TouchFly

TouchFly Product Specification

Display Driver Board

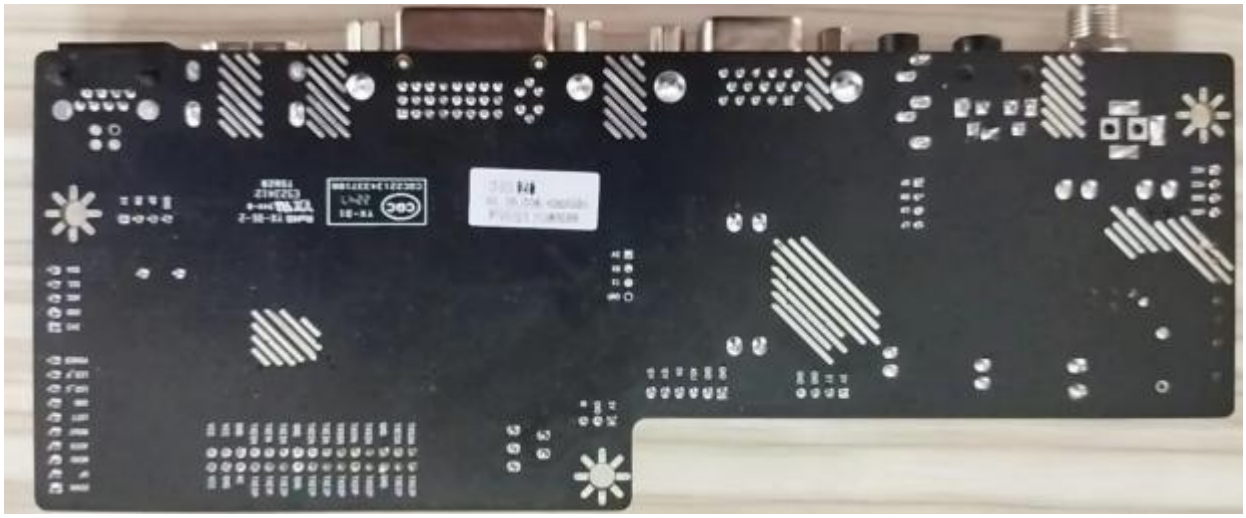
CX-2513

V1.1

Motherboard picture (for reference only)

(Front)

(back)



Product Description .

The product is based on RTD2513 chip for industrial control display market and a new custom driver board. Support external USB signal through RJ45 bridge, support IR, key, LED indicator, light sensor interface input, can support LVDS interface LCD. Support 7-32 inch display size, resolution can support up to 1920 * 1080

Working conditions.

◆ Input voltage: DC 12V~36V full range voltage

◆ Backlight 6P/2.0 interface power: backlight output power can not exceed 48W, more than 48W screen backlight please use external power supply separately.

◆ Backlight current adjustment mode: software current adjustment (choose DC and PWM dimming) (default DC 15K)

◆ Power off/no signal standby power consumption: ≦0.25W.

◆ Speaker power: Maximum support 2*5W@8omh

◆ ESD standard: Contact ±8 KV, Air ±15 KV.

◆ Operating temperature "-20--70 degrees"

Software Features.

Automatic signal source identification.

◆ Blue screen with no signal for **15** seconds and then rest screen.

◆ Menu supports black and white screen display option (for display screen) .

◆ Resolution **UP TO 1920*1080/@60Hz.**

◆ Multi-language (currently 8 languages), default: "English".

◆ Support **DDC/CI** protocol.

◆ Support VGA burn-in

◆ Speaker power default **3W 8** ohms (three channels output sound power to be consistent) .

◆ **DDC CI EDID1.3**

Terminals I/O:

Type	Quantity	Name	Content Description
Input	**1 input**	**RJ45 IN**	Standard network cable interface input plastic black without light **(**to do external **USB** adapter**)**
	1 input	**DVI IN**	Standard General **DVI** Materials
	1 input	**HDMI IN**	General material
	1 input	**VGA IN**	**VGA** signal input, **DEBUG** upgrade support
	1 input	**PC-AUIDO IN**	Black holder **3.5mm, PC** sound input
	1 input	**DC IN**	**DC** socket **2.1MM** power head **90** degree curved foot threaded head length **8.0MM** with nut
Output	**1 input**	**ERPHONE out**	5-pin audio headphone jack, black, output amplitude: **150mV / 32 ohm**

