

承 认 书

SPECIFICATION SHEET

产 品 名 称 DESCRIPTION: MULTI-PURPOSE LCD TV CONTROL BOARD
客 户 型 号 CUSTOMER MODEL: _____
客 户 编 号 CUSTOMER CODE: _____
承 制 方 型 号 MANUFACTURER MODEL: RTD2033
版 本 EDITION: V1.07
日 期 DATE: _____

FINDER ELECTRONICS CO.,LTD.

1. GENERAL DESCRIPTION

2033V1.07 is a multi-purpose LCD controller, It is designed to support dual/single LVDS which 15-22 inch LCD panel.

The main feature of 2033V.07 can support CVBS,HD, S-Video, TV signal input.

Special jumper design supports multi-resolution option, to change the resolution, no need rewrite the program.

2 FEATURES

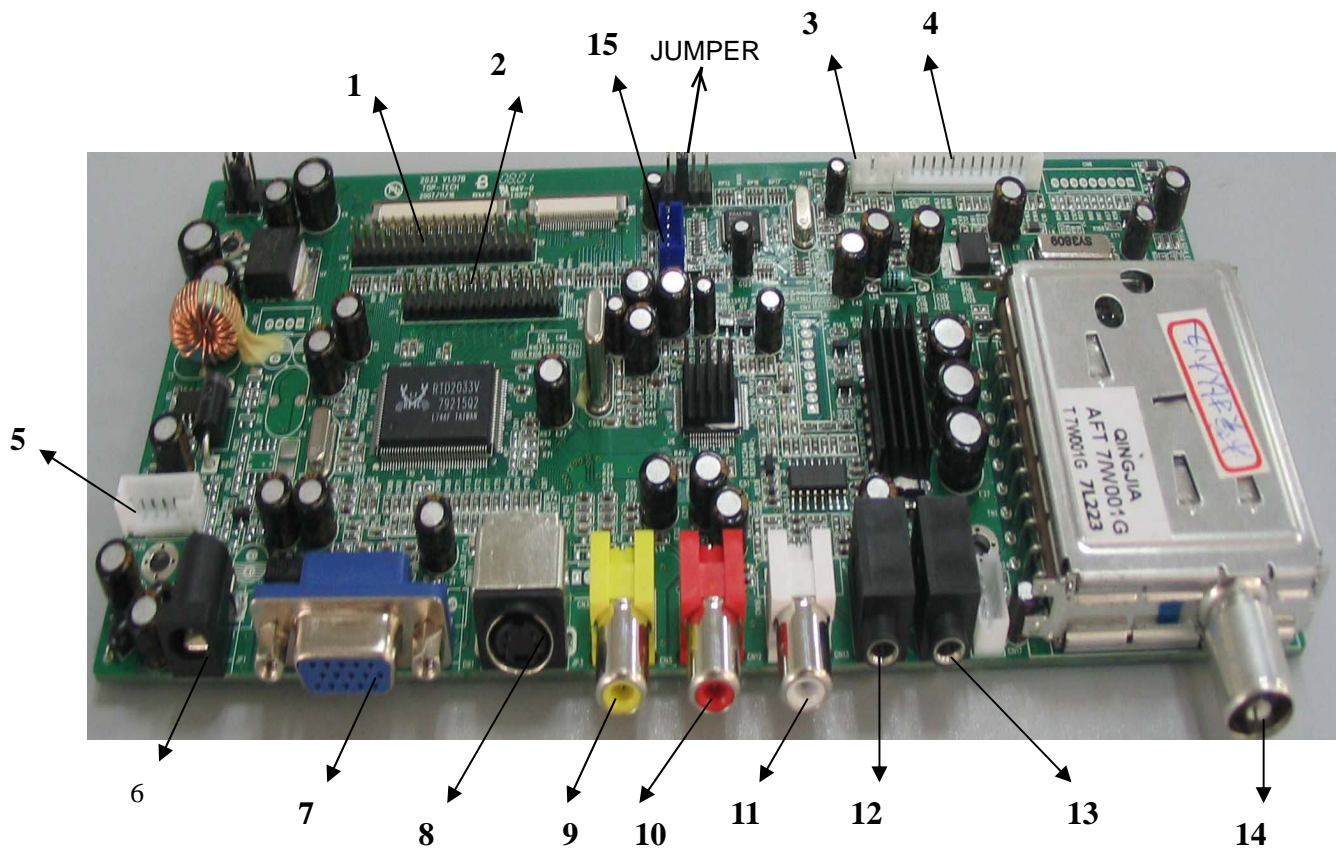
Below you will find the detailed feature

