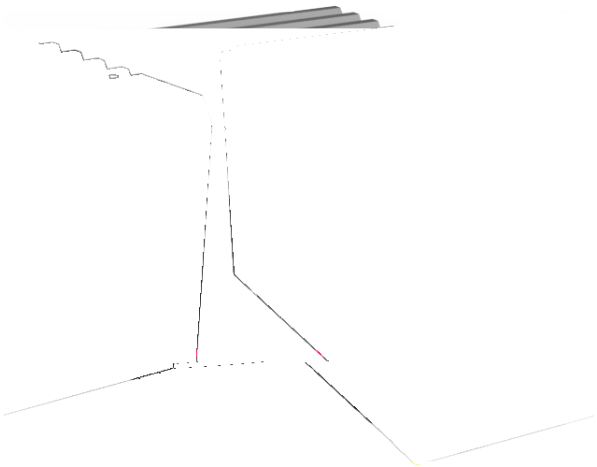
JVC-8100



Version 1.0

G h

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G

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1

5.6.11 USB2_2 14
5.6.12 JFP1 14
5.6.13 ATX_IN1 15
5.6.14 GPIO_PWR1 15
6 .....

1

1.1

ЈVC-8100 D2000 h BOX h UOS h
Ђ h h lO h Ђ h h
G

1.2

	- ЈVC-8100	- ЈVC-8100
	- D2000/8 2.3GHz 8C 25W	
	- 2 x 260-pin DDR4 2666MHz SODIMM h max 64GB	
	- 2 x 2.5 d HDD/SSD	
	- h LVDS - 1 x VGA h VGA 1920*1200@60Hz - 1 x HDMl h HDMl 4096*2160@24Hz	
	- 1 x Mic-in h 1 x Line-out Ў amp ÿ	
	- 2 x RЈ45	
USB		

	- 0˚ 50œ h 10%˚ 85% h	

2

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ÿ ÿ h Hυ G

2.2

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0%‘ 90% G Hυ Hυ h
Hυ G 10cm h Hυ Hυ Hυ
50cm G

⚠

h G h
ÿ ÿ G h 12 G

2.3

2.3.1

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I G h G
I h G
I h G
I G h
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2.4

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I h Hυ G
I G
I 50mm 100mm G
I (ÿ G
I G
I I/O 0.5V G

3

3.1

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■ □VESA □
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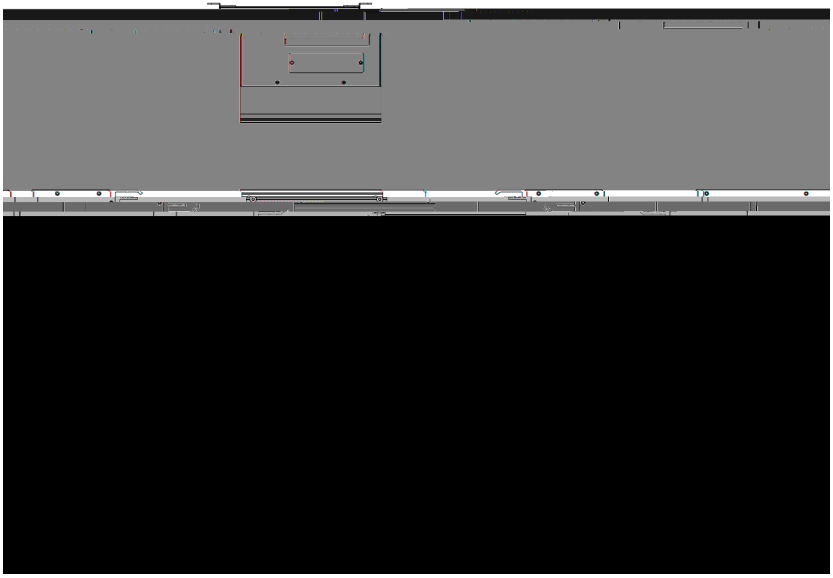
3.2

