Welcome to O-leading

O-Leading strives to be your one stop solution partner in EMS supply chain, including PCB design , PCB fabrication and PCB assembly (PCBA). We provide some of the most advanced PCB technology, including HDI PCBs, multilayer PCBs, Rigid-Flexible PCBs. We can support from quick turn prototype to medium & mass Production.

In general, our global customers are very impressed with our services:Rapid response, competitive price and quality commitment.Providing more valuable technical service and overall solution is the way O-leading forward.

Looking to the future, O-leading will concentrate on the innovation and development of electronics manufacturing technology as always, and make persistent efforts on PCB & PCBA one-stop service to provide first-class services and create more value for our customers.

PLEASE CLICK THESE FOR MORE INFORMATION

Controlled impedance PCB supplier in china

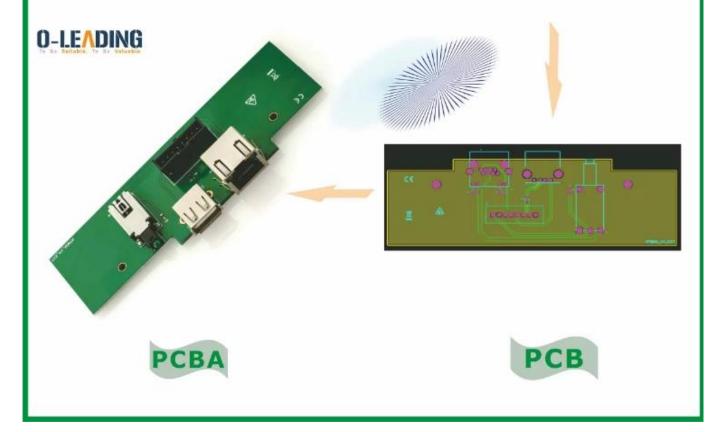
Product Description







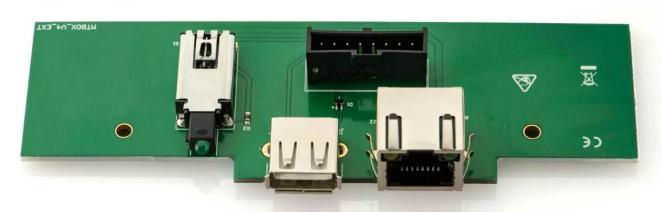
Manufacturer	Manufacturer Part Number	Designator (required)	Qty (required)	Description (required)
Molex	90136-1208	J1	1	Conn Shrouded Header (4 Sides) HDR 8 POS 2.54mm
Vürth Elektronii	615008137421	J2	1	ular Jack WR-MJ, Tab Up, Shielded, with LED and EMI Panel Finger, Horizon
Panasonic	ERJ-3EKF5100V	R1,R2	2	Res Thick Film 0603 510 Ohm 1% 1/10W
Vürth Elektroni	61400416021	J3	1	Conn USB 2.0 Type A F 4 POS Solder RA Thru-Hole 4 Terminal 1 Port Tray
Semtech	RCLAMP0502BATCT	D1	1	LAMP Series 25 V 1 pF SMT Uni/Bi-Directional TVS ESD/CDE Protection - So
&K Componen	ELUMEETHQ6C22	S1	1	Switch Push Button ON ON SPDT Square Plunger 0.25A 50VDC 3.5VA













Our Team



Factory PCB



Automatic vacuum press machine



Drilling Machine



Pattern Plating Machine



Scrubbing Machine



Developing Machine



Routing Machine



High-speed flying probe machine



E-test Machine

Factory SMT













Certifications







Test Report

O-LEADING SUPPLY CHAIN (HK) CO., LIMITED

No. SZXEC1900530401

1313,FLOOR 13, FORTUNE BUILDING, DANSHUI TOWN, HUIYANG DISTRICT, HUIZHOU, GUANGDONG, CHINA

Date: 30 Mar 2019 Page 1 of 6

Test Report No. SZXEC1900530401 Date: 30 Mar 2019 Page 2 of 6

Test Results :

