



SPECIFICATIONS

CUSTOMER	:	CDE021
SAMPLE CODE	:	S05D00062-0L
MASS PRODUCTION CODE	:	P05D00062-0L
SAMPLE VERSION	:	01
SPECIFICATIONS EDITION	:	001
DRAWING NO. (Ver.)	:	LMD-P05D00062-0L (Ver.001)
PACKAGING NO. (Ver.)	:	-

Customer Approved

Date:

Approved	Checked	Designer
廖志豪 Rex Liao	張慶源 Yuan Chang	陳宗淇 Howard Chen

- Preliminary specification for design input
- Specification for sample approval



POWERTIP TECH. CORP.

Headquarters: No.8, 6 th Road, Taichung Industrial Park, Taichung, Taiwan 台中市 407 工業區六路 8 號	TEL: 886-4-2355-8168 FAX: 886-4-2355-8166	E-mail: sales@powertip.com.tw Http://www.powertip.com.tw
---	--	---

History of Version

Date (mm / dd / yyyy)	Ver.	Edi.	Description	Page	Design by
07/09/2018	01	001	New Drawing	-	Howard

Total: 9 Page

Contents

1. SPECIFICATIONS

1.1 PCB Specifications

2. PCB STRUCTURE

2.1 Interface Pin Description

Appendix : PCB Drawing



1. SPECIFICATIONS

1.1 PCB Specifications

Item	Standard Value
Outline Dimension	70.0 (L) * 37.0 (W) * 4.5 (H)
ROHS	THIS PRODUCT CONFORMS THE ROHS OF PTC Detail information please refer website : http://www.powertip.com.tw/news_detail.php?Key=1&cID=1

Note : For detailed information please refer to PCB drawing

2 PCB STRUCTURE

2.1 Interface Pin Description

CN1 For LCM

Pin#	Name	DESCRIPTION
1	GND	Power ground.
2	VDD	Power for Digital Circuit.
3	VDD	Power for Digital Circuit.
4	VCC	Power For LED backlight.
5	VCC	Power For LED backlight.
6	PWM	Shutdown & Dimming control input for backlight. Do not allow this pin to float. "Hi" =100%, "Low" = 0%.
7	GND	Power ground.
8	R0	Red Data.
9	R1	Red Data.
10	R2	Red Data.
11	R3	Red Data.
12	GND	Power ground.
13	R4	Red Data.
14	R5	Red Data.
15	R6	Red Data.
16	R7	Red Data.
17	GND	Power ground.
18	G0	Green Data.
19	G1	Green Data.
20	G2	Green Data.
21	G3	Green Data.
22	GND	Power ground.
23	G4	Green Data.
24	G5	Green Data.
25	G6	Green Data.
26	G7	Green Data.

Pin#	Name	DESCRIPTION
27	GND	Power ground.
28	B0	Blue Data.
29	B1	Blue Data.
30	B2	Blue Data.
31	B3	Blue Data.
32	GND	Power ground.
33	B4	Blue Data.
34	B5	Blue Data.
35	B6	Blue Data.
36	B7	Blue Data.
37	GND	Power ground.
38	HS	Line synchronization signal. Horizontal Sync Input.
39	VS	Frame synchronization signal. Vertical Sync Input.
40	GND	Power ground.
41	DE	Display enable pin from controller. Data Input Enable.
42	GND	Power ground.
43	DCLK	Sample clock. Data will be latched at the falling edge of DCLK.
44	GND	Power ground.
45	CS(NC) / ID1	No Function./ ID[4:1]These pins select LCM type.
46	SDIN(NC) / ID2	No Function./ ID[4:1]These pins select LCM type.
47	SCK(NC) / ID3	No Function ./ ID[4:1]These pins select LCM type.
48	DISPLAY CONTROL / ID4	Display Enable(Hi Active)./ ID[4:1]These pins select LCM type.
49	/RESET	Global Reset (Low Active).
50	GND	Power ground.

CN2 For LVDS

Pin#	Name	DESCRIPTION
1	NC	No Connect.
2	VCC	Power supply for Digital Circuit. (+3.3V)
3	VCC	Power supply for Digital Circuit. (+3.3V)
4	NC	No Connect.
5	NC	No Connect.
6	NC	No Connect.
7	NC	No Connect.
8	RA_N	-LVDS differential data input (R2~R7,G2)
9	RA_P	+LVDS differential data input (R2~R7,G2).
10	VSS	Power ground.
11	RB_N	-LVDS differential data input (G3~G7,B2,B3)
12	RB_P	+LVDS differential data input (G3~G7,B2,B3)
13	VSS	Power ground.
14	RC_N	-LVDS differential data input (B4~B7,HSYNC,VSYNC)
15	RC_P	+LVDS differential data input (B4~B7,HSYNC,VSYNC)
16	VSS	Power ground.
17	RD_N	-LVDS differential data input (R0,R1,G0,G1,B0,B1)
18	RD_P	+LVDS differential data input (R0,R1,G0,G1,B0,B1)
19	VSS	Power ground.
20	RCLK_N	-LVDS differential clock input.
21	RCLK_P	+LVDS differential clock input.
22	VSS	Power ground.
23	VSS	Power ground.
24	VSS	Power ground.
25	VSS	Power ground.
26	NC	Not Connect
27	BL_PWM	PWM for Backlight brightness control. Active :Hi
28	DISP	
29	NC	Not Connect
30	NC	Not Connect

Pin#	Name	DESCRIPTION
31	V5V	Power supply for Analog Circuit.(+5.0V)
32	V5V	Power supply for Analog Circuit.(+5.0V)
33	V5V	Power supply for Analog Circuit.(+5.0V)
34	VSS	Power ground.
35	NC	Not Connect
36	TPVDD	Power supply for Touch Panel. (+3.3V)
37	SCL(TP)	I ² C serial Clock.(For CTP)
38	SDA(TP)	I ² C serial Data. (For CTP)
39	INT(TP)	Indicate coordinate data ready. (For CTP)
40	RESET(TP)	TP Reset (Low Active).(For CTP)

CN3 For T/P

Pin No.	Symbol	Function
1	VSS	Power ground.
2	TPVDD	Power Supply Voltage (3.3V)
3	SCL(TP)	I2C Clock
4	SDA(TP)	I2C Data
5	INT(TP)	The interrupt the CTP to the Host
6	RESET(TP)	RESET

