



# 1. GENERAL DESCRIPTION

2033 V2.0 C is a multi-purpose LCD controller, it is suitable inland market. It is designed to support TTL/LVDS LCD panel.

The main feature of 2033 V2.0 C can support VGA ,S-VIDEO , AV Signal input

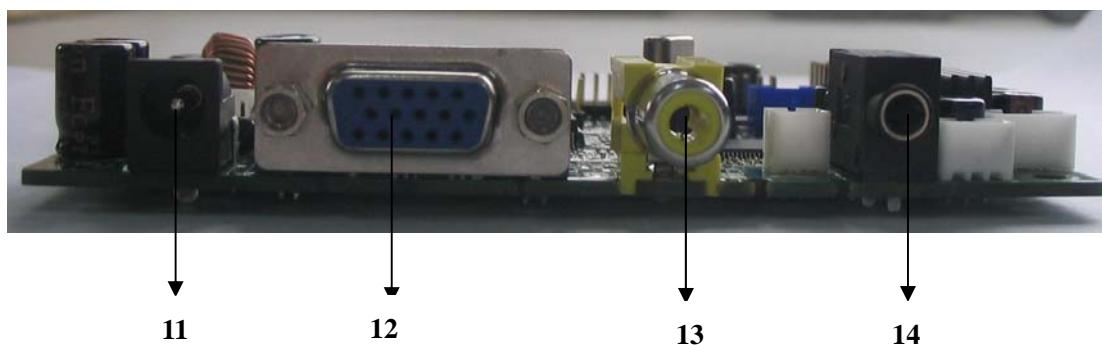
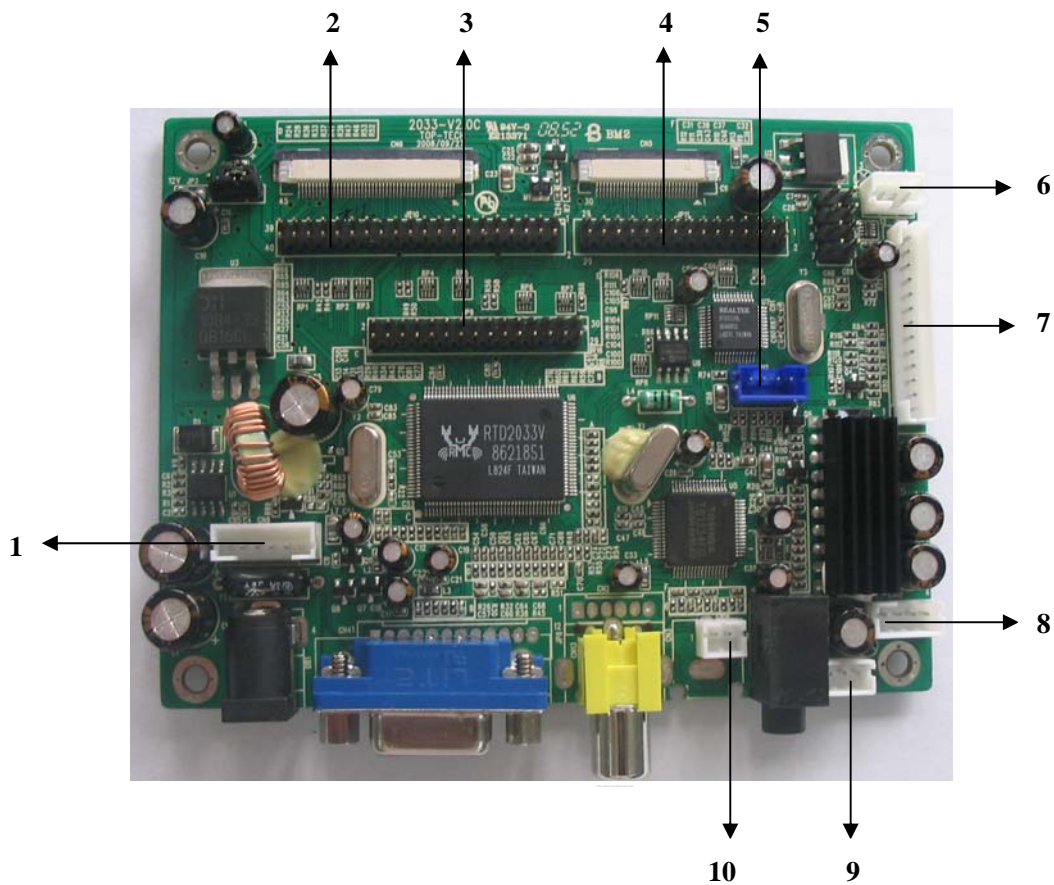
# 2 FEATURES