Test Part Description :

 Specimen No.
 SGS Sample ID
 Description

 SN1
 SZX19-005304.001
 Green*PCB**

(1) 1 mg/kg = 1 ppm = 0.0001% (2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC682321-5:2013, IEC62321-7:2:2017, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	8
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1,000	mg/kg	8	ND
Sum of PBBs	1.000	mg/kg		ND
Monobromobiphenyl		mg/kg	5	ND
Dibromobiphenyl	12	mg/kg	5	ND
Tribromobiphenyl	15	mg/kg	5	ND
Tetrabromobiphenyl		mg/kg	5	ND
Pentabromobiphenyl		mg/kg	5	ND
Hexabromobiphenyl		mg/kg	5	ND
Heptabromobiphenyl		mg/kg	5	ND
Octabromobiphenyl		mg/kg	5	ND
Nonabromobiphenyl	6	mg/kg	5	ND
Decabromobiphenyl		mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg		ND
Monobromodiphenyl ether		mg/kg	5	ND
Dibromodiphenyl ether	12	mg/kg	5	ND
Tribromodiphenyl ether	2	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether		mg/kg	5	ND



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Member of the SGS Group (SGS SA)

The following sample(s) was/were submitted and identified on behalf of the clients as : OSP

SGS Job No. : RP19-005089 - SZ Date of Sample Received : 22 Mar 2019

22 Mar 2019 - 30 Mar 2019 Testing Period :

Test Requested : Selected test(s) as requested by client. Test Method Please refer to next page(s).

Test Results : Please refer to next page(s).

Conclusion:

Based on the performed tests on submitted sample(s), the results of Lead. Mercury, Cadmium, Hexavalent chiromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBBcs) and Phthalates such as Bis(2-ethylbexyl) phthalate (DBFP). Bibutyl phthalate (DBFP). To butyl phthalate (DBFP), and Diisobutyl phthalate (DBFP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/85/EU.

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

lina

Tina Fan Approved Signatory



Max

Max

UL Product iQ™



ZPMV2.E490354 - WIRING, PRINTED - COMPONENT

Wiring, Printed - Component

See General Information for Wiring, Printed - Component

Cond Width

O-LEADING SUPPLY CHAIN (HK) CO LTD

E490354

ROOM 1205, 12/F TAI SANG BANK BLDG 130-132 DES VOEUS ROAD CENTRAL, HONG KONG

		Min	Cond	SS/	Area	Solo	der	Oper		Meets	c
	Min	Edge	Thk	DS/	Diam	Lim	its	Temp	Flame	UL796	T
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	c	sec	c	Class	DSR	1
Multilayer (m	Multilayer (mass laminate) printed wiring boards.										
O-LEADING- 401	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	12.7 (0.5)	260	10	130	V-0	3	50
O-LEADING- 407	0.08 (0.003)	0.2 (0.008)	17 (0.67)	DS	9.7 (0.4)	260	10	130	V-0	All	-
Multilayer pri	nted wiring bo	ards.							3		
O-LEADING- 408	0.125 (0.005)	0.125 (0.005)	12 (0.47) Int:136	DS	50.8 (2.0)	280	20	130	V-0	All	*
Single layer p	rinted wiring b	oards.							3 77	7.57	
O-LEADING- 002	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	19.1 (0.8)	260	10	105	V-0	All	-
O-LEADING- 003	0.38 (0.015)	1.14 (0.045)	34 (1.34)	SS	19.1 (0.8)	260	10	130	V-0	A	-
O-LEADING- 033	0.15 (0.006)	0.3 (0.012)	34 (1.34)	SS	25.4 (1.0)	260	10	120	V-0	All	*
O-LEADING- 205	0.1 (0.004)	0.3 (0.012)	34 (1.34)	DS	69.6 (2.7)	260	10	130	V-0	All	-
O-LEADING- 206	0.15 (0.006)	0.33 (0.013)	17 (0.67)	DS	69.6 (2.7)	260	10	130	V-0	All	-
O-LEADING- D01	0.14 (0.006)	0.15 (0.006)	33 (1.30)	DS	25.4 (1.0)	260	10	130	V-0	All	*
O-LEADING- S01	0.25 (0.010)	0.25 (0.010)	17 (0.67)	SS	25.4 (1.0)	260	4	130	V-0	All	*

