

SPECIFICATION SHEET

FINDER ELECTRONICS CO.,LTD.

CONTENTS

PAGE	TITLE
1	COVER
2	CONTENS
2	RECORD OF REVISIONS
3	GENERAL DESCRIPTION
3	FEATURES
5	FUNCTION LAYOUT
11	CONTROLLER DIMENSIONS
12	KEY BOARD SYSTEM SCHEMATIC
12	IR BOARD SYSTEM SCHEMATIC
12	OPERATION REQUIREMENT

RECORD OF REVISIONS

VERSION NO	DATE	PAGE	DESCRIPTION

1.GENERAL DESCRIPTION

MST6M48 V2.0 is a multi-purpose LCD controller, it is designed to support FULL HD LCD panel.

MST6M48 V2.0 can support HDMI, AV,PC-RGB, S-Video, DVD (Option), USB,YPBPR,TV signal input .

2.FEATURES

Below you will find the detailed feature

Video Input	TV	VIDEO SYSTEM		PAL/SECAM, NTSC (Option)
		SOUND SYSTEM		BG ,DK ,I, (M/N,L,L' Option)
		RECEIVE CHANNEL		100
	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 1920*1080@60HZ	
		Color	16bit, 24bit, 32bit	
	HDMI	480i、480p、576i、576p、720p、1080i、1080p		
Expansion function	USB	YES		
	Inbuilt DVD	Option		
Audio input	S-Video/CVBS and YUV	Left and right audio input		
	PC-RGB	Pc: Earphone input		
Power	Build-in power supply	5V,5VS,12V or only 12v(Option)		
	To panel	3.3V,5V,12V		
	Manage	Low power consumable mode: standby≤0.5w		
OSD Language	English, Chinese, French ,Spanish , German , Arabic , Russian (Option)			
Key Functions	CH-,CH+,MENU,VOL-,VOL+,SOURCE ,ON/OFF			
Audio Output	2*8w@ 8Ω , 2*15w@ 8Ω (option)			
Comb Filter	3D	De-interlace	3D	
Weak signal enhancement		YES		
Noise reduction		YES		
PIP		NO		
EPG		NO		
NICAM,BTSC,A2,CC,VCHIP,Teletext,		YES		
Panel Resolutions	Up to1920*1080@60HZ			
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	2*3RCA terminal green color, blue color and red color
		HDMI Input	2 HDMI terminal
		CVBS and YPbPr Audio Input	3*2RCA terminal white color, red color
		PC-RGB Audio Input	1 earphone terminal black color
	Output	To Panel	Double LVDS 30PIN/2.0 jack , 34PIN/2.0 jack(Optional)
		SPDIF Out	1 SPDIF terminal

