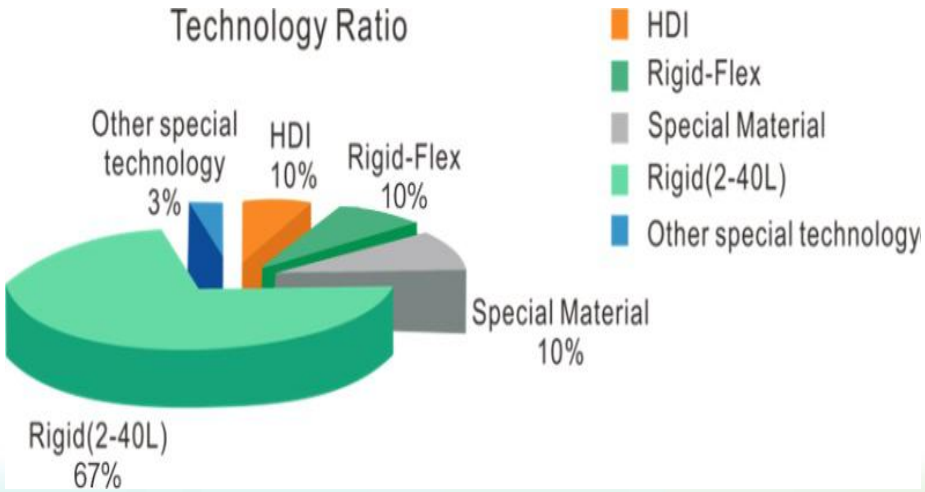
Laser Drilling

Market Distribution



Market Distribution





Technology

Layer Count		1-20 layers	22-40 layer
Base Material		KB、Shengyi、ShengyiSF305、FR408、FR408HR、IS410、FR406、GETEK、370HR、IT180A、Rogers4350、Rogers400、PTFE Laminates(Rogers series、Taconic series、Arlon series、Nelco series)、Rogers/Taconic/Arlon/Nelco laminate with FR-4 material(including partial Ro4350B hybrid laminating with FR-4)	
PCB Type	Rigid PCB/FPC/Flex-Rigid	Backplane、HDI、High multi-layer blind&buried PCB、Embedded Capacitance、Embedded resistance board 、Heavy copper power PCB、Backdrill.	
Lamination type	Blind&buried via type	Mechanical blind&burried vias with less than 3 times laminating	Mechanical blind&burried vias with less than 2 times laminating
	HDI PCB	1+n+1,1+1+n+1+1,2+n+2,3+n+3(n buried vias≤0.3mm),Laser blind via can be filling plating	1+n+1,1+1+n+1+1,2+n+2,3+n+3(n buried vias≤0.3mm),Laser blind via can be filling plating
Finished Board Thickness		0.2-3.2mm	3.4-7mm
Minimum Core Thickness		0.15mm(6mil)	0.1mm(4mil)
Copper Thickness		Min. 1/2 OZ, Max. 4 OZ	Min. 1/3 OZ, Max. 10 OZ
PTH Wall		20um(0.8mil)	25um(1mil)
Maximum Board Size		500*600mm(19"*23")	1100*500mm(43"*19")
Hole	Min laser drilling size	4mil	4mil
	Max laser drilling size	6mil	6mil
	Max aspect ratio for Hole plate	10:1（hole diameter≥8mil）	20:1
	Max aspect ratio for laser via filling plating	0.9:1(Dpeth included copper thickness)	1:1(Dpeth included copper thickness)
	Max aspect ratio for mechanical depth-control drilling board(Blind hole drilling depth/blind hole size)	0.8:1(drilling tool size≥10mil)	1.3:1(drilling tool size≤8mil),1.15:1(drilling tool size≥10mil)
	Min. depth of Mechanical depth-control(backdrill)	8mil	8mil
	Min gap between hole wall and conductor (None blind and buried	7mil(≤8L),9mil(10-14L),10mil(>14L)	5.5mil(≤8L),6.5mil(10-14L),7mil(>14L)
	Min gap between hole wall conductor (Blind and buried via PCB)	8mil(1 times laminating),10mil(2 times laminating),12mil(3 times laminating)	7mil(1 time laminating), 8mil(2 times laminating), 9mil(3 times laminating)
	Min gab between hole wall conductor(Laser blind hole buried via PCB)	7mil（1+N+1）；8mil（1+1+N+1+1 or 2+N+2）	7mil（1+N+1）；8mil（1+1+N+1+1 or 2+N+2）
	Min space between laser holes and conductor	6mil	5mil
	Min space bwteen hole walls in different net	10mil	10mil

Technology

Pad(ring)	Min Pad size for laser drillings	10mil(for 4mil laser via),11mil(for 5mil laser via)	10mil(for 4mil laser via),11mil(for 5mil laser via)
	Min Pad size for mechanical	16mil(8mil drillings)	16mil(8mil drillings)
	Min BGA pad size	HASL:10mil, LF HASL:12mil, other surface technics are	HASL:10mil, LF HASL:12mil, other surface technics are
	Pad size tolerance(BGA)	±1.5mil(pad size≤10mil);±15%(pad size>10mil)	±1.2mil(pad size≤12mil);±10%(pad size≥12mil)
Width/Space	Internal Layer	1/2OZ：3/3mil	1/2OZ：3/3mil
		1OZ: 3/4mil	1OZ: 3/4mil
		2OZ: 4/5.5mil	2OZ: 4/5mil
		3OZ: 5/8mil	3OZ: 5/8mil
		4OZ: 6/11mil	4OZ: 6/11mil
		5OZ: 7/14mil	5OZ: 7/13.5mil
		6OZ: 8/16mil	6OZ: 8/15mil
		7OZ: 9/19mil	7OZ: 9/18mil
		8OZ: 10/22mil	8OZ: 10/21mil
		9OZ: 11/25mil	9OZ: 11/24mil
		10OZ: 12/28mil	10OZ: 12/27mil
	External Layer	1/3OZ：3.5/4mil	1/3OZ：3/3mil
		1/2OZ：3.9/4.5mil	1/2OZ：3.5/3.5mil
		1OZ: 4.8/5mil	1OZ: 4.5/5mil
		1.43OZ（positive）:4.5/7	1.43OZ（positive）:4.5/6
		1.43OZ（negative ）:5/8	1.43OZ（negative ）:5/7
		2OZ: 6/8mil	2OZ: 6/7mil
		3OZ: 6/12mil	3OZ: 6/10mil
		4OZ: 7.5/15mil	4OZ: 7.5/13mil
		5OZ: 9/18mil	5OZ: 9/16mil
		6OZ: 10/21mil	6OZ: 10/19mil
		7OZ: 11/25mil	7OZ: 11/22mil
		8OZ: 12/29mil	8OZ: 12/26mil
		9OZ: 13/33mil	9OZ: 13/30mil
		10OZ: 14/38mil	10OZ: 14/35mil
Dimension Tolerance	Hole Position	0.08 (3 mil)	
	Conductor Width(W)	20% Deviation of Master A/W	1mil Deviation of Master A/W
	Outline Dimension	0.15 mm (6 mil)	0.10 mm (4 mil)
	Conductors & Outline (C - O)	0.15 mm (6 mil)	0.13 mm (5 mil)
	Warp and Twist	0.75%	0.50%