WIRING, PRINTED - COMPONENT | UL Product iQ

O-LEADING- S02	0.2 (0.008)	0.2 (0.008)	17 (0.67)	SS	25.4 (1.0)	260	4	130	НВ	A	*
O-LEADING- S03	0.25 (0.010)	0.25 (0.010)	34 (1.34)	SS	25.4 (1.0)	260	4	130	V-0	All	*

 $[\]mbox{\ensuremath{\star}}$ - CTI marking is optional and may be marked on the printed wiring board.

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

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Process Capability

PCE	Production Capabilities	SMT	Production Capabilities
Layer Count	1Layer-32Layer	PCB Material	FR-4,CEM-1,CEM-3,Aluminum-based board
Finished copper thickness	1/3oz-12oz	PCB Material	FN-4,CEM-1,CEM-5,AluIIIIIIIIIII-DaSeu Dualu
Min Line width/spacing internal	3.0mil/3.0mil	Max PCB size	510x460mm
Min Line width/spacing external	4.0mil/4.0mil	Min PCB size	50x50mm
Max Aspect Ratio	10:1	PCB Thickness	0.5mm-4.5mm
Board thickness	0.2mm-5.0mm	Board thickness	0.5-4mm
Max Panel size(inches)	635*1500mm	Min Components size	0201
Minimum Drilled Hole Size	4mil	Standard chip size component	0603 and larger
Plated Hole Tolerance	+/-3mil	Component max height	15mm
Blind/Buried Vias (All Types)	YES	Min lead pitch	0.3mm
Via Fill(Conductive,Non- Conductive)	YES	Min BGA ball pitch	0.4mm
Base Material	FR-4,FR-4high Tg.Halogen free material,Rogers,Aluminium base,Polyimide,Heavy Copper		
Surface finishes	HASL,OSP,ENIG,HAL-LF,Immersion silver,Immersion Tin,Gold fingers,Carbon ink	Placement precision	+/-0.03mm

Packaging & Delivery

Shipping service











	Quick Turn Lead Time					
Layer Count:	Lead Tim	Special Requirement				
1L/2L	2-3days	24 Hours,48 Hours				
4L	3-4days	48 Hours				
6L	4-5days	72 Hours				
8L	5-6days	NA				
10L	6-7days	NA				
12L	7-8days	NA				
14L	8-9days	NA				

	Standard Lead Time						
Layer Count:	Sample Lead Time	Volume order lead time					
2L	4 days	10 days					
4L	5 days	11 days					
6L	6 days	12 days					
8L	8 days	14 days					
10L	10 days	16 days					
12L	12 days	18 days					
14L	14 days	20 days					
16-32L	18 days	24 days					

FAQ

1. How do O-Leading ensure quality?

Our high quality standard is achieved with the following.

- 1.1 The process is strictly controlled under ISO 9001:2008 standards.
- 1.2 Extensive use of software in managing the production process
- 1.3 State-of-art testing equipments and tools. E.g. Flying Probe, X-ray Inspection, AOI (Automated Optical Inspector) and ICT (in-circuit testing).
- 1.4. Dedicated quality assurance team with failure case analysis process
- 1.5. Continuous staff training and education

2. How do O-Leading keep your price competitive?

Over the last decade, prices of many raw materials (e.g. copper, chemicals) had doubled, tripled or quadrupled; Chinese currency RMB had appreciated 31% over US dollar; And our labor cost also increased significantly.

