

VS DISPLAY TECHNOLOGY (HK) LTD

SPECIFICATION FOR LCD MODULE

Model No.: VS-TY2662-V1

ORGANIZED BY	CHECKED BY	APPROVED BY
RAJU PAU	JOHNSON	CRISTAL RAMY

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1. GENERAL DESCRIPTION

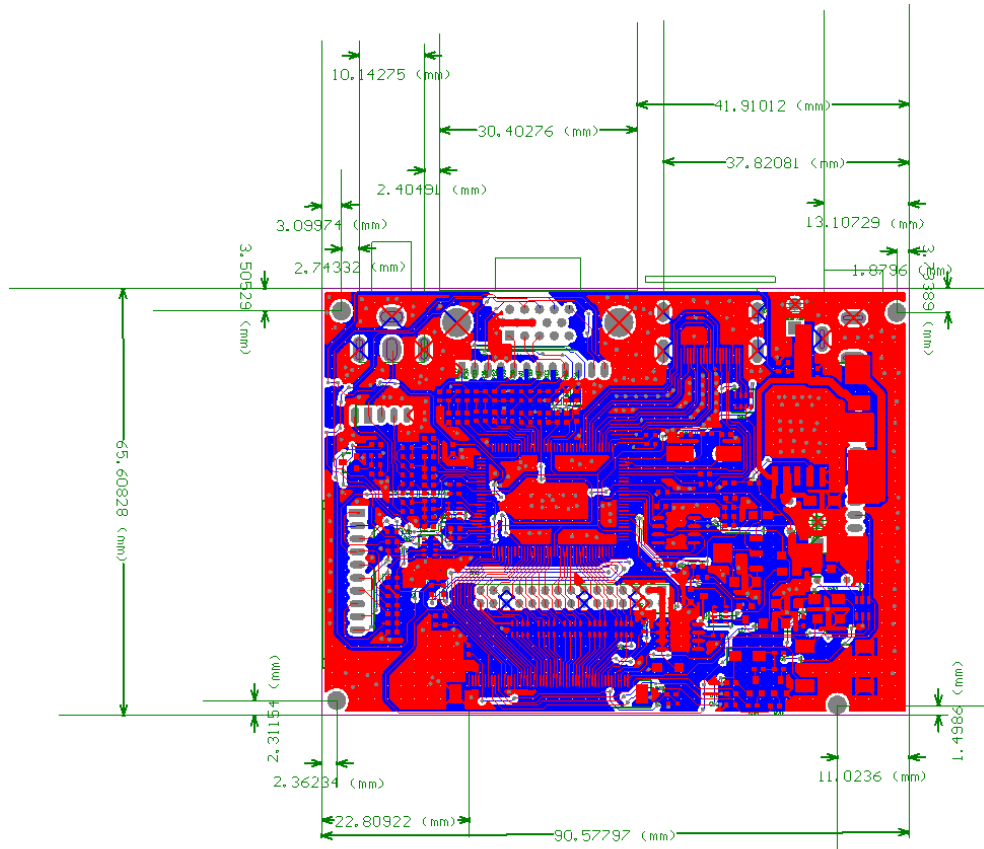
VS-TY2662L-V1 is a LCD control board, it supports between 7 and 22 inch LCD panel with single /dual LVDS interface. And the resolution is up to 1440x900. This board support HDMI+VGA+2CVBS input and support reversing function. It includes an audio power amplifier output. It also supports PC audio input.

2. FEATURES

CHIPSET	RTD2662	
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
POWER	Requirement	12V
	To Panel	3.3V, 5V, 12V
	Management	Low power consumption mode; standby< 1W
KEY FUNCTION	Auto, Menu, Vol-, Vol+, Power	

