

Smart Panlee

ZXACC-EXTRG-PCBA



Revision History:

Date	Revised by	Description
March 30, 2023	Hades	First release

Features:

1. Support rapid prototyping

Hardware Interface:

Hardware interface diagram:

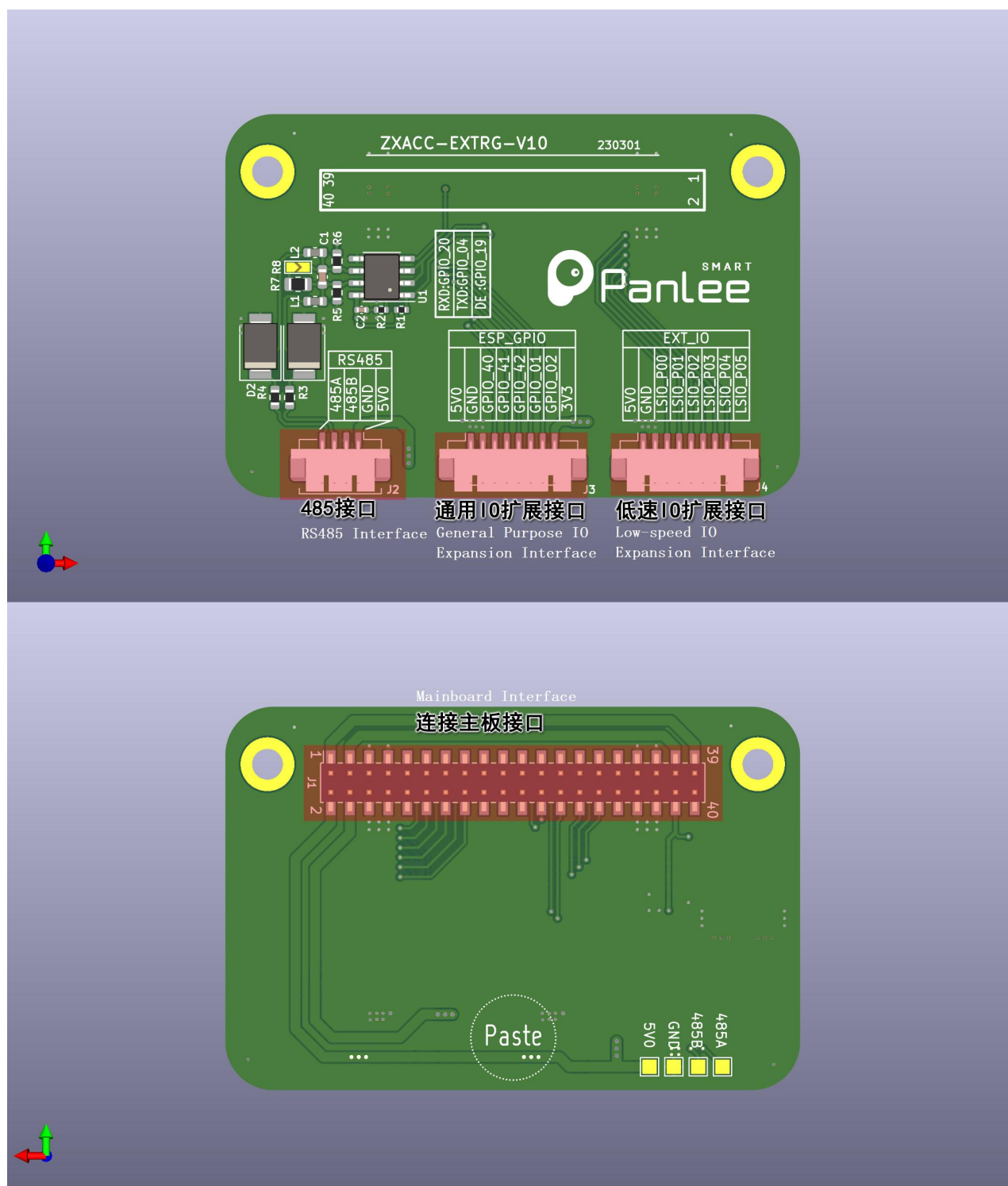


Fig. 1 Hardware Interface

Interface Description:

[1] RS485 Interface (Tab.1)

Pin	Description	Module Pin	Voltage Range	Remark
1	485A	-	-	RS485 signal
2	485B	-	-	For reference, not for power input
3	GND	-	0V	Ground
4	5.0V	-	5V $\pm$ 5%	5V power input/output

[2] General Purpose IO Expansion Interface (Tab.2)

Pin	Description	Module Pin	Voltage Range	Remark
1	5.0V	-	5V $\pm$ 5%	5V power input/output
2	GND	-	0V	Ground
3	EXT_IO3	GPIO_40	3.3V MAX	Connect to ESP32-S3 GPIO
4	EXT_IO2	GPIO_41	3.3V MAX	
5	EXT_IO5	GPIO_42	3.3V MAX	
6	EXT_IO6	GPIO_01	3.3V MAX	
7	EXT_IO7	GPIO_02	3.3V MAX	
8	3.3V	-	-	3.3V power output

[3] Low-speed IO Expansion Interface (Tab.3)

Pin	Description	Module Pin	Voltage Range	Remark
1	5.0V	-	5V $\pm$ 5%	5V power input/output
2	GND	-	0V	Ground

3	LSIO_P00	AW9523-P00	3.3V TTL	Connect to the P0 port of AW9523, and configure it as input/output
4	LSIO_P01	AW9523-P01	3.3V TTL	
5	LSIO_P02	AW9523-P02	3.3V TTL	
6	LSIO_P03	AW9523-P03	3.3V TTL	
7	LSIO_P04	AW9523-P04	3.3V TTL	
8	LSIO_P05	AW9523-P05	3.3V TTL	

[4] Mainboard Interface (Tab.4)

It is used to connect a 7 Inch ESP32 mainboard which is equipped with a serial port LCD display.

Interface Encapsulation:

Interface Description	Interface Encapsulation	Remark
RS485 Interface	MX1.25-4P-H	
General Purpose IO Expansion Interface	MX1.25-8P-H	
Low-speed IO Expansion Interface	MX1.25-8P-H	
Mainboard Interface	SMD 2.0mm PinHeader 2x20Pin	

Hardware Peripherals:

Peripheral Name	Description
RS485	Pin Configuration: RXD->EXT_IO0->GPIO_20 TXD->EXT_IO4->GPIO_04 DE->EXT_IO1->GPIO_19

Schematic:

