PAS-7510F



Version 1.0

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ESD

(ESD, electrostatic sensitive devices)



ESD

- ESD
-
- ESD
- ESD
- ESD

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1.1

PAS-7510F

	- -40°C~55°C - -40°C~85°C - 0~90% Humidity Din rail mounting - SSD 15G IEC 60068-2-27 half sine 11 ms duration - SSD 2Grms IEC 60068-2-64 random 5~500Hz 1 hr/axis
	- 255 /
	- DC 24V 2Pin
BIOS	- AMI UEFI BIOS
	- Win10 x64 Win11 x64 Linux Ubuntu 21.04
L*W*H	- 230mm(L)*165mm(W)*71.5mm(H)
	- 1.4KG
	- / DIN

3

3.1

□ 19″ ■ □
■ □ VESA □
■ DIN

3.2 PAS-7510F

mm



4

4.1

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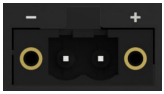
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I/O USB I/O

4.2

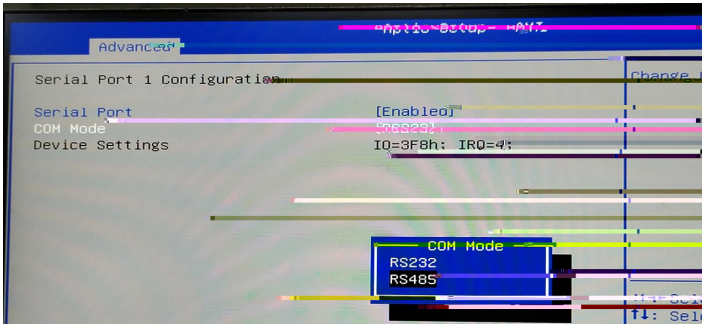
5.3

		
	1	DC-
	2	DC+

5.4 COM_CAN

						
	PIN	RS232	RS422	RS485	CAN	
	A1	COM1_DCD	/	COM1_485-	/	/
	A2	COM1_SIN	/	COM1_485+	/	/
	A3	COM1_SOUT	/	/	/	/
	A4	/	/	/	/	GND
	A5	/	/	/	/	GND
	A6	/	/	/	/	PWRBTN#
	B1	COM2_DCD	/	COM2_485-	/	/
	B2	COM2_SIN	/	COM2_485+	/	/
	B3	COM2_SOUT	/	/	/	/
	B4	/	/	/	GND	/
	B5	/	/	/	CAN1_H	/
	B6	/	/	/	CAN1_L	/

