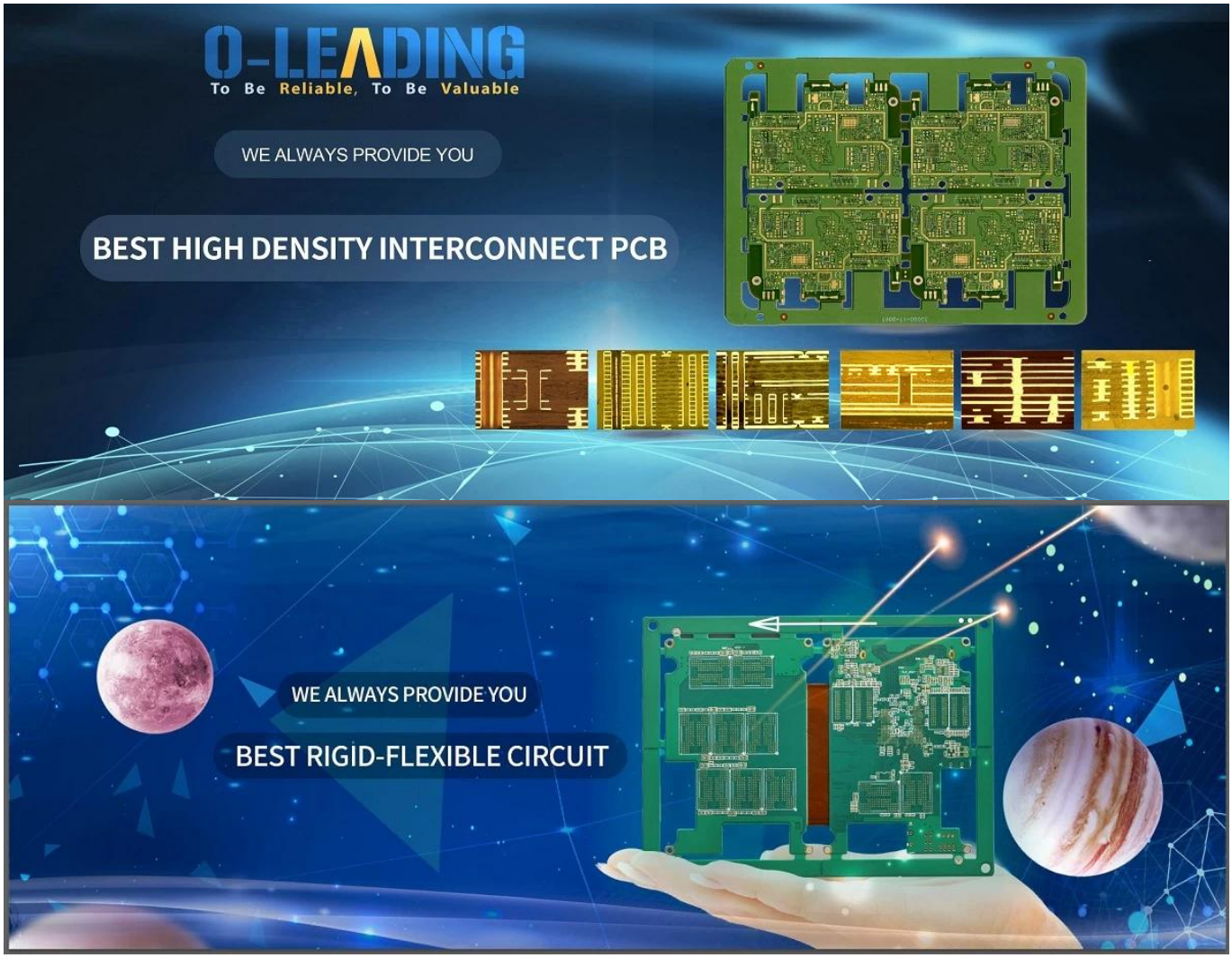
Bienvenido a O-Leaders

O-Leading se esfuerza por ser su socio de solución integral en la cadena de suministro de EMS, incluido el diseño de PCB, la fabricación de PCB y el ensamblaje de PCB. Ofrecemos algunas de las tecnologías de PCB más avanzadas, incluidas PCB HDI, PCB multicapa, PCB rígido-flexible. Soporte desde el prototipo de giro rápido hasta la producción media y masiva. (**PAGProveedor de PCB flexible rígido profesional para caja de ABS Raspberry Pi 4**)

En general, nuestros clientes globales están muy impresionados con nuestros servicios: respuesta rápida, precio competitivo y compromiso de calidad. Brindar un servicio técnico más valioso y una solución general es el camino a seguir para O-liderar.

Mirando hacia el futuro, O-Leaders se concentrará en la innovación y el desarrollo de la tecnología de fabricación de productos electrónicos como siempre, y hará esfuerzos persistentes en el servicio integral de PCB y PCBA para brindar servicios de primera clase y crear más valor para nuestros clientes.