Video Input	TV	VIDEO SYSTEM	PAL、SECAM、DVB-T(Optoin)	
		SOUND SYSTEM	BG ,DK ,I	
		RECEIVE CHANNEL	200	
	S-Video	S-Y:1.0V Vp-p +/-5% S-C:0.3Vp-p +/-5%		
	CVBS	1.0Vp-p +/-5%		
	YPbPr/YCbCr	480i、480p、576i、576p、720p、1080i,1080p		
	PC-RGB	Format	Up to 1280*1024@75HZ 1366*768@60HZ	
		Color	16bit, 24bit, 32bit	
	HDMI	/		
SCART	/			
Expansion function	Card reader/USB	/		
	Inbuilt DVD	/		
Audio input	S-Video/CVBS	Left and right audio input		
	PC-RGB and YUV	Pc:Earphone input		
Power	Power Requirement	12V		
	To panel	3.3V,5V,12V		
	Manage	Low power consumable mode: standby<3w		
OSD Language	English,(French ,Spanish , Italian, German, Portuguese, Dutch)(Option)			
Key Functions	CH-,CH+,MENU,VOL-,VOL+,PC/AV,ON/OFF (Control by remote control)			
Audio Output	2*10w (8 Ω)			
Comb Filter	3D	De-interlace	3D	
Weak signal enhancement	/			
Nosier reduction	/			
PIP	yes			
EPG	NO			
NICAM/A2, TELETEXT	Optional			

Panel Resolutions	Up to 1680x1050		
Terminals	Input	TV Input	1 IEC 75 Ω
		PC-RGB Input	1D-SUB 15PIN terminal blue color
		S-Video Input	1S-Video terminal black color
		CVBS Input	1RCA terminal yellow color
		YPbPr Input	3RCA terminal green color,blue color and red color(external)
		HDMI Input	2 HDMI terminal
		SCART	2 SCART terminal
		CVBS Audio Input	2RCA terminal white color,red color
		YPbPr Audio Input	2RCA terminal white color, red color
		PC-RGB Audio Input	1 earphone terminal black color
	Output	To Panel	LVDS 30PIN/2.0 and TTL jack

3 FUNCTION LAYOUT

PICTURE OF LCD CONTROLLER



(The color of actual item may vary and the image is only for information)

INTERFACE FUNCTION DESCRIPTION

NO	DESCRIPTION	NO	DESCRIPTION
1 (CN9)	TTL INTERFACE	10	AUDIO IN(R)
2 (JP5)	LVDS PANEL INTERFACE	11	AUDIO IN(L)
3 (CN18)	REMOTE RECEIVER INTERFACE	12	EARPHONE OUT
4 (JP11)	KEY BOARD AND REMOTE RECEIVE	13	PC AUDIO IN
5 (CN20)	DC 12V INTERFACE(TO EXTERNAL BOARD)	14	TV SIGNAL IN
6 (JP1)	DC IN	15	ATV DEBUGGING
7	VGA IN		
8	S-VIDEO IN		
9 (CN5)	AV IN		