ч mm

3.2.1 JVC-8100

3.2.2 JVC-8100



4

4.1

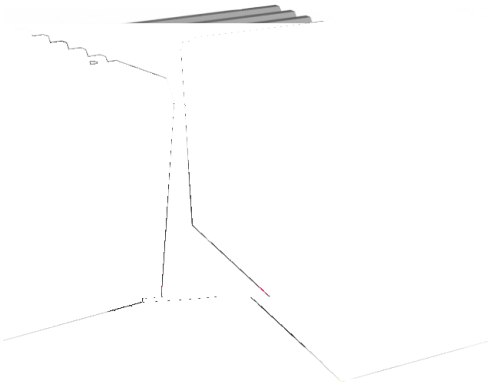
4.2

DCIN h	

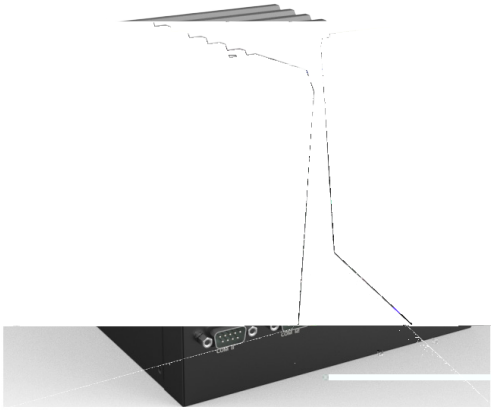
5

5.1

5.1.1 JVC-8100

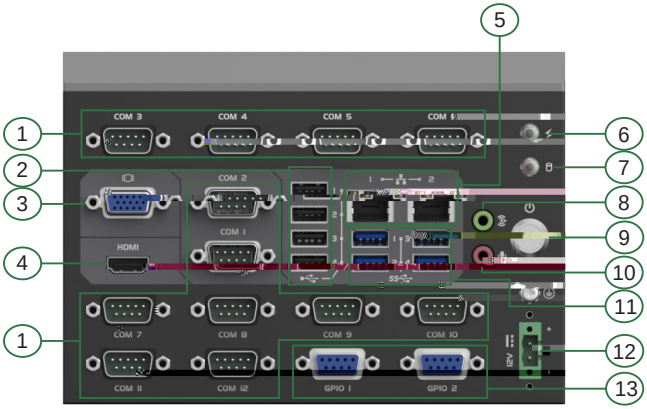


5.1.2 JVC-8100

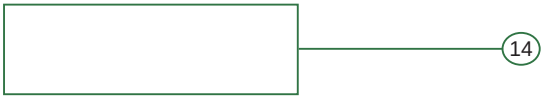


5.2 IO

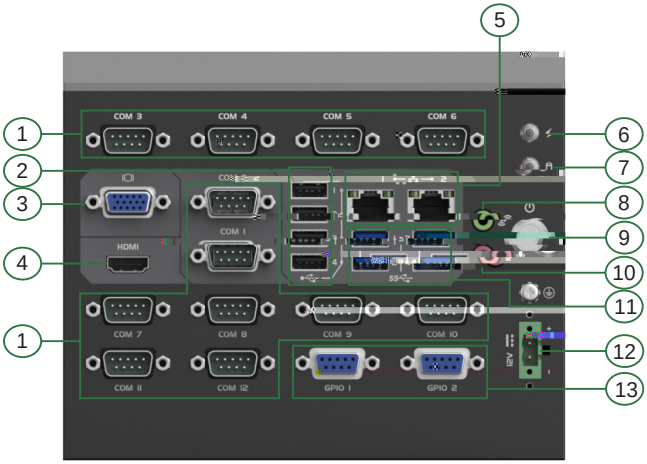
5.2.1 JVC-8100 IO



5.2.2 JVC-8100 IO



5.2.3 JVC-8100 IO



5.2.4 JVC-8100 IO

1. COM1/2/3/4/5/6/7/8/9/10/11/12 ч
2. USB2.0 ч USB2.0
3. VGA ч VGA
4. HDMI ч HDMI
5. LAN1/2 ч RJ45
6. PWR ч
7. HDD ч
8. LINE OUT ч
9. PWR Button ч
10. MIC IN ч
11. USB3.0 ч USB3.0
12. DC_IN ч DC
13. GPIO1/2 ч GPIO
14. Idoor ч
15. Expansion slot ч

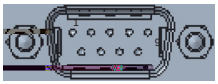
5.3

		LED	
PWR	PC		PC
HDD			

5.4 DC_IN

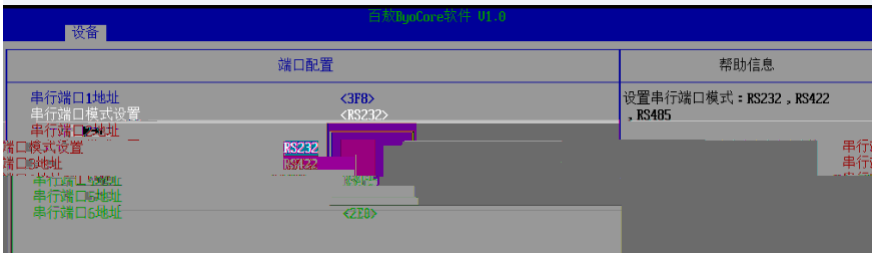
	+	DC_IN
	-	GND

5.5 COM1/2



PIN	RS232	RS422	RS485
1	DCD	422TX-	485-
2	SIN	422TX+	485+
3	SOUT	422RX+	/
4	DTR	422RX-	/
5	GND	/	/
6	DSR	/	/
7	RTS	/	/
8	CTS	/	/
9	RI	/	/

ч COM1-2 RS232/422/485 h BIOS h ч



5.6

5.6.1 JLVDS1

	1	+V3.3
	2	LVDS Power
	3	+V5

5.6.2 JLVDS2

	1	NC
	2	LVDS Power
	3	+V12

5.6.3 INVT1

	1	+V12
	2	GND
	3	BKL_EN
	4	BKL_PWM
	5	+V5

5.6.4 LVDS1

[redacted]	1	LVDS Power	2	LVDS Power
	3	LVDS Power	4	GND
	5	GND	6	GND
	7	LVDS1_D0N	8	LVDS1_D0P
	9	LVDS1_D1N	10	LVDS1_D1P
	11	LVDS1_D2N	12	LVDS1_D2P
	13	GND	14	GND
	15	LVDS1_CLK1N	16	LVDS1_CLK1P
	17	LVDS1_D3N	18	LVDS1_D3P
	19	LVDS1_D4N	20	LVDS1_D4P
	21	LVDS1_D5N	22	LVDS1_D5P
	23	LVDS1_D6N	24	LVDS1_D6P
	25	GND	26	GND
	27	LVDS1_CLK2N	28	LVDS1_CLK2P
	29	LVDS1_D7N	30	LVDS1_D7P

5.6.5 SATA1/2

	1	GND
	2	SATA_TX_P
	3	SATA_TX_N
	4	GND
	5	SATA_RX_N
	6	SATA_RX_P
	7	GND

5.6.6 SATA_POWER1

5.6.7 GPIO1

	1	GPIO1_0	2	GPIO1_4
	3	GPIO1_1	4	GPIO1_5
	5	GPIO1_2	6	GPIO1_6
	7	GPIO1_3	8	GPIO1_7
	9	PVCC_GPIO	10	GND

5.6.8 GPIO2

	1	GPIO2_0	2	GPIO2_4
	3	GPIO2_1	4	GPIO2_5
	5	GPIO2_2	6	GPIO2_6
	7	GPIO2_3	8	GPIO2_7
	9	PVCC_GPIO	10	GND

5.6.9 COM3/4/5/6

	1	COM_SIN	2	COM_DCD
	3	COM_DTR	4	COM_SOUT
	5	COM_DSR	6	GND
	7	COM_CTS	8	COM_RTS
			10	COM_RI

5.6.10 COM7_14

	1	GND	2	GND
	3	COM7_SOUT	4	COM11_SOUT
	5	COM7_SIN	6	COM11_SIN
	7	GND	8	GND
	9	COM8_SOUT	10	COM12_SOUT
	11	COM8_SIN	12	COM12_SIN
	13	GND	14	GND
	15	COM9_SOUT	16	COM13_SOUT
	17	COM9_SIN	18	COM13_SIN
	19	GND	20	GND
	21	COM10_SOUT	22	COM14_SOUT
	23	COM10_SIN	24	COM14_SIN
	25	GND	26	GND

5.6.11 USB2_2

	1	+V5	2	+V5
	3	USB2_HUB_N6	4	USB2_HUB_N5
	5	USB2_HUB_P6	6	USB2_HUB_P5
	7	GND	8	GND
			10	GND

5.6.12 JFP1

	1	UART1_TXD	2	UART1_RXD
	2			

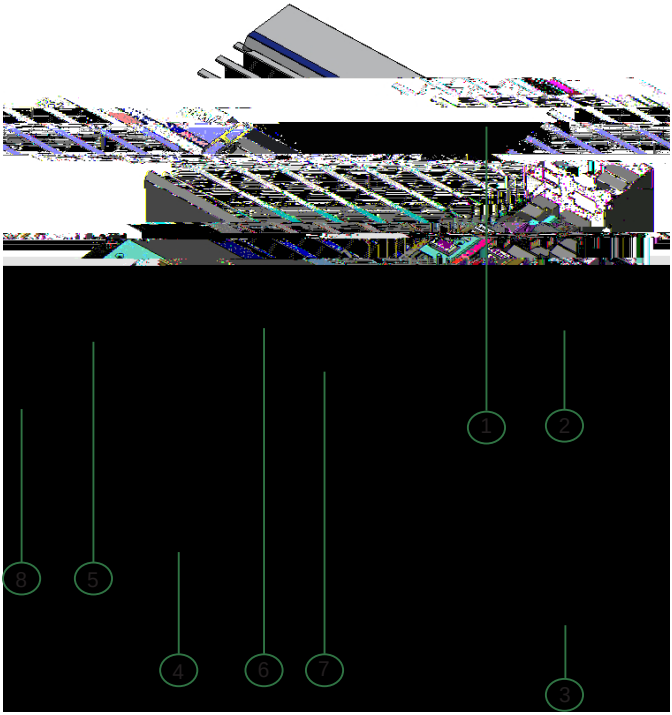
5.6.13 ATX_IN1

	1	GND	2	GND
	3	+12V	4	+12V

5.6.14 GPIO_PWR1

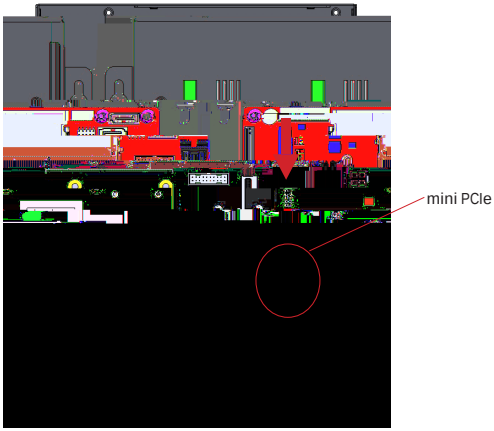
	1	+V5
	2	PVCC_GPIO
	3	+V3.3

6.2.2 JVC-8100



1		2		3	
4		5		6	
7		8			

6.5 mini PCIe



(h)

ч mini PCIe g

ч mini PCIe h 30° g

7.3 BIOS

		BIOS
		BIOS
		BIOS
		BIOS

7.4

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7.5

GMAC G

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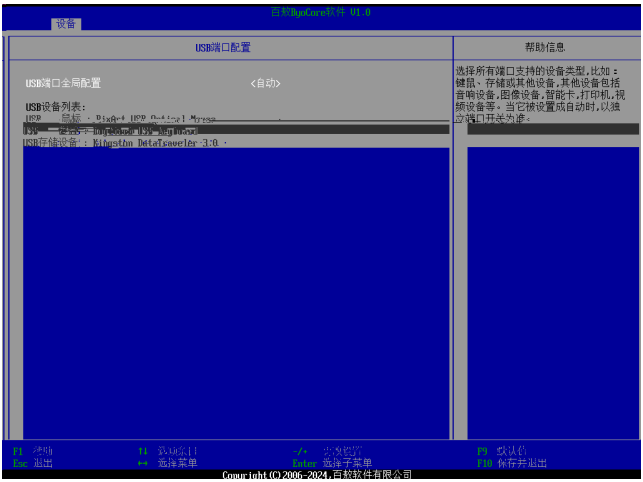
USB <Enter> G



USB

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, h h G h G

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SIO <Enter> G

CPU/SYS

CPU/SYS G

ч Hυ Hυ G

CPU/SYS

CPU/SYS G

CPU/SYS

CPU/SYS G

CPU/SYS

CPU/SYS G

G

WDT

G

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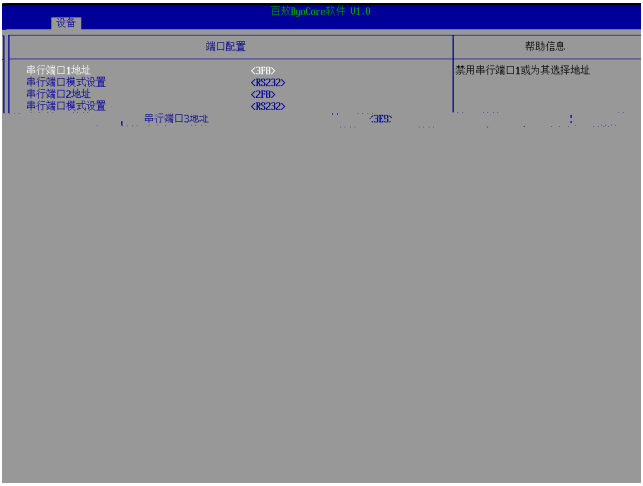

1/2/3/4/5/6

G

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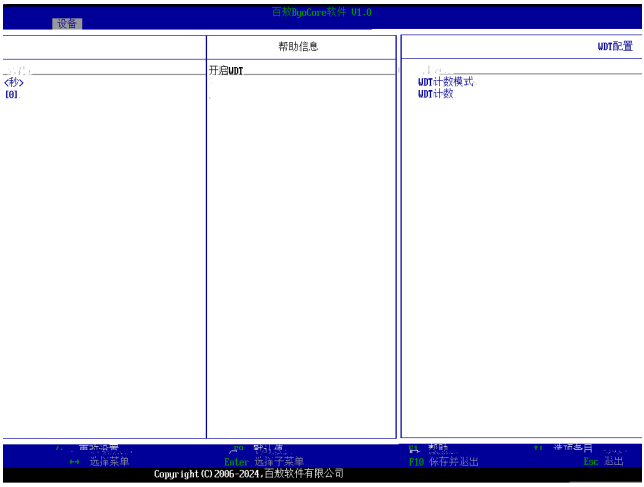
WDT <Enter> G



WDT

WDT G

ч h G

WDT

WDT G

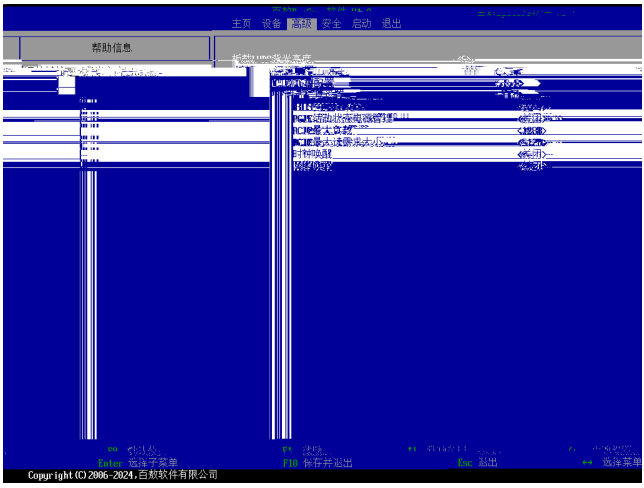
ч h G

WDT

WDT G

ч 0-255 G

7.6



LVDS

LVDS G

ч 1Hь2Hь3Hь4Hь5Hь6 G

LVDS

LVDS G

ч Hь Hь G

PCIEX16

PCIEX16 G

ч x8x8Hьx16Hь G

PBF

PBF G

ч Hь Hь Hь Hь Hь Hь G

BIOS

BIOS G

ч h G

PCIE

PCIE G

ч HьL0sHьL1HьL0s&L1 G

PCIE

PCIE G

ч 128B h 256B G

PCIE

PCIE G

ч 256B h 512B G

G

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Ч h G

7.7

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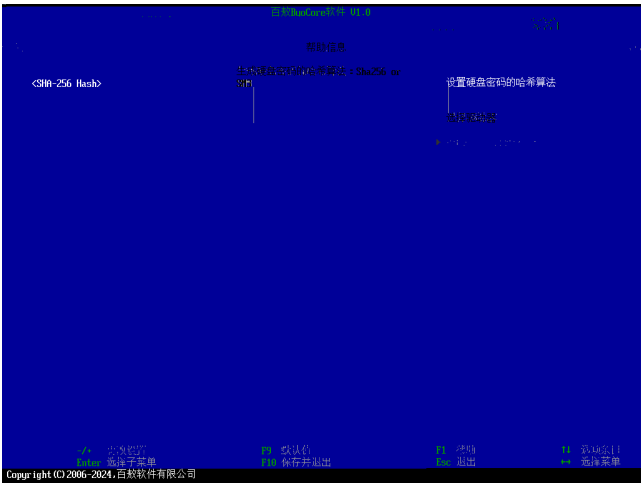

