

VS DISPLAY TECHNOLOGY (HK) LTD

SPECIFICATION FOR LCD MODULE

Model No.: RTMC1B-A

ORGANIZED BY	CHECKED BY	APPROVED BY
RAJU PAU	JOHNSON	CRISTAL RAMY

COMPANY CONTACT:

TEL: 86-755-82508603

FAX: 86-755-27839264

URL: WWW.VSLCD.COM

TABLE OF CONTENTS

PAGE	ITEM
1	TABLE OF CONTENTS
1	REVISION HISTORY
2	GENERAL DESCRIPTION
2	FEATURES
2	FUNCTION LAYOUT
3	PCB DIMENSION
3	KEY BOARD SCHEMATICS
4	INTERFACE DEFINITION
6	CONFIGURATION & GENERAL PRECAUTIONS

REVISION HISTORY

VERSION	DATE	PAGE	DESCRIPTION	AUTHOR
V1.0	09.04.16	All	First issued	JinhuaHuang

. GENERAL DESCRIPTION

RTMC1B-1 is a LCD control board, it supports between 14 and 19 inch LCD panel with single /dual LVDS interface. And the resolution is up to 1440x900.

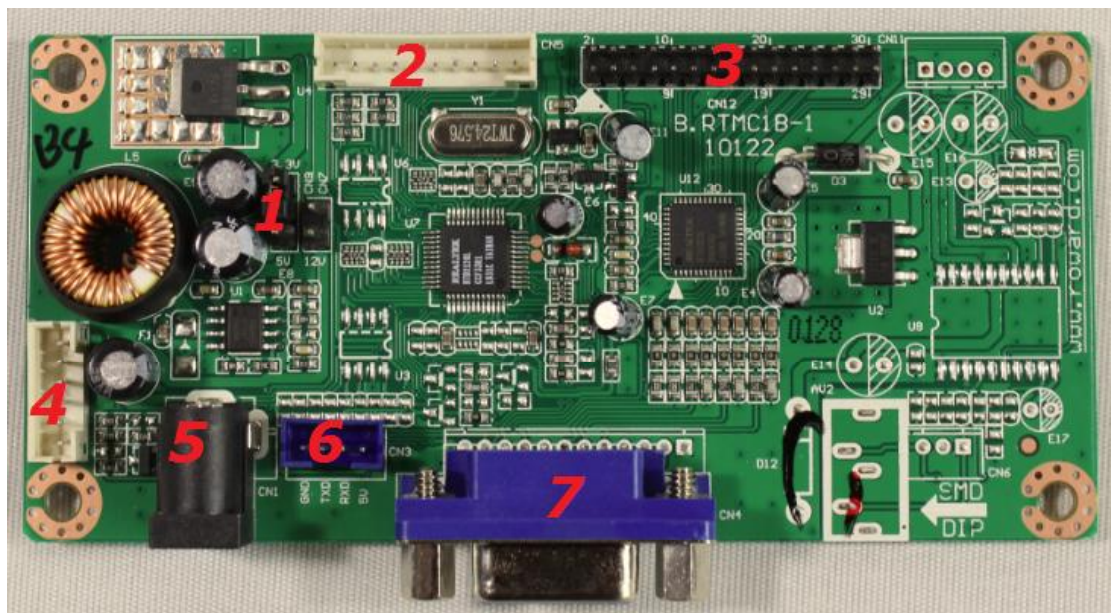
It includes an audio power amplifier which can support 2X1W (8Ω) output. It also supports PC audio input.

. FEATURES

CHIPSET	RTD2025L+RTD2120L	
OSD LANGUAGE	Simplified Chinese, Traditional Chinese, English, French, German, Italian, Spanish, Japanese, Korean	
PANEL	Interface	Dual/Single LVDS interface
	Resolution	Up to 1440x900
VIDEO INPUT (PC-RGB)	Format	Up to 1440x900
	H-Frequency	30~80KHz
	V-Frequency	56~75Hz
AUDIO INPUT	PC-RGB 3PIN/2.0 Connector	
AUDIO OUTPUT	2X1W (8Ω)	
POWER	Requirement	12V
	To Panel	3.3V, 5V, 12V
	Management	Low power consumption mode; standby< 1W
KEY FUNCTION	Auto, Menu, Vol-, Vol+, Power	