USB Function

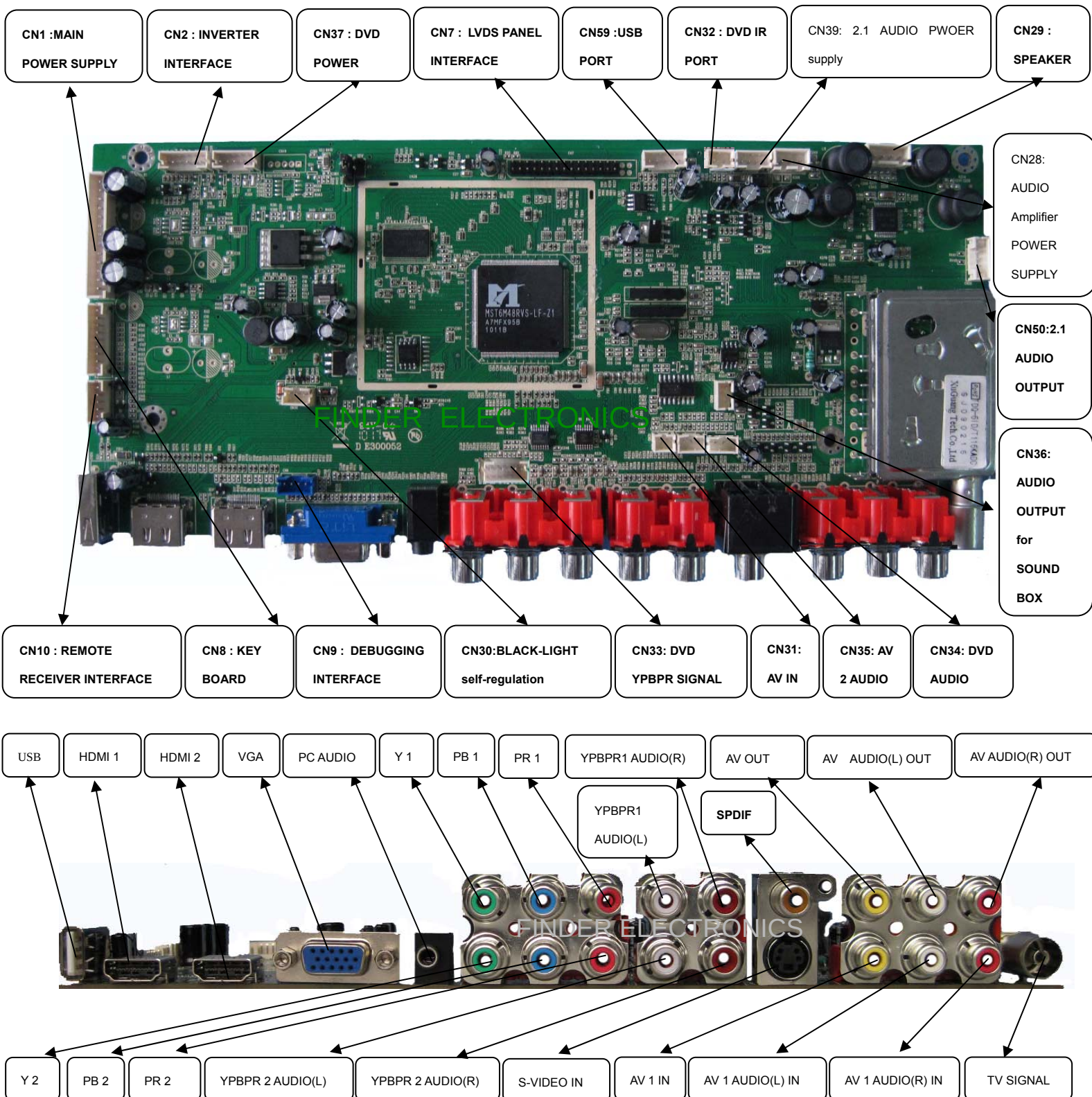
Multimedia Categories	File Extension	
PICTURE	JPEG、BMP、PNG	.jpg、.bmp、.png
MOVIE	MPEG1、MPEG2、 MPEG4、H264、RM、 RMVB、MOV、MJPEG、 VC1、DivX、FLV	.avi、.mpg、.dat、.vob、.div、.mov、 mkv、.rm、.rmvb、.mp4、.mjpeg、.ts、.trp、 wmv、.asf、.flv
MUSIC	WMA、MP3、M4A、 (AAC)	.wma、.mp3、.m4a

File type \ The relevant parameters	Resolution	Compression option	Support boundaries
JPEG	15360*8640	Progressive JPEG	Resolution Only support 1024*768
		Baseline("standard")	support
		Baseline optimized	support
BMP	9600*6400	homochromatism	support
		16color	support
		256color	support
		16bit	support
		24bit	support
		32bit	support
PNG	9600*6400	No interlacing	support
		Interlaced	Resolution Only support 1200*800

***Realize the above-mentioned USB function must be going to gain the corresponding copyright first.**

3 .FUNCTION LAYOUT

PICTURE OF LCD CONTROLLER



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

INTERFACE DEFINITION

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

CN1 (13PIN/2.54) MAIN POWER SUPPLY

NO.	SYMBOL	DESCRIPTION	ELECTRIC CHARACTER
1	12VA	+12V DC Power supply	1.5A+Panel Electric Current +electric Current of extended module
2	12VA		
3	GND	Ground	---
4	GND		
5	GND		
6	5VA	+5V DC Power supply	2A+Panel Electric Current + electric Current of extended module
7	5VA		
10	5VA		
11	5VA		
8	5VS	+5V DC Power standby	1A
9	STB	Standby Control	5V , 1K ohm output impedance
12	GND	Ground	---
13	GND		

CN8 (9PIN/2.0) KEY BOARD

NO.	SYMBOL	DESCRIPTION
1	GND	Ground
2	CH-	CH- key
3	CH+	CH+ Key
4	MENU	MENU Key
5	VOL-	VOL- Key
6	VOL+	VOL+ Key
7	SOURCE	SOURCE Key
8	POWER	ON/OFF key
9	NC	NC

CN10 (5PIN/2.0) REMOTE RECEIVER INTERFACE

NO.	SYMBOL	DESCRIPTION
1	GND	Ground
2	IR_IN	Remote receiver
3	LED_G	Green indicator
4	LED_R	Red indicator
5	IR_VCC	+5V DC power supply

CN2 (6PIN/2.0) INVERTER INTERFACE

NO.	SYMBOL	DESCRIPTION	ELECTRIC CHARACTER
1	GND	Ground	---
2	GND		
3	ADJ	Brightness adjustment	---
4	BKL	Black-light ON/OFF control	5V , 1K ohm output impedance
5	12VA	+12V DC Power supply	INVERTER Power Supply
6	12VA		

CN37 (5PIN/2.0) DVD POWER

NO.	SYMBOL	DESCRIPTION
1	12V	DVD +12V DC Power supply
2	GND	Ground
3	GND	
4	5V_DVD	DVD +5V DC Power supply
5	5V_DVD	

CN7 (2*17PIN/2.0) LVDS PANEL INTERFACE

NO.	SYMBOL	DESCRIPTION
1	VCC	Power for panel
2	CT	mode pin for panel
3	VCC	Power for panel
4	GND	Ground
5	GND	
6	GND	
7	RX00-	LVDS ODD 0- Signal
8	RX00+	LVDS ODD 0+ Signal
9	RX01-	LVDS ODD 1- Signal
10	RX01+	LVDS ODD 1+ Signal
11	RX02-	LVDS ODD 2- Signal
12	RX02+	LVDS ODD 2+ Signal
13	GND	Ground
14	GND	
15	RXOC-	LVDS ODD Clock- Signal
16	RXOC+	LVDS ODD Clock+ Signal
17	RX03-	LVDS ODD 3- Signal
18	RX03+	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
29	RXE3-	LVDS EVEN 3- Signal
30	RXE3+	LVDS EVEN 3+ Signal
31	RXE4-	LVDS EVEN 4- Signal
32	RXE4+	LVDS EVEN 4+ Signal
33	RXO4-	LVDS ODD 4- Signal
34	RXO4+	LVDS ODD 4+ Signal

CN59(5PIN/2.0) USB PORT

NO.	SYMBOL	DESCRIPTION
1	5V_USB	5V power supply
2	USB_DM	USB data-
3	USB_DP	USB data+
4	GND	Ground
5	USB_I/O	USB I/O Control

CN32 (2PIN/2.0) DVD IR PORT

NO.	SYMBOL	DESCRIPTION
1	DVD_IR	DVD UART PORT
2	GND	Ground

CN39 (4PIN/2.0) 2.1 AUDIO PWOER SUPPLY

NO.	SYMBOL	DESCRIPTION
1	VCC_AMP	AUDIO Amplifier POWER SUPPLY (15W)
2	VCC_AMP	
3	GND	Ground
4	GND	

CN28 (3PIN/2.54) AUDIO Amplifier POWER SUPPLY (15W)

NO.	SYMBOL	DESCRIPTION
1	24V	24V Power supply
2	24V	
3	GND	Ground

CN29 (4PIN/2.54) SPEAKER

NO.	SYMBOL	DESCRIPTION
1	R+	Positive Right audio channel out
2	R-	Negative Right audio channel out
3	L-	Negative Left audio channel out
4	L+	Positive Left audio channel out

CN50 (5PIN/2.0) 2.1 AUDIO OUTPUT

NO.	SYMBOL	DESCRIPTION
1	MUTE_2.1	MUTE Control
2	STB_2.1	STB Control
3	AU_L_2.1	AUDIO (Left)
4	GND	Ground
5	AU_R_2.1	AUDIO (Right)

CN34 (3PIN/2.0) DVD AUDIO

NO.	SYMBOL	DESCRIPTION
1	DVD_R	DVD YPBPR AUDIO (right)
2	GND	Ground
3	DVD_L	DVD YPBPR AUDIO (left)

CN35 (3PIN/2.0) AV2 AUDIO

NO.	SYMBOL	DESCRIPTION
1	AV2_R	AV 2 AUDIO (right)
2	GND	Ground
3	AV2_L	AV 2 AUDIO (left)

CN31 (2PIN/2.0) AV IN

NO.	SYMBOL	DESCRIPTION
1	AV2	AV 2 IN
2	GND	Ground

CN33 (6PIN/2.0) DVD YPBPR SIGNAL

NO.	SYMBOL	DESCRIPTION
1	DVD_Y	DVD Y signal
2	GND	Ground
3	DVD_PB	DVD Pb signal
4	GND	Ground
5	DVD_PR	DVD Pr signal
6	GND	Ground