Below you will find the detailed feature

Video Input	S-Video	S-Y:1.0V Vp-p +/-5% S-C:0.3Vp-p +/-5%	
	CVBS	1.0Vp-p +/-5%	
	PC-RGB	Format	Up to 1920*1200@60HZ
Color		16bit, 24bit, 32bit	
Audio input	S-Video, CVBS, PC-RGB	Left and right audio input	
Power	Power Requirement	12V	
	To panel	3.3V, 5V, 12V	
	Manage	Low power consumable mode: standby < 2W	
OSD Language	English, French , Spanish , Italian, German, Portuguese, Dutch (Option )		
Key Functions	CH-, CH+, MENU, VOL-, VOL+, AUTO, ON/OFF (Control by remote control)		
Audio Output	2w (8 Ω)		
Comb Filter	/	De-interlace	/
Weak signal enhancement	/		
Nosier reduction	/		
Panel Resolutions	Up to 1920*1200@60HZ		
Terminals	Input	PC-RGB Input	1D-SUB 15PIN terminal blue color
		S-Video Input	1S-Video terminal black color
		CVBS Input	1RCA terminal yellow color
		CVBS Audio Input	1 earphone terminal black color
		S-Video Audio Input	
		PC-RGB Audio Input	
	Output	To Panel	LVDS 30PIN/2.0 JACK, TTL (Option )

### 3 FUNCTION LAYOUT

#### PICTURE OF LCD CONTROLLER



#### INTERFACE FUNCTION DESCRIPTION

NO	DESCRIPTION	NO	DESCRIPTION
1 (CN9)	INVERTER INTERFACE	11	DC IN
2 (JP10)	TTL1	12	VGA IN
3 (JP9)	LVDS PANEL INTERFACE	13	AV IN
4 (JP11)	TTL2	14	PC AUDIO IN
5 (JP12)	DEBUG		

<b>6 (CN7)</b>	<b>REMOTE RECEIVER INTERFACE</b>		
<b>7 (JP13)</b>	<b>KEY BOARD+ LED</b>		
<b>8 (CN12)</b>	<b>SPEAKER</b>		
<b>9 (CN10)</b>	<b>PC AUDIO INPUT</b>		
<b>10 (CN14)</b>	<b>AV SIGNAL INPUT</b>		

## INTERFACE DEFINITION

Below ,please see the symbol and description from left to right pin

### CN9 ( 6PIN/2.0 ) INVERTER INTERFACE

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

### JP9(2\*15PIN/2.0)LVDS PANEL INTERFACE

NO	SYMBOL	DESCRIPTION
1	PWR	Power for panel
2	PWR	Power for panel
3	PWR	Power for panel
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	ATX0-	LVDS ODD 0- Signal
8	ATX0+	LVDS ODD 0+ Signal
9	ATX1-	LVDS ODD 1- Signal
10	ATX1+	LVDS ODD 1+ Signal
11	ATX2-	LVDS ODD 2- Signal
12	ATX2+	LVDS ODD 2+ Signal
13	GND	Ground
14	GND	Ground
15	ATCK-	LVDS ODD Clock- Signal
16	ATCK+	LVDS ODD Clock+ Signal
17	ATX3-	LVDS ODD 3- Signal
18	ATX3+	LVDS ODD 3+ Signal
19	BTX0-	LVDS EVEN 0- Signal
20	BTX0+	LVDS EVEN 0+ Signal
21	BTX1-	LVDS EVEN 1- Signal
22	BTX1+	LVDS EVEN 1+ Signal
23	BTX2-	LVDS EVEN 2- Signal

24	BTX2+	LVDS EVEN 2+ Signal
25	GND	Ground
26	GND	Ground
27	BTCK-	LVDS EVEN Clock- Signal
28	BTCK+	LVDS EVEN Clock+ Signal
29	BTX3-	LVDS EVEN 3- Signal
30	BTX3+	LVDS EVEN 3+ Signal

