

1.GENERAL DESCRIPTION

TSU26V2.0-A is a multi-purpose LCD controller, it is suitable for the Asia market. It is designed to support dual/single LVDS which 14-32 inch LCD panel.

The main feature of TSU26V2.0-A can support HDMI, AV, PC-RGB, S-Video, DVD(YPBPR/SPDIF signal, internal selectable), YPBPR, TV signal input.

2.FEATURES

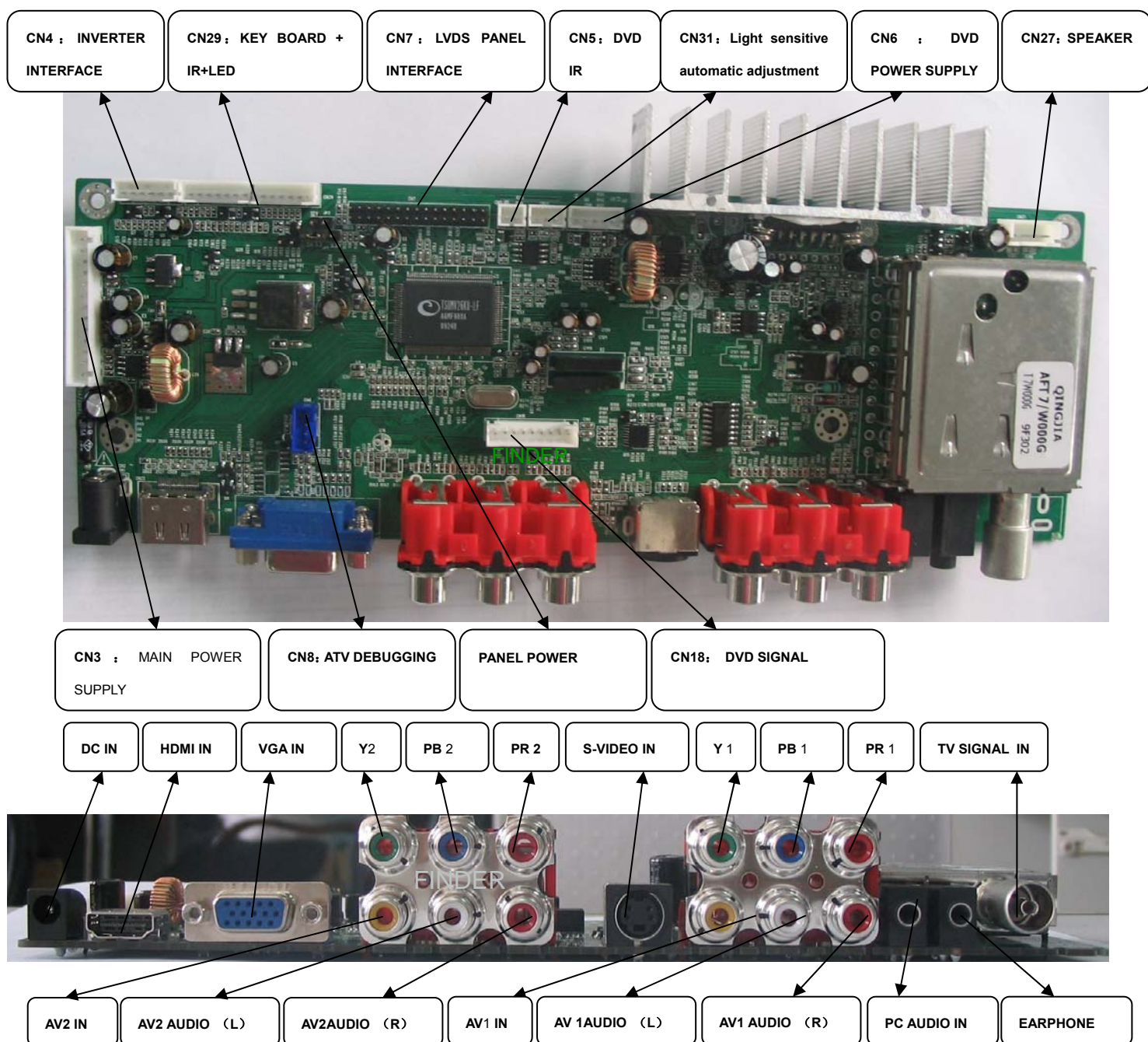
Below you will find the detailed feature