COM1/2 RS232/485 BIOS



5.5

5.5.1 ATX-M1

1-2	ATX Mode
2-3	AT Mode

5.5.2 FAN

1	GND
2	+5V
3	PWM_IN
4	PWM_OUT

5.5.3 BAT

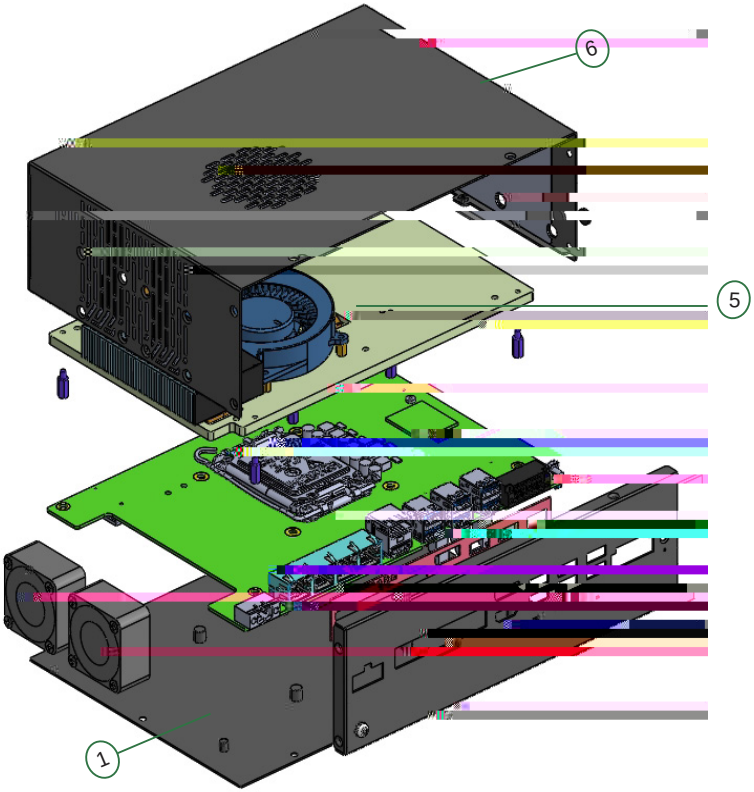
1	BAT+
2	BAT-

5.5.4 PWRBTN

1	+
2	GND

6

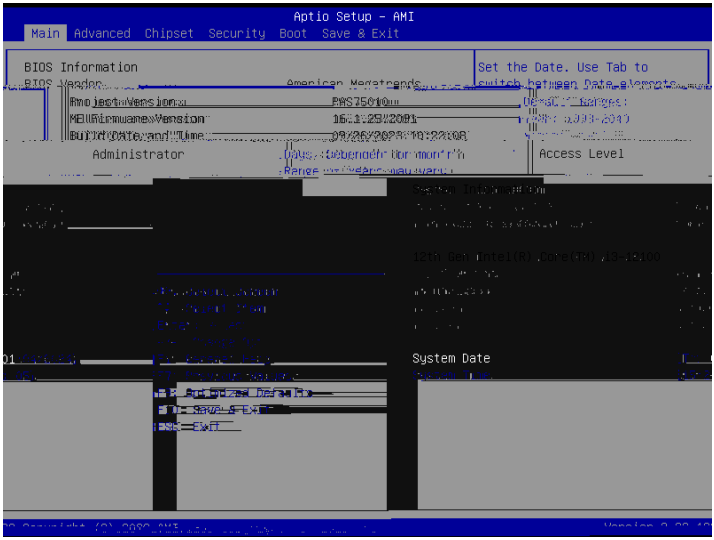
6.1 PAS-7510F



7.3 BIOS

Main		BIOS
Advanced		BIOS
Chipset		
Security		
Boot		
Save & Exit		BIOS

7.4 Main



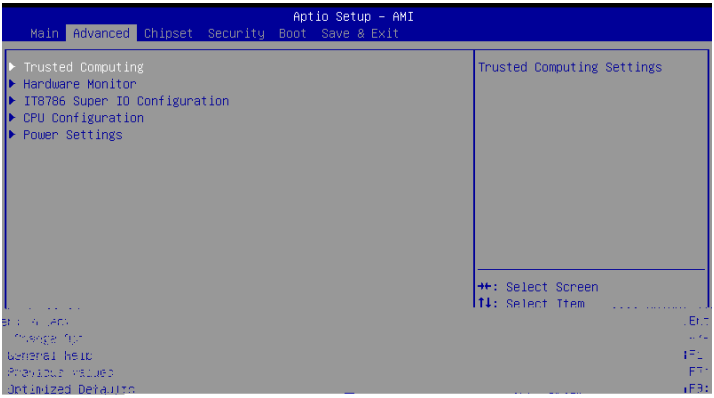
System Date ( )

, “ , / / ”