INTERFACE DEFINITION

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

CN9 (2*18PIN/2.0) TTL INTERFACE

NO	SYMBOL	DESCRIPTION
1	PCLK	Data input clock
2	PENAB	Data enable signal each data signal
3	GND	Ground
4	PVS	Vertical Sync Signal
5	R7	Red data signal
6	PHS	Horizontal Sync Signal
7	R5	Red data signal (MSB)
8	R6	Red data signal
9	R3	Red data signal
10	R4	Red data signal
11	R1	Red data signal
12	R2	Red data signal
13	GND	Ground
14	R0	Red data signal
15	GND	Ground
16	G7	Green data signal (MSB)
17	G6	Green data signal
18	G5	Green data signal
19	G4	Green data signal
20	G3	Green data signal
21	G2	Green data signal
22	G1	Green data signal
23	G0	Green data signal

24	B7	Blue data signal
25	B6	Blue data signal
26	B5	Blue data signal(MSB)
27	B4	Blue data signal
28	B3	Blue data signal
29	B2	Blue data signal
30	B1	Blue data signal
31	GND	Ground
32	B0	Blue data signal
33	CDPWR	Power for panel
34	CDPWR	Power for panel
35	CDPWR	Power for panel
36	GND	Ground

CN18(3PIN/2.0) REMOTE RECEIVER INTERFACE

NO	SYMBOL	DESCRIPTION
1	IR_VCC	+5V DC power supply
2	GND	Ground
3	IR	Remote receiver

JP10(4PIN/2.0) ATV DEBUGGING INTERFACE

NO	SYMBOL	DESCRIPTION
1	VCC	+5V Power supply
2	TXD	TXD signal
3	RXD	RXD signal
4	GND	Ground

CN20 (6PIN/2.0) INVERTER INTERFACE

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

JP11(14PIN/2.0)KEY BOARD

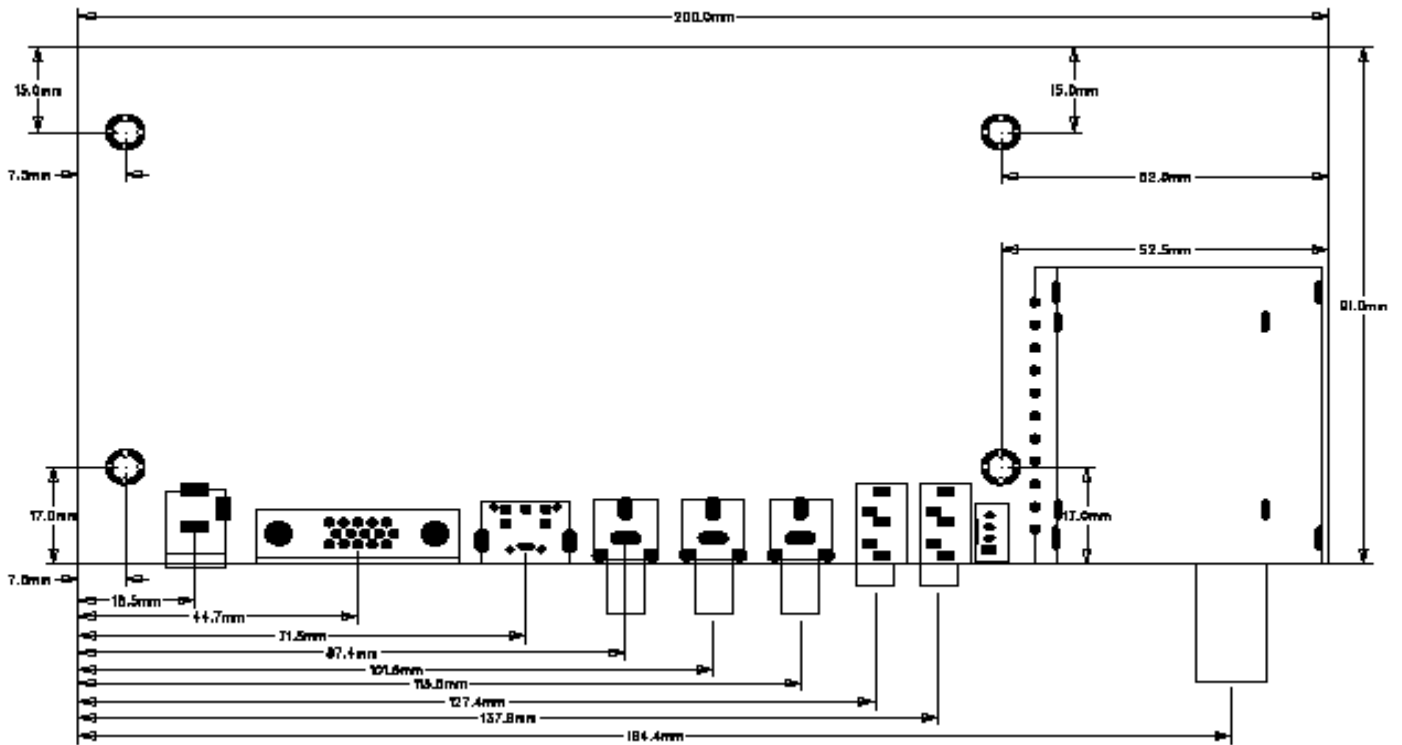
NO	SYMBOL	DESCRIPTION
1	VCC	
2	IR	Remote receiver
3	GND	Ground
4	ON/F	ON/OFF KEY
5	RED	Red indicator
6	GRN	Green indicator