Video Input	TV	VIDEO SYSTEM		PAL
		SOUND SYSTEM		BG ,DK ,I
		RECEIVE CHANNEL		127
	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		
SCART	/			
Expansion function	Card reader/USB	NO		
	Inbuilt DVD	DVD :video and audio input		
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<1w		
OSD Language	English, Chinese			
Key Functions	CH-,CH+,MENU,VOL-,VOL+,AUTO,ON/OFF (Control by remote control)			
Audio Output	2*6w (8Ω)			
Comb Filter	2D	De-interlace	2D	
Weak signal enhancement	/			
Noise reduction	/			
PIP	NO			
EPG	NO			
NICAM/A2, TELETEXT	NO			
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	3RCA terminal green color, blue color and red color
	HDMI Input	1 HDMI terminal
	SCART	/
	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	Double LVDS 30PIN/2.0 jack

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

CN3 (13PIN/2.54) MAIN POWER SUPPLY

NO	SYMBOL	DESCRIPTION
1	12V	+12V DC Power supply
2	12V	
3	GND	Ground
4	GND	
5	GND	
6	5V	+5V DC Power supply
7	5V	
8	5VS	Power standby
9	PSON	Power switch control
10	5V	+5V DC Power supply
11	5V	
12	GND	Ground
13	GND	

CN4 (6PIN/2.0) INVERTER INTERFACE

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

CN8(4PIN/2.0) ATV DEBUGGING INTERFACE

NO	SYMBOL	DESCRIPTION
1	GND	Ground
2	TXD	Transmit data
3	RXD	Receive data
4	5VS	+5V DC Power supply

CN29(14PIN/2.0)KEY BOARD

NO	SYMBOL	DESCRIPTION
1	NC	NC
2	CH-	CH- key
3	CH+	CH+ Key
4	MENU	MENU Key
5	SOURCE	SOURCE Key
6	VOL-	VOL- Key

7	VOL+	VOL+ Key
8	GND	Ground
9	LED_G	Green indicator
10	LED_R	Red indicator
11	POWER	ON/OFF key
12	GND	Ground
13	IR_IN	Remote receiver
14	IR_VCC	IR power supply

CN7 (2*15PIN/2.0)LVDS PANEL INTERFACE

NO	SYMBOL	DESCRIPTION
1	VDD	Power for panel
2	CT	mode pin for panel
3	VDD	Power for panel
4	GND	Ground
5	GND	
6	GND	
7	BX0-	LVDS EVEN 0- Signal
8	BX0+	LVDS EVEN 0+ Signal
9	BX1-	LVDS EVEN 1- Signal
10	BX1+	LVDS EVEN 1+ Signal
11	BX2-	LVDS EVEN 2- Signal
12	BX2+	LVDS EVEN 2+ Signal
13	GND	Ground
14	GND	
15	BCKC-	LVDS EVEN Clock- Signal
16	BCK+	LVDS EVEN Clock+ Signal
17	BX3-	LVDS EVEN 3- Signal
18	BX3+	LVDS EVEN 3+ Signal
19	AX0-	LVDS ODD 0- Signal
20	AX0+	LVDS ODD 0+ Signal
21	AX1-	LVDS ODD 1- Signal
22	AX1+	LVDS ODD 1+ Signal
23	AX2-	LVDS ODD 2- Signal
24	AX2+	LVDS ODD 2+ Signal
25	GND	Ground
26	GND	
27	ACK-	LVDS ODD Clock- Signal
28	ACK+	LVDS ODD Clock+ Signal
29	AX3-	LVDS ODD 3- Signal
30	AX3+	LVDS ODD 3+ Signal