. FUNCTION LAYOUT

TOP VIEW OF LCD CONTROL BOARD

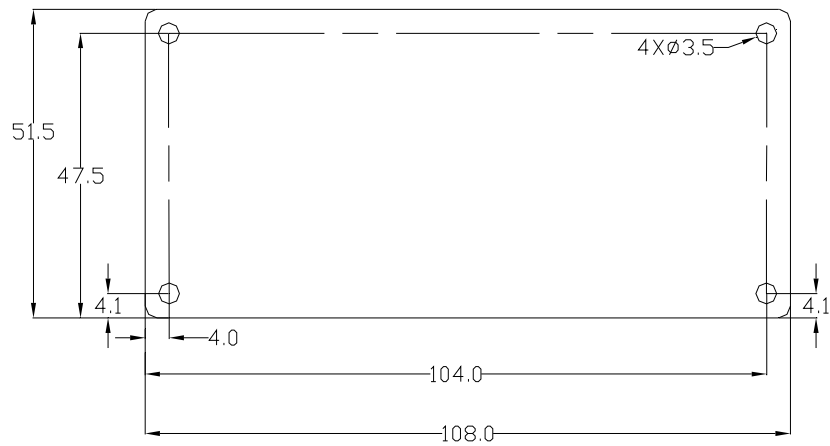


INTERFACE FUNCTION DESCRIPTION

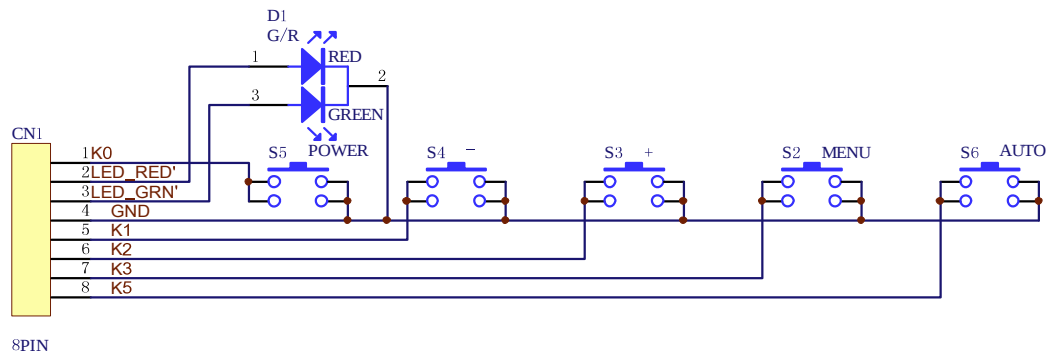
NO.	DESCRIPTION	NO.	DESCRIPTION
1(CN7/9)	Power Supply Jumper For Panel	5(CN2)	Power Supply Input Connector
2(CN5)	Key Board & LED Indicator Connector	6(CN3)	Updating Connector
3(CN12)	LVDS Panel Connector	7(CN8)	PC-RGB Input Connector
4(CN10)	Inverter Connector		

. PCB DIMENSION

The height of the control board is 16.0mm.



. KEY BOARD SCHEMATICS



. INTERFACE DEFINITION

◆ CN10(6PIN/2.0): INVERTER 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	ADJ	Brightness Adjustment
5	GND	Ground
6	GND	Ground

◆ **CN2(4PIN/2.0): POWER SUPPLY INPUT CONNECTOR**

NO.	SYMBOL	DESCRIPTION
1	12V	+12V DC Power Supply
2	12V	+12V DC Power Supply
3	GND	Ground
4	GND	Ground

◆ **CN5(10PIN/2.0): 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

◆ **CN6(3PIN/2.0): AUDIO INPUT CONNECTOR**

NO.	SYMBOL	DESCRIPTION
1	LI	Audio Left Channel Input
2	GND	Ground
3	RI	Audio Right Channel Input

◆ **CN11(4PIN/2.0): SPEAKER CONNECTOR**

NO.	SYMBOL	DESCRIPTION
1	LO	Audio Left Channel Output
2	GND	Ground
3	GND	Ground
4	RO	Audio Right Channel Output

◆ **CN8(12PIN/2.0): 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	SDA	I2C Data
12	SCL	I2C Clock

◆ **CN12(2x15PIN/2.0): 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

NO.	SYMBOL	DESCRIPTION
29	RXE3-	LVDS EVEN 3- Signal
30	RXE3+	LVDS EVEN 3+ Signal

. CONFIGURATION & GENERAL PRECAUTIONS

- **Relative humidity:** ≤ %.
- **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.**