

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

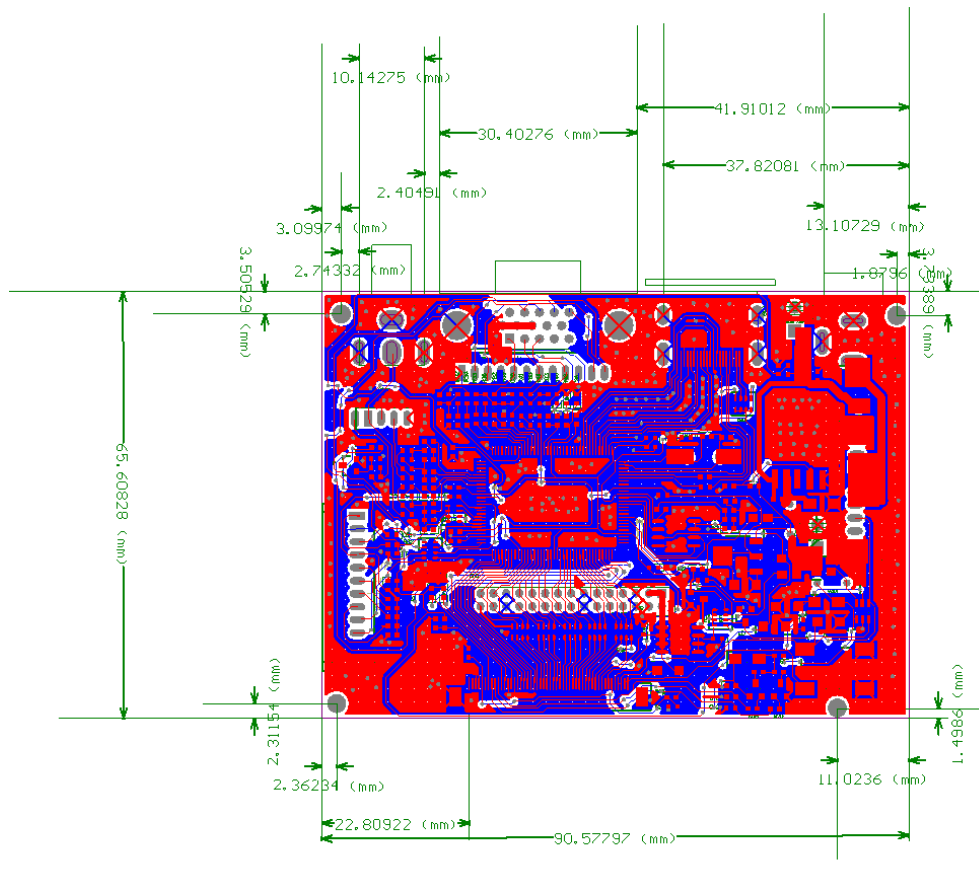
VS-TY2662L-V1 is a LCD control board, it supports between 7 and 22 inch LCD panel with single /dual LVDS interface. And the resolution is up to 1440x900. This board support HDMI+VGA+2CVBS input and support reversing function.

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	

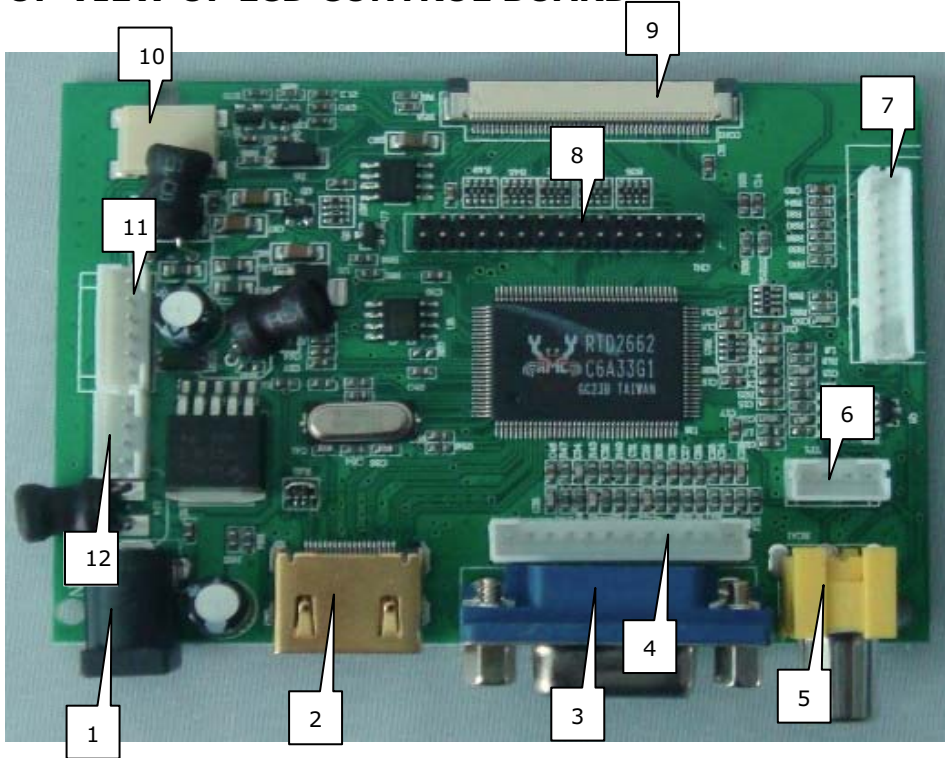
3. PCB DIMENSION

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

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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: $-10\sim+60$ °C.
- Operation temperature: $0\sim+40$ °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.