

# **SPECIFICATION**

**MODEL: M.RT2270C.1**

**Area:** Global

**Description:** Monitor

**Part Number:** 14090204

## CONTENT

ITEM	PAGE
1.GENERAL DESCRIPTION	2
2.STANDARD CONFIGURATION	2
3.FEATURES	4
4.PCB DIMENSIONS	4
5.SCHEMATICS OF IR & KEY BOARD	5
6.INTERFACE DEFINITION	5
7.CONFIGURATION & GENERAL PRECAUTIONS	8

## REVISION HISTORY

VERSION	DATE	BOARD ID	PAGE	DESCRIPTION	AUTHOR
A0	2014.09.02	M.RT2270C.1 A14325	All	First issued.	Cathy

## 1. GENERAL DESCRIPTION

**M.RT2270C.1** is a monitor control board, The resolution is up to 1680x1050@75HZ. Its color reach 24bit potentially. H-Frequency signal range from 30 to 80 KHz, V-Frequency signal 60 to 75 Hz.

**M.RT2270C.1** supports synchronize automatic detection and Dynamic Contrast Control, apply to Sync Separator for extracting Hsync and Vsync.

## 2. STANDARD CONFIGURATION

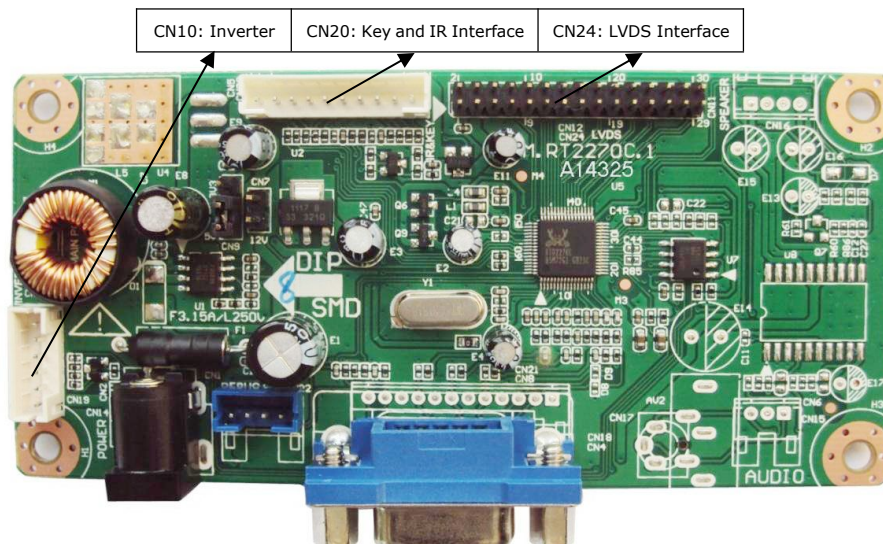
Pictures are for reference only, specific to prevail in kind.

The optional connectors and terminals are marked with “\*”.

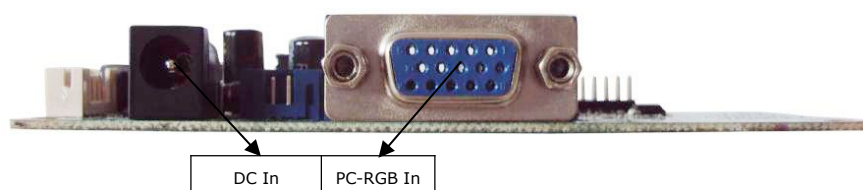
Standard Configuration 1	
<b>Features</b>	VGA(Horizontal terminal), without PC AUDIO IN
<b>Main chipset</b>	RTD2270CLW-CG
<b>Terminal Functions</b>	VGA(Horizontal terminal), without PC AUDIO IN
<b>Optional Functions</b>	--
<b>Power Supply</b>	External Power Supply, Inside Diameter of Power Terminal is 2.0mm
<b>Power to Panel</b>	3.3V, 5V, 12V Reserved (Power to Panel switch to 5V)
<b>Special Requirements</b>	CN3/4PIN-2.0mm Blue Interface (Reverse)
<b>Button Types</b>	Ground Key Interface