System Time

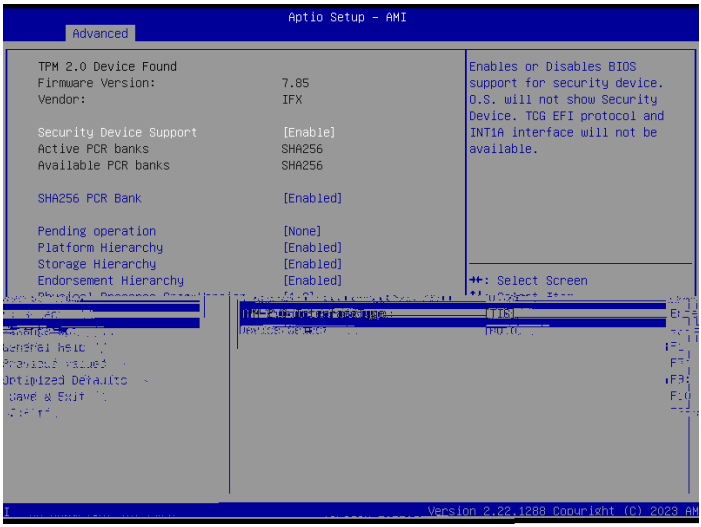
< >< >< >

7.5 Advanced



Trusted Computing		
Hardware Monitor		
IT8786 Super IO Con f guration	Super IO	
CPU Con f guration	CPU	
Power Settings		

- Trusted Configuration <Enter>



Security Device Support

BIOS

Disable,Enable.

SHA256 PCR Bank

SHA256 PCR Bank

Enabled,Disabled.

Pending operation

None, TPM Clear.

Platform Hierarchy

Enabled,Disabled.

Storage Hierarchy

Enabled,Disabled.

Endorsement Hierarchy

Enabled,Disabled.

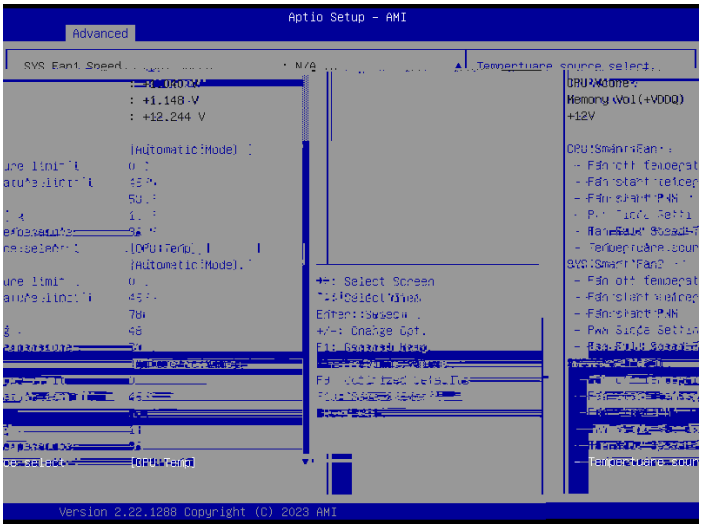
Physical Presence Spec Version

1.2, 1.3.

Device Select

TPM 1.2 ,TPM 2.0 ,Auto.

- Hardware Monitor <Enter>



CPU Smart Fan

CPU

Full on Mode,Automatic Mode,Manual Mode.

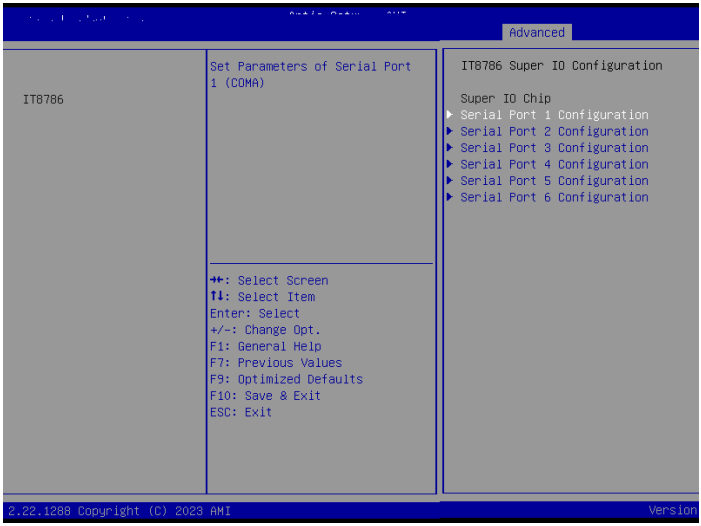
SYS Smart Fan2/1

Full on Mode,Automatic Mode,Manual Mode.

