產 品 規 格 書

Product Specification

Customer： ******

Cust. Material No.： ******

Cust. Product No.： ******

Elight No.: EB185-48-408230w

Production: 18.5"AD Board

Applied Mode: ******

Approved	Review	Author

Initial :	Revised:	Version:
Document No.:		
Customer Signature		**Data of approval**

1. General Function

A. TFT-LCD module drive board.

B. Resolution up to 1920 X 1080 @ 60 Hz.

C. 15 PIN D-SUB VGA connector input.

D. DVI-D (Digital Video Input) connector input

E. Dual port 8 bit LVDS interface output to panel.

F. OSD (On Screen Display) control menu.

G. Supporting HDCP protocol (optional)

H. Supporting DDC/CI protocol.

I. Supporting DCR function (optional)

2. Specification

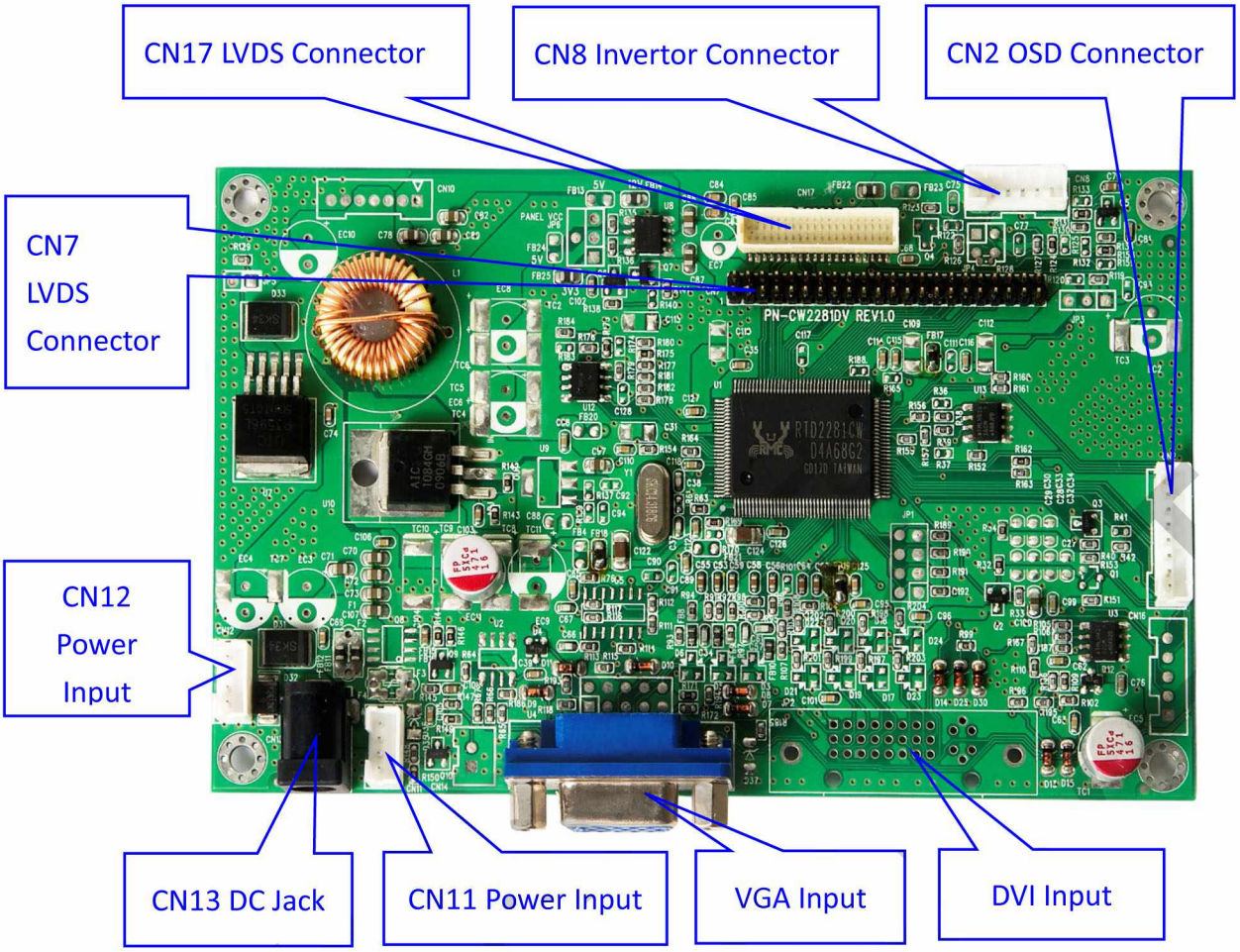
Model	EB185-48-408230W
Panel Interface	Single/Dual LVDS
Maximum Resolution	Up to WUXGA 1920x1080 / 8 bits per color, total 16.7M Colors
Vertical Refresh Rate	VGA、SVGA ,XGA AND UXGA VESA standard up to 75Hz WUXGA up to 60HZ
Input Source	VGA analog (15 pin D-Sub) ,DVI
Dot Clock Maximum(pixel clock)	165 MHz
Key Function	Power / Menu / Adjust — / Adjust ＋ / Auto
Board Dimension	127 mm x 83 mm
Storage Temperature Limits	Temperature –40C~70℃
Operation TemperatureLimits	Temperature 0C~50C Humidity：Less than 85%

