

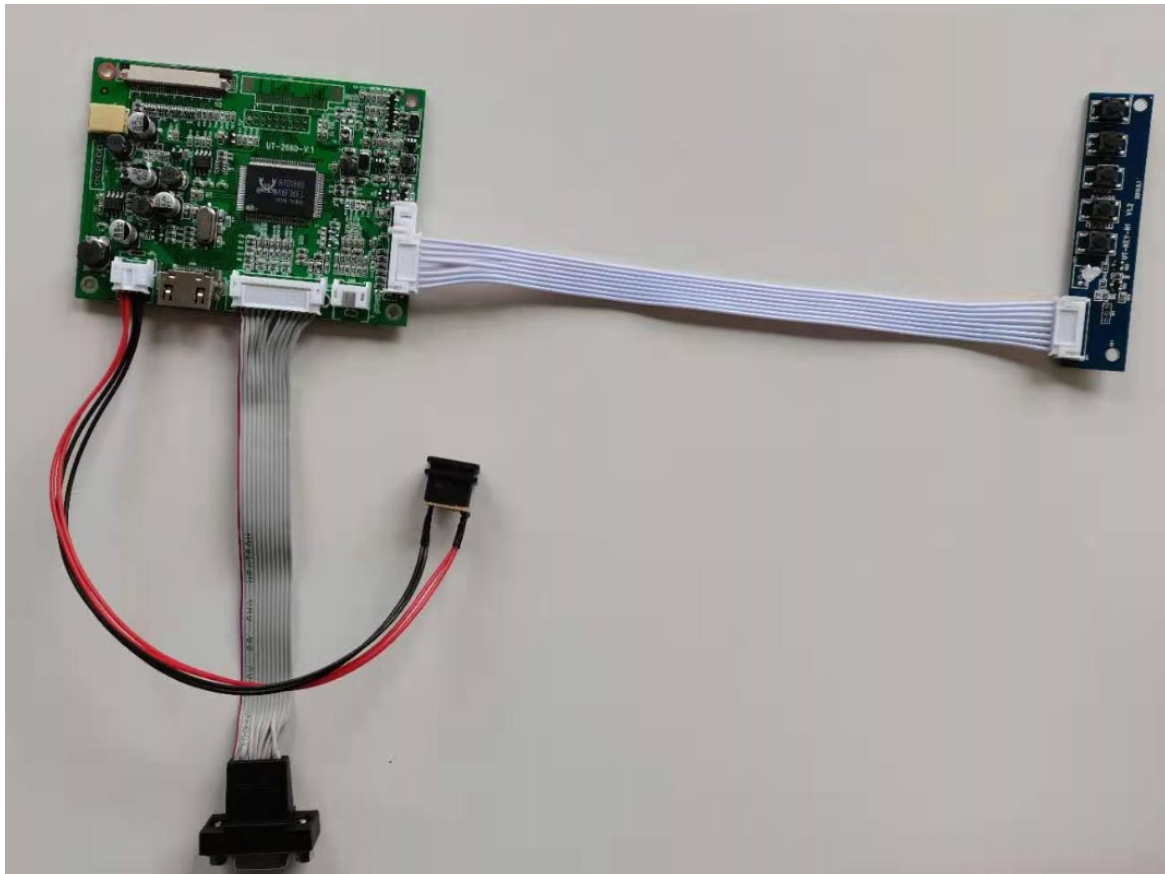
MAXEN ELECTRONICS LIMITED

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HDMI/VGA CONTROLLER BOARD SPECIFICDATION

FOR 7"/10.1" TFT LCD WITH 50PIN RGB INTERFACE

Version	Release Date	Updates	Remarks
V1.0	2015.11.25	1 st edition	



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1. Application range

This board was designed for 7"/10.1" TFT lcd with 50pin RGB interface, with main controller RTD2660+PM25X40.