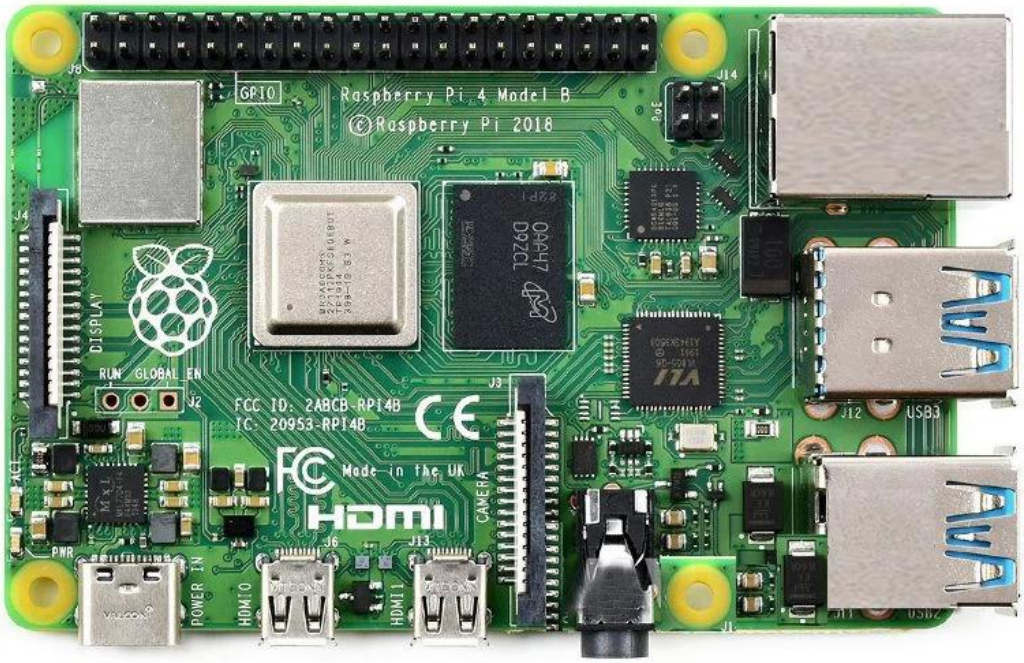
HAGA CLIC EN ESTOS PARA OBTENER MÁS INFORMACIÓN:**Fabricación de PCB de bajo costo Fabricación de OEM POE**



Descripción del producto

Raspberry Pi 4 8GB RAM

More Powerful Processor, Richer Multi-Media Capability, Faster Networking



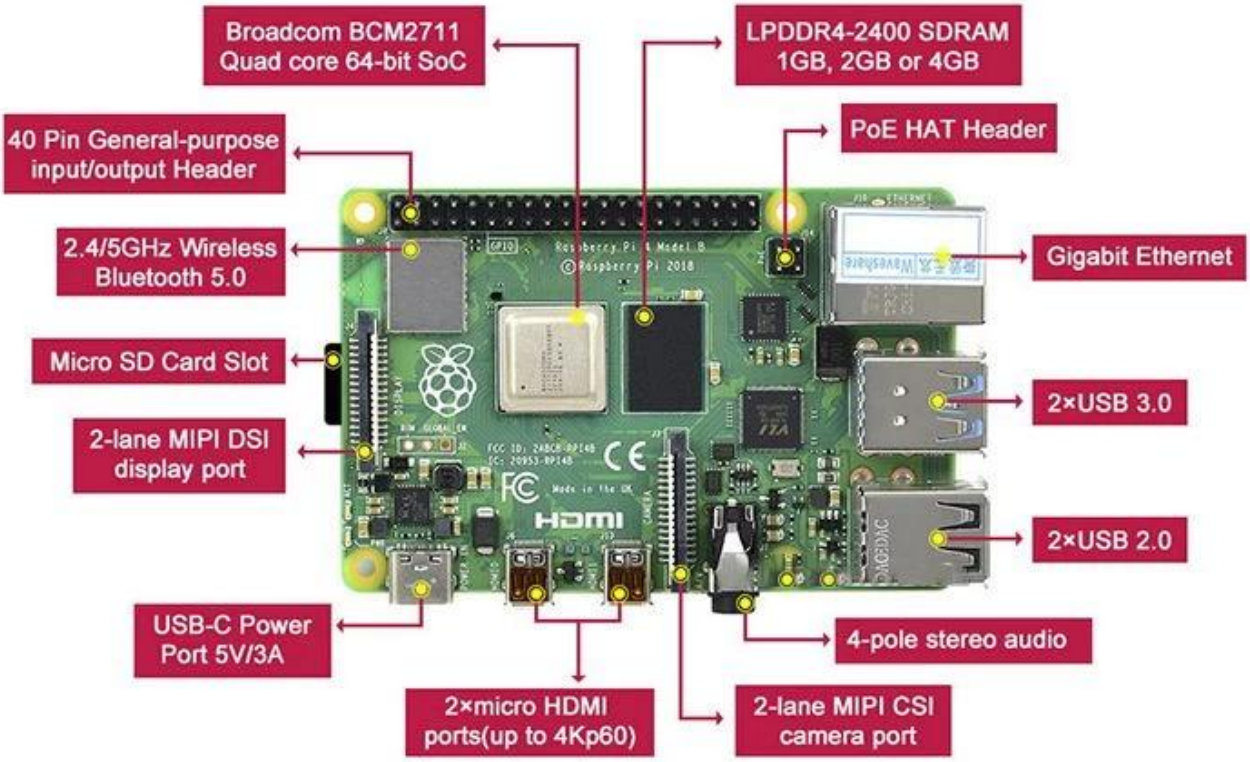
IMPROVEMENTS OF V1.2

1. In additional to the official USB Type-C cable, Pi 4B V1.2 now supports more other USB Type-C cables
2. Relocates the WLCSP SD card voltage switch, to protect the Pi 4B better
3. Optimizes silkscreen printing, to minimize the soldering and bridging in manufacturing process

* The Raspberry Pi 4 is optional, up to your choice.

Raspberry Pi 4 Completely Upgraded

More Powerful Processor, Richer Multi-Media Capability, Faster Networking



BCM2711B0 64-bit 1.5GHz Quad-core Processor	**Choice Of RAM** 2GB / 4GB / 8GB	**4K Dual HDMI** 4K High Resolution Dual Displays
Faster Networking Gigabit ETH, Bluetooth 5.0, Dual-band WiFi	**New USB3.0** 2xUSB3.0 + 2xUSB2.0	**USB-C Power** Upgraded Power Supply, More Powerful

BCM2711B0

64-Bit Quad-Core Processor

Cortex-A72 ARM Architecture	64-bit Quad-core	1.5GHz Frequency

Faster, more powerful CPU
Provides smooth experience like X86 desktop PC

4K Ultra High Definition

Dual Micro HDMI

Upgrade to dual micro HDMI instead of a full size HDMI
Dual displays, up to 60fps refreshing rate

Bluetooth 5.0 BLE

2.4G / 5G Dual-Band WIFI

Upgraded Bluetooth 5.0 BLE, better performance
Dual-band WIFI, along with the Gigabit Ethernet
Better connectivity, faster and more stable networking

New USB3.0 Ports

Faster Data Transmission

2xUSB 3.0 + 2xUSB 2.0
No more trouble when connecting with high speed devices

Raspberry Pi Versions Comparing

	ZERO	ZEROW/ WH	3A+	3B	3B+	4B
SOC	BCM2835		BCM2837B0			BCM2711B0
CPU	ARM11 Single-core 700MHz		ARM Cortex-A53 Quad-core (3B 1.2GHz, 3A+/3B+ 1.4GHz)			ARM Cortex-A72 Quad-core 1.5GHz
GPU	Broadcom VideoCore IV@400MHz					Broadcom VideoCore IV@500MHz
RAM	512MB		512MB	1GB		Choice of 2GB/4GB/8GB
USB	1x micro USB		1x USB2.0	4x USB2.0		2x USB2.0 + 2x USB3.0
HDMI	Micro HDMI		HDMI			Mini HDMI
Bluetooth	N/A	Bluetooth 4.1	Bluetooth 4.2	Bluetooth 4.1	Bluetooth 4.2	Bluetooth 5.0
WiFi	N/A	802.11 b/g/n	3B: 802.11 b/g/n, others: 802.11 b/g/n/ac 2.4GHz/5GHz dual band			
Ethernet	N/A		100Mbps		300Mbps (USB)	1000Mbps
PoE	N/A				Yes	
Power Input	Micro USB (5V 2.5A)					USB Type-C (5V 3A)
Dimensions	65 × 30 x 5 mm		65 × 56 mm	85 x 56 x 17 mm		

2GB/4GB/8GB WHICH SHOULD I CHOOSE?

2GB	Suitable for running lots apps while GUI is not required, e.g. robot controller and smart car.
4GB	Suitable for graphic task or Internet application, e.g. watching video as normal PC, or deploying a network server.
8GB	Suitable for complicate multi-tasking, heavy server workloads e.g. dual display 4K video playing, AI depth vision learning.

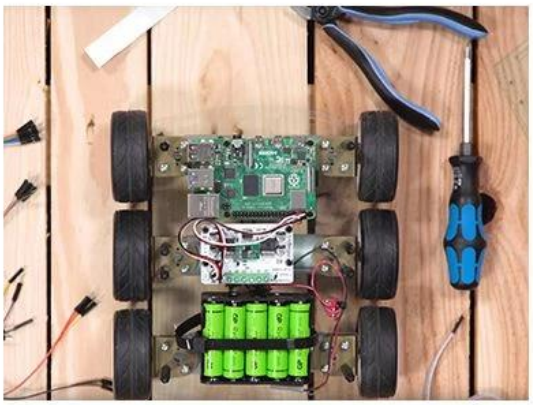
The total operational performance of Pi 4B is more than triple the 3B+'s, even the 2GB variant. Larger RAM has minor impact on performance if the RAM is just enough, therefore, we should choose the RAM capacity that best fits the target project. It is unnecessary to always choose the largest RAM.

Applications

Your Tiny, Dual-Display, Desktop Computer

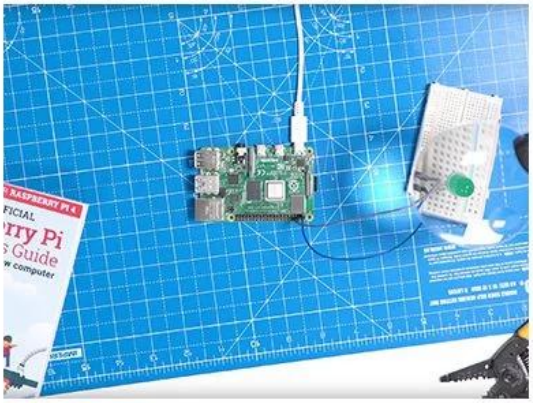
…And Robot Brains, Smart Home Hub, Media Center, Game Console...

tiny dual-display desktop (balance work and life)



Raspberry Pi smart robot (try the AI magic)

Raspberry Pi game console (relive retro games)



Study and development (DIY endless possibilities)

Nuestro equipo

O-LEADING CUSTOMER

To be RELIABLE

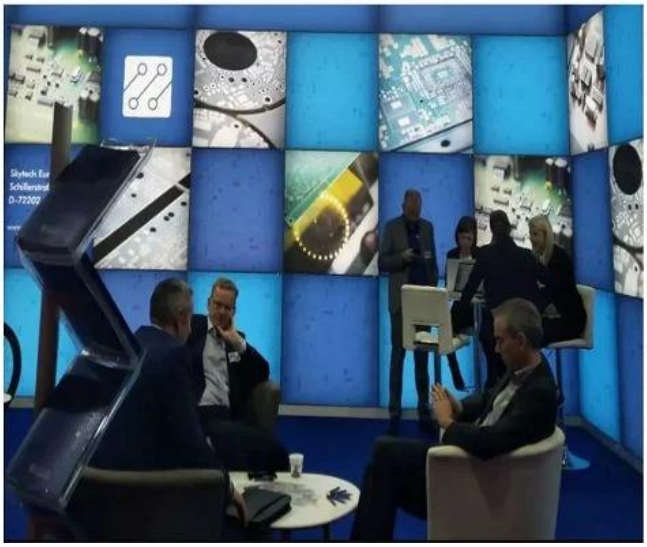
Quality first ,

Customer supreme ,

Scientifically management ,

Striving for famous brand

THE CUSTOMER IS KING



To be VALUABLE

Science and technology keeps head ,

Put people first,

Be precise and practical,

contribute sincerely

Factory PCB

Automatic vacuum press machine

Drilling Machine

Pattern Plating Machine

Scrubbing Machine

Developing Machine

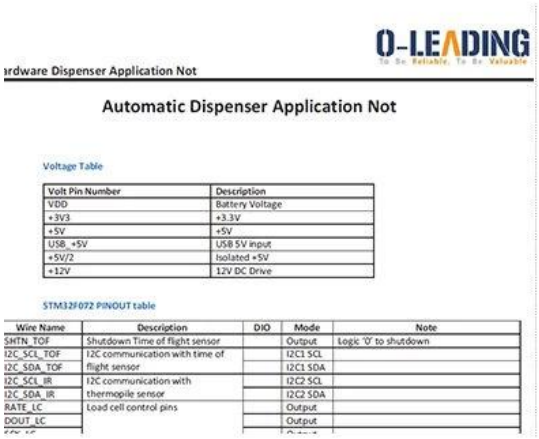
Routing Machine

High-speed flying probe machine

E-test Machine

Factory SMT

HOW O-LEADING MAKE A PROJECT FOR YOU



O-LEADING
To Be Reliable, To Be Valuable

ardware Dispenser Application Not

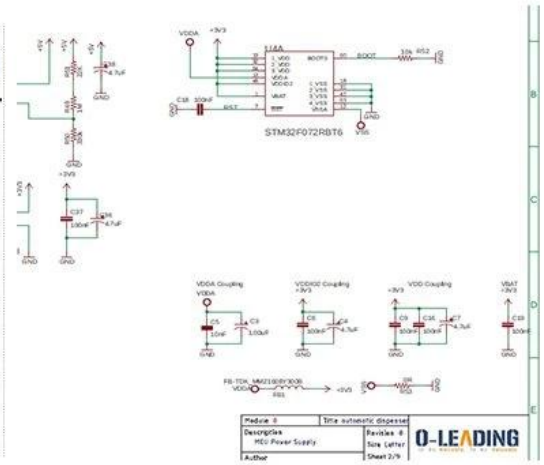
Automatic Dispenser Application Not

Voltage Table

Volt Pin Number	Description
VDD	Battery Voltage
+3V3	+3.3V
+5V	+5V
USB_+5V	USB 5V input
+5V/2	Isolated +5V
+12V	12V DC Drive

