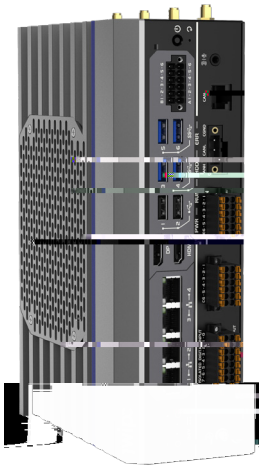
PAS-7511



Veuvl r q 1.0

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ESD

(ESD, electrostatic sensitive devices)



ESD

- ESD
-
- ESD
- ESD
- ESD

1 1
1.1 1
1.2 1
2 3
2.1 3
2.2 3
2.3 3
2.3.1 3
2.4 3
3 4
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3.3 PAS-7511 5
3.4 PAS-7511 6
3.5 PAS-7511 6
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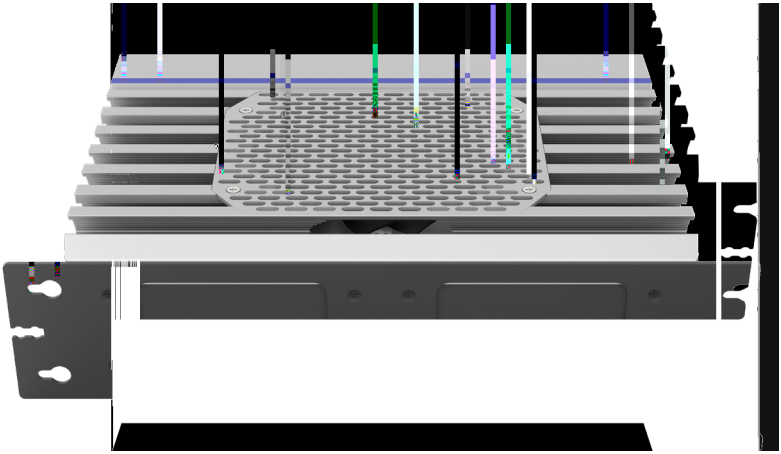
1.1

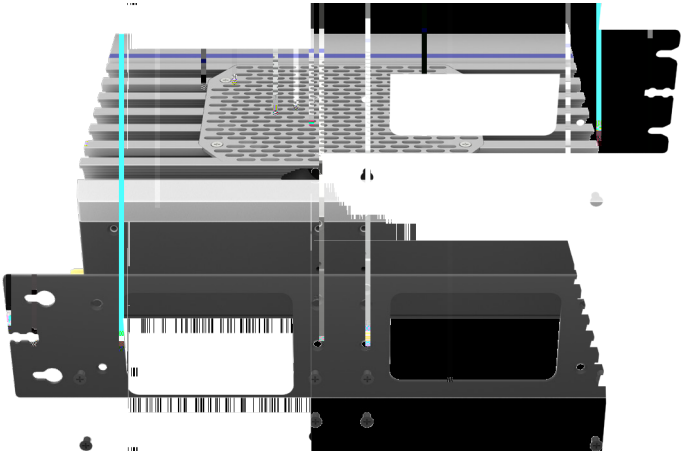
PAS-7511
ą Intel LGA1700 12&13 i9/i7/i5/i3/G CPU,TDP 65W
ą 2 DDR5-SODIMM 64GB
ą DP+HDMI
ą 4 USB3.0 ,2 USB2.0 USB3.0 1.5A HUB
ą 12pin 485/232 1 3 CAN
Ŕ ą 4 ï :2 #Intel i226-V 2.5Gb RJ45 HUB RJB7 - l' M.5A

1	COM	- 4 RS232/485/422
	CAN	- 1 CAN R⁉50 +3pi0 a 1

0 0 0 p À Öæ £ 0 0 :

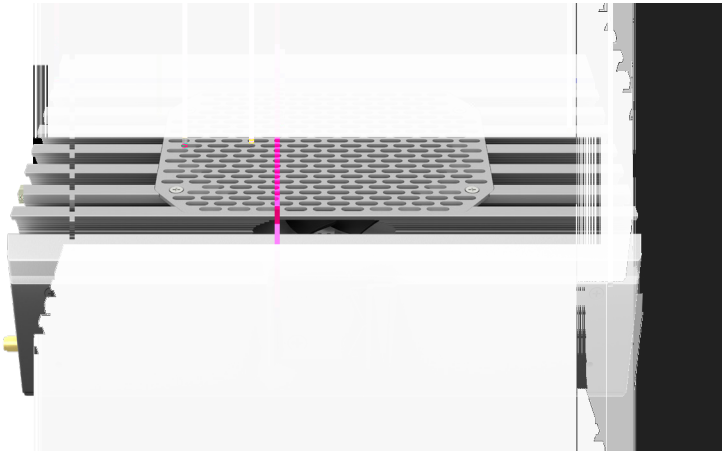
3.3 PAS-7511



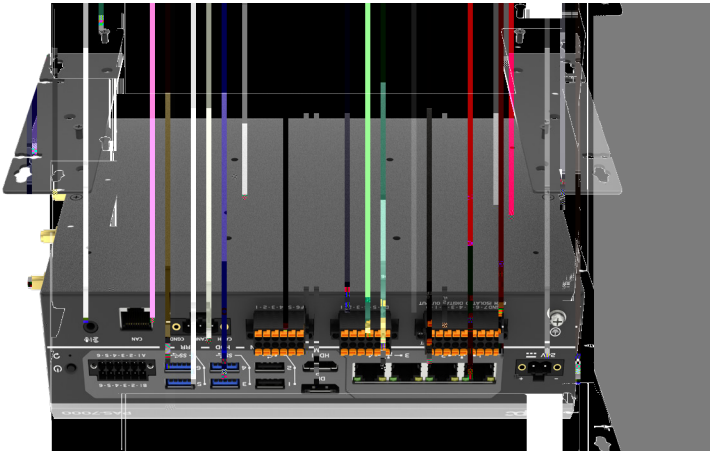


2 , M3x5.6

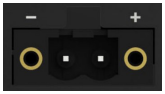
3.4 PAS-7511



3.5 PAS-7511



5.3



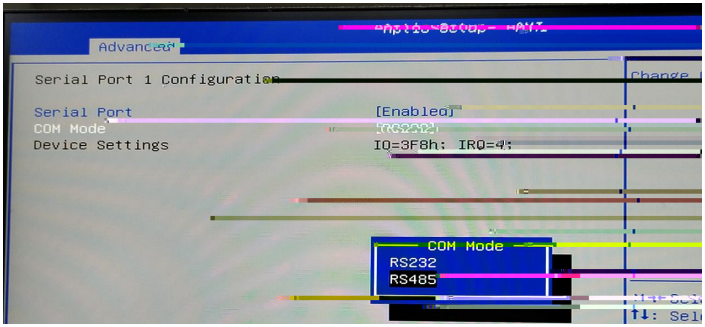
1	DC-
2	DC+

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



5.9

5.9.1 ATX-M1

1-2	ATX Mode
2-3	AT Mode

5.9.2 FAN

1	GND
2	+5V
3	PWM_IN
4	PWM_OUT

5.9.3 BAT

1	BAT+
2	BAT-

5.9.4 PWRBTN

1	+
2	GND

6

6.1 PAS-7511



7 BIOS

7.1 BIOS

AMI BIOS BIOS Basic Input Output System (
ROM Read-Only Memory) BIOS

a. POST(Power On Self Test)
b.
c.
d. SETUP
BIOS CMOS RAM
BIOS CMOS
BIOS

7.2 BIOS

BIOS Setup BIOS

SETUP

a. SETUP
b.

BIOS BIOS

7.2.1 BIOS

<DEL> BIOS

Puevv <Deoewe> wr eqweu SETUP

Puevv <F11> wr eqweu Brrw Meqx

7.2.2

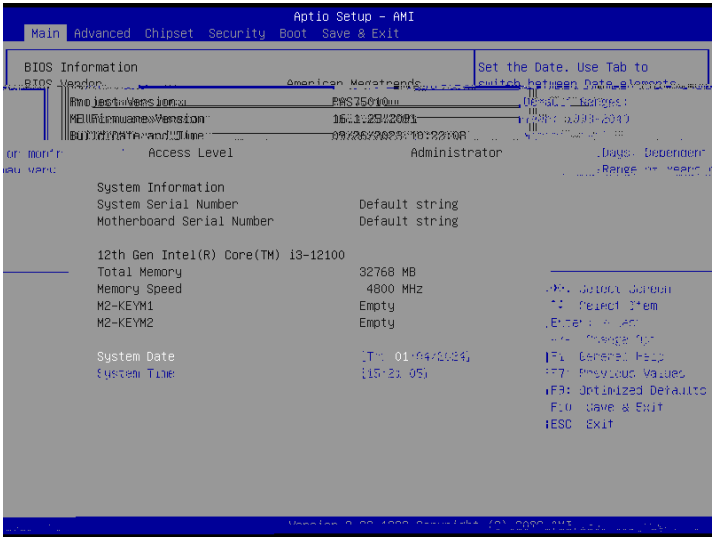
<Enter> <F1> <Esc>

↑ / ↓	
← / →	
+/ -	/
<Enter>	
<ESC>	CMOS SETUP
<F1>	
<F7>	
<F9>	
<F10>	CMOS

7.3 BIOS

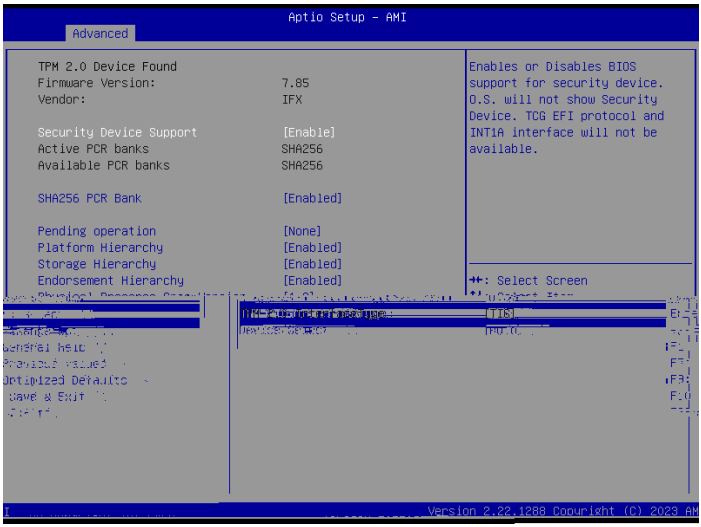
Main		BIOS
Advanced		BIOS
Chipset		

7.4 Malq



- S|vwep Dawe ( )
  , “ , / / ”
- S|vwep Tlpe
  < >< >< >

- Trusted Confguration <Enter>



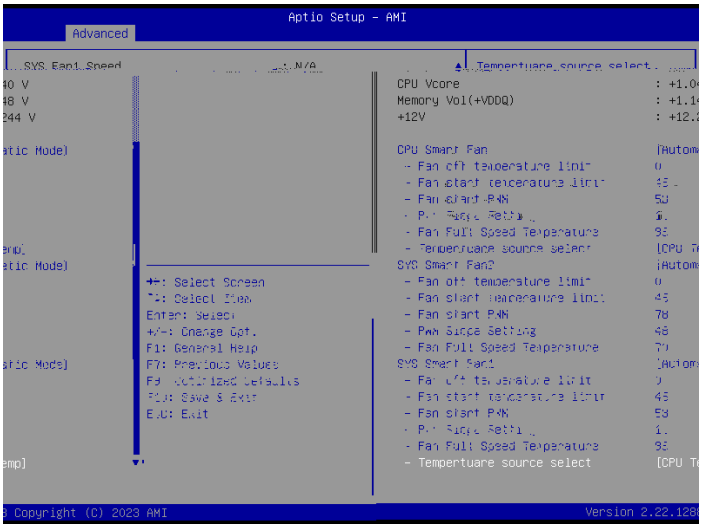
- SecxuIw| Deylce Sxssruw
  BIOS
  Disable,Enable.
- SHA256 PCR Baqn
  SHA256 PCR Bank
  Enabled,Disabled.
- Peqdlqj rseuawlrq

  None, TPM Clear.
- Poawirup Hleuauck|

  Enabled,Disabled.
- Swruaje Hleuauck|

  Enabled,Disabled.
- B+tZUXn\-S a¾auck|

- Hardware Monitor <Enter>



- CPU S p auw Faq

  CPU

  Full on Mode,Automatic Mode,Manual Mode.