Tempertuare source select

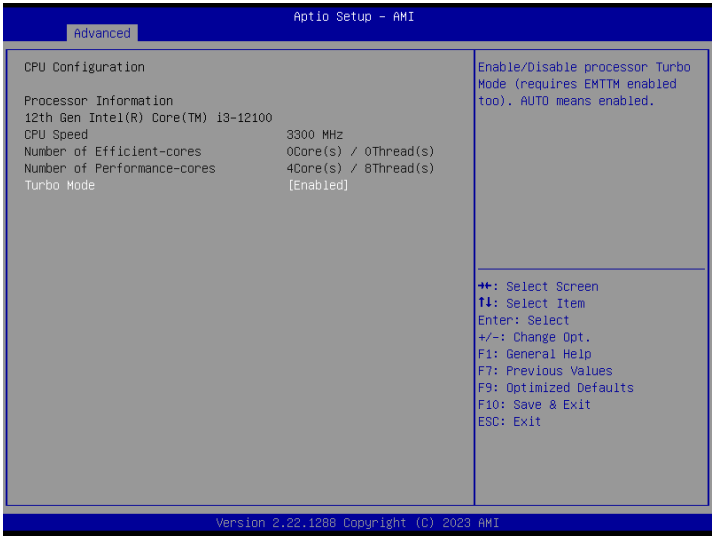
CPU Temp,SYS Temperature.

- IT8786 Super IO Configuration <Enter>



Serial Port 1/2/3/4/5/6 Configuration

- CPU Configuration <Enter>

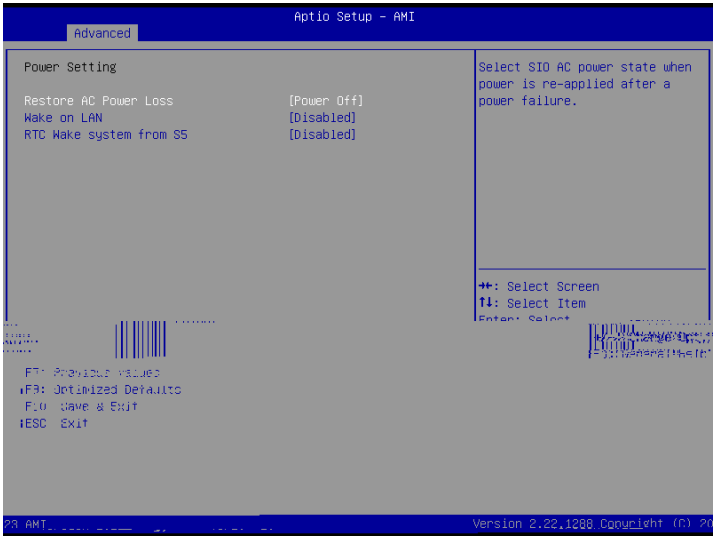


Turbo Mode

Turbo

Enabled,Disabled.

- Power Configuration <Enter>



Restore AC Power Loss

Power Off,Power On,Last State.

Wake on LAN

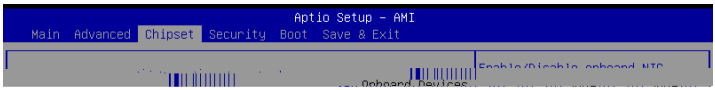
Disable,Enable.

RTC Wake system from S5

RTC

Disable,Enable.