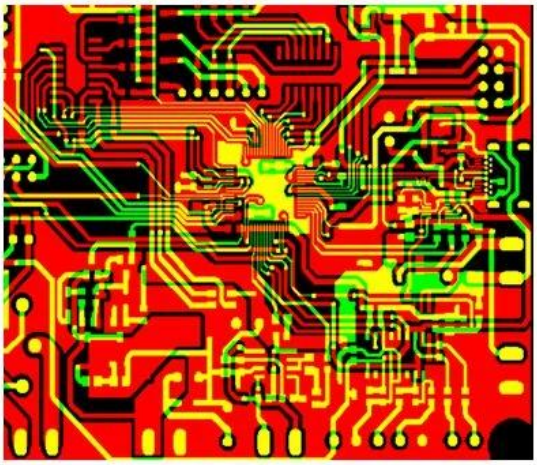
STM32F072 PINOUT table

Wire Name	Description	DIO	Mode	Note
SHTN_TOF	Shutdown Time of flight sensor		Output	Logic '0' to shutdown
I2C_SCL_TOF	I2C communication with time of		I2C1 SCL	
I2C_SDA_TOF	flight sensor		I2C1 SDA	
I2C_SCL_IR	I2C communication with		I2C2 SCL	
I2C_SDA_IR	thermopile sensor		I2C2 SDA	
RATE_LC	Load cell control pins		Output	
DOUT_LC			Output	

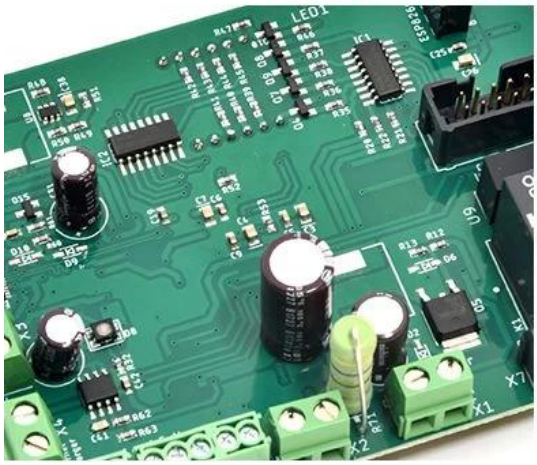


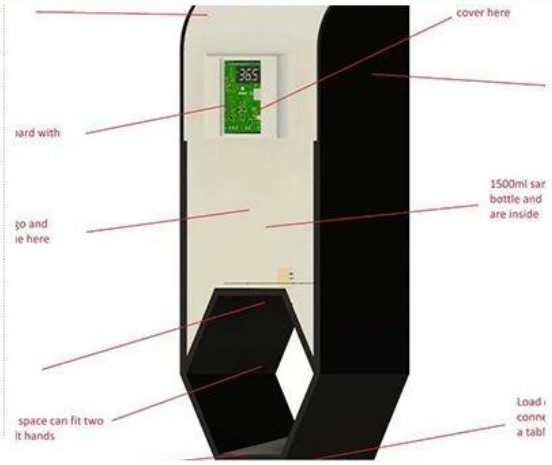
HARDWARE schematics

PCB PRODUCTION COMPONNETS SOURCING



Qty	Value	Device	Parts	Description
4	AK500/2	AK500/2	X1, X2,	CONNECTOR
1	AK500/3	AK500/3	X7	CONNECTOR
1	1241148	MA04-2	SV2	
1	PPPC04	MA04-2	SV1	8 POS , 4*2 FEMALE PIN HEADE
1	ML10	ML10	SV4	HARTING
1	8MHZ	XTALL_CSTCE8M	X5	CSTCE8M00G52-R0 RESONATOR
1	0R	R-0603	R53	Thick Film Resistors - SMD 0603
2	10R	R-0603	R12, R5	Thick Film Resistors - SMD 0603
8	100R	R-0603	R1, R2,	Thick Film Resistors - SMD 0603
1	270R	R-0805	R15	Thick Film Resistors - SMD 0605
1	330R	R-0603	R11	Thick Film Resistors - SMD 0603
9	680R	R-0603	R20, R3	Thick Film Resistors - SMD 0603
17	1k	R-0603	R9, R10	Thick Film Resistors - SMD 0603
2	4.7k	R-0603	R17, R6	Thick Film Resistors - SMD 0603
2	5.1k	R-0603	R18, R1	Thick Film Resistors - SMD 0603
9	10k	R-0603	R16, R3	Thick Film Resistors - SMD 0603





PCB Assembly MECHANICAL DESIGN

合作伙伴 Customers

Skyworth 创维
H&T 和布泰 H&T INTELLIGENT CONTROL
dongweikeji 东威科技
美的 Midea
STAR-NET 星网锐捷
FORYOU ADAYO 华阳集团
EDIFIER
Cultraview 金锐显
3nod 三诺
T&W
TCL
AcBel 康舒科技 ACBEL POLYTECH INC.
Honeywell
Schneider Electric
ZTE 中兴
EMERSON
BYD
PHILIPS
TE connectivity
VIDEOTON

O-LEADING CUSTOMER REVIEW

CUSTOMER VOICE IS EXTREMELY IMPORTANT TO US

订单编号: 49335463501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

High quality usb power pcb , pcba manufacturer

Fancy has done an exllent job, whenever we write, she answered us within 1 second, O-leading is very perfe ct with fast delivery, fast logistics, the most important thing is good quality, good packaging, thank you!

回复该评论

oem customized rohs pcb drawing schematic s...