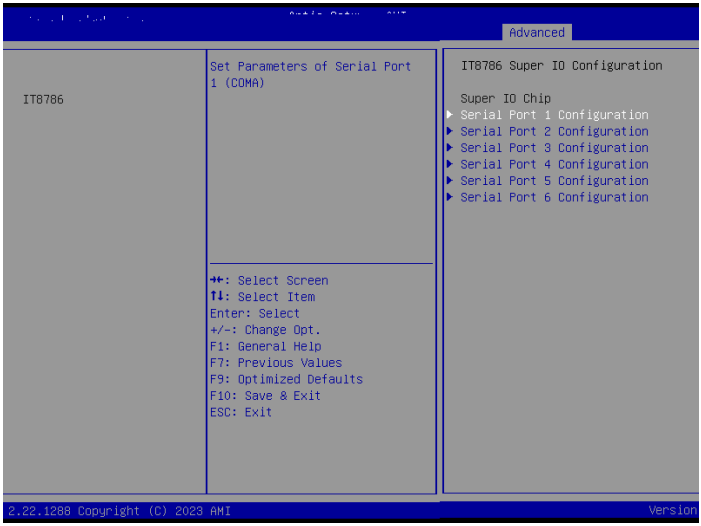
- SYS S p auw Faq2/1

  Full on Mode,Automatic Mode,Manual Mode.

- Te p seuwxaue v r xuce ve0ecw

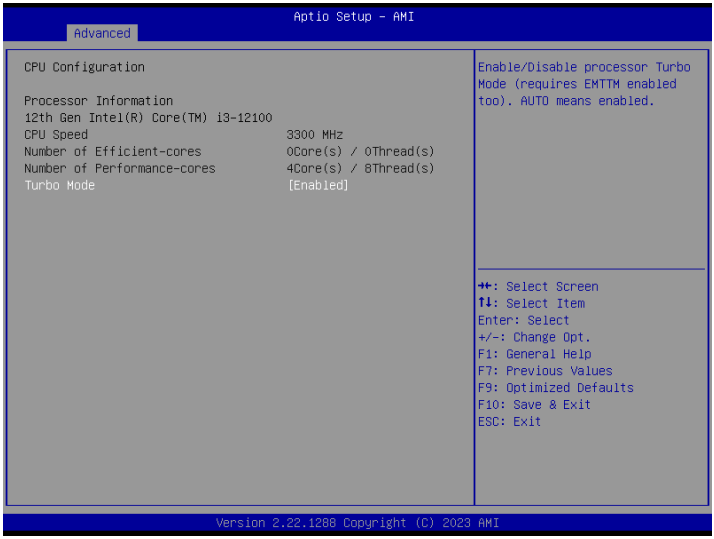
  CPU Temp,SYS Temperature.

- IT8786 Super IO Configuration <Enter>



Seulao Pruw 1/2/3/4/5/6 Crq jxuawlrq

- CPU Configuration <Enter>

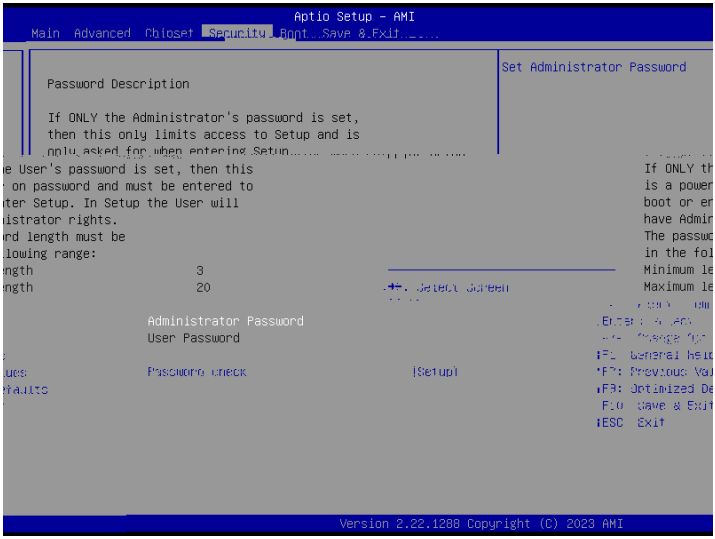


Txubr Mrde

Turbo

Enabled,Disabled.