2. Description

- 2.1 VGA,CVBS,HDMI video signal input;
- 2.2 Power supply: DC +12V
- 2.3 Multi-functional OSD menu
- 2.4 Remote control function (available)
- 2.5 Automatically power offer when with no signal

2. Signal input standard

- 3.1 CVBS: 1.0Vp-p75Ω
- 3.2 VGA: 800*480 800*600 1024*600 1024*768 1280*800(Refresh rate 60~75)
- 3.3 HDMI (General V1.2)

3. Working Temperature

- 4.1 Temperature: -10°C~+60°C
- 4.2 Humidity: 90%RH

4.Storage Temperature

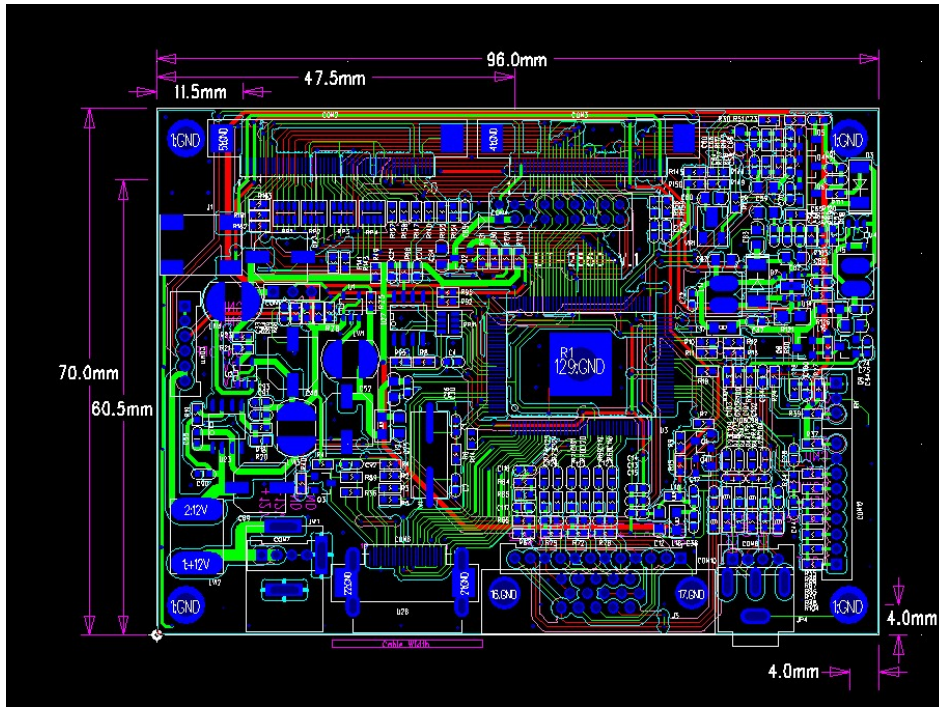
- 5.1 Temperature: -20°C~+70°C
- 5.2 Humidity: 90%RH

6. Detailed specification

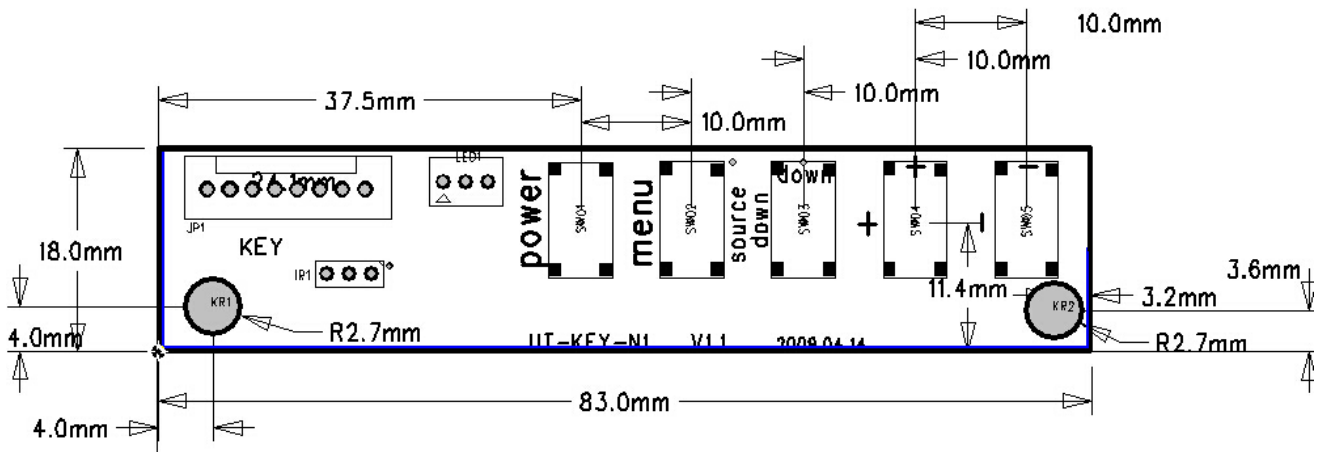
- 6.1 Mechanical dimension (Unit: mm)

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6.2 Keyboard



6.3 LCD Panel PIN Assignment

CON2 (TFT LCD) 50PIN-0.5MM

Pin No.	Symbol	Function	Remarks
1	LED+	P	
2	LED+	P	
3	LED-	P	
4	LED-	P	
5	GND	P	

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6	VCOM	I	
7	VCC	p	
8	MODE	I	
9	DE	I	
10	VS	I	
11	HS	I	
12	B7	I	
13	B6	I	
14	B5	I	
15	B4	I	
16	B3	I	
17	B2	I	
18	B1	I	
19	B0	I	
20	G7	I	
21	G6	I	
22	G5	I	
23	G4	I	
24	G3	I	
25	G2	I	
26	G1	I	
27	G0	I	
28	R7	I	
29	B6	I	
30	B5	I	
31	B4	I	
32	B3	I	
33	B2	I	
34	B1	I	
35	B0	I	
36	GND	P	
37	DCLK	I	
38	GND	P	
39	L/R	I	
40	U/D	I	
41	VGH	P	
42	VGL	P	
43	AVDD	P	
44	RESET	I	
45	NC		
46	VCOM	I	
47	DITHB	I	
48	GND	P	
49	NC		
50	NC		

CON7 (Power connector) 4PIN/2.0

Pin No.	Symbol	Function
1	+12V	Power
2	+12V	Power
3	GND	GND

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4	GND	GND
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CON8 (CVBS Input) 4PIN-2.0

Pin No.	Symbol	Function
1	CVBS	AV signal input
2	GND	GND
3	CVBS1	AV1Signal input
4	GND	GND

CON10(VGA Connector)12PIN/2.0

Pin No.	Symbol	Function
1	GND	Null
2	VS	field sync signal
3	HS	horizontal sync signal
4	GND	Null
5	R+	Red signal+
6	GND	GND
7	G+	Green signal+
8	GND	GND
9	B+	Blue Signal+
10	GND	GND
11	SDA	I2C channel
12	SCL	I2C channel

CON11 (INVERTER control) 6PIN/2.0

Pin No.	Symbol	Function
1	GND	GND
2	GND	GND
3	+5V	+5V
4	On/off	Input backlight voltage switch
5	VCC_12V	INVERTER Power 12V
6	VCC_12V	INVERTER Power 12V

CON12 (keypad definitions) 9PIN/2.0

Pin No.	Symbol	Function
1	VCC	5v Power
2	GND	GND
3	LED	Power indicating LED
4	POWER	On/off
5	MENU	Menu
6	SOURCE	Signal switch menu

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7	LEFT	+
8	RIGHT	-
9	AOUT	Auto adjust (optional)

J1 (Backlight connector) 2PIN high pressure connector

Pin No.	Symbol	Function
1	LED+	LED voltage +
2	LED-	LED voltage -

IR (Remote control receiver) 3PIN-2.0

Pin No.	Symbol	Function
1	IR	RECEIVER
2	GND	GND
3	VCC	Power

7. Electronics Parameters

INPUT (V _{IN})	Input Current (I _{IN})				Remarks
	Min.	Typ.	Max.	Unit	
+12V	260	280	300	mA	

