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 Production of printed circuits

Product Description

| Place of origin | Guangdong, China (Mainland) | Brand name | O-leader |
|------------------|---|-------------------|------------------------|
| Basic material | FR-4, Aluminum | Thickness of | 0.5 ounces - 5 ounces |
| | | copper | |
| Min. Size of the | 0.2 mm | Min. Width of the | 0.2 mm |
| hole | | line | |
| Surface finish | gold immersion, OSP, lead-free | Thickness of the | 0.1-5mm |
| | HASL | table | |
| Applicable to | LED, cell phone, air conditioners, washing machines | character | Industrial control pcb |
| certified | ISO9001, UL, RoHS, SGS | Q / CTN | 10PCS-100PCS |
| weight | 0.01 kg -5 kg | MOQ | 10 pieces |
| Model number | pcba manufacturer pcb assembly | Min. Line | 0.2 mm |
| Intoder Hamber | power bank | spacing | U. 2 IIIIII |
| color | blue, red, green, black, yellow | price | \$ 0.1- \$ 10 |
| type desigh | customer's requirement | cut it | 0.01m3-10m3 |

Product description

Professional manufacture of PCB boards for 16 years

| article | 2014 | | 2015 ~ 2016 | | 2017 ~ 2018 | |
|-----------------------|--------|--------|-------------|--------|-------------|--------|
| | Volume | Sample | Volume | Sample | Volume | Sample |
| Counting of levels | 32 | 42 | 38 | 44 | 42 | 48 |
| Line / space min (µm) | 50/50 | 40/45 | 40/45 | 40/40 | 35/40 | 35/35 |
| Minimum hole | 00:15 | 00:10 | 00:15 | 00:10 | 00:15 | 00:10 |
| diameter (mm) | 00:13 | 00:10 | 00:13 | 00:10 | 00:13 | 00:10 |

| Proportions of PTH | 14: 1 | 16: 1 | 16: 1 | 18: 1 | 18: 1 | 20: 1 |
|---|--|------------|------------|-----------|-----------|-----------|
| N + C + N | 4 + C + 4 | 5 + C + 5 | 5 + C + 5 | 6 + C + 6 | 5 + C + 5 | 6 + C + 6 |
| Any level interconnection | 5 + 2 + 5 | 6 + 2 + 6 | 5 + 2 + 5 | 6 + 2 + 6 | 5 + 2 + 5 | 6 + 2 + 6 |
| Plate filling away | YUP | - | YUP | - | YUP | - |
| Min. Core thickness (excluding copper) (μm) | 50 | 40 | 40 | 30 | 40 | 30 |
| Min. Laser drill diameter (μm) | 75 | 65 | 65 | 50 | 50 | 40 |
| Way up buried hole / stacked away | YUP | - | YUP | - | YUP | - |
| Material | FR4, Meg | tron, Nelc | o, Rogers, | heavy cop | per, etc. | |
| Built-in capacitor PCB | YUP | - | YUP | - | YUP | - |
| Surface process | Lead-free HASL, ENIG, OSP, silver by immersion, immersion pond, Gold flash, gold plating, selective hard gold plating, Peelable welding mask, carbon ink | | | | | |













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Prototype manufacturer Pcb China

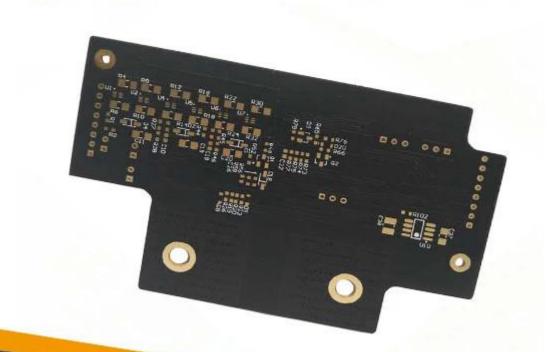












www.o-leading.com



printed circuit board manufacturer

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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- Remark (14.0 post-times-days-scene)
(2586g to 4.1 post-times-form) (14.0 post-times-for

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 | ass laminate) p | rinted wiring l | ooards. | | | | | | | | |
| 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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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 | | | | | | |

Process Capability

PCB Production Capabilities

Layer Count: 1Layer-32Layer

Finished copper thickness 1/3oz-12oz

Min Line width/spacing internal ☐ 3.0mil/3.0mil Min Line width/spacing external: 4.0mil/4.0mil

Max Aspect Ratio: 10:1

Board thickness[] 0.2mm-5.0mm
Max Panel size(inches): 635*1500mm
Minimum Drilled Hole Size: 4mil
Plated Hole Tolerance: +/-3mil
Blind/Buried Vias (All Types): YES
Via Fill(Conductive,Non-Conductive): YES

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

SMT Production Capabilities

PCB Material: FR-4,CEM-1,CEM-3,Aluminum-based board

Max PCB size: 510x460mm Min PCB size 50x50mm PCB Thickness 0.5mm-4.5m

PCB Thickness□0.5mm-4.5mm Board thickness□0.5-4mm Min Components size: 0201

Standard chip size component: 0603 and larger

Component max height
☐15mm

Min lead pitch: 0.3mm Min BGA ball pitch:0.4mm

Placement precision: +/-0.03mm