

SPECIFICATION FOR APPROVAL

Product: LCD Converter Board

BTP-LC-RTD2556V1.0

1. Product Introduction

BTP-RTD2556-V1.0 is a 2K display control board with 24V power input developed in response to customer requirements. It has the characteristics of multi-interface, multi-function and moderate size. It supports a variety of TFT-LCD with EDP or LVDS interface with a resolution of 1920*1080. The image display is clear without interference, and can meet the environmental requirements of customers in special fields. All technical specifications, configuration/usage instructions are included in this document.

2. Characteristics

Model	BTP-LC-RTD2556V1.0	
Dimension	142mm*72mm	
Panel	LVDS	Sinlge port 6-bit LVDS, single port 8-bit LVDS, Support 1366*768@60Hz
		Dual port 8-bit LVDS Support 1920*1200@60Hz
	EDP	2-Lane EDP Port/4-Lane EDP Port Support 1920*1080@60Hz
Signal input	Signal interface	
	VGA	Up To 1920*1200@60Hz
	DVI	Up To 1920*1200@60Hz
	HDMI	Up To 1920*1080@60Hz
Power	Operating voltage	12/24V
	Drive-screen voltage	3.3V or 5V or 12V
	Supply mode	Support low power mode, standby mode
	Standby power consumption	<1W
OSD Language	English, Chinese	
Key function	POWER, MENU, +/-, AUTO/EXIT	
Operating temperature	0°C ~+60°C	
Operating humidity	0~95%RH, non-corrosive gas environment	
Storage temperature	-50°C ~+70°C	
Storage humidity	0~95%RH, non-corrosive gas environment	

6. Interface Definition

No.	Interface Definition
JP7	Power Socket Input
JP5	Backlight Plug Socket
CN3	VGA Input Socket
CN5	DVI Input Socket
CN6	HDMI Input Socket
JP12	Audio Output Socket
JP6	5V Power Output Socket
JP11	Keyboard and Indicator Socket
JP13	LVDS Output Socket
JN1	EDP Output Socket
JP1	Power Input Socket (Terminal)
JP2	DVI Input Socket (Terminal)
JP3	VGA Input Socket (Terminal)
JP4	HDMI Input Socket (Terminal)

I. JP7 Power Input Socket

No.	Definition	No.	Definition
1	12V/24V	3	GND
2	12V/24V	4	GND

II. JP5 LED Backlight Socket

No.	Definition	No.	Definition
1	GND	4	EN
2	GND	5	12V
3	ADJ	6	12V

III. CN3 VGA Input Socket

No.	Definition	No.	Definition
1	VGA-SCL	7	GND

2	VGA-SDA	8	RIN+
3	GND	9	GND
4	BIN+	10	HSYNC
5	GND	11	VSYNC
6	GIN+	12	GND

IV. CN5 DVI Input Socket

No.	Definition	No.	Definition
1	DVI-SCL	8	DATA_0+
2	DVI-SDA	9	DATA_0+
3	GND	10	CLK+
4	DATA_2+	11	CLK-
5	DATA_2-	12	GND
6	DATA_1+	13	DVI-5V
7	DATA_1-	14	HPD

V. CN6 HDMI Input Socket

No.	Definition	No.	Definition
1	HDMI-5V	9	HDMI-D1+
2	HDMI-HDP	10	HDMI-D1-
3	HDMI-SCL	11	HDMI-D2+
4	HDMI-SDA	12	HDMI-D2-
5	GND	13	GND

6	GND	14	GND
7	HDMI-D0+	15	HDMI-CLK+
8	HDMI-D0-	16	HDMI-CLK-

VI. JP12 Audio Output Socket

No.	Definition	No.	Definition
1	A-OUT-R+	3	A-OUT-L-
2	A-OUT-R-	4	A-OUT-L+

VII. CN6 5V Power Output Socket

No.	Definition	No.	Definition
1	+5V	3	GND
2	+5V	4	GND

VIII. JP11 Keyboard and Indicator Socket

No.	Definition	No.	Definition
1	RIGHT	6	UP
2	LEFT	7	GND
3	MENU	8	LED_G
4	AUTO	9	LED_R
5	DOWN	10	Power

IX. JP13 LVDS Output Socket

No.	Definition	No.	Definition
1	VSEL	16	RX0C+

2	VSEL	17	RX03-
3	VSEL	18	RX03+
4	GND	19	RXE0-
5	GND	20	RXE0+
6	GND	21	RXE1-
7	RX00-	22	RXE1+
8	RX00+	23	RXE2-
9	RX01-	24	RXE2+
10	RX01+	25	GND
11	RX02-	26	GND
12	RX02+	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RX0C-	30	RXE3+

X. JN1 EDP Output Socket

No.	Definition	No.	Definition
1	VCC	16	GND
2	VCC	17	AUXN
3	VCC	18	AUXP
4	VCC	19	HPD
5	GND	20	HPD

6	GND	21	BL-VCC
7	L0P	22	BL-VCC
8	L0N	23	BL-VCC
9	L1P	24	BL-VCC
10	L1N	25	ADJ
11	L2P	26	ON/OFF
12	L2N	27	GND
13	L3P	28	GND
14	L3N	29	GND
15	GND	30	GND

Dimensions:

