

O-leading

O-Leading PCB PCB PCB PCB EMS HDIPCB PCB PCB PCB

O

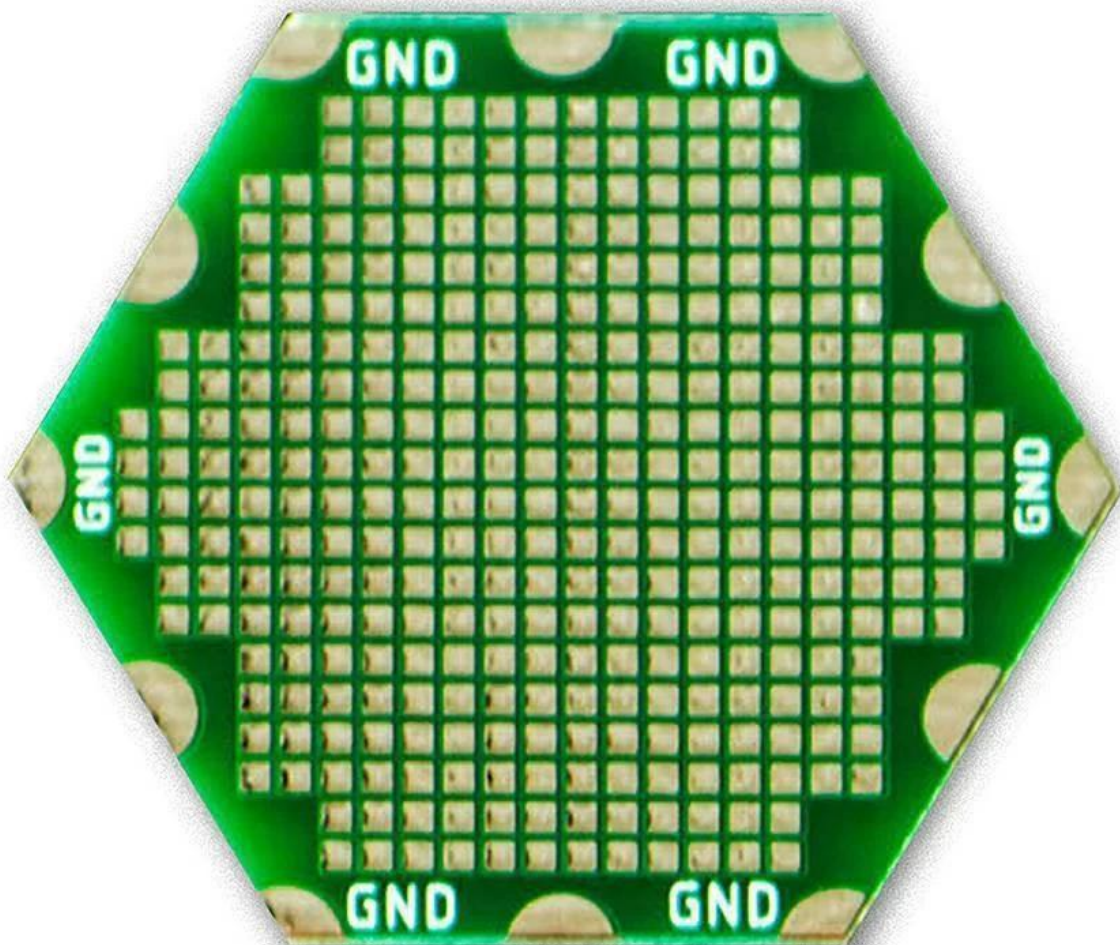
O-leading PCB&PCBA

PCB

H07R3x ST TS4990 1.2W STM32F0 MCU

8 CUI

MCU



11/11

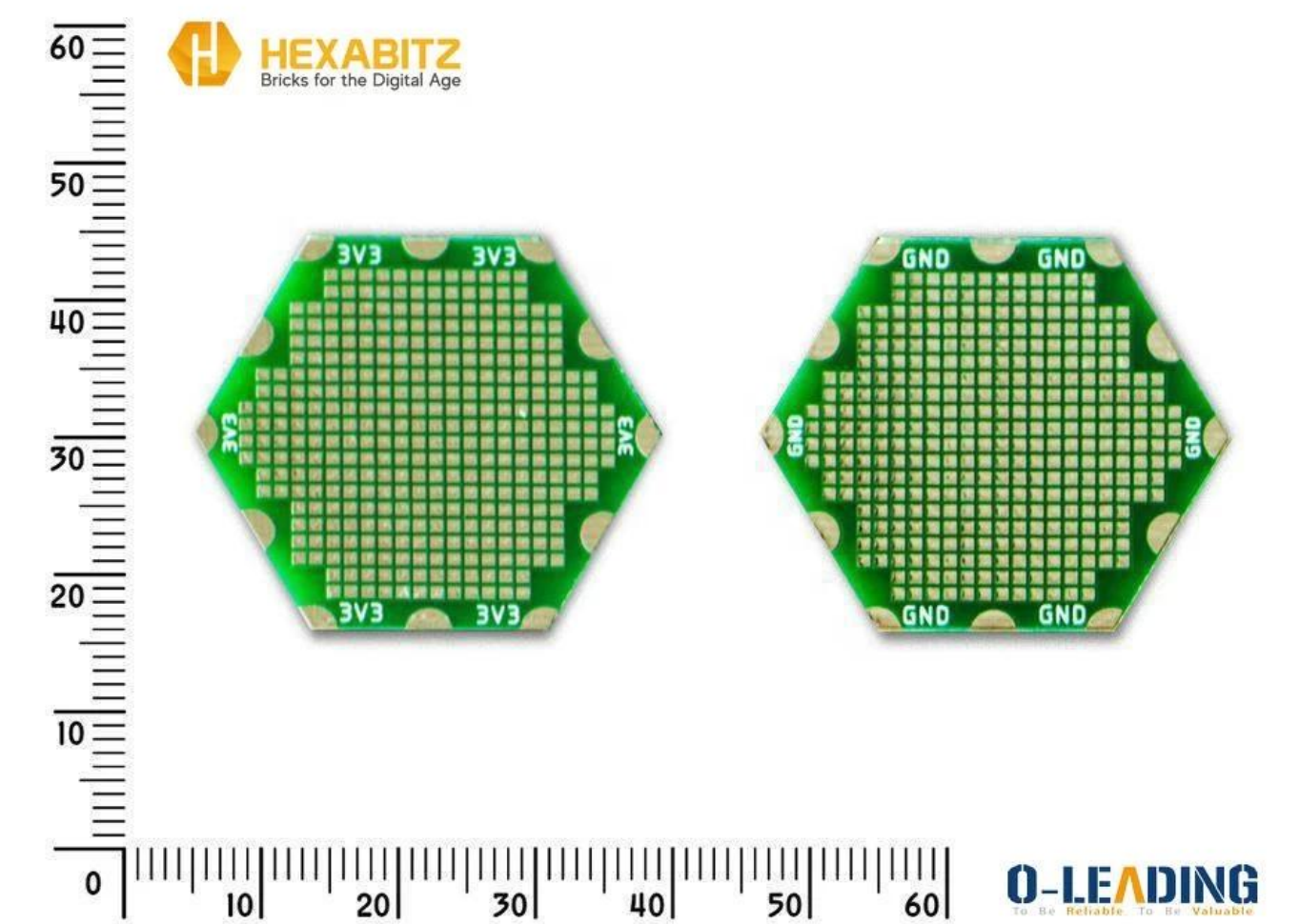