We received the boards, the quality is very good,the price is very reasonable, Fancy is very nice & smart & e xperienced, the logistics is super fast, I will come to see more in the future.

回复该评论

订单编号: 49298271001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

perfect product,perfect PCB supplier!

回复该评论

oem customized rohs pcb drawing schematic s...

Very good and professional PCB product as usual!

回复该评论

Strip LED Aluminum FR-4 lighting PCB board 9...

High quality, fast delivery, good service, competitve price, lucky and happy to purchase from O-leading!

回复该评论

订单编号: 49224411001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

This is a very difficult PCB design, but we are lucky to find O-leading to support the PCB for us,very good to p PCB supplier!

universal FR4 Multilayer PCB washing machine...

Fancy gives us very excellent service, very professional and experienced, O-leading is the best one of our su ppliers, very happy to work with them

订单编号: 49024962001024670

United States

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

High quality Keyboard pcb & pcba Factory SMT...

Top quality,it's the right choice to choose O-leading to make the PCB & PCBA

回复该评论

订单编号: 40938622501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

Professional Printed Circuit Board Manufactur...

Very high quality PCB products, O-leading is the best PCB supplier that we have ever worked with,

订单编号: 44068794501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

High TG180 FR-4 Circuit HDI PCB 94V0 Board ...

We bought two batches, one by DHL the other one by air, good quality and fast delivery!

LISTEN TO CUSTOMER VOICE

订单编号: 40903347501024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

Strip LED Aluminum FR-4 lighting PCB board 9...

Very fast delivery! Fantastic, good job!!!

Professional Printed Circuit Board Manufactur...

Very happy to great support from O-leading,they are not only professional on the PCB, but also provide goo d PCBA products, very good supplier!!!

hot sale rigid-flexible PCB with 0.2mm BGA an...

very professional supplier

High Quality custom FPCB/Flex PCB/FPC/Flexi...

Good product

OEM ODM PCBA Bluetooth Wireless Marking G...

high soldering quality

Electronic parts haptic pcba Circuit Board asse...

Very Good product

订单编号: 36919647001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

AML-S802 Quad-core Android embedded boar...

Good products

Fast delivery low cost pcb fabrication O-leadin...

Good supplier

Lidar IR Sensor board pcba(H08R6x)

perfect product

Customized PCBA design PCB design

perfect

Audio Speaker and Headphone Jack (H07R3x)

High quality, good

订单编号: 37378603001024670

供应商服务: 非常满意 (5 stars) 按时发货: 非常满意 (5 stars)

Raspberry pi 0 Zero Raspberry Pi Zero Pi W ver...

Fantastic products!!

double layer pcb with red S/M and LF-HASL su...

Good!

half hole pcb, half hole pcb module, half hole m...

Top half hole pcb supplier, very perfect goods

High Quality custom FPCB/Flex PCB/FPC/Flexi...

this rigid-flexible pcb quality is perfect!

Electronic parts haptic pcba Circuit Board asse...

Very satisfied with O-leading products and quality,especially their on-time delivery, fantastic!

Be kind to your client, because he has many choices, but he chooses you instead.

Certificaciones

O-LEADING TRAINING

Keep LEARNING

There's a phrase in Buddhism, 'Beginner's mind.'

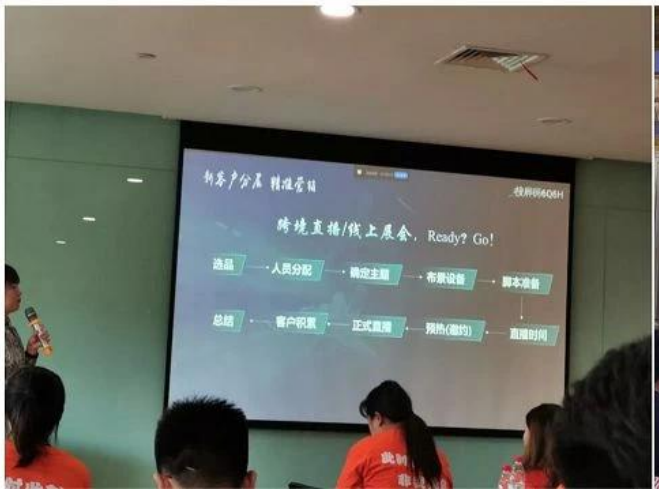
It's wonderful to have a beginner's mind

WE HAVE A DREAM

Keep RUNNING

I would like to live to study and not study to live.