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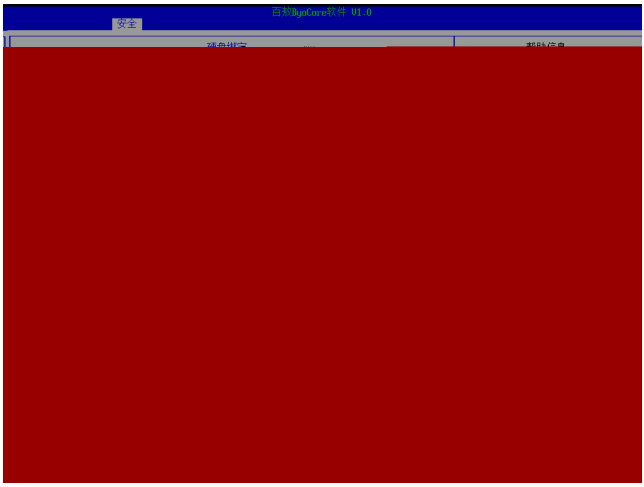

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7.8

NunLock
NumLock G
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ЧhG
SHELL
SHELL G
ЧhG

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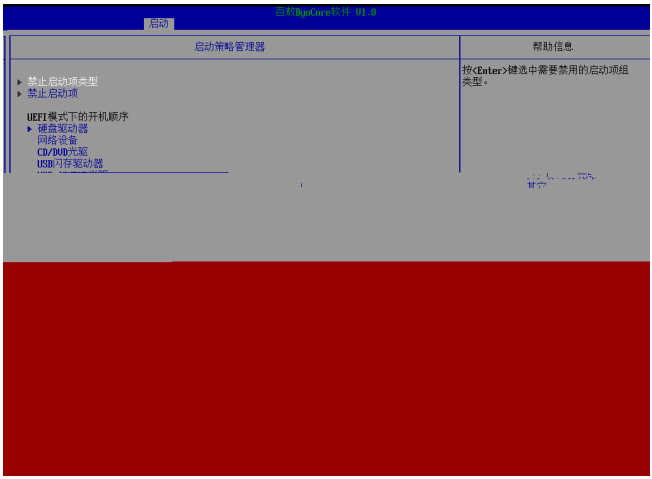

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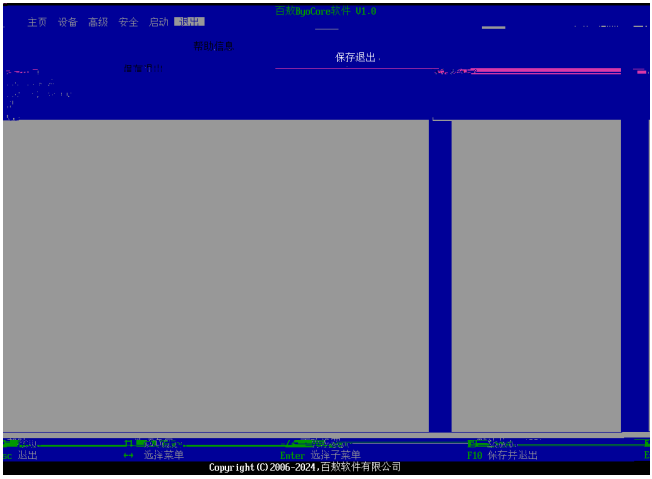
7.9