*50mm 1.27 mm 42x 42 SMT

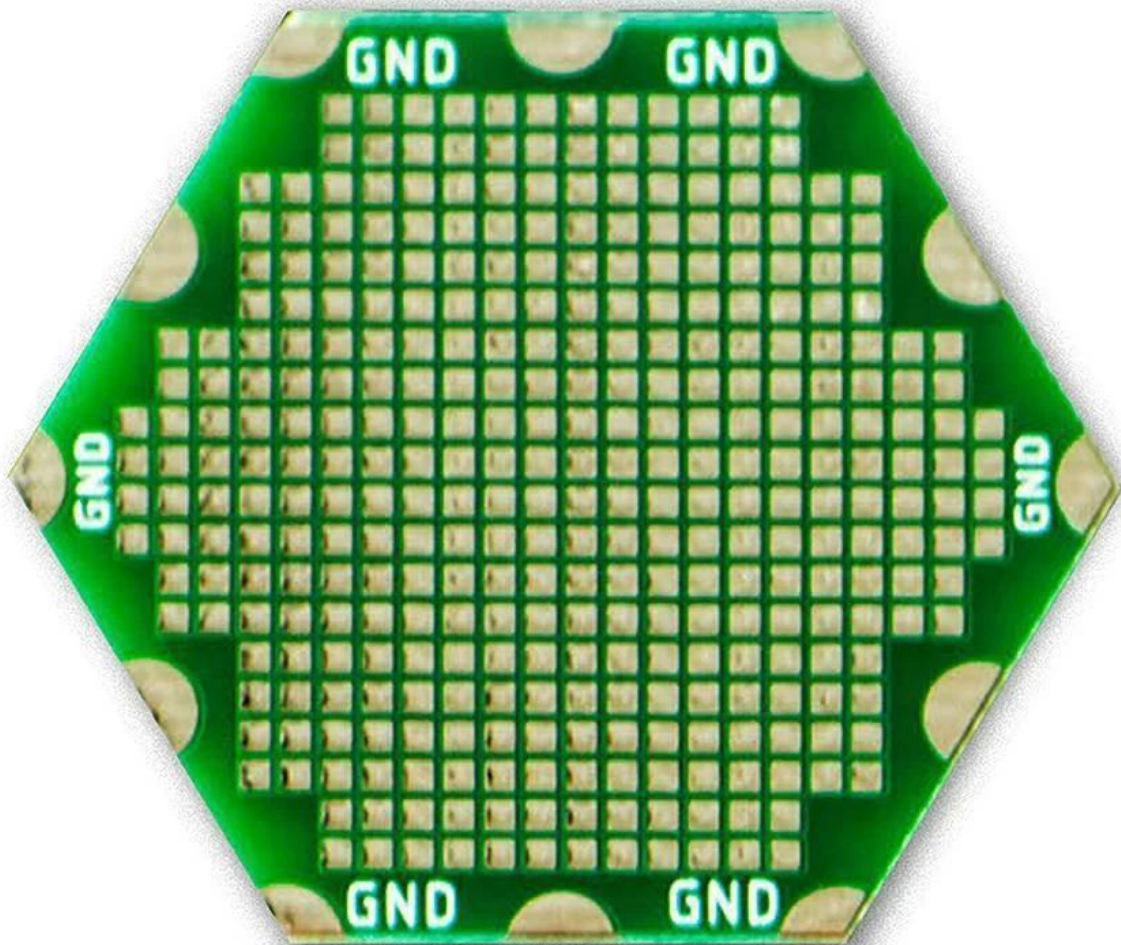
$$* \frac{V_{in}}{6} + 3.3V_{GND}$$

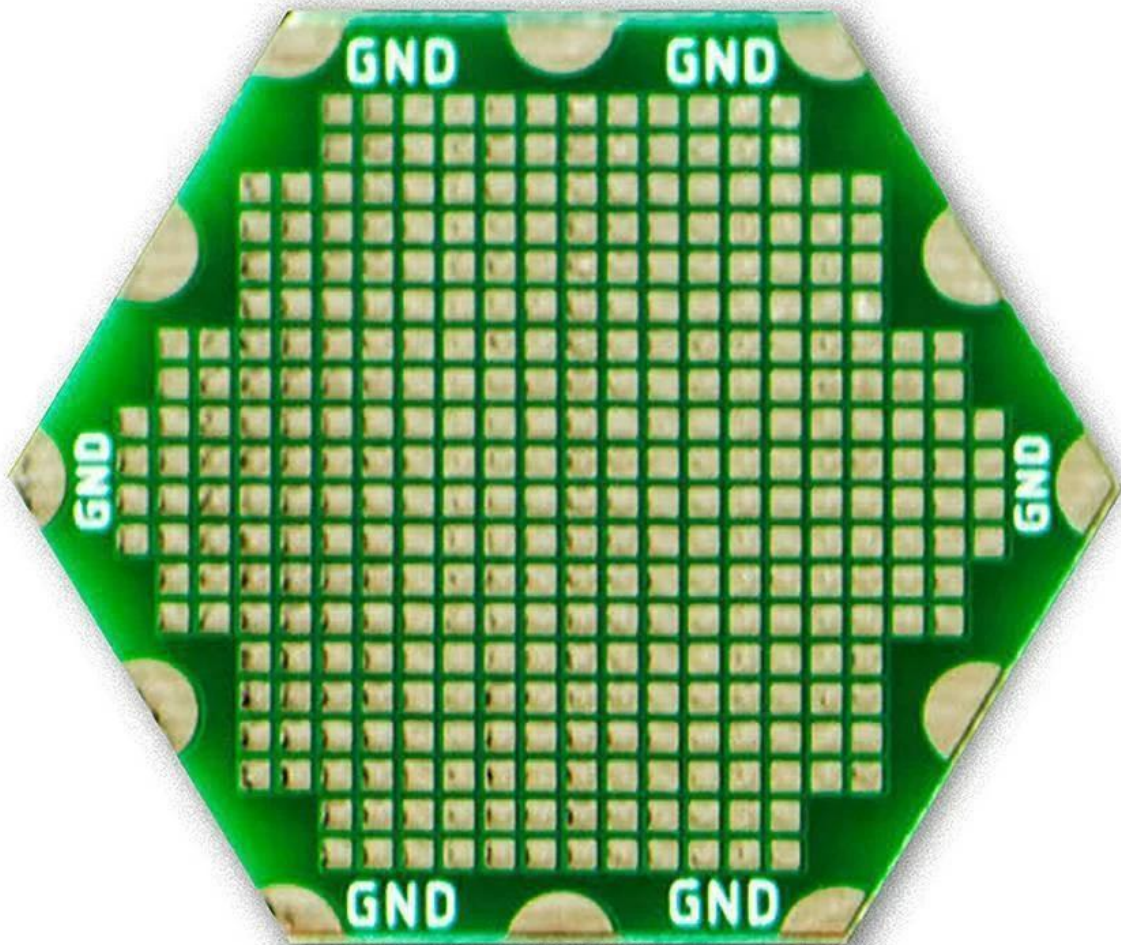
*6

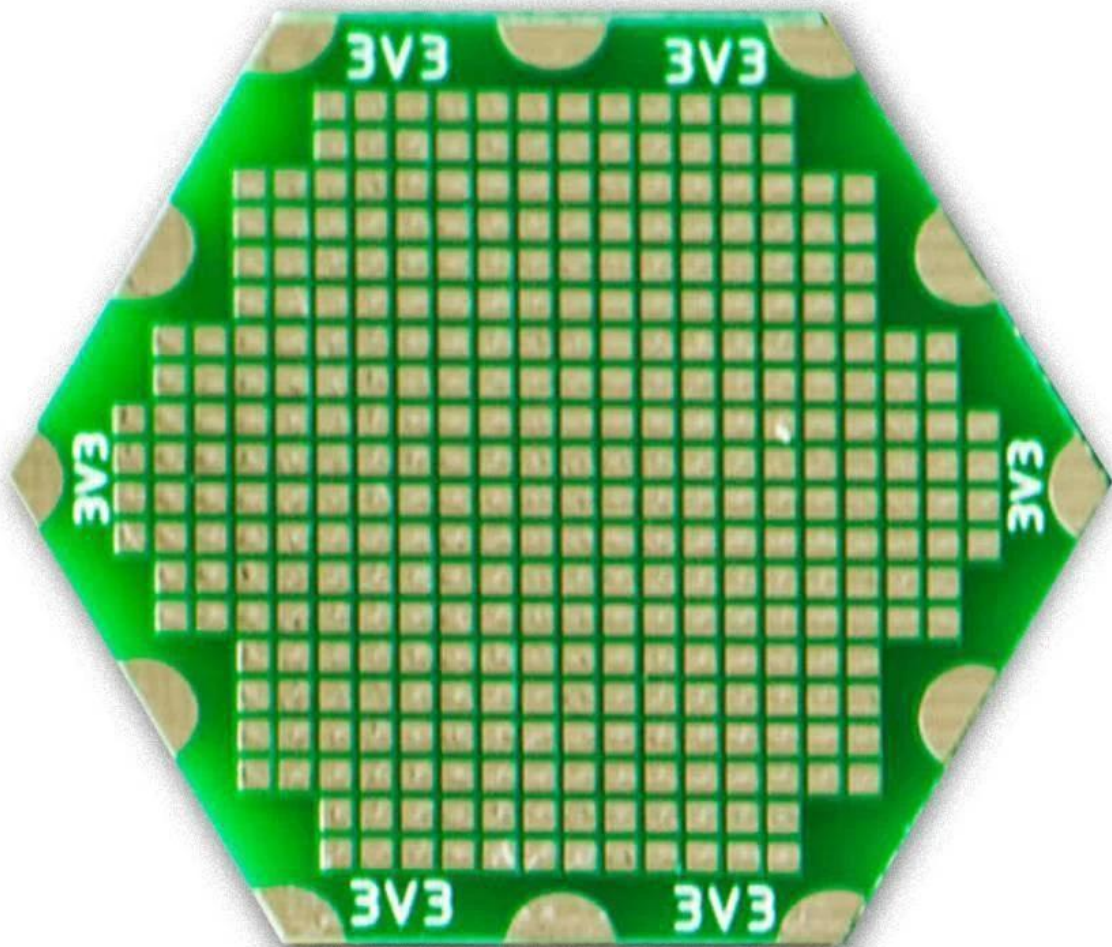
	□□□□
□□□	□□□
□□□□	30 mm □□□□□
□□□	7.8cm ^ 2
□□□	1 g