CN5(2PIN/2.0)DVD IR

NO	SYMBOL	DESCRIPTION
1	IR	DVD IR
2	GND	Ground

CN6(5PIN/2.0) DVD POWER SUPPLY

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

CN27 (4PIN/2.54)SPEAKER

NO	SYMBOL	DESCRIPTION
1	R	Right audio channel out
2	GND	Ground
3	GND	
4	L	Left audio channel out

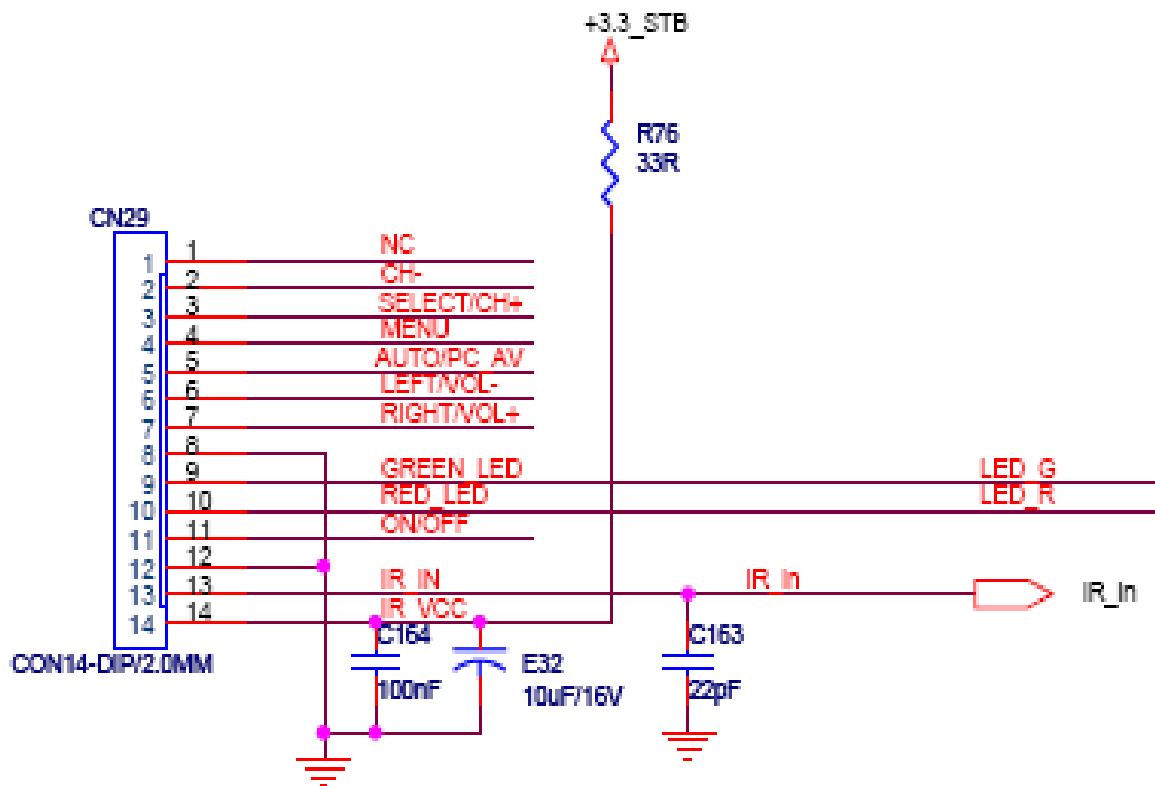
CN18(9PIN/2.0) DVD SIGNAL

NO	SYMBOL	DESCRIPTION
1	HD_Y2	HD Y2 or DVD Y signal
2	GND	Ground
3	HD_PB2	HD PB2 or DVD PB signal
4	GND	Ground
5	HD_PR2	HD PR2 or DVD PR signal
6	GND	Ground
7	DVD_R	DVD right audio channel out
8	GND	Ground
9	DVD_L	DVD left audio channel out

CN31 (3PIN/2.0) Light sensitive automatic adjustment

NO	SYMBOL	DESCRIPTION
1	12V	+12V DC Power supply
2	SAR2	Photoreceptor signal
3	GND	Ground

5.KEY BOARD & IR BOARD SYSTEM SCHEMATIC



6.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℃