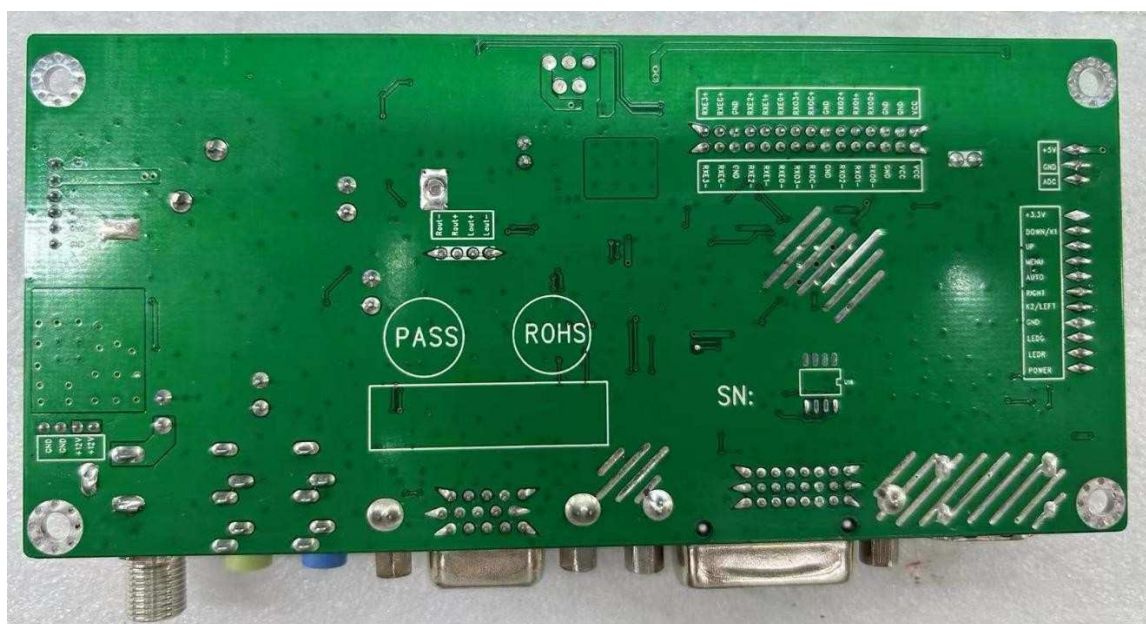
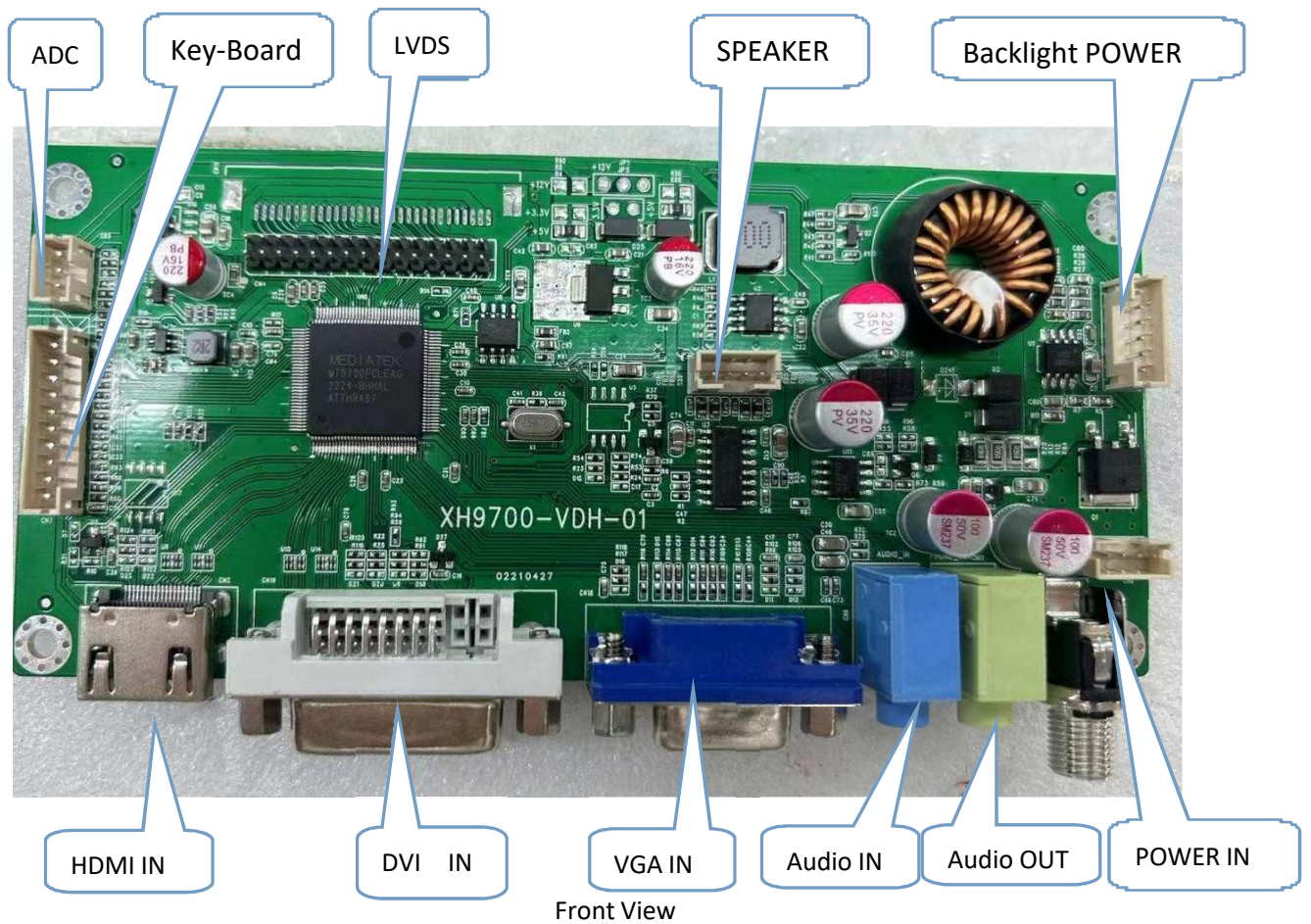