3. Support PC Timing

No.	Description	H-Freq.(KHz)	V-Freq.(Hz)
1	VGA 640 x 640	31.480	70
2	VGA 640 x 480	31.649	60
3	VGA720×400	37.469	70

No.	Description	H-Freq.(KHz)	V-Freq.(Hz)
4	VESA 640×480	37.862	72.809
5	VESA 640×480	37.5	75
6	VESA 800×600	35.156	56.25
7	VESA 800×600	37.9	60
8	VESA 800×600	48.077	72.188
9	VESA 800×600	46.875	75
10	VESA 1024×768	48.363	60
11	VESA 1024×768	56.476	70
12	VESA 1024×768	60.023	75
13	VESA 1152×864	67.5	75
14	VESA 1280 x 768	47.8	60
15	VESA 1280 x 768	60.3	75
16	VESA 1280×960	60	60
17	VESA 1280×1024	63.981	60
18	VESA 1280×1024	79.977	75
19	VESA 1440x900	59.9	60
20	VESA 1440x900	75	75
21	VESA 1600x1200	75	60
22	VESA 1600x1200	81.3	65
23	VESA 1600x1200	87.5	70
24	VESA 1600x1200	93.8	75
25	VESA 1680x1050	65.3	60
26	VESA 1680x1050	74.9	75
27	VESA 1920x1080	56.25	50
28	VESA 1920x1080	67.5	60

4. Signal Input Connections



4.1. VGA Input

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	RED IN	6	R-GND	11	GND
2	GREEN IN	7	G-GND	12	SDA DDC
3	BLUE IN	8	B-GND	13	SYNC. H
4	GND	9	PC 5V	14	SYNC. V
5	GND	10	DET	15	SCL DDC

4.2. DVI Input

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	DATA2-	11	GND	21	NC
2	DATA2+	12	NC	22	GND
3	GND	13	NC	23	CLKa+
4	NC	14	DDC 5V	24	CLKa-
5	NC	15	GND	25	NC
6	DVI_DDC_SCL	16	GND	26	NC
7	DVI_DDC_SDA	17	DATA0-	27	NC
8	NC	18	DATA0+	28	NC
9	DATA1-	19	GND	29	GND
10	DATA1+	20	NC	30	NC

4.3. Power Input

Location – CN11、CN12、CN13 DC JACK DC=2.5mm

Pin assign and definition

Pin No.	Symbol
1	+12V
2	+12V
3	GND
4	GND

4.4 OSD Connector

Location – CN2: 8PIN wafer pitch 2.0mm

All Key Active Low Level., All LED Active HI Level , Output Current 10mA MAX

Pin assign and definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	MENU KEY	4	UP KEY	7	LED_O
2	AUTO KEY	5	GND	8	POWER KEY
3	DOWN KEY	6	LED_G	-	-

4.5 LVDS Output

Location – CN7 :BOX 2.0 22x2Pin

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	VLCD for Panel	16	GND	31	LVDS RXO_2-
2	VLCD for Panel	17	LVDS RXE_3-	32	LVDS RXO_2+
3	GND	18	LVDS RXE_3+	33	GND
4	GND	19	GND	34	LVDS RXO_CLK-
5	LVDS RXE_0-	20	GND	35	LVDS RXO_CLK+
6	LVDS RXE_0+	21	NC	36	GND
7	GND	22	NC	37	LVDS RXO_3-
8	LVDS RXE_1-	23	GND	38	LVDS RXO_3+
9	LVDS RXE_1+	24	GND	39	GND
10	GND	25	LVDS RXO_0-	40	GND
11	LVDS RXE_2-	26	LVDS RXO_0+	41	NC
12	LVDS RXE_2+	27	GND	42	NC
13	GND	28	LVDS RXO_1-	43	NC
14	LVDS RXE_CLK-	29	LVDS RXO_1+	44	NC
15	LVDS RXE_CLK+	30	GND	-	-

4.6 Inverter Connector

Location – CN8: 6 PIN wafer pitch 2.0mm

Pin assign and definition

Pin No.	Symbol	Pin No.	Symbol
1	GND	4	PWM
2	GND	5	+12V
3	Enable	6	+12V

4.6.1 Dimming:

IF CCFL panel Range 0 (Inverter Current Max) to 5V (Inverter Current Min) IF LED panel PWM Ratio 100%(LED Current Max) to PWM Ratio 20%(LED Current Min)

4.6.2 Back light enable: 5V (ON) or 0V (OFF)

4 PCB Dimension