#### JP12(4PIN/2.0) DTV DEBUGGING

NO	SYMBOL	DESCRIPTION
1	GND	Ground
2	SCL	I2C CLOCK
3	SDA	I2C DATA
4	5V	VCC ( IR Power supply )

#### CN7(3PIN/2.0) REMOTE RECEIVER INTERFACE

NO	SYMBOL	DESCRIPTION
1	IR	Remote receiver
2	GND	Ground
3	VCC	VCC ( IR Power supply )

#### JP13(13PIN/2.0)KEY BOARD+ LED

NO	SYMBOL	DESCRIPTION
1	CH-	CH- Key
2	CH+	CH+ Key
3	MENU	MENU Key
4	PC/AV	PC/AV Key
5	VOL-	VOL- Key
6	VOL+	VOL+ Key
7	GND	Ground
8	GRN	Green indicator
9	RED	Red indicator
10	ON/OFF	ON/OFF key
11	GND	Ground
12	IR	Remote receiver
13	VCC	DC power supply

#### CN12(4PIN/2.0)SPEAKER

NO	SYMBOL	DESCRIPTION
1	SK_R	Speaker right
2	GND	Ground
3	GND	Ground
4	SK_L	Speaker left

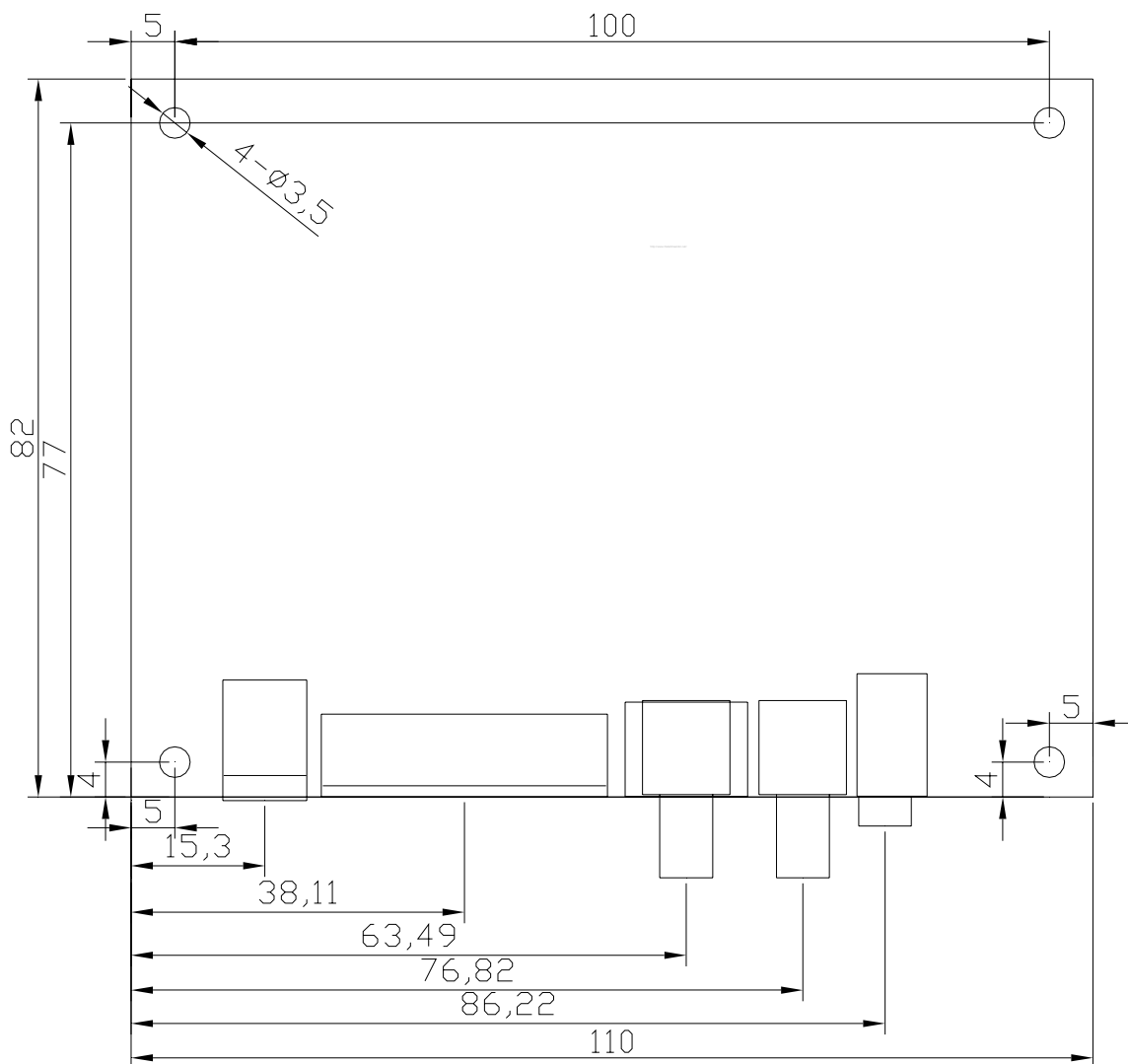
### CN10(3PIN/2.0) PC AUDIO INPUT

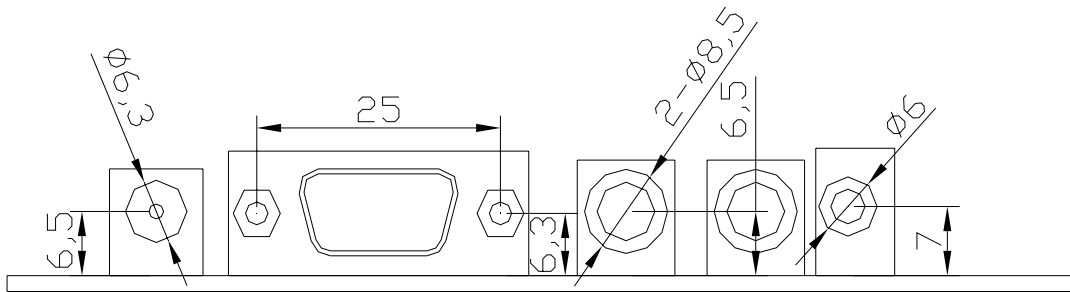
NO	SYMBOL	DESCRIPTION
1	PC_R	Right Audio Input
2	GND	Ground
3	PC_L	Left Audio Input

### CN14(2PIN/2.0) AV SIGNAL INPUT

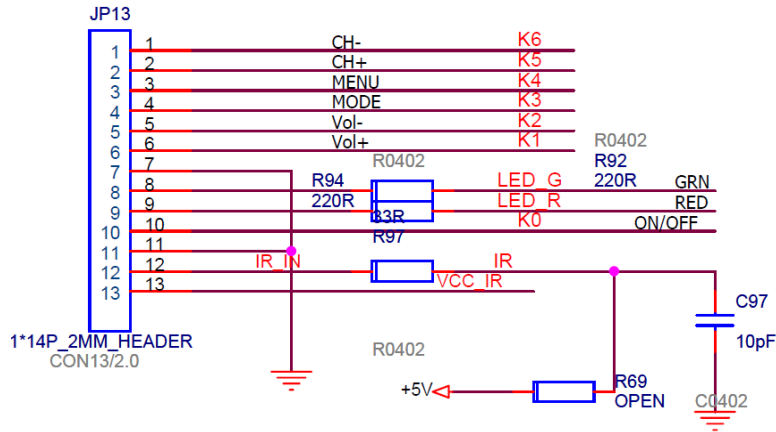
NO	SYMBOL	DESCRIPTION
1	AV	AV SIGNAL INPUT
2	GND	Ground

## 4.CONTROLLER DIMENSIONS

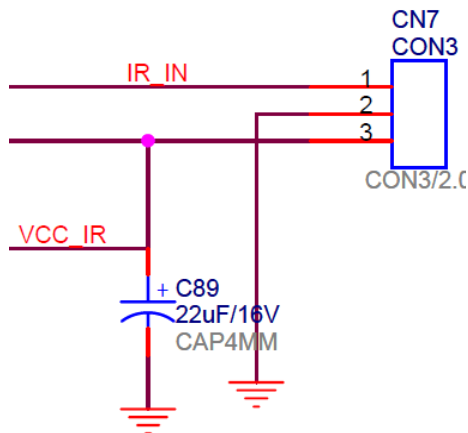




### 5.KEY BOARD SYSTEM SCHEMATIC



### 6.IR BOARD SYSTEM SCHEMATIC



### 7.OPERTION REQUIREMENT

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