CN9 (4PIN/2.0) DEBUGGING INTERFACE

NO.	SYMBOL	DESCRIPTION
1	GND	Ground
2	UPRT-TX	Transmit data
3	UPRT-RX	Receive data
4	5VS	+5V DC Power supply

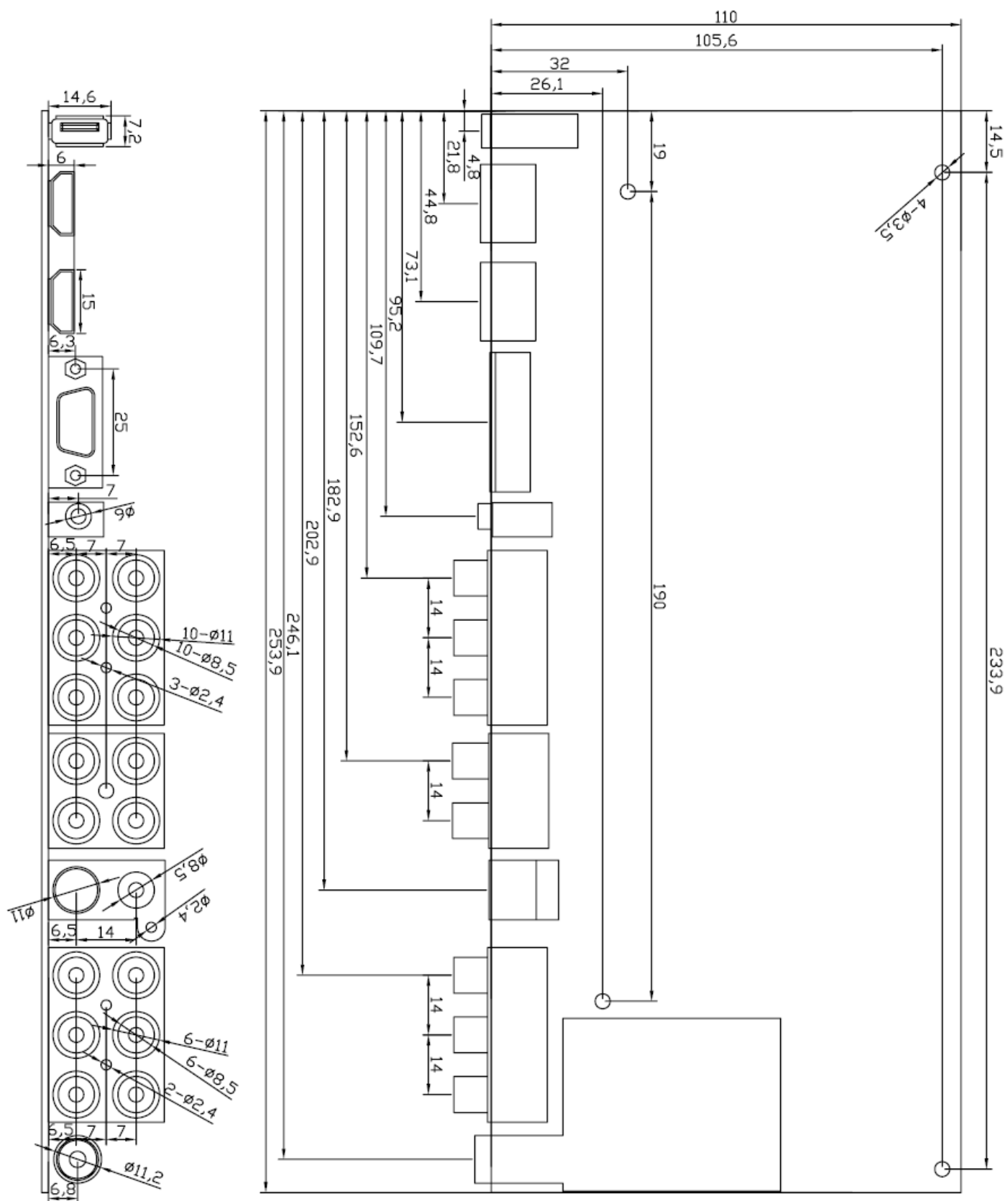
CN30 (3PIN/2.0) BLACK-LIGHT self-regulation

NO.	SYMBOL	DESCRIPTION
1	12VSB	12V Power output
2	GND	Ground
3	PWMADJ	ADC Signal input for ADJ Black-light