----Bacon



CICC CERTIFICATION
嘉泰认证

CICC INSPECTION CERTIFICATION

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 18118Q10347R0S

We hereby certify that

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

Credit No: 61691591-000-07-18-7

Registration Add: FLAT/RM 1205 12/F TAI SANG BANK BUILDING 130-132 DES VOEUS ROAD CENTRAL HK

Business Add: 1313, Floor 13, Fortune Building, Danshui Town, Huiyang District, Huizhou, Guangdong, China

Has implemented and maintains a **Quality Management System**

Which fulfils the requirements of the following standards

GB/T19001-2016 idt ISO9001:2015

Scope of certification

Sales of printed circuit boards

Initial Issuance period: February 27, 2018

Renewal date: April 22, 2019

This certificate is valid during: April 22, 2019 ~ February 26, 2021

This certificate is invalid without CICC qualified label in the following period

First supervision and audit		Second supervision and audit	Qualified mark

CICC CERTIFICATION IAF CNAS

CICC CERTIFICATION
嘉泰认证

CICC INSPECTION CERTIFICATION

质量管理体系认证证书

证书号：18118Q10347R0S

兹证明

诚领供应链（香港）有限公司

统一社会信用代码：61691591-000-07-18-7

注册地址：香港中環德輔道中130-132號大生銀行大廈1205室

经营地址：广东惠州惠阳淡水南亨西路财富大厦13楼1313

建立的质量管理体系符合

GB/T19001-2016 idt ISO9001:2015 质量标准适用条款的要求

认证范围

印刷线路板的销售

初次获证日期：2018年02月27日

换证日期：2019年04月22日

证书有效期：自2019年04月22日至2021年02月26日

在下列期限内，未经CICC贴防合格标贴，本证书无效

第一次监审		第二次监审	贴标处

本证书认证范围不包括未获得有效的国家规定的相关行政许可、资质许可的产品/服务范围；

本证书通过CICC定期监督审核保持，与年度《保持认证通知书》共同方为有效；

本证书信息可在国家认监委网站：www.cnca.gov.cn及CICC网站www.cicc-cqc.com查询。

CICC CERTIFICATION IAF CNAS

SGS

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

Tina Fan
Approved Signatory

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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
| SGS Bldg. No.2, Jianghai Industrial Park, No.68, Jihua Road, Bantian, Longgang District, Shenzhen, China 518129 | t (86 - 755) 25328888 | f (86 - 755) 83106190 | www.sgsgroup.com.cn
中国 · 深圳 · 龙岗区坂田吉华路430号江灏工业园4栋SGS大楼 邮编: 518129 | t (86 - 755) 25328888 | f (86 - 755) 83106190 | e sgs.china@sgs.com
Member of the SGS Group (SGS SA)

SGS

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, IEC62321-5:2013, 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	-	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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UL Product iQ™

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 Min mm(in)	Cond Width Min Edge mm(in)	Cond Thk mic(mil)	SS/ DS/ DSO	Max Area Diam mm(in)	Solder Limits C	Solder Limits sec	Max Oper Temp C	Flame Class	Meets UL796 DSR	CTI
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	*

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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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Capacidad de procesamiento

Capacidades de producción de PCB	
Recuento de capas	1 capa-32 capa
Espesor de cobre terminado	1 / 3oz-12oz
Mínimo ancho de línea / espaciado interno	3,0 mil / 3,0 mil
Mínimo ancho de línea / espaciado externo	4.0 mil / 4.0 mil
Relación de aspecto máxima	10: 1
Espesor del tablero	0,2 mm a 5,0 mm
Tamaño máximo del panel (pulgadas)	635 * 1500 mm
Tamaño mínimo del orificio perforado	4 mil
Tolerancia de orificio revestido	+/- 3 mil
Vias BIind / Enterradas (Tipos AII)	SÍ
Vía relleno (conductivo, no conductivo)	SÍ
Material de base	FR-4, FR-4high Tg. Material libre de halógenos, Rogers, Base de aluminio,Poliamida, cobre pesado
Acabados superficiales	HASL, OSP, ENIG, HAL-LF, plata de inmersión,Estaño de inmersión, Dedos de oro, Tinta de carbón

Capacidades de producción SMT

Material de PCB	FR-4, CEM-1, CEM-3, tablero a base de aluminio, FPC
Tamaño máximo de PCB	510x1500mm
Tamaño mínimo de PCB	50x50mm
Espesor de PCB	0,5 mm a 4,5 mm
Espesor del tablero	0,5-4 mm
Tamaño mínimo de los componentes	0201
Componente de tamaño de chip estándar	0603 y mayor
Altura máxima del componente	15 mm
Paso mínimo de plomo	0,3 mm
Paso mínimo de bola BGA	0,4 mm
Precisión de colocación	+/- 0,03 mm

Empaquetado y entrega

Shipping service

DHL WORLDWIDE EXPRESS TNT FedEx Express UPS

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

Preguntas más frecuentes

1. ¿Cómo asegura O-Leading la calidad?
Nuestro alto estándar de calidad se logra con lo siguiente.
1.1 El proceso está estrictamente controlado bajo las normas ISO 9001: 2008.
1.2 Uso extensivo de software en la gestión del proceso de producción
1.3 Equipos y herramientas de prueba de última generación. P.ej. Flying Probe, inspección de rayos X, AOI (inspector óptico automatizado) e ICT (pruebas en circuito).
1.4 Equipo de aseguramiento de la calidad dedicado con proceso de análisis de casos de fallas
1.5 Formación y educación continua del personal

2. ¿Cómo mantiene O-Leading su precio competitivo?
Durante la última década, los precios de muchas materias primas (por ejemplo, cobre, productos químicos) se han duplicado, triplicado o cuadriplicado; La moneda china RMB se había apreciado un 31% con respecto al dólar estadounidense; Y nuestro costo laboral también aumentó significativamente.
Sin embargo, O-Leading ha mantenido nuestros precios estables. Esto se debe enteramente a nuestras innovaciones para reducir costos, evitar desperdicios y mejorar la eficiencia. Nuestros precios son muy competitivos en la industria al mismo nivel de calidad.
Creemos en una asociación de beneficio mutuo con nuestros clientes. Nuestra asociación será de beneficio mutuo si podemos ofrecerle una ventaja sobre el costo y la calidad.

