1 GENERAL DESCRIPTION

RTMC1B is a TFT-LCD controllor board. It supports between 14 and 19 inch LCD panel with dual/single LVDS interface.
R**TMC1B** supports PC-RGB function.
RTMC1B includes an audio amplifier which can support 2 x 1W (8 ohm) output. It also supports PC audio input.
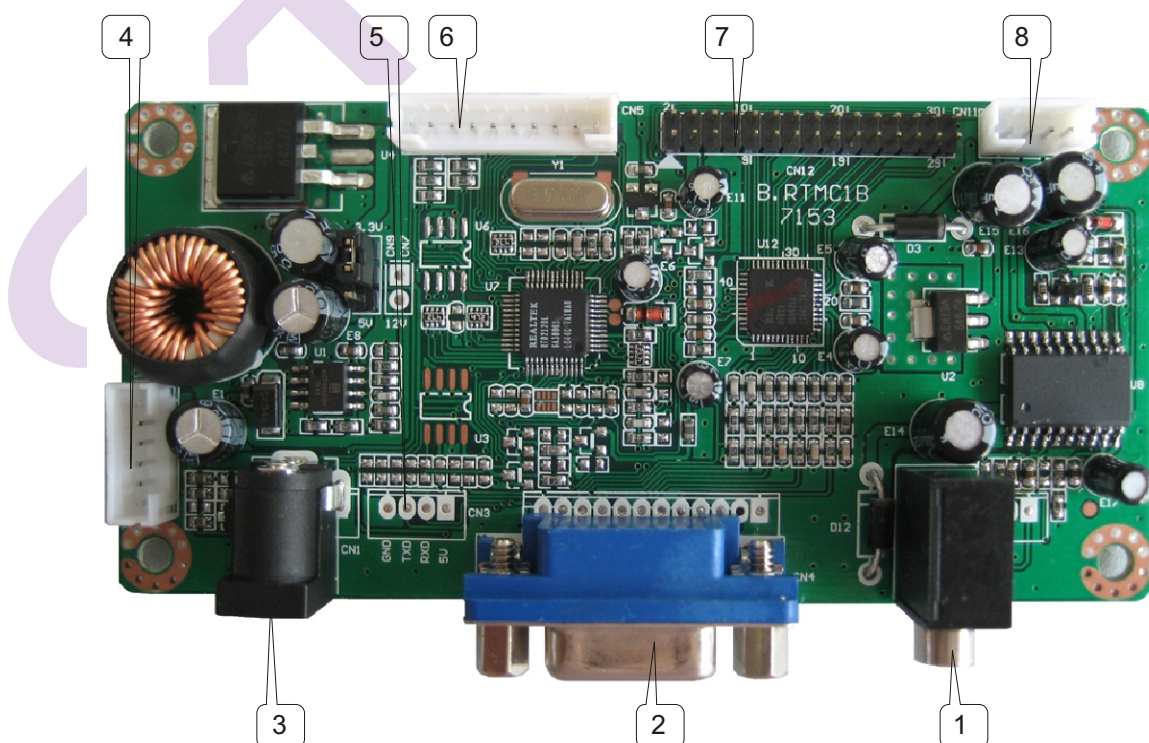
2 FEATURES

Below you will find the detailed features.

Video Input	PC-RGB	Format	Up to 1440x900
		H-Frequency	30~80KHz
		V-Frequency	56~75Hz
Audio Input	PC-RGB	Earphone input terminal	
Power	Input	DC12V (+/-0.6V)	
	To Panel	3.3V or 5V or 12V	
	Manage	Low power consumable mode; standby< 1W	
OSD Language	Simplified Chinese, Traditional Chinese, English, French, German, Spanish, Italian, Japanese, Korean		
Key Functions	Auto, Menu, Vol+/-, Power		
Audio Output	2X1W (8 Ω)		
Panel Resolutions	Up to 1440x900		
Terminals	Input	PC-RGB Input	1 D-SUB 15Pin terminal blue color
		PC Audio Input	1 earphone terminal black color

3 FUNCTION LAYOUT

✦ **PICTURE OF LCD CONTROLLER BOARD**

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✦ **INTERFACE FUNCTION DESCRIPTION**

NO	DESCRIPTION	NO	DESCRIPTION
1	PC-Audio Input	5(CN3)	Debugging Interface 1
2	PC-RGB Input	6(CN5)	Key Board and LED Indicator Jack
3	Main Power Input	7(CN12)	LVDS Panel Jack
4(CN10)	INVERTER Jack	8(CN11)	Amplifier Jack

4 PCB DIMENSION AND CONFIGURABLE

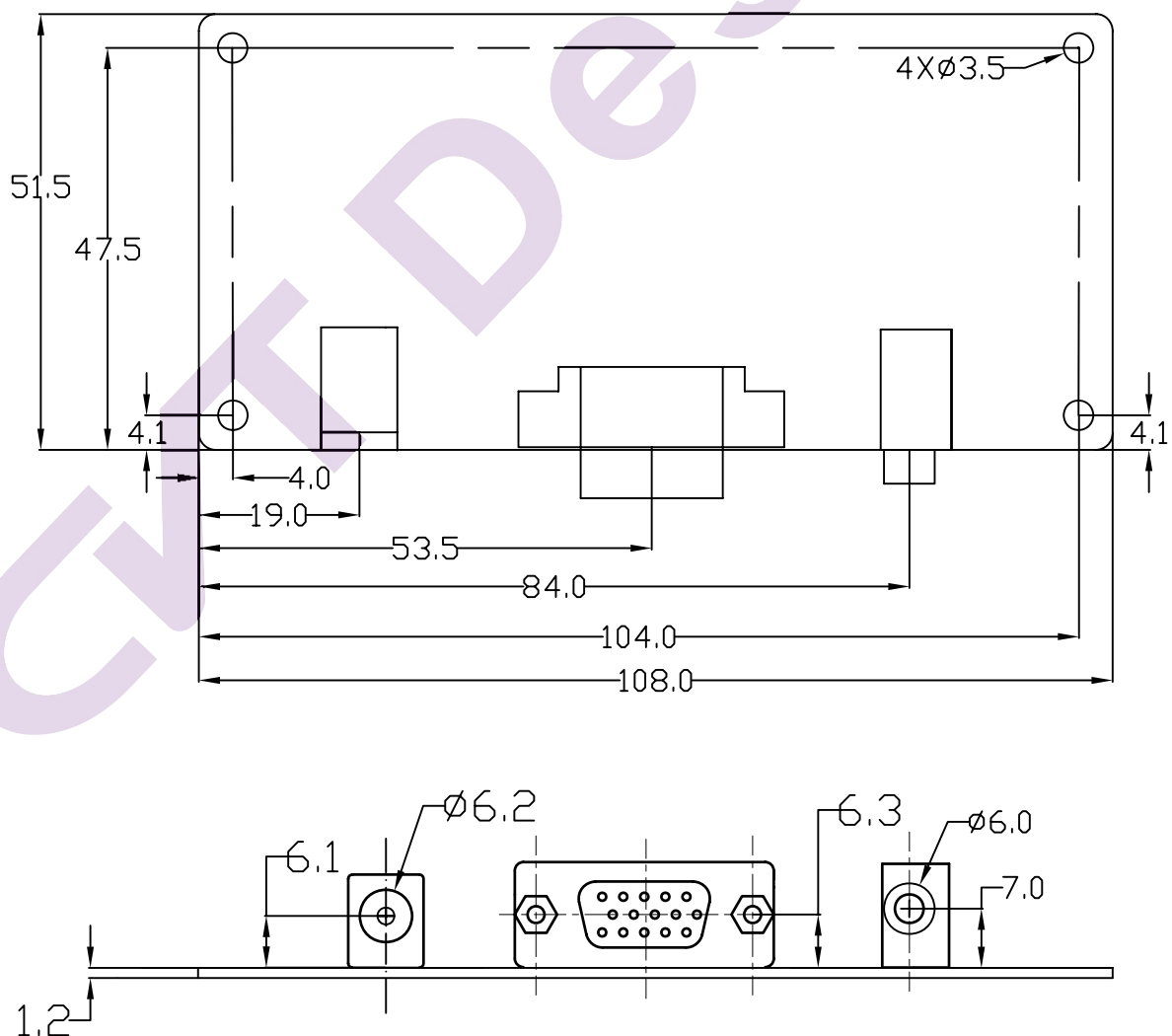## 4.1 PCB DIMENSION

PCB Height=1.2mm
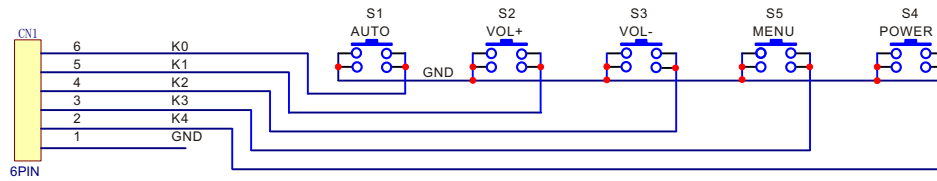**PCB Length=108mm**
PCB Width=51.5mm
The height of the whole controller board is:18.0mm
The diameter of PCB Screw is: 3.5mm.

4.2 CONFIGURABLE

5 KEY BOARD SCHEMATIC

6 OPERATION REQUIREMENT

+ **Do not Pressed and distorted.**
+ **Keep away from static and water.**
+ **Relative humidity: ≤ 80%.**
+ **Storage temperature: -10~+60 ℃.**
+ **Operation temperature: 0~+40 ℃.**

7 INTERFACE DEFINITION

✦ CN10 (6PIN/2.0): INVERTER JACK

NO	SYMBOL	DESCRIPTION
1	12V	+12V DC Power supply
2	12V	+12V DC Power supply
3	BL_ON	Black-light ON/OFF control
4	ADJ	Brightness adjustment
5	GND	Ground
6	GND	Ground

✦ CN11(4PIN/2.0): AMPLIFIER JACK

NO	SYMBOL	DESCRIPTION
1	LO	Left audio channel out
2	GND	Ground
3	GND	Ground
4	RO	Right audio channel out

✦ CN2(4PIN/2.0):BUILT-IN POWER JACK

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

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✦ CN5(10PIN/2.0): KEY BOARD JACK

NO	SYMBOL	DESCRIPTION
1	K0	Key0
2	LED-R	Red indicator
3	LED-G	Green indicator
4	GND	Ground
5	K1	Key1
6	K2	Key2
7	K3	Key3
8	K4	Key4
9	K5	Key5
10	K6	Key6

✦ CN12(2 X 15PIN/2.0): LVDS PANEL JACK

NO	SYMBOL	DESCRIPTION
1	VSEL	Power for panel
2	VSEL	Power for panel
3	VSEL	Power 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

NOTE: RTMC1B provides option jacks such as CN2 (built-in power jack), CN8 (PC-RGB jack) and CN6 (audio input jack). The position of CN2 jack is compatible with CN1 terminal; The position of CN8 jack is compatible with CN4 terminal; The position of CN6 jack is compatible with AV2 terminal.