WT32P4-43S

（ZX4D30CE40S）



Changelog:

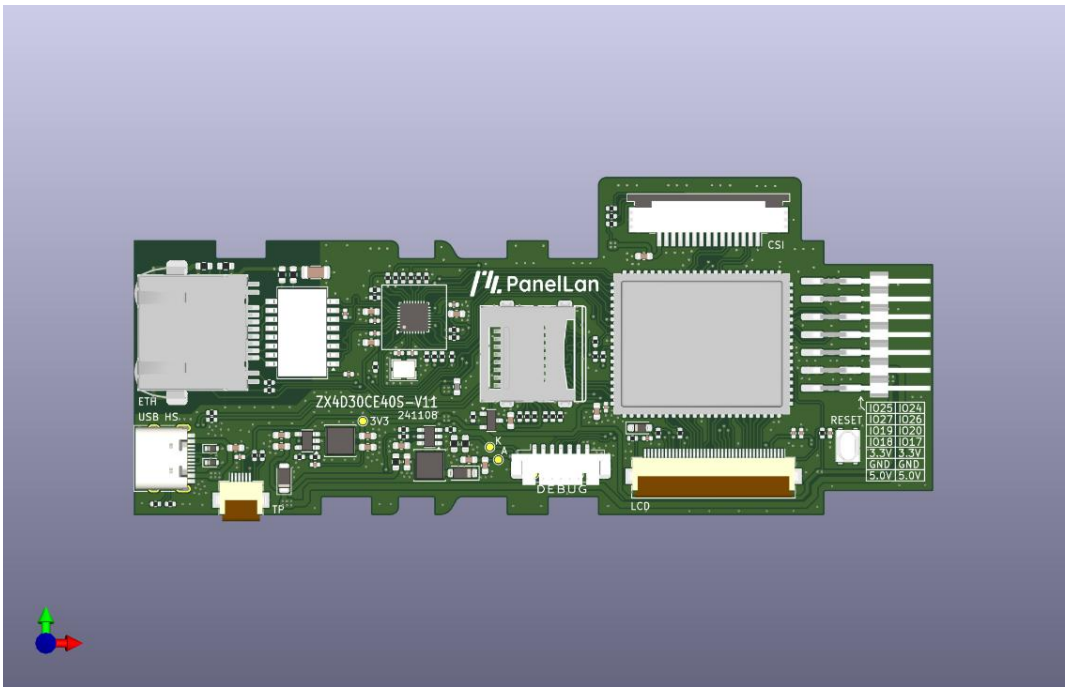
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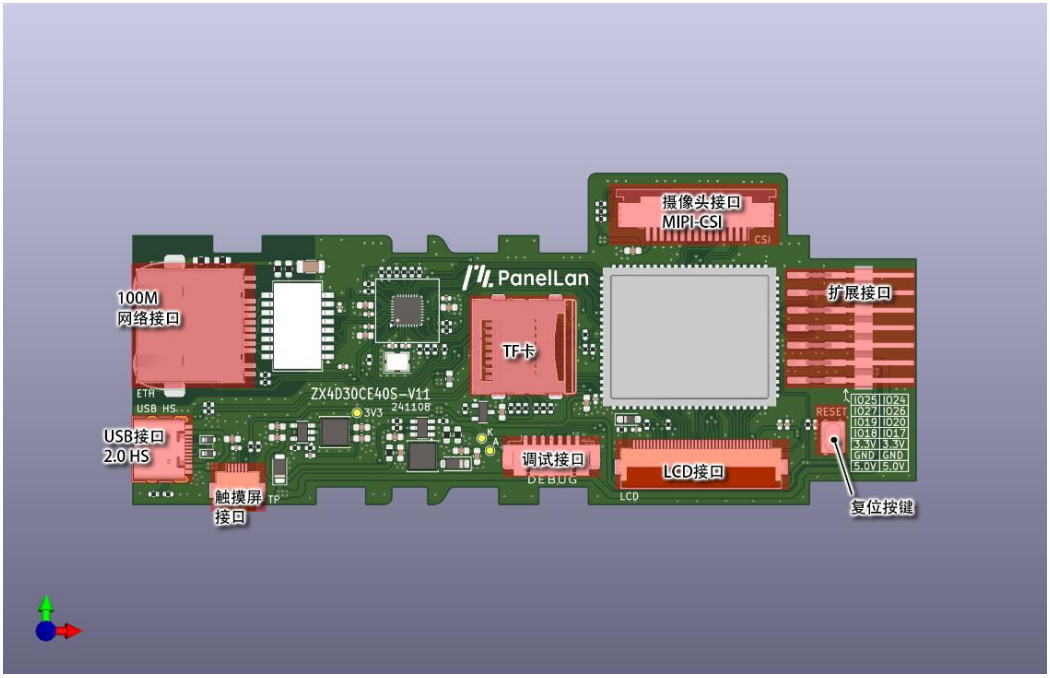
Features:

Support rapid prototyping

Hardware interface:

Hardware interface diagram:





Hardware Interface (Figure 1 Hardware Interface Diagram).