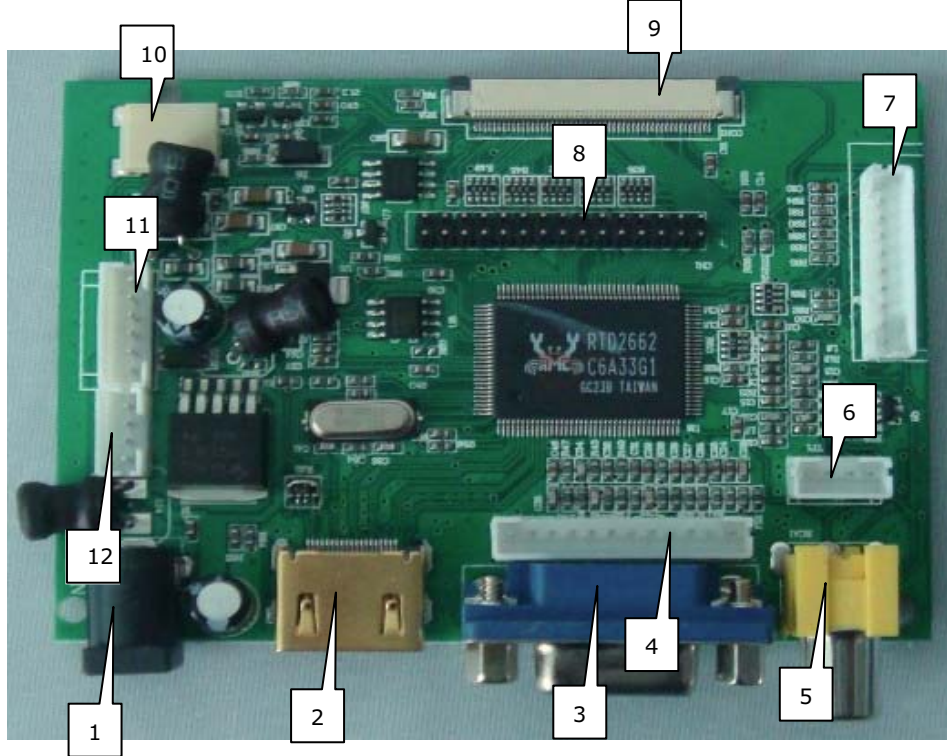
3. PCB DIMENSION

The height of the control board is 12.0mm.



4. FUNCTION LAYOUT

TOP VIEW OF LCD CONTROL BOARD



INTERFACE FUNCTION DESCRIPTION

NO.	DESCRIPTION	NO.	DESCRIPTION
1	Power Supply	7	KeyBoard
2	HDMI	8	30P LVDS interface
3	VGA	9	50P TTL interface
4	VGA	10	Backlight
5	AV1	11	Inverter
6	AV1/AV2	12	Power Supply

5. INTERFACE DEFINITION

1/12: POWER SUPPLY INPUT CONNECTOR

NO.	SYMBOL	DESCRIPTION
1	5V/12V	12V
2	5V/12V	12V
3	GND	Ground
4	GND	Ground

3/4 : PC-RGB Input Connector

NO.	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

5/6: CVBS INPUT CONNECTOR

NO.	SYMBOL	DESCRIPTION
	ACC	Reversing Power Supply +12V
	CVBS1	CVBS1
	GND	GROUND
	CVBS2	CVBS2
	GND	GROUND

7 : KEY BOARD & LED Indicator CONNECTOR

NO.	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

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8 : LVDS PANEL CONNECTOR

NO.	SYMBOL	DESCRIPTION
1	VSEL	Power Supply for Panel
2	VSEL	
3	VSEL	
4	GND	Ground
5	GND	
6	GND	
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	
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	
27	RXEC-	LVDS EVEN Clock- Signal
28	RXEC+	LVDS EVEN Clock+ Signal
29	RXE3-	LVDS EVEN 3- Signal
30	RXE3+	LVDS EVEN 3+ Signal

9 50P TTL CONNECTOR

Pin No.	Symbol	I/O	Function	Remark
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	Note 1
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	Note 2
19	B0	I	Blue data(LSB)	Note 2
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	

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26	G1	I	Green data	Note 2
27	G0	I	Green data(LSB)	Note 2
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	Note 2
35	R0	I	Red data(LSB)	Note 2
36	GND	P	Power Ground	
37	DCLK	I	Sample clock	Note 3
38	GND	P	Power Ground	
39	L/R	I	Left / right selection	Note 4,5
40	U/D	I	Up/down selection	Note 4,5
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.	Note 6
45	NC	-	No connection	
46	V _{COM}	I	Common Voltage	
47	DITHB	I	Dithering function	Note 7
48	GND	P	Power Ground	
49	NC	-	No connection	
50	NC	-	No connection	

I: input, O: output, P: Power

11 Inverter Board CONNECTOR

NO.	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

7. CONFIGURATION & GENERAL PRECAUTIONS

- Relative humidity: $\leq 80\%$.
- Storage temperature: $-10\sim+60\text{ }^{\circ}\text{C}$.
- Operation temperature: $0\sim+40\text{ }^{\circ}\text{C}$.
- 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.