Specification of PCB800099 Controller Board

V1.0

2013-8-8

ELECREALM

http://www.elecrealm.com/

CONTENT

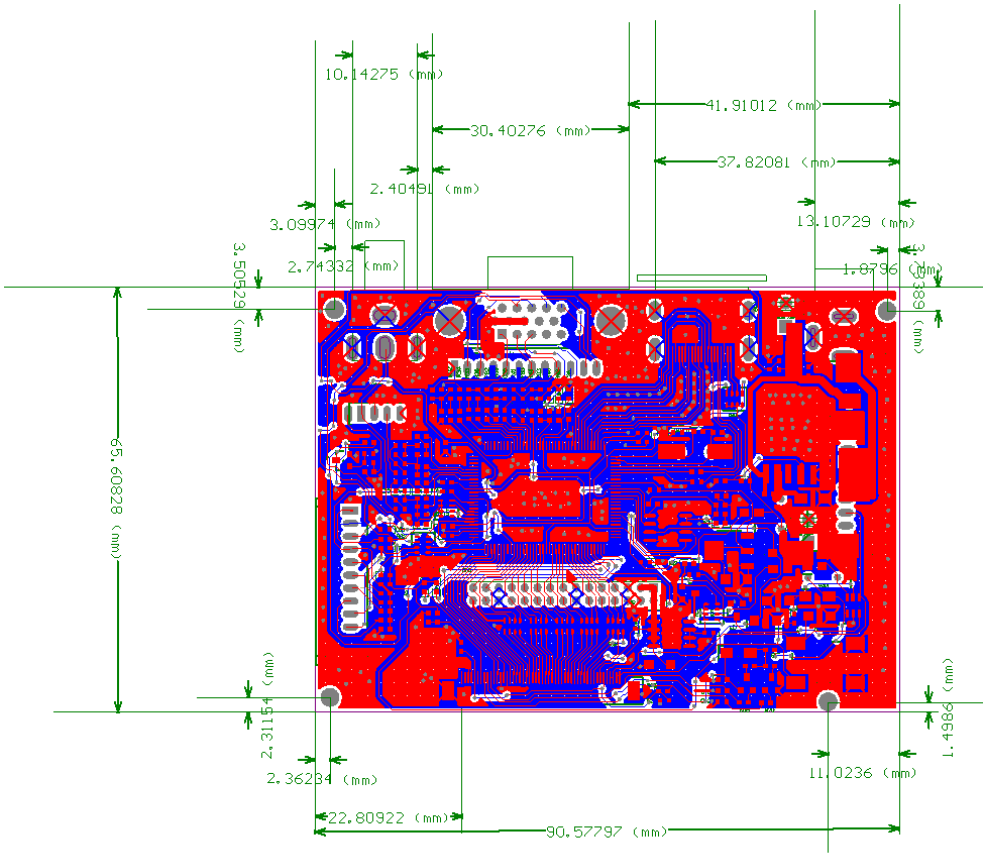
1.GENERAL DESCRIPTION

VS-TY2662L-V1 is a LCD control board, it supports between 7 and 22 inch LCD panel with single /dual LVDS interface. And the resolution is up to 1440x900. This board support HDMI+ VGA+2CVBS input and support reversing function.