However, O-Leading have kept our pricing steady. This owns entirely to our innovations in reducing cost, avoiding wastes and improving efficiency. Our prices are very competitive in the industry at the same quality level.

We believe in a win-win partnership with our customers. Our partnership will be mutually beneficial if we can provide you an edgeon cost and quality.

3. What kinds of boards can O-Leading process?

Common FR4, high-TG and halogen-free boards, Rogers, Arlon, Telfon, aluminum/copper-based boards, PI, etc.

4. What data are needed for PCB & PCBA production?

- 4.1 BOM (Bill of Materials) with reference designators: component description, manufacturer's name and part number.
- 4.2 PCB Gerber files.
- 4.3 PCB fabrication drawing and PCBA assembly drawing.
- 4.4 Test procedures.
- 4.5 Any mechanical restrictions such as assembly height requirements.

5. What's the typical process flow for multi-layer PCB?

Material cutting \rightarrow Inner dry film \rightarrow inner etching \rightarrow Inner AOI \rightarrow Multi-bond \rightarrow Layer stack up Pressing \rightarrow Drilling \rightarrow PTH \rightarrow Panel Plating \rightarrow Outer Dry Film \rightarrow Pattern Plating \rightarrow Outer etching \rightarrow Outer AOI \rightarrow Solder Mask \rightarrow Component Mark \rightarrow Surface finish \rightarrow Routing \rightarrow E/T \rightarrow Visual Inspection.

6. What's the key equipments for HDI manufacturing?

Key equipment list is as following: Laser drilling machine, Pressing machine, VCP line, Automatic Exposing machine, LDI and etc.

The equipments we have are the best in the industry, laser drilling machines are from Mitsubishi and Hitachi, LDI machines are from Screen(Japan), Automatic Exposing machines are also from Hitachi, all of them make we can meet customer's technical requirements.

7. How many types of surface finish O-lead can do?

O-the leader has the full series of surface finish, such as: ENIG, OSP, LF-HASL, gold plating (soft/hard), immersion silver, Tin, silver plating, immersion tin plating, carbon ink and etc. .. OSP, ENIG, OSP + ENIG commonly used on the HDI, we usually recommend that you use a client or OSP OSP + ENIG if BGA PAD size less than 0.3 mm.

8. What's your capability for FPC? Can O-Leading provide SMT service also?

O-Leading can fabricate FPC from single layer to 8layer, the working panel size can be as large as 2000mm*240mm, please find the details in the page "Flex Capability" We also provide SMT one stop service to customer.

9. What are the main factors which will affect the price of PCB?

Material;

Surface finish;

Technology difficulty;

Different quality criteria;

PCB characteristics;

Payment terms;

Different manufacturing countries.

10. What's the definition of PCB, PWB and FPC and what's the difference?

PCB is short for Printed Circuit Board;

PWB is short for Printed Wire Board, same meaning as Printed Circuit Board;

FPC is short for Flexible Printed Board.

11. What factors should be considered when choosing the material for a PCB board?

Below factors should be considered when we choose the material for PCB:

The material's Tg value should be greater than the operation temperature;

Low CTE material has good performance of thermal stability;

Good thermal resistance performance: Normally PCBs are required to resist 250°C for at least 50s. Good flatness; In consideration of the electrical properties, low loss/high permittivity material is used on high frequency PCB; Polyimide glass fiber substrate used for flexible PCB; Metal core is used when the product has strict requirement of heat dissipation.

12. What's the merits of O-leading's rIgid-flex PCB?

O-leading's rigid-flex PCB has the characters of both FPC and PCB, so it can be used in some special products. Some part is flexible while the other part rigid, it can help save product's interior space, reduce product volume and improve performance.

13. How to you make the impedance calculation?

The impedance control system is done using some test coupons, the SI6000 soft and the CITS 500s equipment from POLAR INSTRUMENTS.

The equipment measures the impedance on a representative track configuration coupon of which the client has given us a determinate value and tolerance.