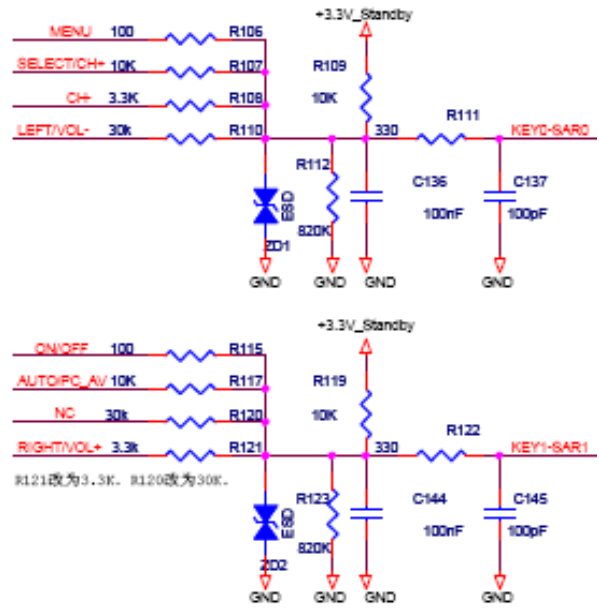
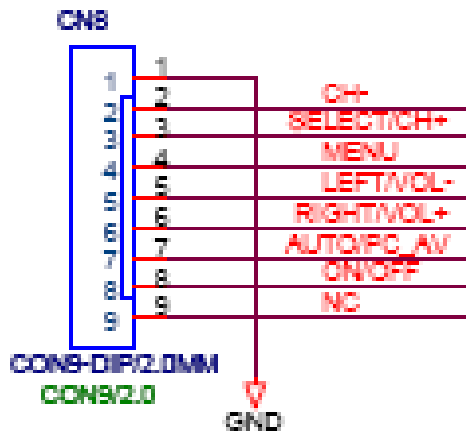
CN36 (3PIN/2.0) AUDIO OUTPUT for SOUND BOX

NO.	SYMBOL	DESCRIPTION
1	LINE_ROUT	AUDIO OUTPUT (R) for SOUND BOX
2	GND	Ground
3	LINE_LOUT	AUDIO OUTPUT(L) for SOUND BOX

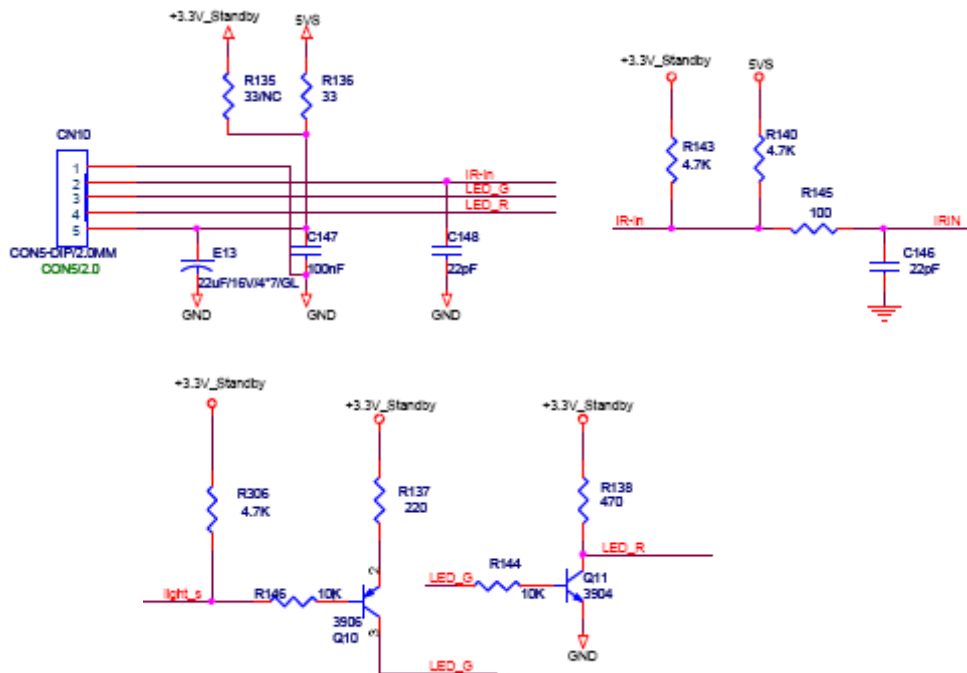
4. CONTROLLER DIMENSIONS



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 : $\leq 80\%$
 Storage temperature:-10~+60℃
 Operation temperature:0~+40℃