XXXXXXXXXX	XXXX
XXXXXX	ENIGXXXXXXXXHASL-LFXXXX













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



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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



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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	Edge			Area	Solder	Oper	Flame	UL796	T	
	mm(in)	mm(in)			Diam	Limits	Temp	Class	DSR	I	
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.

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PCB

PCB	
Layer	1Layer-32Layer
Weight	1 / 3oz-12oz
Thickness	3.0mil / 3.0mil
Thickness	4.0mil / 4.0mil
Drill	101
Drill	0.2mm5.0mm
Drill	635 * 1500mm
Drill	4mil
Plated	+/- 3mil
Blind / Buried Vias	All
Via Fill	
Material	FR-4FR-4high Tg
Material	HASLOSPENIGHAL-LF

SMT

PCB	FR-4CEM-1CEM-3
PCB	510x460mm
PCB	50x50mm
PCB	0.5mm4.5mm
Drill	0.54mm
Drill	0201
Drill	0603
Drill	15mm
Drill	0.3mm
DrillBGA	0.4mm
Drill	+/- 0.03mm

PCB

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



1. O

1.1
1.2
1.3
1.4
1.5
2. O-Leading
3. O-Leading

4. PCB□□PCBA□□□□□□□□□□□□□□□□

4.1 BOM

4.2 PCB

4.3 PCBとPCBA

4.4 实验结果

4.5

5. PCB

□□□□□→□□□□□□□□□→□□□□□□□→□□AOI→□□□□□□□→□□□□□□□□□□□□□□□□→□□□□→PTH→□□□□□□□→□□□□□□□□□□□→□□□□□□□□
 □→□□□□□□□□□→□□AOI→□□□□□□□→□□□□□□□□□□□→□□□□□□→□□□□□□□→E / T→□□□□□□□

6. HDI□□□□□□□□□□

00000000000000000000000000000000VCP000000000000LDI000

LDI

7. 0-□□□□□□□□□□□□□□□□□□□□

O-ENIGOSP-LF-HASL/

OSI-ENIG-OSP + ENIG-HDI-BGAPAD-0.3 mm-OSP OSP + ENIG-BGAPAD

8. FPC O-Leading SMT

O-Leading FPC 1 8 2000mm * 240mm SMT

9. PCB

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PCB;;
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10. PCB PWB FPC

PCB□□□□□□□□□□
PWB□Printed Wire Board□□□□□□□□□□□□□□□□
FPC□□□□□□□□□□□□□□□□

11. PCB

PCBの特性は、ガラス転移温度（Tg）と熱膨張係数（CTE）によって大きく影響を受けます。Tgは、材料が硬い状態から柔らかい状態に変化する温度であり、CTEは、材料が加熱されたときに膨張する割合を示します。PCBのTgは250°C以上であり、CTEは50ppm/K以下であることが望ましいです。

12. 0-leading PCB

O-leading PCB FPC PCB

13.

POLAR INSTRUMENTS SI6000 soft CITS 500s

