

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

CUSTOMER PART NO. : _____

MODEL NO. : _____ 0Q-6105

PART NO. : _____ OLMU25Q2-6105A1T1-XX-1

MODEL NAME: _____ QI2.2 wireless charger

REVISION: _____ A1.0

DATE: _____ 2025-12-1

APPROVED SIGNATURES

--	--	--



- ☐ 联宝电子股份有限公司
☒ 东莞联宝光电科技有限公司
☐ 深圳联骅电子科技有限公司
☐ LinkCom USA, Inc.
☐ 其他

(Taiwan Headquarter)

5F., No.127, Ln. 235, Baoqiao Rd., Xindian Dist, New Taipei City 231 ,Taiwan(R.O.C.)

Tel: (886) 2-8919-1380

Fax: (886) 2-8919-1370

E-mail: sales@linkcom.com.tw

(China Plant)

Technology Industrial Park Chi-Shi Town Dong Guan City China

Tel: (86-769) 8678-6368

Fax: (86-769) 8678-8988

E-mail: sales@linkcom.com.tw

Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

Product Specification

产品规格书

Product name/产品名称: QI2.2 wireless charger

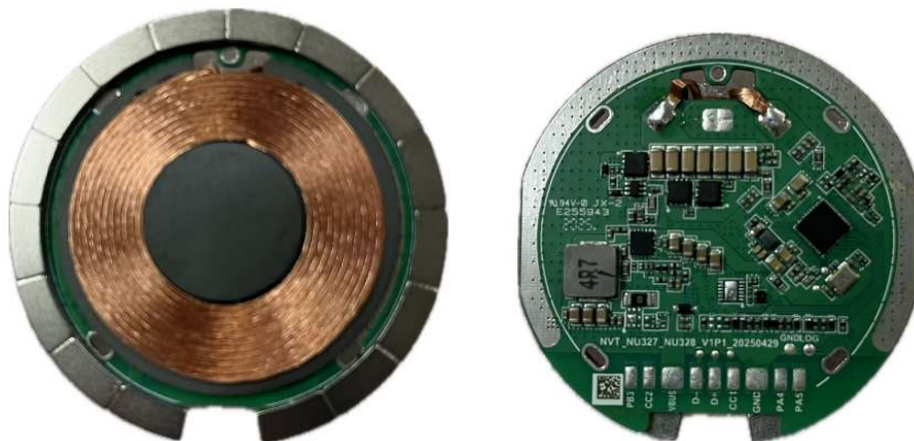
Model No/ 产品型号: OQ-6105

File number /文件编号:

Revision/版本号: A1.0

Date/日期: 2025-12-1

产品图



APPROVED BY 批准	CHECKED BY 审核	DESIGNED BY 制作

Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

目录

Reversion History/更新记录.....	4
1. Scope/概述	5
2. Product Characteristic / 产品特点	5
3. Performance Parameter/性能参数	5
4. Safety Control/安全机制	5
5. Reliability Requirements/可靠性要求	8
6. Environmental characteristic/环境特性	8
7. Execution Standards/执行标准	9
8. Photo of Product/产品照片	9
9. Module/模块	9
10. Attentions/使用注意事项	11
11. Weight/重量	11
12. Packaging/包装	11
13. Statement/声明	13



Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

Reversion History/更新记录

Revision	Date	Changes
A1.0	2025-12-1	New release

Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

1. Scope/概述

OQ-6105 MPP TX module support Qi 2.2 MPP/BPP/ PPDE protocols. It can support PD inputs and is compatible with input voltages of 5V/9V/15V. It can support 25W and 15W charging power for MPP RX device, and 7.5W fast charging power for Apple non-MPP phones, and 5W charging for BPP RX device.

OQ-6105 MPP TX 模块支持 Qi 2.2 MPP/BPP/ PPDE 协议. 该模块支持 PD 输入, 兼容 5V/9V/15V 的输入电压. 它能为 MPP RX 设备提供 25W 和 15W 的充电功率, 为 Apple 非 MPP 手机提供 7.5W 的快速充电功率, 并为 BPP RX 设备提供 5W 的充电功率.