### Standard Configuration 1:

#### TOP VIEW OF M.RT2270.1C



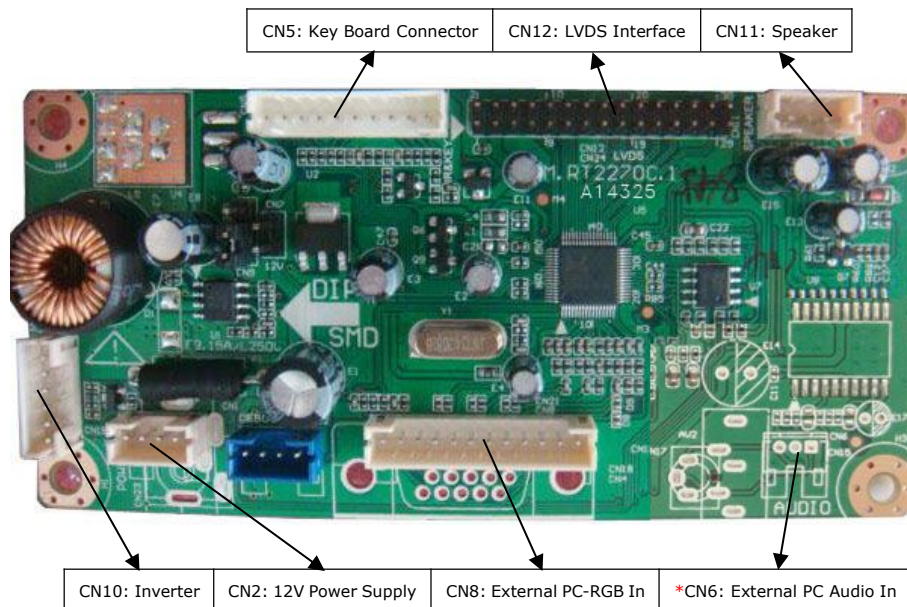
#### FRONT VIEW OF M.RT2270.1C



<b>Standard Configuration 2</b>	
<b>Features</b>	VGA(Vertical terminal), without PC AUDIO IN
<b>Main chipset</b>	RTD2270CLW-CG
<b>Terminal Functions</b>	VGA(Vertical terminal), without PC AUDIO IN
<b>Optional Functions</b>	--
<b>Power Supply</b>	External Power Supply, Inside Diameter of Power Terminal is 2.0mm
<b>Power to Panel</b>	3.3V, 5V, 12V Reserved (Power to Panel switch to 5V)
<b>Special Requirements</b>	CN3/4PIN-2.0mm Blue Interface (Reverse)
<b>Button Types</b>	Ground Key Interface

### Standard Configuration 2:

### TOP VIEW OF M.RT2270.1C



## 3. FEATURES

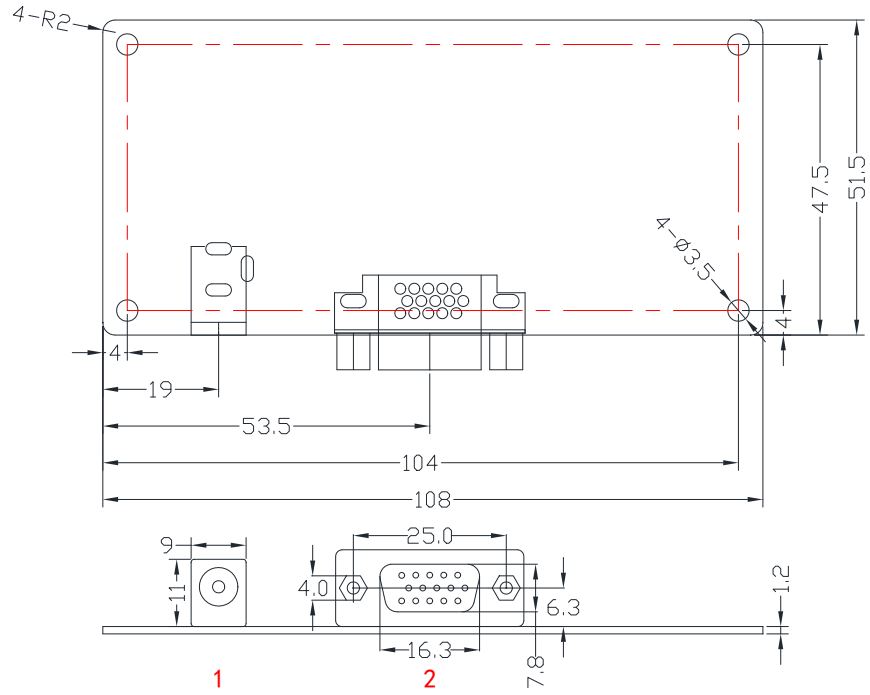
<b>MAIN CHIP</b>	RTD2270L	
<b>PANEL</b>	Interface	Single/Dual LVDS
	Resolution	1680x1050@75HZ
<b>POWER</b>	Requirement	12V DC, 12V (Built in), 12V/5V (Built in)
	To Panel	3.3V, 5V,12V
	Management	Low power consumption mode, standby
	standby	<1W
<b>OSD LANGUAGE</b>	Simplified Chinese, Traditional Chinese, English, French, German, Italian, Spanish, Portuguese, Japanese, Korean	
<b>KEY FUNCTION</b>	POWER,MENU,VOL+,VOL-,AUTO/EXIT	

## 4. PCB DIMENSIONS

The size of M.RT2270C.1 is 108mm(L)\*51.5mm(W).

配置一

Ver.	A0
NO.	Description
1	DC IN
2	VGA IN

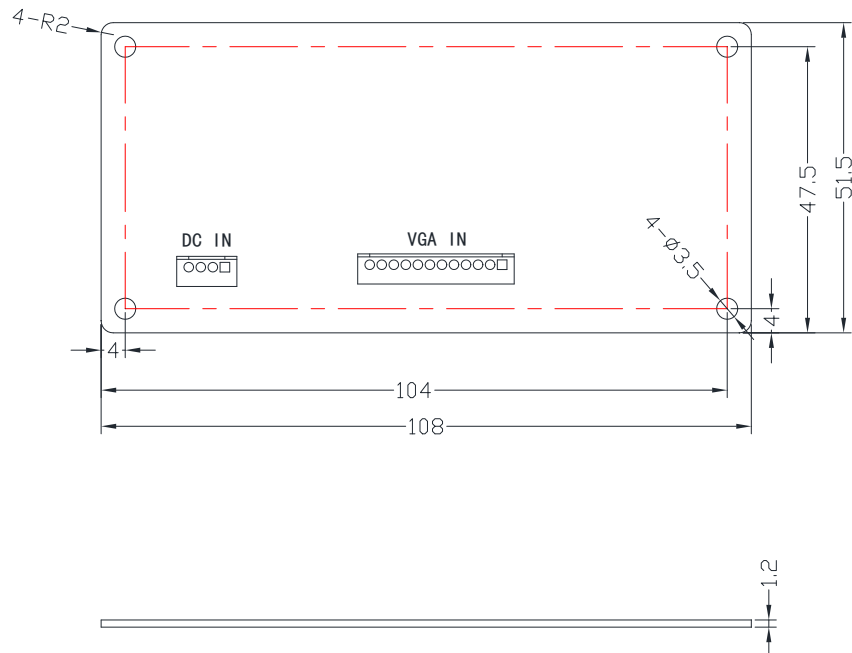


NOTE:

除端子外，顶层器件最高13mm、底层最高4mm

配置二

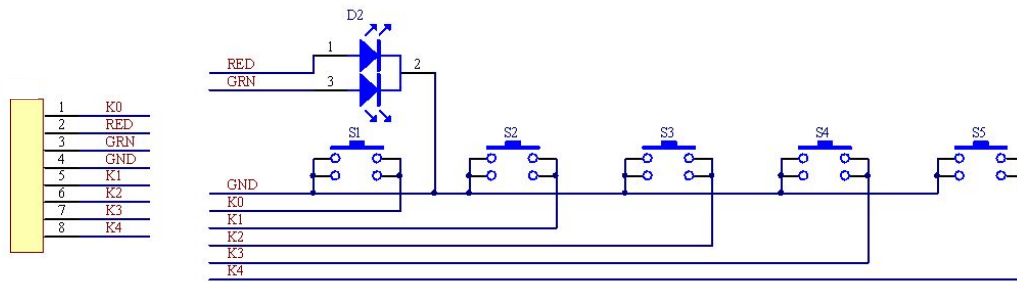
Ver.	A0
NO.	Description
1	
2	



NOTE:

除端子外，顶层器件最高13mm、底层最高4mm

## 5. SCHEMATICS OF IR BOARD & KEY BOARD



## 6. INTERFACE DEFINITION

The optional connectors are marked with “\*”.

### ◆ \*CN13(4PIN/2.0): 5V POWER SUPPLY CONNECTOR

NO.	SYMBOL	DESCRIPTION	
1	5V	+5V DC Power Supply	
2	5V		
3	GND	Ground	
4	GND		

### ◆ CN5(10PIN/2.0): KEY BOARD CONNECTOR

NO.	SYMBOL	DESCRIPTION	
1	K0	Key0	
2	RED	Red Indicator	
3	GRN	Green Indicator	
4	GND	Ground	
5	K1	Key1	
6	K2	Key2	
7	K3	Key3	
8	K4	Key4	
9	K5	Key5	
10	K6	Key6	

### ◆ CN12(2×15PIN/2.0): LVDS INTERFACE CONNECTOR

NO.	SYMBOL	DESCRIPTION
1	VSEL	Power Supply for Panel
2	VSEL	
3	VSEL	
4	GND	Ground
5	GND	
6	GND	
7	TXO0-	LVDS ODD 0- Signal
8	TXO0+	LVDS ODD 0+ Signal
9	TXO1-	LVDS ODD 1- Signal
10	TXO1+	LVDS ODD 1+ Signal
11	TXO2-	LVDS ODD 2- Signal
12	TXO2+	LVDS ODD 2+ Signal
13	GND	Ground
14	GND	
15	TXOC-	LVDS ODD Clock- Signal
16	TXOC+	LVDS ODD Clock+ Signal
17	TXO3-	LVDS ODD 3- Signal
18	TXO3+	LVDS ODD 3+ Signal
19	TXE0-	LVDS EVEN 0- Signal
20	TXE0+	LVDS EVEN 0+ Signal
21	TXE1-	LVDS EVEN 1- Signal
22	TXE1+	LVDS EVEN 1+ Signal
23	TXE2-	LVDS EVEN 2- Signal
24	TXE2+	LVDS EVEN 2+ Signal
25	GND	Ground
26	GND	
27	TXEC-	LVDS EVEN Clock- Signal
28	TXEC+	LVDS EVEN Clock+ Signal
29	TXE3-	LVDS EVEN 3- Signal
30	TXE3+	LVDS EVEN 3+ Signal

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

NO.	SYMBOL	DESCRIPTION
1	LO	Audio Left Channel Output

2	GND	Ground
3	GND	
4	RO	Audio Right Channel Output

◆ **CN10(6PIN/2.0): INVERTER CONNECTOR**

NO.	SYMBOL	DESCRIPTION
1	12V	+12V DC Power Supply
2	12V	
3	BLO	Back-Light ON/OFF Control for Panel
4	ADJ	Brightness Adjustment for Panel
5	GND	Ground
6	GND	

◆ **CN2(4PIN/2.0): 12V POWER SUPPLY CONNECTOR**

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

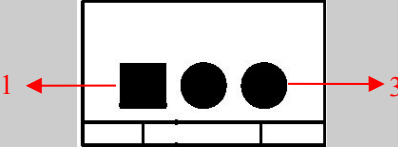
◆ **CN8(12PIN/2.0): EXTERNAL PC RGB IN CONNECTOR**

NO.	SYMBOL	DESCRIPTION
1	GND	Ground
2	VS	V-Frequency Signal
3	HS	H-Frequency Signal
4	GND	Ground
5	R	Red Signal
6	GND	Ground
7	G	Green Signal
8	GND	Ground
9	B	Blue Signal
10	GND	Ground



11	SDA	I <sup>2</sup> C SDA
12	SCL	I <sup>2</sup> C SCL

◆ **CN6(3PIN/2.0): EXTERNAL PC AUDIO IN CONNECTOR**

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

## 7.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.**