Interface socket description:

LVDS Pins	2*15P/2.0 double row of pins	1-29 Definition: DuPont pin
Backlight output voltage	6P/ PH2.0	1-6 Definitions: GND,GND,ADJ,EN,BVCC,BVCC Red (ADJ supports DC and PWM)
Screen voltage jumping	3P/2.54+2P/2.54 pins	1-3 Definition:3.3V,5V 1-2 Definition:12V
Horn Mount	4P/2.0 socket	1-4 Definitions: RP,RN,LN,LP
Light-sensitive interface	5P/2.0 socket	1-5 Definitions: 3.3V,GND,ADC,SCL,SDA
Key indicator interface	10P/2.0 socket	1-10 Definitions: S,EXIT,M,AUTO,V-,V+,GND,G.R,ON/OFF(default insert 8P/5 presses) key)
USB Touch Screen Interface	4P/2.0 socket	1-4 Definitions: 5V,D-,D+,GND
Serial port holders	4P/2.0 socket	1-4 Definitions: GND,TX,RX,5V
IR Interface	3P/2.0 socket	1-3 Definition: 5V ,GND,IR
Built-in input power supply	4P/PH2.0	1-4 Definitions: V CC ,V CC ,GND,GND
Built-in output voltage	4P/PH2.0	1-4 Definitions: 5V, 5V, GND,GND

Hardware design:

◆ Screen voltage jumping design

◆ All metal ports require additional ESD devices included

PC AUIDI IN the metal.

◆ Solid state electrolytic capacitors

◆ Screen ripple problem circumvention, ground loop circumvention

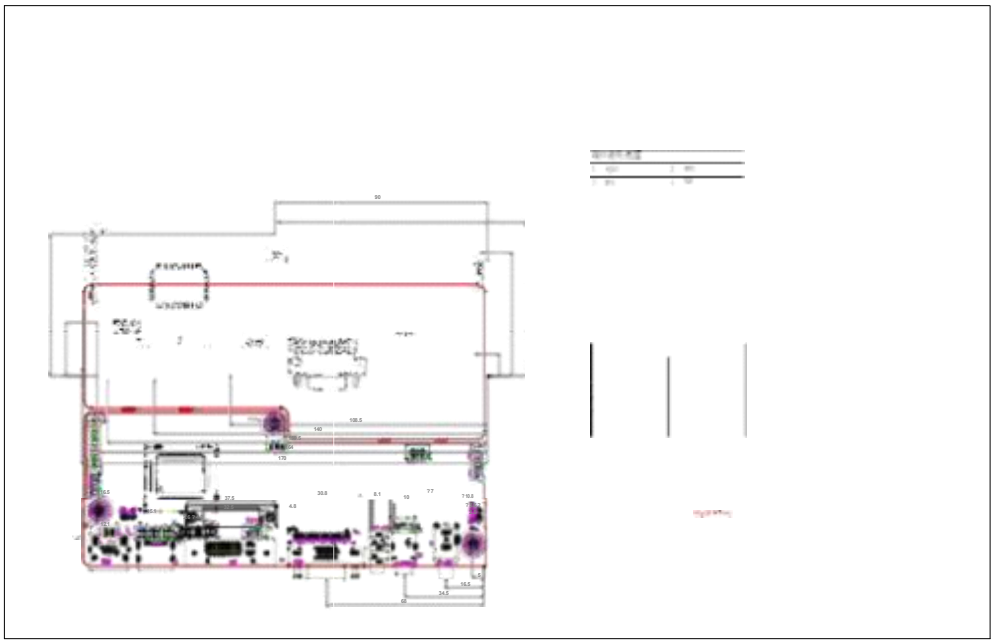
Layout design:

◆ QC PASSED silkscreen frame: diameter 15mm Barcode silkscreen frame: size 40*15mm (left on the back of the board)

◆ The bottom layer of the port package is reserved for conductive foam contact points and metal backplane, which needs to be considered for certification

◆ Main chip increase shield package: Reference RTD2483V3.1

Structure size:



Change Records

V1.2 - V1.3 Change Notes

1. Optimize the problem of excessive power supply ripple
2. Optimize the power supply hot, insufficient power supply problems