Engineering Capabilities

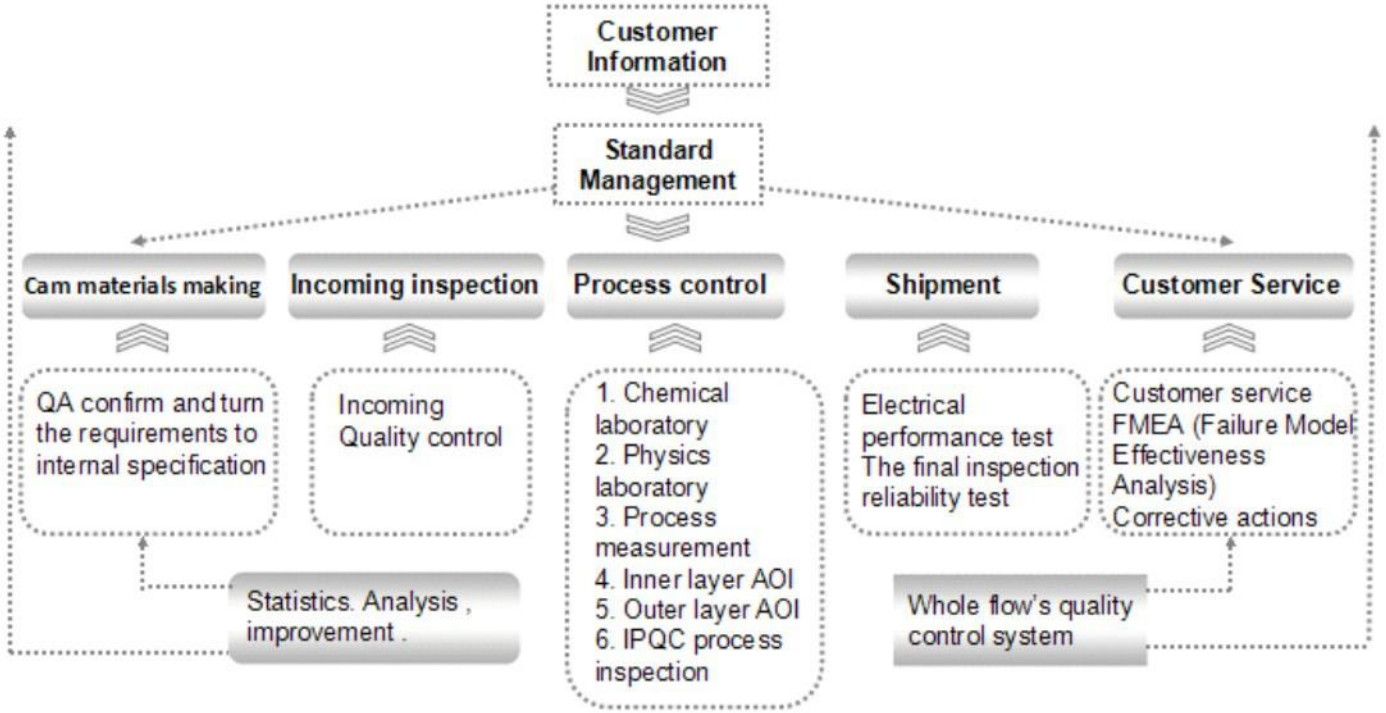
New PN(200/D)

QT:2.5 hours
Standard :7 hours

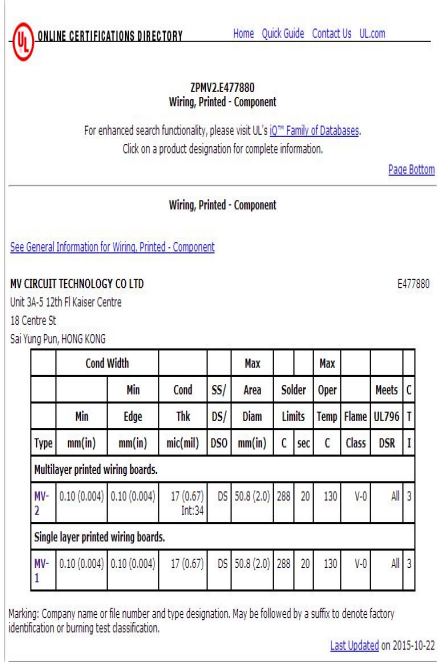
Repeat PN(200/D)

QT:0.5 hours
Standard :2 hours

Quality Assurance



Certification



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ZPMV2.E477880
Wiring, Printed - Component

For enhanced search functionality, please visit UL's iQ™ Family of Databases.
Click on a product designation for complete information.

Page Bottom

Wiring, Printed - Component

See General Information for Wiring, Printed - Component

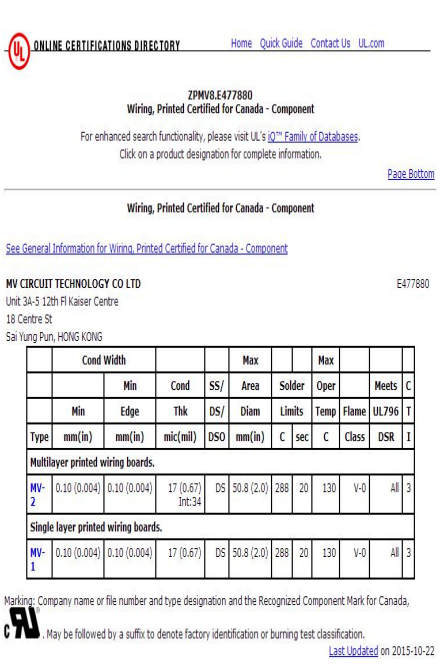
MV CIRCUIT TECHNOLOGY CO LTD E477880
Unit 3A-5 12th Fl Kaiser Centre
18 Centre St
Sai Yung Pun, HONG KONG

	Cond Width				Max			Max			
		Min	Cond	SS/	Area	Solder	Oper		Meets	C	
	Min	Edge	Thk	DS/	Diam	Limits	Temp	Flame	UL796	T	
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	C	sec	C	Class	DSR	I
Multilayer printed wiring boards.											
MV-2	0.10 (0.004)	0.10 (0.004)	17 (0.67) Int:34	DS	50.8 (2.0)	288	20	130	V-0	All	3
Single layer printed wiring boards.											
MV-1	0.10 (0.004)	0.10 (0.004)	17 (0.67)	DS	50.8 (2.0)	288	20	130	V-0	All	3

Marking: Company name or file number and type designation. May be followed by a suffix to denote factory identification or burning test classification.

Last Updated on 2015-10-22

USA UL



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ZPMV8.E477880
Wiring, Printed Certified for Canada - Component

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Wiring, Printed Certified for Canada - Component

See General Information for Wiring, Printed Certified for Canada - Component

MV CIRCUIT TECHNOLOGY CO LTD E477880
Unit 3A-5 12th Fl Kaiser Centre
18 Centre St
Sai Yung Pun, HONG KONG

	Cond Width				Max			Max			
		Min	Cond	SS/	Area	Solder	Oper		Meets	C	
	Min	Edge	Thk	DS/	Diam	Limits	Temp	Flame	UL796	T	
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	C	sec	C	Class	DSR	I
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Marking: Company name or file number and type designation and the Recognized Component Mark for Canada, . May be followed by a suffix to denote factory identification or burning test classification.

Last Updated on 2015-10-22

Canada UL

CERTIFICATION INTERNATIONAL

Certificate of Registration

This is to certify that

MV CIRCUIT TECHNOLOGY CO.,LIMITED
Organization code: 00000000-0
Registered address: UNIT 3A-5, 12/F KAISER CENTRE 18 CENTRE STREET SAI YUAN PUN HONG KONG
Audited address: UNIT 3A-5, 12/F KAISER CENTRE 18 CENTRE STREET SAI YUAN PUN HONG KONG

Has been assessed as conforming to meet the requirements of

ISO9001：2008

for the scope of activities

Manufacture and Sale PCB

Certificate No: CI/135563Q
Issue Date: 19 August 2015 Valid until 18 August 2018
Subject to adherence to the agreed ongoing audit programme, successful endorsement of certification following each audit and compliance with CI Regulations

Signed for and on behalf of

General Manager

UKAS MANAGEMENT SYSTEMS 063

IAF

Annual surveillance audit for the first time

Annual surveillance audit for the second time

Note: According to the certification requirements, the interval between the annual surveillance audit and the last spot audit cannot exceed twelve months.

The certificate information is validity on: Our company Web: www.civc.com.cn , CNCA official web: www.cnca.gov.cn

Certification International (China) Co., Ltd. Tel: 0086-021-63435510 Fax: 0086-021-63431403

ISO 9001
(Manufacturing)

ISO14001
CERTIFICATE

Certificate No.: 061-10-E1-00065-R1-M

We hereby certify that

MV Circuit Technology Co., Ltd
by reason of its
Environmental Management Syste
has been awarded this certificate for
compliance with the standard
GB/T24001-ISO14001:2004
The Environmental Management System
applies in the following area:

MV Circuit Technology Co., Ltd
is located in YanChuan BeiBu Industrial Park SongGang ST,BaoAn ShenZhen, the production of double-side and multilayer printed circuit board and relatcd administrative movements .

Date of initial issue: 18th July 2012
Date of issue: 20th July 2014
Date of expiry: 25th July 2017

Signed by:

CNAS

IAF

SHENZHEN SOUTHERN CERTIFICATION CO., LTD.

ISO 14001
(Environment)

Why MV Circuit

Technical competence and guidance

- Technical helpdesk in China
- CAM departments running preproduction check to ensure quick production start and correct production

Deviation and risk management

- Unique automated process for deviation handling including 8D report and status update to customer. Enables root cause analysis.
- Supplier performance and cooperation follow up.

Logistics

- Wide networks of transporters and forwarders
- Warehouse management, flexibility based on customer requirement
- Close follow up on production status ensures possibilities for proactive actions
- Flexibility for specific packing requirements

Thank you