J1 For Micro USB

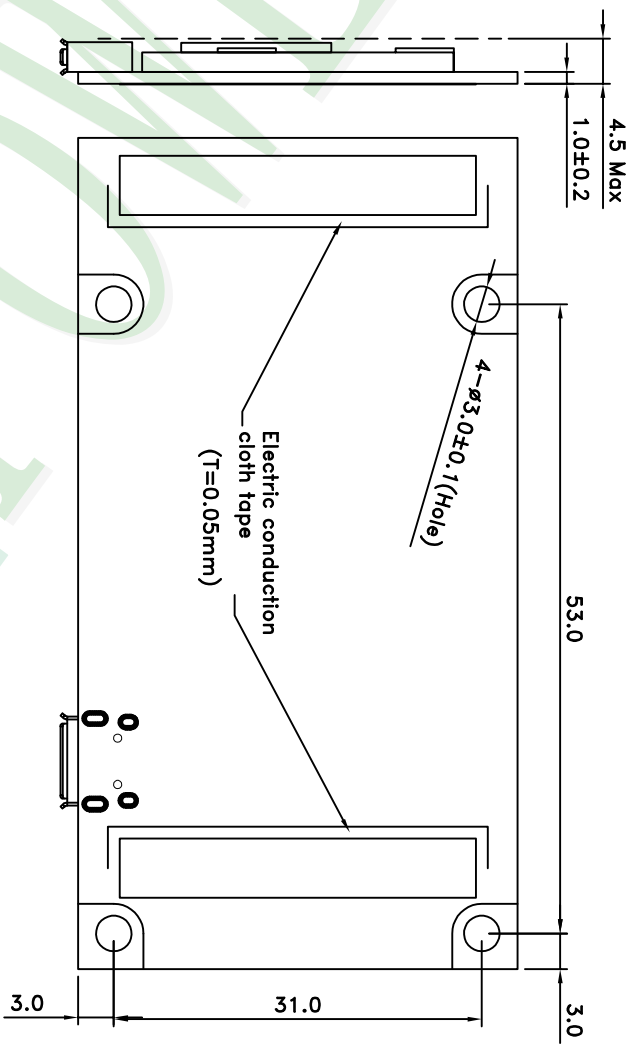
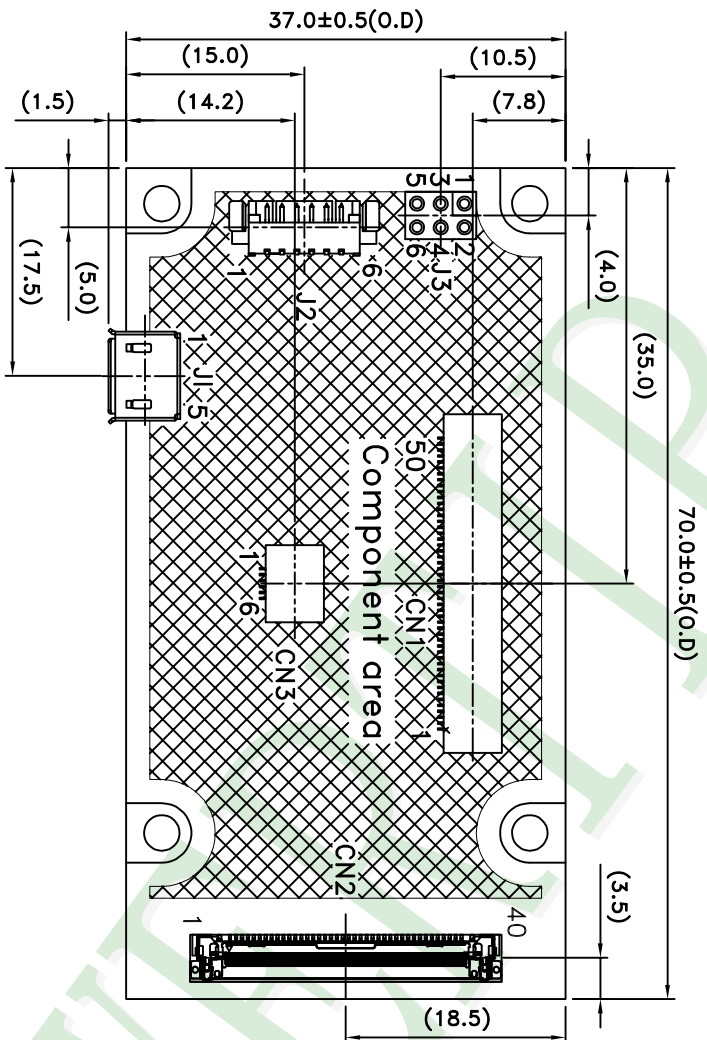
Pin No.	Symbol	Function
1	VUSB	USB Power Supply Voltage
2	D-	Data-
3	D+	Data+
4	ID	Not Connect
5	VSS	Power ground.

J2 For USB

Pin No.	Symbol	Function
1	VUSB	USB Power Supply Voltage
2	D-	Data-
3	D+	Data+
4	VSS	Power ground.
5	VSS	Power ground.
6	VSS	Power ground.

J3 For Programming

Pin No.	Symbol	Function
1	VSS	Power ground.
2	MCU_RST	Target device reset pin, active low
3	VSS	Power ground.
4	SWCLK	Serial wire clock pin
5	VCC	Power supply for Digital Circuit. (+3.3V)
6	SWDIO	Serial wire bidirectional data pin



NOTES:

1. The tolerance unless classified $\pm 0.3\text{mm}$
2. CN1:ETC-AF024-S50D1A-00 (E-Tech)or compatible(OMRON XF2M-5015-1 compatible)
- CN2:ETC-LVR5072240-H1210PK (E-Tech)or compatible(Starconn 300E40-0010RA-G3 compatible)
- CN3:ETC-AF024-S06D1A-00 (E-Tech)or compatible(MOLEX SD-503480-0600 compatible)
- J1:ETC-MUSR231F205-GT17266S-RH (E-Tech)or compatible(Micro USB-B)
- J2:C14406M1HR0-LF (CvILux)or compatible(MOLEX 53261-0671 compatible)

007		PART NO:	P05DD00062-0L		久正光電股份有限公司 POWER TIP TECHNOLOGY CORPORATION	Design Clare Chen	Check Tina Chen	Unit MM	Surface Material	Precision Level 1 ~ 4 4 ~ 16 16 ~ 63 63 ~ 250 250 ~ 1000
006		DRAWING NAME:	LMD-P05DD00062-0L							
005		TITLE:	LCD MODULE DRAWING		Approve Jimmy Chen	Scale 1:1	Page 1/1	Thickness -	Quantity -	Precision Level -
004		REV BY	Clare	2018/7/6						
003		REV BY								
002		REV BY								
001	NEW DRAWING	REV BY	Clare	2018/7/6						