7.6 Chipset



PCH LAN Controller(I219)

Enabled,Disabled.

I226_1/2/3

Disable,Enable.

Lan BootROM

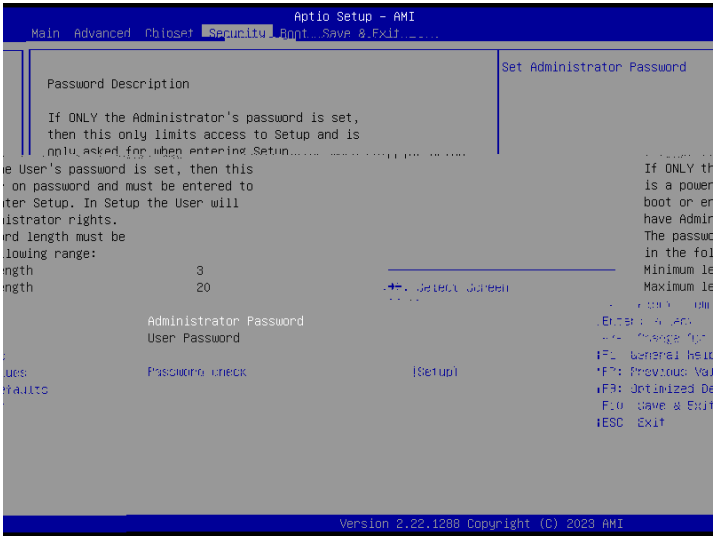
ROM

Disable,Enable.

Primary Display

Auto,Enabled,Disabled.

7.7 Security



Administrator Password

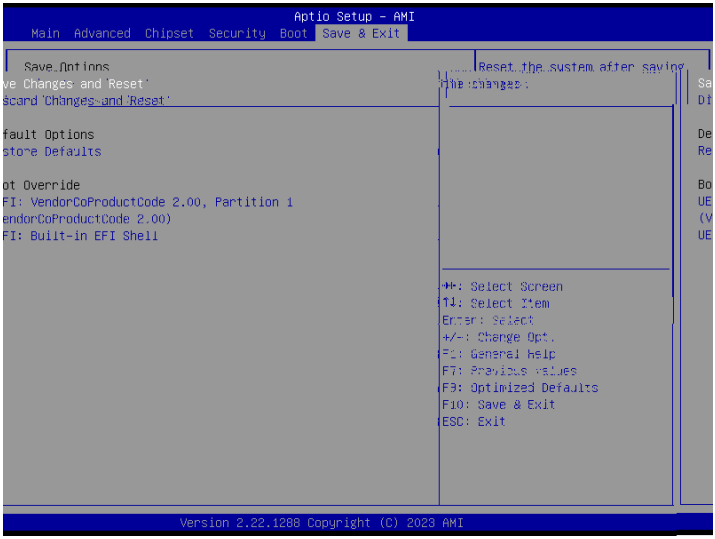
1. Administrator Password <Enter>
2. “ Create New Password ” 3~20 <Enter> “ Confrm Password ” “ Invalid Password! ”

“ Administrator Password ” “ Enter Current Password ” “ Create New Password ” <Enter>

Password check

BIOS Setup,Setup&Post

7.9 Save&Exit



Save Changes and Reset

Discard Changes and Reset

Restore Defaults

8

8.1 WDT

WDT SIO LDN DEV7, 0X72 BIT7 1 0
0XF3 0X72 BIT7 1 0XF3 0X20 32

8.1.1

```
//enter ite config
        IoWrite8(SioIndexPort,0x87);
        IoWrite8(SioIndexPort,0x01);
        IoWrite8(SioIndexPort,0x55);
        IoWrite8(SioIndexPort,0x55);

//select watchdog device
        IoWrite8(SioIndexPort,0x07);
        IoWrite8(SioDataPort,0x07);
        IoWrite8(SioIndexPort, 0xF1);
        temp_data = IoRead8(SioDataPort);
        temp_data &= 0xBB;
        temp_data |= 0x44;
        IoWrite8(SioIndexPort, 0xF1);
        IoWrite8(SioDataPort, temp_data);

//MAP to GP10
        IoWrite8(SioIndexPort, 0xF4);
        temp_data = IoRead8(SioDataPort);
        temp_data &= 0xC0;
        temp_data |= 0x08;
        IoWrite8(SioIndexPort, 0xF4);
//wdt start
if(ite_watch_dog_element->wdt_operator==START_WDT){

//clear status
IoWrite8(SioIndexPort, 0x71);
temp_data = IoRead8(SioDataPort);
temp_data &= 0xfe;
IoWrite8(SioIndexPort, 0x71);
IoWrite8(SioDataPort, temp_data);

IoWrite8(SioIndexPort, 0x72);
temp_data = IoRead8(SioDataPort);

temp_data &= 0x1f;
temp_data |= 0xC0;
//minute or second BIT7 1->second  0->minute
if(ite_watch_dog_element->wdt_unit == 1){
temp_data &= 0x7f;
}

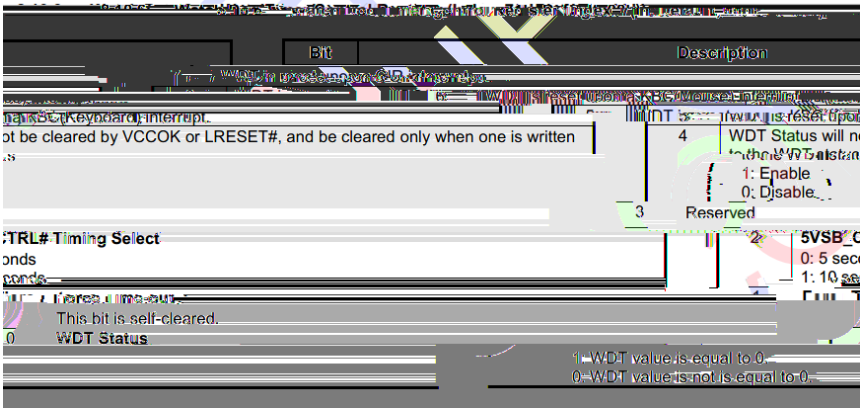
IoWrite8(SioIndexPort, 0x72);
IoWrite8(SioDataPort, temp_data);
```

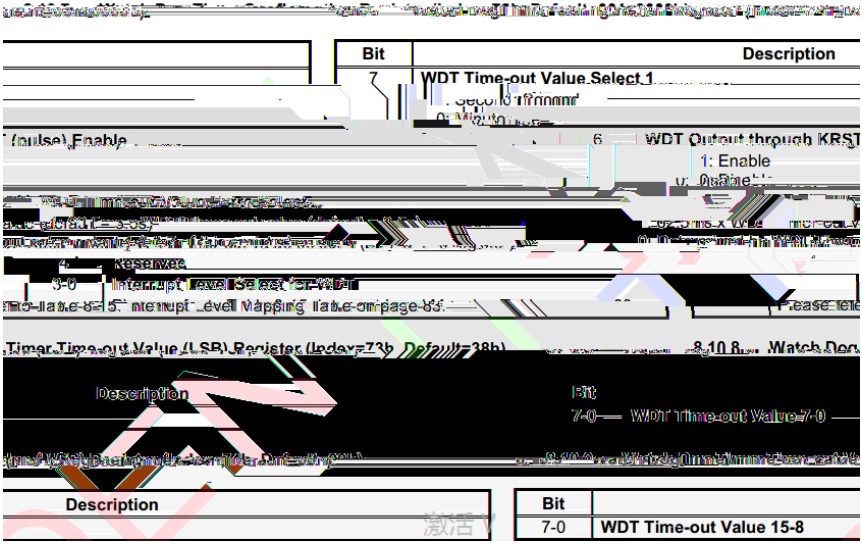
```
    //Clear Status
    IoWrite8(SioIndexPort, 0x71);
    temp_data = IoRead8(SioDataPort);
    temp_data &= 0xfe;
    IoWrite8(SioIndexPort, 0x71);
    IoWrite8(SioDataPort, temp_data);

    //Count
    IoWrite8(SioIndexPort, 0x74);
    IoWrite8(SioDataPort, 0x0);
    IoWrite8(SioIndexPort, 0x73);
    IoWrite8(SioDataPort, ite_watch_dog_element->wdt_time);
        //printf("wdt start:%x\n",IoRead8(data));
  }
```

8.1.2

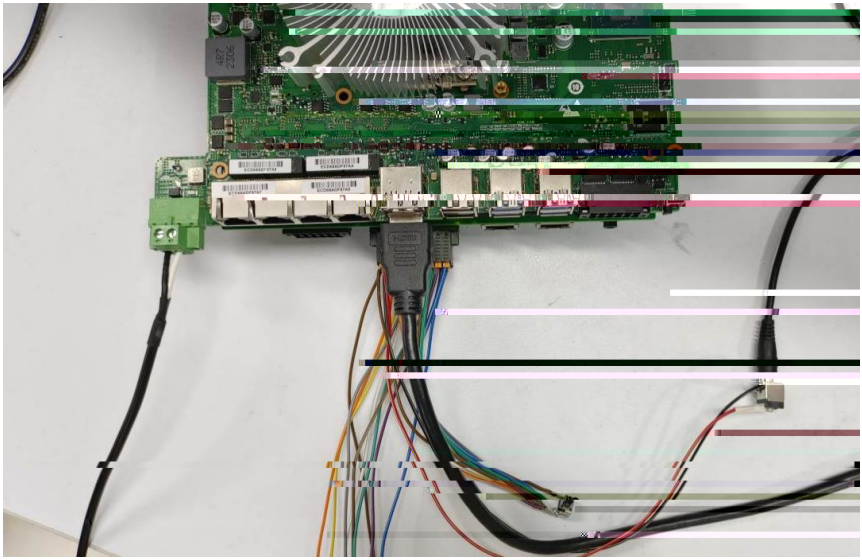
```
    //wdt stop
    if(ite_watch_dog_element->wdt_operator==STOP_WDT){
       IoWrite8(SioIndexPort, 0x74);
       IoWrite8(SioDataPort, 0x0);
       IoWrite8(SioIndexPort, 0x73);
       IoWrite8(SioDataPort, 0x0);
     }
```



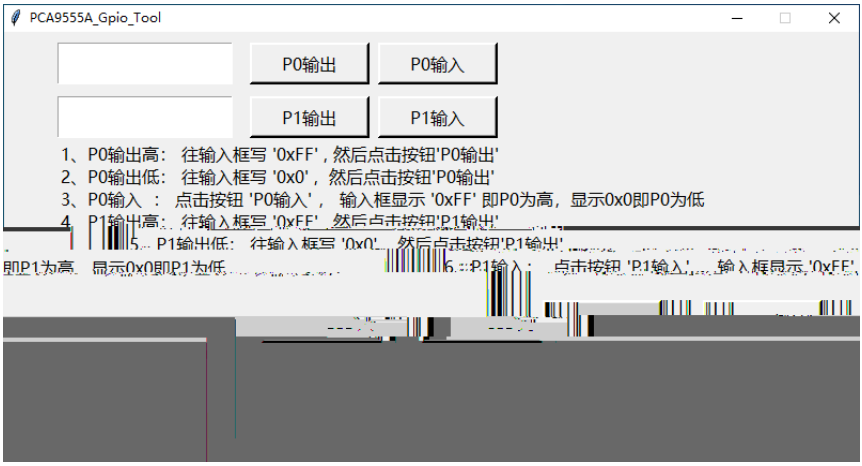


8.2 GPIO

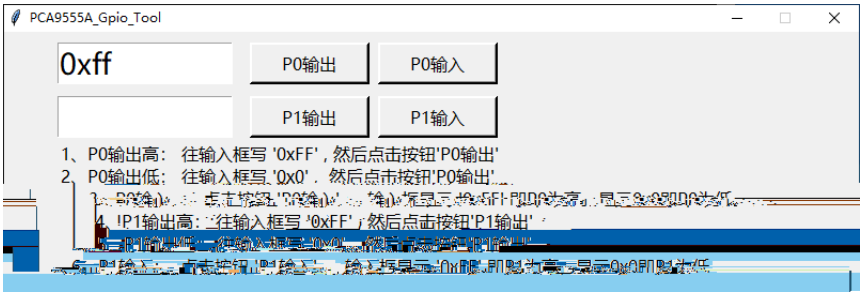
1 5V LED 5V 12V 24V



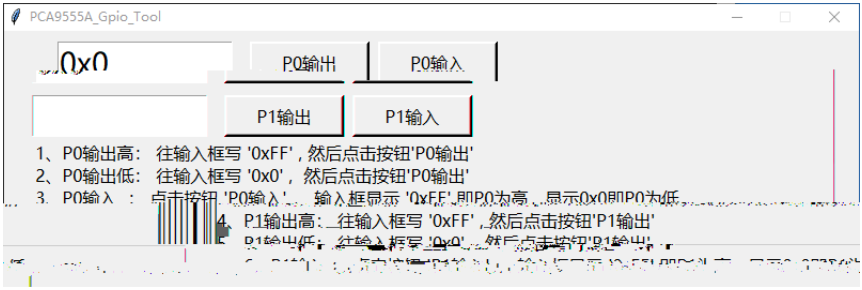
2 PCA9555A_Gpio_Tool



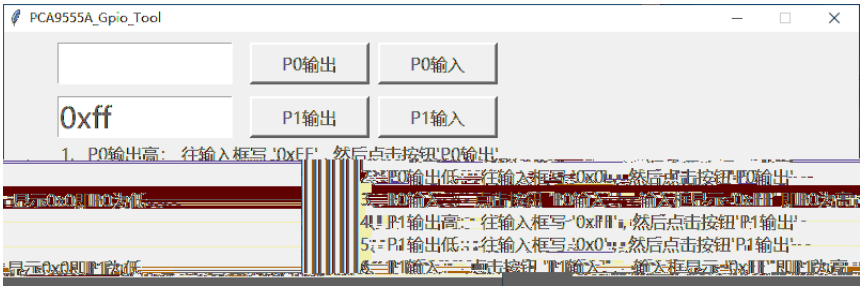
3 “ P0 ” 0x f



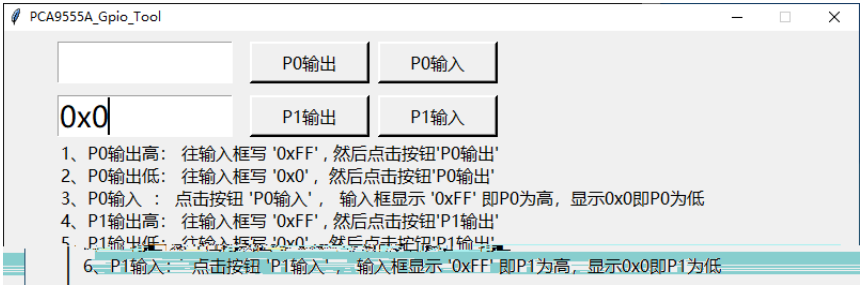
4 “ P0 ” 0x0



5 “P1 ” 0xf “P1 ” 0xf “P1 ”



6 “P1 ” 0x0 “P1 ”



9

9.1