2. Product Characteristic / 产品特点

- ◆ Comply with original Apple MPP module standard.
符合原厂苹果 MPP 模块标准尺寸
- ◆ Qi2.2 certification standard
符合 Qi2.2 认证标准

3. Performance Parameter/性能参数

Item	Parameter
Input Power	USB PD with 5V/3A 9V/3A 15V/2.4A
Output Power	25W MAX
Standby power	350mW REF
System Efficiency	83% REF at 15V input
Protocol	BPP+MPP+PPDE (Qi 2.2)
Frequency	MPP:360KHz
Coil Type	MPP, 7.4uH @ 360kHz
Protection	OVP / UVP / OCP / OTP / OSP
FOD	Mate Q/ Analog Ping / MPLA/ ΔPloss
Audio noise/噪音	15cm distance less than 30dB
Nominal force value	7-9N
Check sum	cs6F61

4. Safety Control/安全机制

4.1 Short Circuit Protection/短路保护

In the case of short-circuit at the receiver output, the transmitter stop output.

Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

When removed the receiver or short circuit, the transmitter will resume normal operation.

在接收端输出短路的情况下, 发射端停止输出. 当移除接收或者短路解除时, 发射端将恢复正常工作.

4.2 Over Current Protection/过流保护

When the receiver load exceeds the rated value(110% - 130%), the overcurrent protection is triggered and the transmitter stops working. When removed the receiver, the transmitter will resume normal operation.

当接收器负载>额定值的110% - 130%时, 触发过电流保护, 发射端停止工作, 当接收器被移除时, 发射端将恢复正常工作.

4.3 OVP过压保护 / UVP欠压保护

Item	Parameter
OVP / 5V	5.8V
UVP / 5V	4.5V (Reduce Power) / 4.2V (Shutdown)
OVP / 9V	10.0V
UVP / 9V	8.0V (Reduce Power) / 7.8V (Shutdown)
OVP / 15V	16.0V
UVP / 15V	14.0V (Reduce Power) / 13.5V (Shutdown)

4.4 Foreign Object Detect (FOD) (1 RMB coin as the standard.) /

异物检测 (以一元RMB硬币为标准)

4.4.1 When placing the coin onto the center of the product under no-load condition, the transmitter detected foreign object and reports an error, then stops working. Removes the foreign object to resume normal operation .

空载时放置产品中心, 发射端检测到异物并报错, 停止工作, 移除异物可恢复正常工作。

4.4.2 When placing the load and coin together onto the center of the product, an error is reported within 10s (time varies with different mobile phone models) and the output is closed. Removes the foreign object to resume normal operation.

负载和硬币一起放置产品中心时, 10秒 (不同手机型号时间不同) 之内报错并关闭输出, 移除异物可恢复正常工作。

4.5 Temperature Protection/温度保护

4.5.1 OTP / UTP Protection 过温/低温保护

Item	Parameter
UTP Shutdown	-20°C
UTP Recovery	-10°C
OTP Shutdown	73°C
OTP Recovery	48°C

Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

4.5.2 Within 6 minutes after power contact 电源接通后6分钟内

Temperature	Max Output Power
-20°C ~ 53°C	25W
54°C	23W
55°C	21W
56°C	19W
57°C	18W
58°C	17W
59°C	16W
60°C	15W
61°C	14W
62°C	13W
63°C	12W
64°C	11W
65°C	10W
66°C	9W
67°C	8W
68°C	7W
69°C	6W
70°C	5W
71°C	4W
72°C	3W

4.5.3 After 6 minutes after power contact 电源接通后6分钟后

Temperature	Max Output Power
-20°C ~ 50°C	25W
51°C	23W
52°C	21W
53°C	19W
54°C	18W
55°C	17W
56°C	16W
57°C	15W
58°C	14W
59°C	13W
60°C	12W

Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

61°C	11W
62°C	10W
63°C	9W
64°C	8W
65°C	7W
66°C	6W
67°C	5W
68°C	4W
69°C ~ 72°C	3W

5. Reliability Requirements/可靠性要求

Reliability Test/可靠性测试

Please refer to Link Com' s reliability standard and reliability test Report.