3. ¿Qué tipo de tableros puede procesar O-Leading?
Placas comunes FR4, High-TG y libres de halógenos, Rogers, Arlon, Telfon, placas a base de aluminio / cobre, PI, etc.

4. ¿Qué datos se necesitan para la producción de PCB y PCBA?
4.1 Lista de materiales (BOM) con designadores de referencia: descripción del componente, nombre del fabricante y número de pieza.
4.2 Archivos Gerber de PCB.
4.3 Plano de fabricación de PCB y plano de montaje de PCBA.
4.4 Procedimientos de prueba.
4.5 Cualquier restricción mecánica, como los requisitos de altura de montaje.

5. ¿Cuál es el flujo de proceso típico para PCB multicapa?
Corte de material → Película seca interna → Grabado interno → AOI interno → Multi-bond → Apilado de capas Presionando → Perforación → PTH → Revestimiento de paneles → Película seca externa → Revestimiento de patrón → Grabado externo → AOI externo → Máscara de soldadura → Marca de componente → Acabado de superficie → Enrutamiento → E / T → Inspección visual.

6. ¿Cuáles son los equipos clave para la fabricación de HDI?
La lista de equipos clave es la siguiente: máquina de perforación láser, máquina de prensado, línea VCP, máquina de exposición automática, LDI, etc.
Los equipos que tenemos son los mejores en la industria, las máquinas de perforación láser son de Mitsubishi e Hitachi, las máquinas LDI son de Screen (Japón), las máquinas de exposición automática también son de Hitachi, todas ellas hacen que podamos cumplir con los requisitos técnicos del cliente.

7. ¿Cuántos tipos de acabado de superficie se pueden realizar con O-lead?
O-the leader tiene la serie completa de acabados superficiales, tales como: ENIG, OSP, LF-HASL, chapado en oro (suave / duro), plata de inmersión, estaño, chapado en plata, estañado por inmersión, tinta de carbón y etc. OSP, ENIG, OSP + ENIG de uso común en el HDI, generalmente recomendamos que utilice un cliente o OSP OSP + ENIG si el tamaño de BGA PAD es inferior a 0,3 mm.

8. ¿Cuál es su capacidad para FPC? ¿O-Leading también puede proporcionar servicio SMT?
O-Leading puede fabricar FPC de una sola capa a 8 capas, el tamaño del panel de trabajo puede ser tan grande como 2000 mm * 240 mm, encuentre los detalles en la página "Capacidad flexible"
También proporcionamos un servicio integral de SMT al cliente.

9. ¿Cuáles son los principales factores que afectarán el precio de los PCB?
Material;
Acabado de superficie;
Dificultad tecnológica;
Diferentes criterios de calidad;
Características de PCB;
Términos de pago;
Diferentes países fabricantes.

10. ¿Cuál es la definición de PCB, PWB y FPC y cuál es la diferencia?
PCB es la abreviatura de placa de circuito impreso;
PWB es la abreviatura de Printed Wire Board, con el mismo significado que Printed Circuit Board;
FPC es la abreviatura de Tablero impreso flexible.

11. ¿Qué factores deben tenerse en cuenta al elegir el material para una placa PCB?
Se deben considerar los siguientes factores cuando elegimos el material para PCB:
El valor de Tg del material debe ser mayor que la temperatura de operación;

El material de bajo CTE tiene un buen rendimiento de estabilidad térmica;
Buen rendimiento de resistencia térmica: normalmente se requiere que los PCB resistan 250 ℃ durante al menos 50 segundos.
Buena planitud; Teniendo en cuenta las propiedades eléctricas, se utiliza material de baja pérdida / alta permitividad en PCB de alta frecuencia; Sustrato de fibra de vidrio de poliimida utilizado para PCB flexible; El núcleo de metal se utiliza cuando el producto tiene un requisito estricto de disipación de calor.

12. ¿Cuáles son las ventajas de la placa de circuito impreso rígido-flexible de O-Leader?
El PCB rígido-flexible de O-leading tiene los caracteres de FPC y PCB, por lo que se puede utilizar en algunos productos especiales. Una parte es flexible mientras que la otra parte rígida, puede ayudar a ahorrar espacio interior del producto, reducir el volumen del producto y mejorar el rendimiento.

13. ¿Cómo se hace el cálculo de la impedancia?
El sistema de control de impedancia se realiza utilizando algunos cupones de prueba, el equipo SI6000 soft y el CITS 500s de POLAR INSTRUMENTS.
El equipo mide la impedancia en un cupón de configuración de pista representativa del cual el cliente nos ha dado un valor y tolerancia determinados.