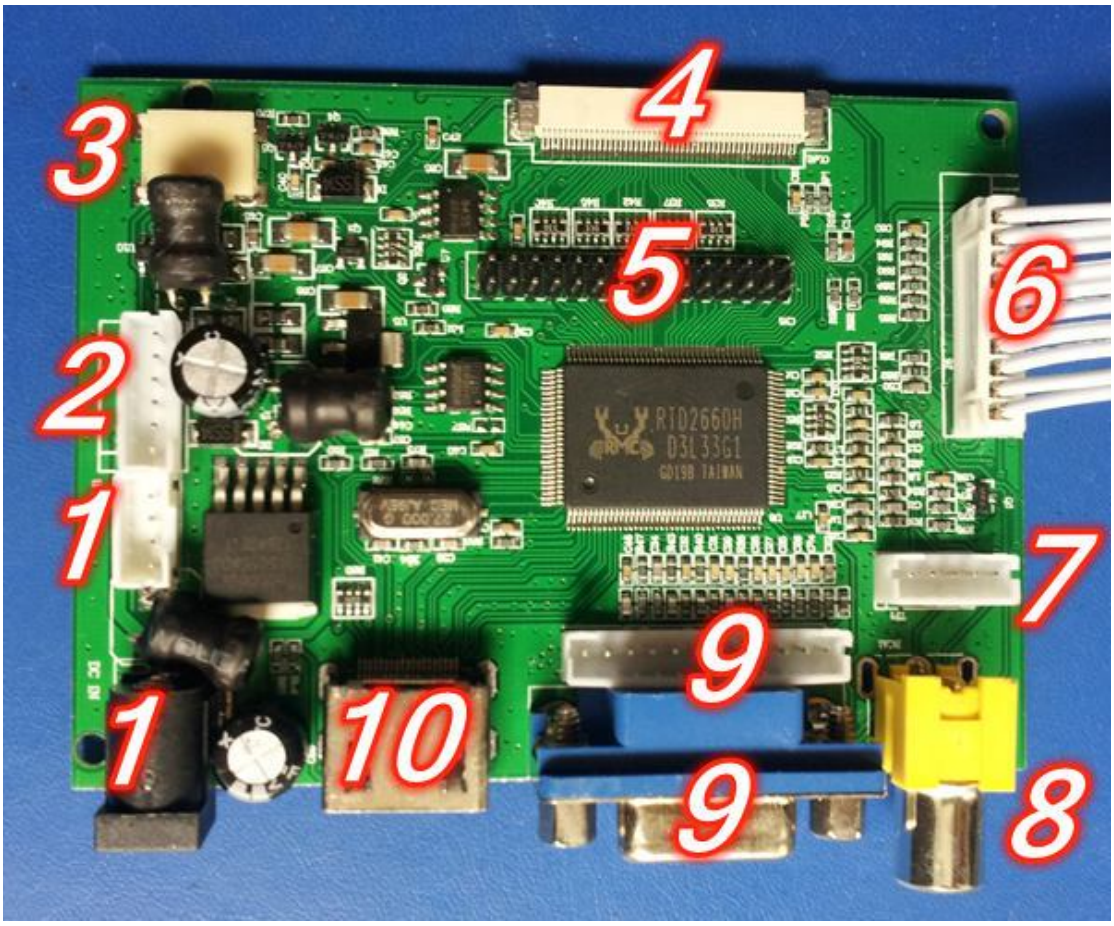
2.FEATURES

OSD LANGUAGE	Simplified Chinese, Traditional Chinese, English, French, German, Italian, Spanish, Japanese, Korean	
PANEL	Interface	50PIN TTL/6Bit 8it Dual/Single LVDS interface
	Resolution	Up to 1920x1080
VIDEO INPUT	Interface	HDMI1.1+VGA+2AV
	H-Frequency	30~80KHz
	V-Frequency	65~85Hz
	Requirement	12V
POWER	To Panel	3.3V, 5V, 12V
	Management	Low power consumption mode; standby< 1W
KEY FUNCTION	Auto, Menu, Vol-, Vol+, Power	

3.PCB DIMENSION



4.FUNCTION LAYOUT



INTERFACE FUNCTION DESCRIPTION:			
1	Power Supply(5~24V)	**6**	Keyboard
2	Inverter Connector	**7**	AV1+AV2
3	12V Backlight	**8**	AV1 Input
4	TTL Signal 50Pin	**9**	VGA Connector
5	LVDS Signal 1/2 ch 6bit 8bit	**10**	HDMI Input

5.INTERFACE DEFINITION

1/1: POWER SUPPLY INPUT CONNECTOR

	SYMBOL	DESCRIPTION
1	5V/12V	12V
2	5V/12V	12V
	GND	Ground
4	GND	Ground

9/9: PC-RGB Input Connector

	SYMBOL	DESCRIPTION
1	GND	Ground
2	VS	Display Vertical Signal For Panel
3	HS	Display horizontal Signal For Panel
4	GND	Ground
5	R	Red Signal Input
6	GND	Ground
7	G	Green Signal Input
8	GND	Ground
9	B	Blue Signal Input
10	GND	Ground
11	SCL	I2C Clock
12	SDA	I2C Data

7/8: CVBS INPUT CONNECTOR

SYMBOL	DESCRIPTION
ACC	Reversing Power Supply +12V
CVBS1	CVBS1
GND	GROUND
CVBS2	CVBS2
GND	GROUND

6: KEY BOARD & LED INDICATOR CONNECTOR

	SYMBOL	DESCRIPTION
1	K0	Key 0
2	R	Led-Red
3	G	Led-Green
4	GND	Ground
5	K1	Key 1
6	K2	Key 2
7	K3	Key 3
8	K4	Key 4
9	K5	Key 5
10	K6	Key 6
11	IR	IR
12	VCC	VCC for IR

5: LVDS PANEL CONNECTOR

	SYMBOL	**DESCRIPTION**
1	VSEL	Power Supply for Panel
2	VSEL	Power Supply for Panel
3	VSEL	Power Supply for Panel

4	GND	Ground
5	GND	Ground
6	GND	Ground
7	RXO0-	LVDS ODD 0- Signal
8	RXO0+	LVDS ODD 0+ Signal
9	RXO1-	LVDS ODD 1- Signal
10	RXO1+	LVDS ODD 1+ Signal
11	RXO2-	LVDS ODD 2- Signal
12	RXO2+	LVDS ODD 2+ Signal
13	GND	Ground
14	GND	Ground
15	RXOC-	LVDS ODD Clock- Signal
16	RXOC+	LVDS ODD Clock+ Signal
17	RXO3-	LVDS ODD 3- Signal
18	RXO3+	LVDS ODD 3+ Signal
19	RXE0-	LVDS EVEN 0- Signal
20	RXE0+	LVDS EVEN 0+ Signal
21	RXE1-	LVDS EVEN 1- Signal
22	RXE1+	LVDS EVEN 1+ Signal
23	RXE2-	LVDS EVEN 2- Signal
24	RXE2+	LVDS EVEN 2+ Signal
25	GND	Ground
26	GND	Ground
27	RXEC-	LVDS EVEN Clock- Signal
28	RXEC+	LVDS EVEN Clock+ Signal
29	RXE3-	LVDS EVEN 3- Signal
30	RXE3+	LVDS EVEN 3+ Signal

4: 50P TTL CONNECTOR

Pin No.	Symbol	I/O	Function
1	V_{LED+}	P	Power for LED backlight(Anode)
2	V_{LED+}	P	Power for LED backlight(Anode)
3	V_{LED-}	P	Power for LED backlight(Cathode)
4	V_{LED-}	P	Power for LED backlight(Cathode)
5	GND	P	Power ground
6	V_{COM}	I	Common voltage
7	DV_{DD}	P	Power for Digital Circuit
8	MODE	I	DE/SYNC mode select
9	DE	I	Data Input Enable
10	VS	I	Vertical Sync Input
11	HS	I	Horizontal Sync Input
12	B7	I	Blue data(MSB)
13	B6	I	Blue data

14	B5	I	Blue data
15	B4	I	Blue data
16	B3	I	Blue data
17	B2	I	Blue data
18	B1	I	Blue data
19	B0	I	Blue data(LSB)
20	G7	I	Green data(MSB)
21	G6	I	Green data
22	G5	I	Green data
23	G4	I	Green data
24	G3	I	Green data
25	G2	I	Green data
26	G1	I	Green data
27	G0	I	Green data(LSB)
28	R7	I	Red data(MSB)
29	R6	I	Red data
30	R5	I	Red data
31	R4	I	Red data
32	R3	I	Red data
33	R2	I	Red data
34	R1	I	Red data
35	R0	I	Red data(LSB)
36	GND	P	Power Ground
37	DCLK	I	Sample clock
38	GND	P	Power Ground
39	L/R	I	Left/Right selection
40	U/D	I	Up/Down selection
41	V_{GH}	P	Gate On Voltage
42	V_{GL}	P	Gate Off Voltage
43	AV_{DD}	P	Power for Analog Circuit
44	RESET	I	Global reset pin.
45	NC	-	No connection
46	V_{COM}	I	Common Voltage
47	DITHB	I	Dithering function
48	GND	P	Power Ground
49	NC	-	No connection
50	NC	-	No connection
		I	
		I	
		I	

2: Inverter Board CONNECTOR

	SYMBOL	DESCRIPTION

1	+12V	+12V DC Power Supply
2	+12V	+12V DC Power Supply
3	BL_ON	Back-light ON/OFF control
4	NC	
5	GND	Ground
6	GND	Ground

6.CONFIGURATION & GENERAL PRECAUTIONS

- Relative humidity:≤80%.
- Storage temperature: -10~+60 °C.
- Operation temperature: 0~+40 °C.
- Protect the control board from static; it may cause damage to the IC.
- Disconnect the TV before the power supply of panel is connected correctly.
- Do not drop any metal on the control board when it is working.
- Do not push or pull the connector when the control board is working.
- Do not disassemble the module.
- If the surface or the control board is dirty, clean it with soft dry cloth.
- Can't be pressed and distorted.