

O-Leading 專業製造各種 PCB

O-Lead PCB 製造, PCB 設計及 PCB 組裝 (PCBA) 服務 EMS 客戶。我們提供各種 PCB 產品, 包括 HDI PCB, 剛性 PCB, Rigid-Flexible PCB 及各種特殊 PCB 產品。我們擁有先進的生產設備及技術, 確保產品質量及交貨時間。

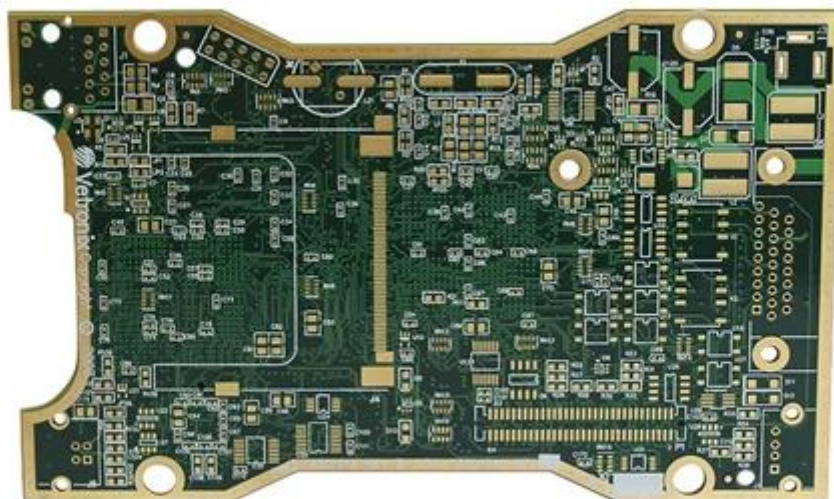
我們的產品範圍廣泛, 包括各種規格及尺寸的 PCB。我們提供專業的技術支持及諮詢, 幫助客戶解決各種 PCB 問題。我們的 O- 服務, 為客戶提供一站式的 PCB 解決方案。

我們擁有豐富的 PCB 製造經驗, 為客戶提供高品質的 PCB 產品。我們的生產設備先進, 技術人員專業, 確保產品質量及交貨時間。我們的 PCB 產品, 廣泛應用於各種電子產品中。

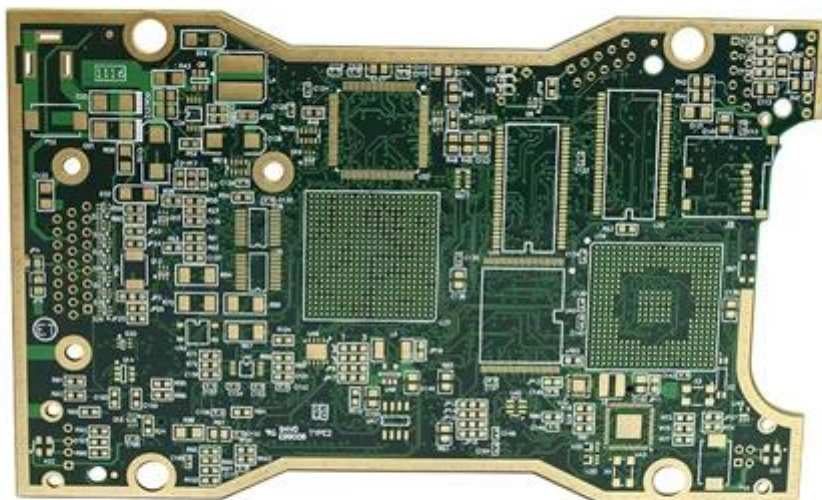
歡迎垂詢, 我們將竭誠為您服務。www.o-leading.com

地點	Guang Dong, China (中國)	產品	o-leading.
材料	FR-4, 銅箔	厚度	0.5oz-5oz.
厚度	0.2mm.	公差	0.2mm.
表面處理	銅, OSP, 鍍金 HASL.	尺寸	0.1-5mm.
塗層	LED, 鍍金, 鍍銀, 鍍銅	類型	各種 PCB
認證	ISO9001, UL, RoHS, SGS.	數量	Q / CTN. 10pcs-100pcs.
重量	0.01kg -5kg.	MOQ	10pcs.
規格	各種, 各種, 各種, 各種	公差	0.2mm.
價格	各種 PCB 各種 PCBA 各種	價格	\$0.1- \$ 10.
design 服務	各種 PCB 各種	數量	0.01m3-10m3.

O-LEADING
To Be Reliable, To Be Valuable



www.o-leading.com



www.o-leading.com





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







Test Report

No. SZXEC1900530401

Date: 30 Mar 2019

Page 1 of 6

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

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

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

Testing Period : 22 Mar 2019 - 30 Mar 2019

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 chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

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

Tina Fan
Approved Signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/terms-and-conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions. If any, the Company's sole responsibility is to the Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

For more information, please contact our sales representative. Please contact us at telephone: (86-755) 8307 1442 or email: CHN.Sales@sgs.com

SGS (Shanghai) Inspection & Certification Co., Ltd. (Shanghai Branch) 518120 | (86-755) 25328888 | (86-755) 83106190 | www.sgs.com or www.cn.sgs.com

中国·深圳·龙岗·龙岗区布吉街道430号工业路4楼SGS大厦 邮编: 518120 | (86-755) 25328888 | (86-755) 83106190 | sgs.china@sgs.com

Member of the SGS Group (SGS SA)



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"

Remarks :

- (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, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test item(s)	Limit	Unit	MDL	Q/Z
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	-	mg/kg	5	ND
Tribromobiphenyl	-	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	-	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	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/terms-and-conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions. If any, the Company's sole responsibility is to the Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

For more information, please contact our sales representative. Please contact us at telephone: (86-755) 8307 1442 or email: CHN.Sales@sgs.com

SGS (Shanghai) Inspection & Certification Co., Ltd. (Shanghai Branch) 518120 | (86-755) 25328888 | (86-755) 83106190 | www.sgs.com or www.cn.sgs.com

中国·深圳·龙岗·龙岗区布吉街道430号工业路4楼SGS大厦 邮编: 518120 | (86-755) 25328888 | (86-755) 83106190 | sgs.china@sgs.com

Member of the SGS Group (SGS SA)



ZPMV2.E490354 - WIRING, PRINTED - COMPONENT

Wiring, Printed - Component

See General Information for Wiring, Printed - Component

O-LEADING SUPPLY CHAIN (HK) CO LTD

E490354

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

Type	Cond Width		Cond Thk mic(mil)	SS/ DS/ DSO	Max		Max		Meets		C
	Min	Min			Area	Solder	Oper	Flame	UL796		
	mm(in)	mm(in)			Diam	Limits	Temp	Class	DSR		
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	-	-
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 printed wiring boards.											
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 printed wiring boards.											
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	▲	-
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	HB	▲
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

* - 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.

并不是所有出现在本数据库中的公司名称和产品都满足了UL 跟踪检验服务的要求。只有带有 UL 标志的产品，才应该被视为经过 UL 认证，并满足UL 跟踪检验服务的要求。注意查看产品上的标志。

UL 允许在线认证目录中所含材料的复制遵循以下条件：1.指南信息、装配、构造、设计、系统和/或认证（文件）必须在不篡改任何数据（或图纸）的情况下完整且无误导性地呈现。2.“经 UL 允许从在线认证目录转载”声明必须出现在所摘取材料的邻近位置。此外，转载材料必须包含以下格式的版权声明：“© 2019 UL LLC”

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



PCB 材料 規格

層數 : 1Layer-32layer.
 銅厚 : 1 / 3oz-12oz.
 線寬 / 線距 : 3.0mil / 3.0mil
 線寬 / 線距 : 4.0mil / 4.0mil
 孔徑 : 10 : 1.
 厚度 : 0.2mm-5.0mm.
 板面尺寸 (mm) : 635 * 1500mm
 最小線寬 : 4mil.
 最小孔徑 : +/- 3mil.
 BLIND / 埋孔 (All 孔) : 有
 VIA 通孔 (通孔, 盲孔) : 有
 材料 : FR-4, FR-4High TG.Halogen 無鹵, 有鹵, 銅箔厚度, 銅厚, 銅厚
 鍍層 : HASL, OSP, ENIG, HAL-LF, LMMersion 有, Immersion tin, 有, 有

SMT 材料 規格

PCB 材料 : FR-4, CEM-1, CEM-3, 銅箔 銅 板

銅 PCB 板 : 510x460mm

銅 PCB 板 : 50x50mm.

PCB 厚度 : 0.5mm-4.5mm

銅 箔 : 0.5-4mm.

銅 箔 銅 板 : 0201.

銅 箔 銅 板 銅 板 : 0603 銅 板

銅 箔 銅 板 銅 板 : 15mm

銅 箔 銅 板 : 0.3mm.

銅 BGA 銅 板 : 0.4mm.

銅 箔 銅 板 : +/- 0.03mm.