Interface description:

[1] Extended Interface (Tab.1).

Pin	description	Voltage range	remark
1	GPIO24	3.3V TTL	USB0-DN
2	GPIO25	3.3V TTL	USB0-DP
3	GPIO26	3.3V TTL	USB1-DN
4	GPIO27	3.3V TTL	USB1-DP
5	GPIO20	3.3V TTL	
6	GPIO19	3.3V TTL	
7	GPIO17	3.3V TTL	
8	GPIO18	3.3V TTL	
9~10	+3.3V	3.3V	3.3V internal output, no input
11~12	GND	0V	earthing
13~14	+5V	5V	5V input or output

[2] Camera interface (Tab.2).

Pin	description	Module PIN	remark
1	GND	-	
2	CSI_D0N	CSI_D0N	
3	CSI_D0P	CSI_D0P	
4	GND	-	
5	CSI_D1N	CSI_D1N	
6	CSI_D1P	CSI_D1P	
7	GND	-	
8	CSI_CKN	CSI_CKN	
9	CSI_CKP	CSI_CKP	
10	GND	-	
11	ENABLE	-	Enable by default
12	NC	-	
13	SCL	GPIO15	Multiplexed with IIC
14	SDA	GPIO14	
15	3.3V	-	

[3] LCD interface (Tab.3).

description	Module PIN	remark
RGB_D0	GPIO10	RGB 6:6:6 interface
RGB_D1	GPIO9	
RGB_D2	GPIO8	
RGB_D3	GPIO7	
RGB_D4	GPIO6	
RGB_D5	GPIO5	
RGB_D6	GPIO4	
RGB_D7	GPIO11	
RGB_D8	GPIO12	
RGB_D9	GPIO13	
RGB_D10	GPIO3	
RGB_D11	GPIO2	
RGB_D12	GPIO54	
RGB_D13	GPIO53	
RGB_D14	GPIO52	
RGB_D15	GPIO51	
RGB_D16	GPIO50	
RGB_D17	GPIO48	
RGB_CLK	GPIO49	
RGB_HS	GPIO47	
RGB_VS	GPIO46	
RGB_DE	GPIO45	
LCD_BL	GPIO16	Backlight control, support PWM modulation

[4] Touch interface (Tab.4).

description	Module PIN	remark
SCL	GPIO15	IIC and CSI multiplexing
SDA	GPIO14	
INT	GPIO0	
RST	GPIO1	

[5] USB interface (Tab.5).

Connect to USB2 peripherals, support USB2.0 HS host/device.
Can be used for power supply.

[6] Network Interface (Tab.6).

Support 100M bandwidth.

[7] TF Card (Tab.7).

Support 4-wire SDIO mode to read and write TF card.

[8] Debug Interface (Tab.8).

Pin	description	Module PIN	Voltage range	remark
1	+5V	-	5V	
2	NC	-	3.3V	
3	ESP_TXD	TXD0	3.3V TTL	
4	ESP_RXD	RXD0	3.3V TTL	
5	EN	ESP_EN	0-3.3V	Chip enabled
6	BOOT	GPIO 35	0-3.3V	
7	GND	-	0V	earthing

Interface Encapsulation :

Description of the interface	Interface encapsulation	remark
Extended interfaces	Expansion interface: 2*7p-2.54mm pin header	
Camera interface	Camera interface FPC-15P-1.0mm	Raspberry Pi camera support
USB interface	USB interface: USB-C 16pin USB2.0	
Network interfaces	Network interface RJ45-100M with light	
TF card	TF Card TF-1307 Clamshell TF Card Slot	
Debug interfaces	MX1.25-7P	

Hardware peripherals:

The name of the peripheral	description
LCD screen	RGB666 interface, 800*480 resolution
touch screen	IIC interface
Ethernet port	RMII interface, IP101 chipset
TF card	SDIO-4wire interface
USB	Connect to USB2
Camera	The interface supports Raspberry Pi MIPI-CSI camera

Schematic

See annex

[1] LCD Parameters (Tab.9).

Display class	TFT
Driver IC model	ST7262E43
visual angle	All VIEWING
resolution	800x480
interface	RGB
color	16.7M
Backlight mode	TRANSMISSIVE
Backlight brightness	500cc/m2

[2] Touch Parameters (Tab.10).

Driver IC model	CST3240
interface	IIC
Touchscreen structure	GFF
Touch mode	Multitouch
Surface hardness	6H
Light transmittance	85%

SDK: https://gitee.com/qiming-zhixian/zx4d30ce40s

Exterior design drawings