请参考联宝标准《可靠性测试规范》与《可靠性测试报告》

6. Environmental characteristic/环境特性

6.1 Operating Temperature and Relative Humidity/操作温度和相对湿度-10°C~40°C / RH10~90%

6.2 Storage Temperature and Relative Humidity/储存温度和相对湿度-20°C~70°C / RH5~95%

6.2.1 Avoid direct exposure to the storage environment, and do a good temperature and humidity control, room temperature should be controlled at -20°C~70°C, relative humidity RH5~ 95%. In order to maintain good functionality of the product, please observe the following storage conditions.

储存环境应避免产品受阳光直接照射, 并作好温湿度管控, 室温宜控制在-20°C~70°C / RH5~95%. 为使产品维持良好之功能性, 请确实遵守以下保存条件.

6.2.2 Keep away from high humidity ,salt spray or oil spray. 储存需避开高湿, 盐雾或油雾之环境.

6.2.3 When storing, the storage environment temperature should be avoided too drastic, and the humidity should be avoided too high or too low. High humidity and large temperature difference tend to cause water Vapor condensation phenomenon, too low humidity easily cause the high electrostatic strength. Therefore, humidity will cause the electron ionization, and eventually cause the product functional abnormalities.

储存时应避免储存环境温度变化过于激烈, 同时避免湿度过高或过低. 湿度过高和温差过大容

Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

易导致水蒸气凝结现象,湿度过低容易导致静电强度高. 故湿度会造成电子游離, 最终导致产品功能性异常.

7. Execution Standards/执行标准

7.1 EMC Standards 电磁兼容标准

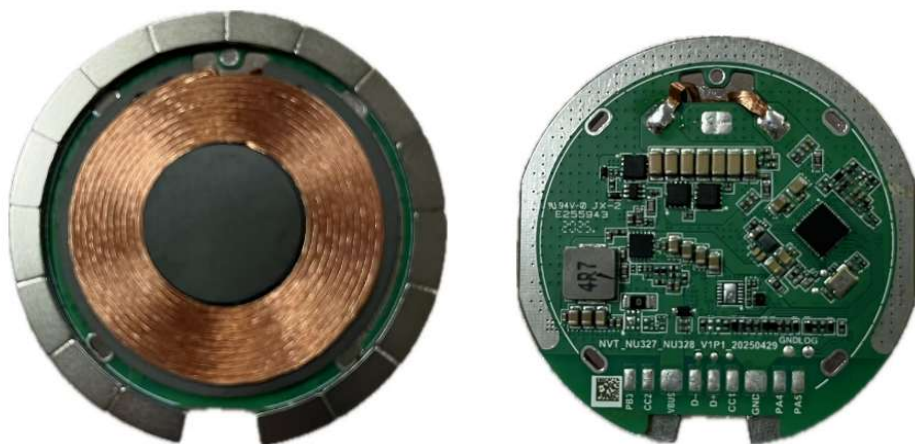
EN55032

Note: EMI testing with enclosure and actual receiver equipment required

备注: EMI 测试需待外壳及 RX 待测物实际测

7.2 WPC Qi2.2 Standards/ WPC Qi2.2 标准

8. Photo of Product/产品照片



9. Module/模块

9.1 Product design proposal/产品设计要求

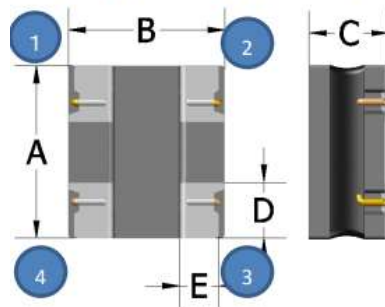
According to the standardization of Qi, Please note the following:

为了要符合Qi的标准, 以下几点需注意:

1. The distance between Coil with PCBA and other metal components is Min: 4.50mm.
线圈, PCBA和其他金属部件之间的最小距离: 4.50mm.
2. The surface distance between Tx Coil and Rx Coil is 2 - 4mm.
输出线圈和接收线圈之间的表面距离为2 - 4mm.
3. In order to pass the EMI test, it is recommended to plus a common mode inductor and then connect to the PCBA. The recommended specifications of common mode inductors are as follows, which can be adjusted according to actual conditions:
为了通过EMI测试, 建议建议加装一个共模电感器, 然后连接到印刷电路板组件 (PCBA) 上. 共模电感器的推荐规格如下, 可根据实际情况进行调整:

Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

PACKING DIMENSIONS (mm)



Marking



5045	Dimensions
A	5.0 ± 0.3
B	4.5 ± 0.3
C	2.5 Max.
D	1.6 ± 0.3
E	1.4 ± 0.3

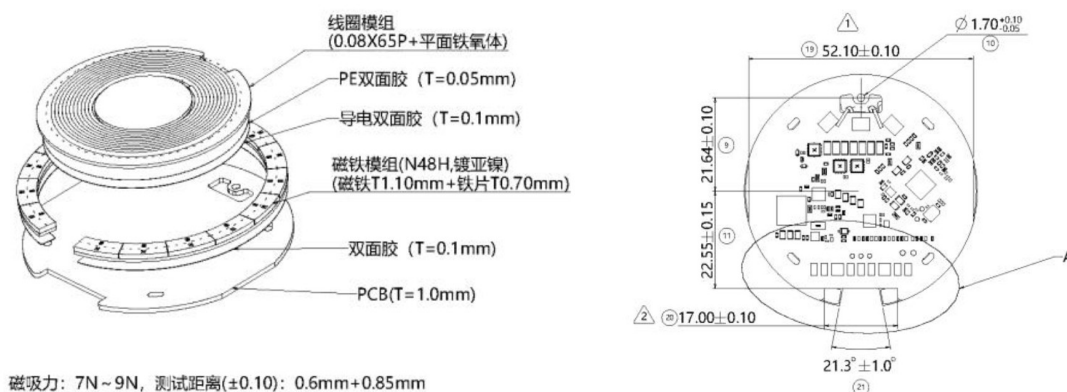
Electrical Characteristics

P/N	Z(Ω) Common Mode	DCR (Ω)	IDC (A)	Rated Voltage	Insulation Resistance	Withstand Voltage
	Impedance at 100MHz	±40%	Max.	Vdc (V)Typ.	IR (MΩ) Min.	Vdc (V)Typ.
PCN5045A-102	1000 Typ.	0.024	3.0	50	10	125

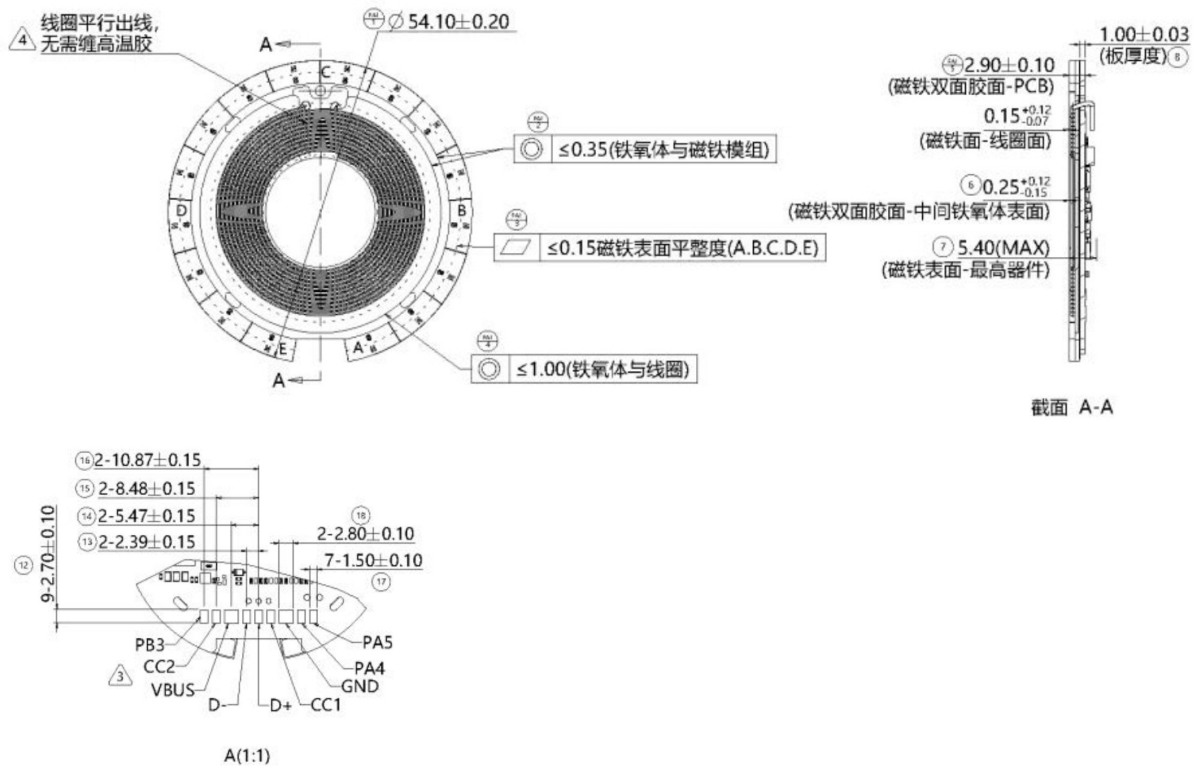
9.2 Port Functional Illustration/端口功能说明

Items	Parameter
VBUS/GND	Power input
D-	USB D- PIN or I2C SDA for FW update
D+	USB D+ PIN or I2C SCL for FW update
CC1/CC2	USB PD pin
PB3	LED control
PA5	Custom IO or alternative I2C SCL interface for data query
PA4	Custom IO or alternative I2C SDA interface for data query

9.3 PCBA Size/ PCBA 尺寸



Model No.	OQ-6105	Model Name	Qi2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX



10. Attentions/使用注意事项

- 10.1 Please use the correct rated AC Adapter, to ensure the normal function.
请使用配置的正确规格火牛, 保证功能正常.
- 10.2 This product is only suitable for general consumer product application installation and is not suitable for any automotive or aviation product application.
本产品仅适用于一般消费性产品应用安装, 不适用于任何汽车或航空产品应用。

11. Weight/重量

24.2±2 g

12. Packaging/包装

毛重: 7.0kg 净重: 4.84kg

Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

Carton Packing Method

2025.12.01

Outer Carton: 200 pcs size: W 415 x D 305 x H 138mm
 A=A (boxes) NW: kg GW: kg
 Inner Carton: pcs size: W x D x H mm
 (boxes) NW: kg GW: kg
 隔板: 400x290mm(1PC/ 内箱) A=A

PRODUCT



1托盘装20pcs, 放好产品之后, 放一块垫棉; 一箱10个托盘共200pcs产品; 将10盘装满产品的托盘放入中箱内之后, 顶部放一块平板板。

weight:

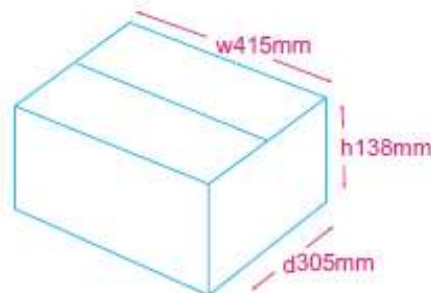
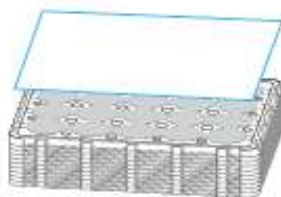
OUTER

叠放10层共200PCS

shipping mark: 4 faces

line:

pcs: 200



INNER

shipping mark: faces

line:

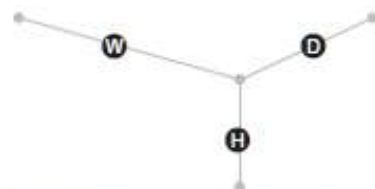
pcs:

Inner Material:

Outer Material: A=A

Designer: Bruce

Coordinate:



Please make sure to get our approval of following issues before you start mass production of the cartons:

- printing of the shipping mark (ink color, printing date etc.)
- weight and size of the carton
- fitting between product & Inner carton, Inner carton & outer carton

Model No.	OQ-6105	Model Name	QI2.2 wireless charger
Part No.	OLMU25Q2-6105A1T1-XX-1	Size	Φ54.1±0.2 * 5.4mm MAX

13. Statement/声明

All rights reserved by LinkCom Manufacturing Co., Ltd. for all of this specification for approval. About warranty, please refer to LinkCom company warranty policy.