7.7 Secxulw|



Adplqlvwuawru Pavvzrud

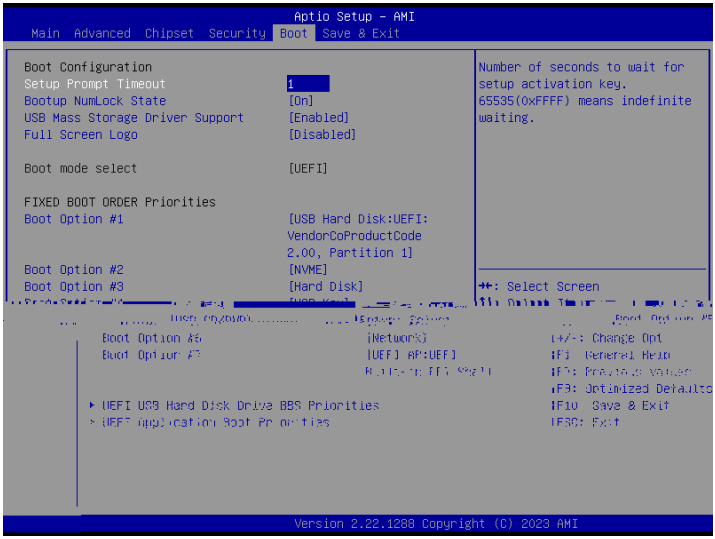
1. Administrator Password <Enter>
2. “Create New Password” 3~20 <Enter> “Confrm Password” “Invalid Password!”

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

Pavvzrud ckecn

BIOS Setup,Setup&Post

7.8 Brrw



Brrw Nxp Lrcn Swawe

NumLock

On,Of.

USB Mavv Swrua j e Dulyeu Sxs s ruw

USB

Disable,Enable.

Fxoo Scueeq L r j r

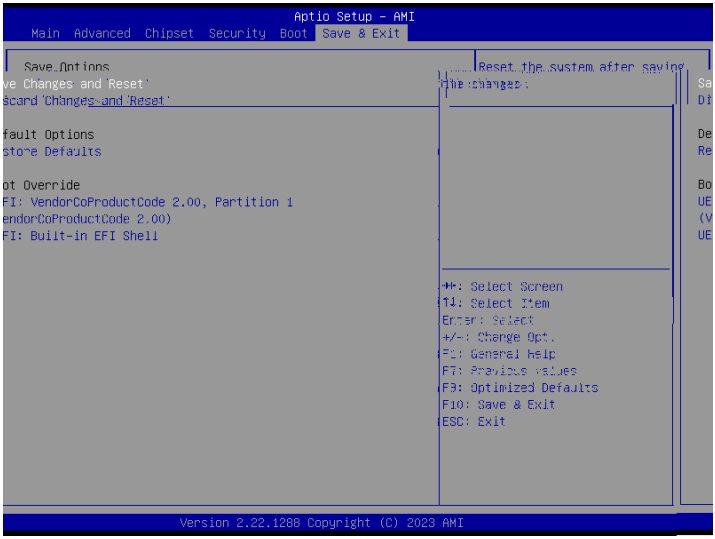
Logo

Disable,Enable.

Brrw Oswlrq #1-7

NVME,Hard Disk,USB Hard Disk,USB key,USB CD/DVD,Network,UEFI AP: Built-in EFI Shell.