7	GND	Ground
8	VOL+	VOL+ Key
9	VOL-	VOL- Key
10	AV/PC	SOURCE Key
11	Menu	Menu key
12	CH+	CH+ key
13	CH-	CH- key
14	NC	NC

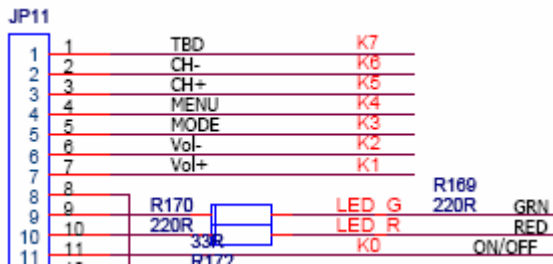
JP5(2*15PIN/2.0)LVDS PANEL INTERFACE

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

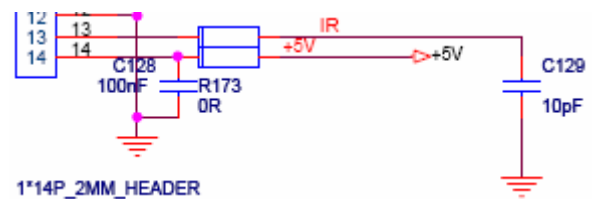
4.CONTROLLER DIMENSIONS



5.KEY BOARD SYSTEM SCHEMATIC



6.IR BOARD SYSTEM SCHEMATIC



7.JUMPER DEFINE TABLE

Resolution		CN19				
		1-2	3-4	5-6	7-8	
1280x1024	dou 8	lvds	0	0	0	0
1024x768	sig 8	lvds	1	0	0	1
1024x768	sig 6	lvds	0	1	0	2
800x600	sig 6	lvds	1	1	0	3
1280x800	sig 6	lvds	0	0	1	4
1400x1050	dou 6	lvds	1	0	1	5
1440x900	dou 6	lvds	0	1	1	6
1440x900	dou 8	lvds	1	1	1	7
1024x768	sig 8	ttl	0	0	0	8
1024x768	dou 8	ttl	1	0	0	9
800x600	sig 8	ttl	0	1	0	A
1280x1024	dou 8	ttl	1	1	0	B
1280x768	dou 8	ttl	0	0	1	C
640x480	sig 8	ttl	1	0	1	D
1920x1200	dou 6	lvds	0	1	1	E
1680x1050	dou 8	lvds	1	1	1	F

8.OPERTION REQUIREMENT

Do not pressed and distorted.

Keep away from static and water.

Relative humidity :≤80%

Storage temperature:-10~+60℃

Operation temperature:0~+40℃