SPECIFICATION

1. Function Layout

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



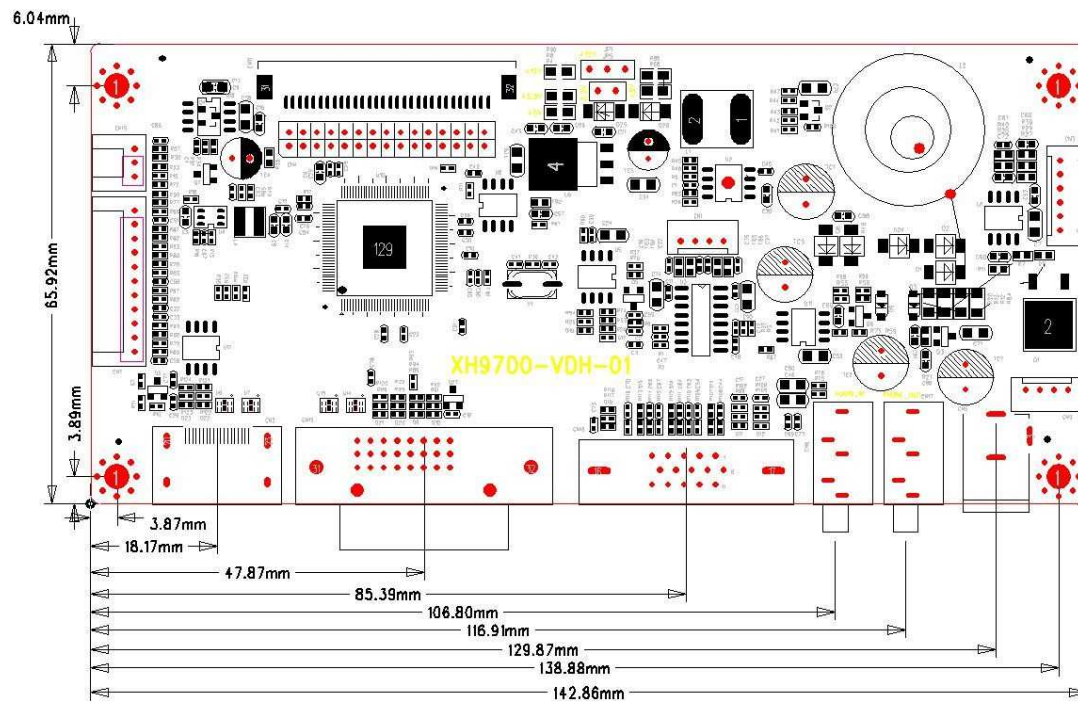
View

2. Features

Chipset	MT97XXX		
OSD Language	English, Chinese, Multi-Language,		
Panel	Panel Type		TFT LCD With LED Backlight
	Interface		Dual/single LVDS Interface
	Resolution		1920*1200
Video Input	VGA In	Signal	Anglog RGB(0.7Vpp)
		Connector	15Pin D-Sub
	HDMI In	Signal	T.M.D.S
		Connector	19Pin HDMI
	DVI In	Signal	T.M.D.S
		Connector	24Pin DVI
	Horizontal frequency		31.5-80.0KHz
	Vertical frequency		55-75Hz
	Video Mode		VGA,SVGA,XGA,SXGA,WSXGA+,WXGA, WXGA+,HD+,FHD
	Resolution		Up to 1920*1080
Video Output	Signal		R,G,B 8bit LVDS Output
	Connector		30Pin 2.0mm Pitch
	Color Temp		9300/6500/7500/Srgb/User-defined
Audio Input	Signal		PC-RGB
	Connector		5Pin Audio (3.5MM)
Phone Output	Signal		Phone Output
	Connector		5Pin Audio (3.5MM)
Power	DC input Requirement		9V~12V OR 15V~36V
	Panel Power Input		+3.3Vdc/+5Vdc/+12Vdc
	Power OFF Model		<0.5W
	Power Manage		Yes
PCB Specification	PCB Layer		Two Layers
	PCB Material		FR-4
	PCB Thickness		1.6mm
PCB Dimension	L*W*H		143*66*1.6mm
Component Foot	Bottom Layer Height		≤3.0mm
Key Function	Power Menu Right Left AUTO (Optional)		

3. Mechanical Dimension

The size of TDS-SM97C-VDH-N1 is 143mm(L)*66mm(W)*16mm (H)



4. Interface Definition

●CN5 (DC-2.5MM):DC Input

NO.	SYMBOL	DESCRIPTION	Fig.
1	VCC	9V~36V	
2	GND	Earth wire	
3	GND	Earth wire	

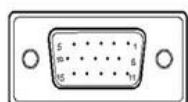
●CN9(4PIN/PH2.0/180°):VCC POWER IN

NO.	SYMBOL	DESCRIPTION	Fig.
1	VCC	9V~36V	
2	VCC	9V~36V	
3	GND	Earth wire	
4	GND	Earth wire	

●CN6 :Audio Input(3.5MM)

●CN17 :Audio out(3.5MM)

●CN18 (15PIN/D-sub MALE Connector):D-sub 30mm

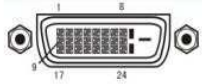
NO.	SYMBOL	DESCRIPTION	Fig.
1	R	Red Video	
2	G	Green Video	
3	B	Blue Video	
4	NC	NC	
5	NC	NC	
6	Gr	Red Ground	
7	Gg	Green Ground	
8	Gb	BLUE Ground	
9	NC	NC	
10	GND	Ground	
11	NC	NC	
12	SDA	DDC-Serial Data	
13	H	H.sync	
14	V	V.sync	
15	SCL	DDC-Serial Clock	

●CN2 (19PIN/HDMI Connector):HDMI 15mm 【HDMI 】

NO 【	SYMBOL	NO.	SYMBOL	Fig.
1	TMDS data2+	13	CEC	
2	TMDS data2 shield	14	NC	
3	TMDS data2-	15	SCL	
4	TMDS data1+	16	SDA	

5	TMDS data1 shield	17	DDC/CEC Ground	
6	TMDS data1-	18	+5V Power	
7	TMDS data0+	19	Hot Plug Detect	
8	TMDS data0 shield			
9	TMDS data0-			
10	TMDS clock+			
11	TMDS clock shield			
12	TMDS clock-			

●CN19 (24PIN/DVI Connector):DVI 38mm 【DVI 】

NO 【	SYMBOL	NO.	SYMBOL	Fig.
1	TMDS data2-	13	NC	
2	TMDS data2+	14	+5V	
3	TMDS data2 shield	15	NC	
4	NC	16	Hot plug detect	
5	NC	17	TMDS data0-	
6	DDC clock	18	TMDS data0+	
7	DDC data	19	TMDS data0 shield	
8	NC	20	NC	
9	TMDS data1-	21	NC	
10	TMDS data1+	22	TMDS clock shield	
11	TMDS data1 shield	23	TMDS clock+	
12	NC	24	TMDS clock-	

●CN7(10PIN/PH2.0/180°):Key-Board Connector

NO.	SYMBOL	DESCRIPTION
1	POWER	Power ON/OFF
2	LEDR	LED-R
3	LEDG	LED-G
4	GND	GND
5	K2/LEFT	LEFT
6	RIGHT	RIGHT KEY
7	AUTO	AUTO KEY
8	MENU	MENU KEY
9	UP	UP KEY
10	DOWN/K1	DOWN KEY
11	3.3V	NC

●CN15(3PIN/PH2.0/180°):ADC Connector

NO.	SYMBOL	DESCRIPTION	Fig.
1	+5V	+5V	
2	GND	Earth wire	
3	ADC	ADC	

●CN1 (4PIN/PH2.0/180°):Speaker Connector

NO.	SYMBOL	DESCRIPTION
1	LOUT—	Audio Left Channel Output-
2	LOUT+	Audio Left Channel Output+
3	ROUT+	Audio Right Channel Output+
4	ROUT—	Audio Right Channel Output-

●CN14(6PIN/PH2.0/180°): Backlight Power out

NO.	SYMBOL	DESCRIPTION
1	12V	12V
2	12V	12V
3	ON	
4	ADJ	
5	GND	GND
6	GND	GND

●CN4(30PIN/2.0mm):Panel interface Connector

NO. 【序号】	SYMBOL	NO.	SYMBOL
1	PANEL_VCC	16	RXOC+
2	PANEL_VCC	17	RXO3-
3	PANEL_VCC	18	RXO3+
4	GND	19	RXE0-
5	GND	20	RXE0+
6	GND	21	RXE1-
7	RXO0-	22	RXE1+
8	RXO0+	23	RXE2-
9	RXO1-	24	RXE2+
10	RXO1+	25	GND
11	RXO2-	26	GND
12	RXO2+	27	RXEC-
13	GND	28	RXEC+
14	GND	29	RXE3-
15	RXOC-	30	RXE3+

5. Electrical Characteristics

6.1 Input electrical specifications

Input	Minimum	Nominal	Rating	Maximum	Unit
Voltage	9V			36	Vdc
Current	--	--	--	10	A

6. Configuration & General Precautions

- Relative humidity: $\leq 80\%$
- Storage temperature: $-10\sim 60^{\circ}\text{C}$
- Operation temperature: $0\sim 40^{\circ}\text{C}$
- Protect the board from static electricity in case of damage to the IC.
- keep the board away from connectors when it is working.
- Don't push or pull the connectors when board is working.
- Don't Press, distort or disassemble the board.
- Don't wire in the board to power supply before panel is correctly connected.

7. Mount Precautions

- For Safety Issue, please keep 4.0mm at least from the metal parts of the system to the converter. Or put a high-voltage insulator between the converter and the metal parts to avoid the situation of Hi-POT failure or arcing---etc.
- Don't twist, deform , drop or knock the Drive board during assembly.
- Guarantee to offer ESD shield bag to protect the product from electrostatic or magnetic interference during delivery.but due to the converter is usually designed without the case. please take care about ESD at anytime.