7.9 Saye&E{lw



Saye Ckaqjev aqd Revew

Dlvcaud Ckaqjev aqd Revew

Revwrue Deiaxowv

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;
}

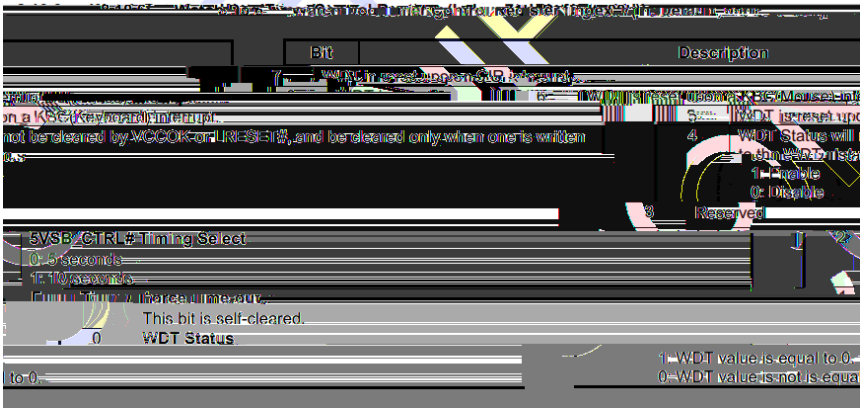
IoWrite8(SioIndexPort, 0x72);
IoWrite8(SioDataPort, temp_data);
```

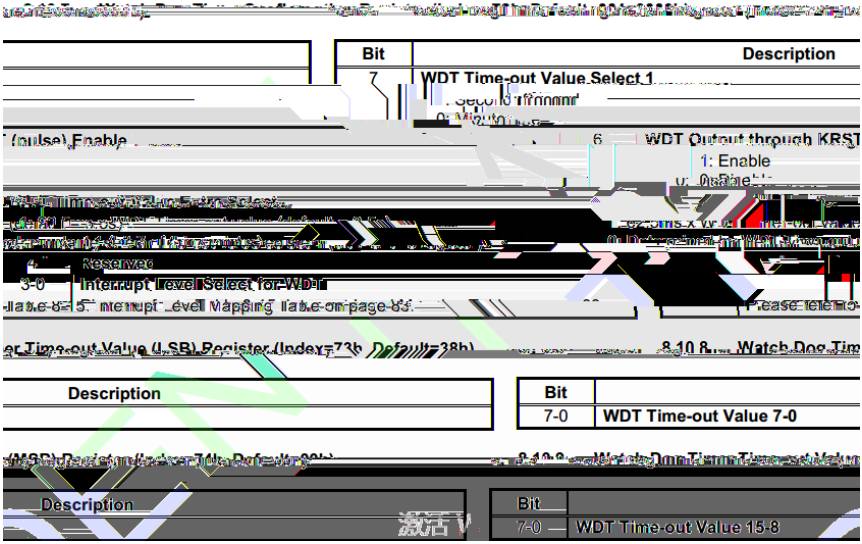
```
    //Clear Status
    IoWrite8(SioIndexPort, 0x71);
    temp_data = IoRead8(SioDataPort);
    temp_data &= 0xfe;
    IoWrite8(SioIndexPort, 0x71);
    IoWrite8(SioDataPort, temp_data);

    //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

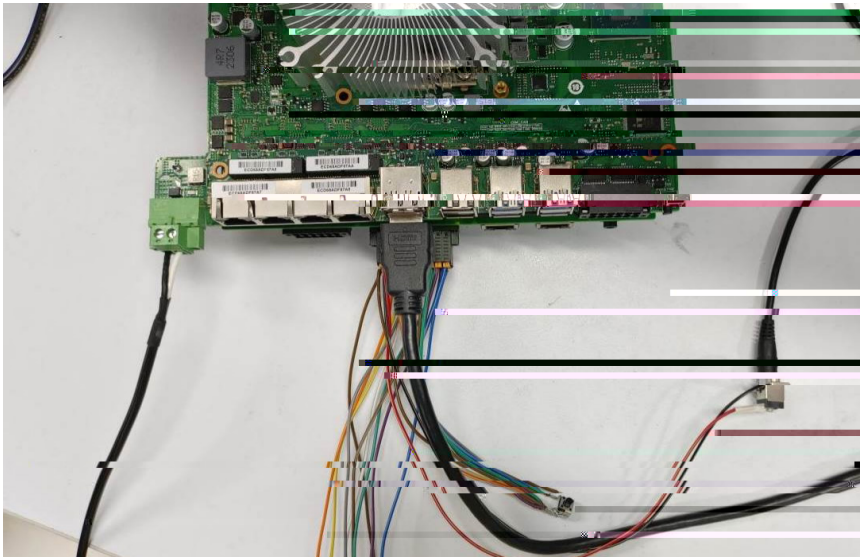
```
    //wdt stop
    if(ite_watch_dog_element->wdt_operator==STOP_WDT){
       IoWrite8(SioIndexPort, 0x74);
       IoWrite8(SioDataPort, 0x0);
       IoWrite8(SioIndexPort, 0x73);
       IoWrite8(SioDataPort, 0x0);
     }
```



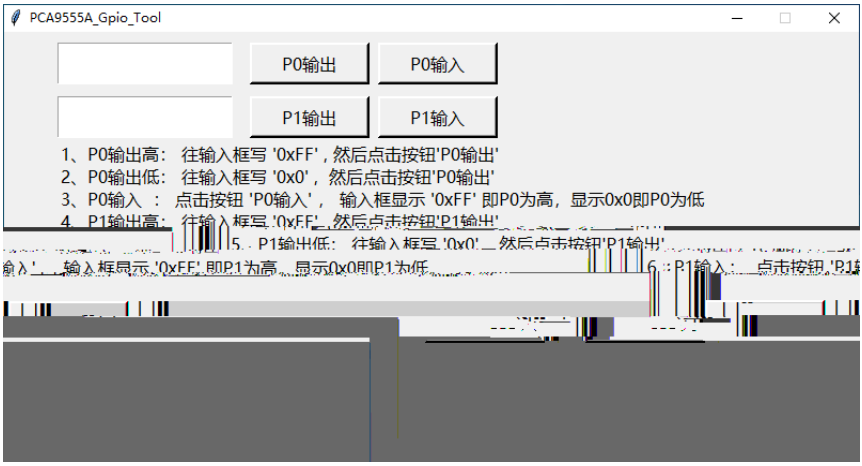


8.2 GPIO

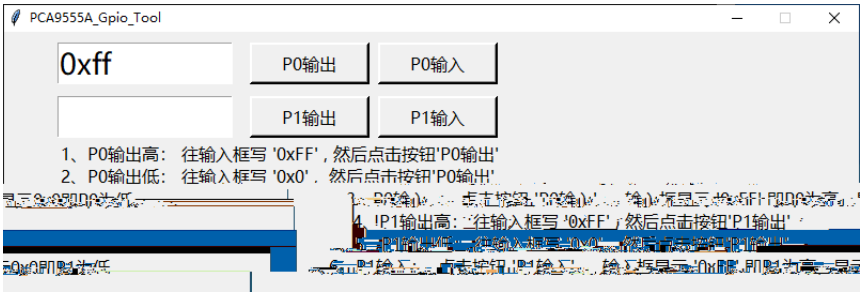
1 5V LED 5V 12V 24V



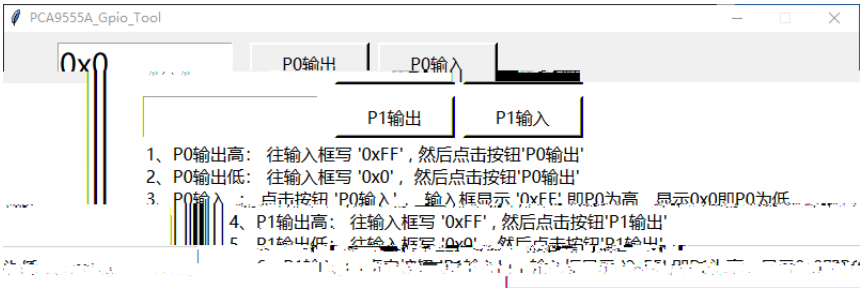
2 PCA9555A_Gpio_Tool



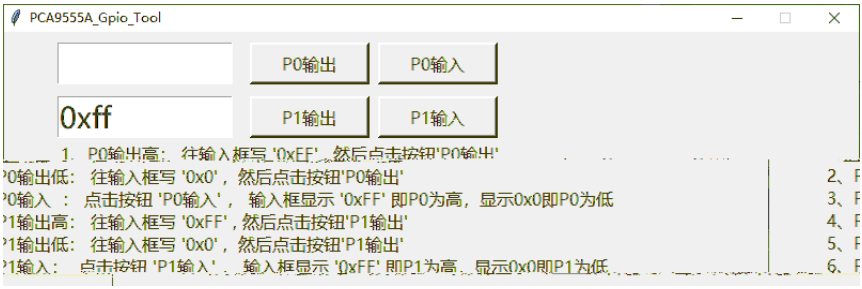
3 “ P0 ” 0x f



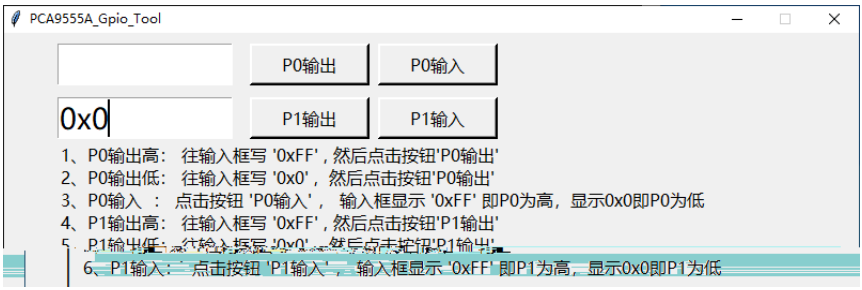
4 “ P0 ” 0x0



5 “P1” 0xf “P1” 0xf “P1”



6 “P1” 0x0 “P1”



Sample code PCA9555A_Gpio_Tool_LED_Program_source_code

9

9.1

		/
		1 2 12
	“ ”	
		1 2