G

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BIOS

BIOS G

BIOS

BIOS G

G

G

8 WDT

```
#dežne SuperIo_Index_Port 0x2E
#dežne SuperIo_Data_Port 0x2F
#dežne GPIO_LDN8_DEVICE 0x08
UINT8 Data8Ц

//a.      Super IO   Conžguration Mode
IoWrite8(SuperIo_Index_Port, 0x87);
IoWrite8(SuperIo_Index_Port, 0x87);

//b.                  GPIO, LDN 8
IoWrite8(SuperIo_Index_Port, 0x07);
IoWrite8(SuperIo_Data_Port, GPIO_LDN8_DEVICE);

//c. Enabled WDT
IoWrite8(SuperIo_Index_Port, 0x30);
IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) | 0x01);

//d.      WDT                    h Register 0xF0   Bit3        1              h    0
IoWrite8(SuperIo_Index_Port, 0xF0);
//
IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) | 0x08);
//
// IoWrite8(SuperIo_Data_Port, IoRead8(SuperIo_Data_Port) & 0xF7);

//e.      WDT          ч 5   /
IoWrite8(SuperIo_Index_Port, 0xF1);
IoWrite8(SuperIo_Data_Port, 0x5);

//f.      Super IO   Conžguration Mode
IoWrite8(SuperIo_Index_Port, 0xAA); //      Super IO Conžguration Mode    h SuperIO
                                    ,                 Conžguration Mode
```

9 GPIO

JVC-8100 GPIO I2C h :

(1) 9555 I2C-1

(2) Slave address 1 0x20

(3) GPIO0 I0.0HυI0.1HυI0.2HυI0.3HυI0.4HυI0.5HυI0.6HυI0.7 h /

(4)GPIO1 I1.0HυI1.1HυI1.2HυI1.3HυI1.4HυI1.5HυI1.6HυI1.7 h /

(5) I2C Command GPIO h 3 h ч

a. 6Hυ 7 ч GPIO0HυGPIO1d h 0-7bit Ix.0-Ix.7 h bit 0 1 / h 1 Hυ 0 G

b. 0Hυ 1 ч GPIO0HυGPIO1 h 0-7bit Ix.0-Ix.7 h 0Hυ 1 GPIO0HυGPIO1 G

c. 2Hυ 3 ч GPIO0HυGPIO1 h 0-7bit Ix.0-Ix.7 h 2Hυ 3 GPIO0HυGPIO1 G

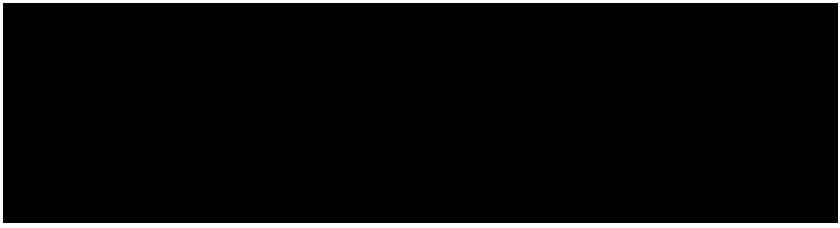
(6) i2c h sudo apt install libi2c-dev

(7) ч

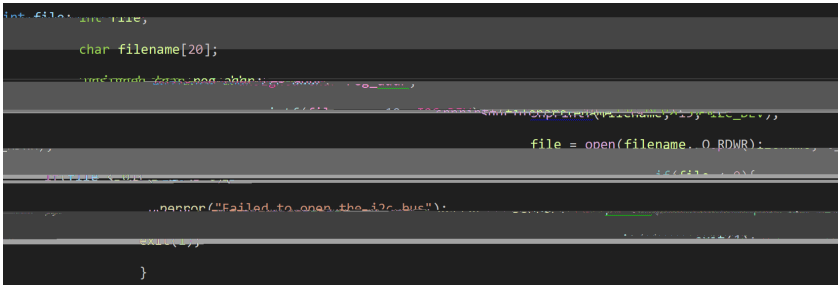
```
#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
#include <sys/ioctl.h>
#include <linux/i2c.h>
#include <unistd.h>
```

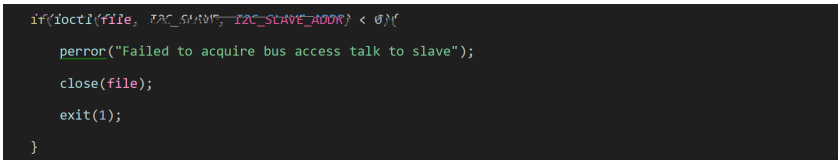
(8) ч

a.

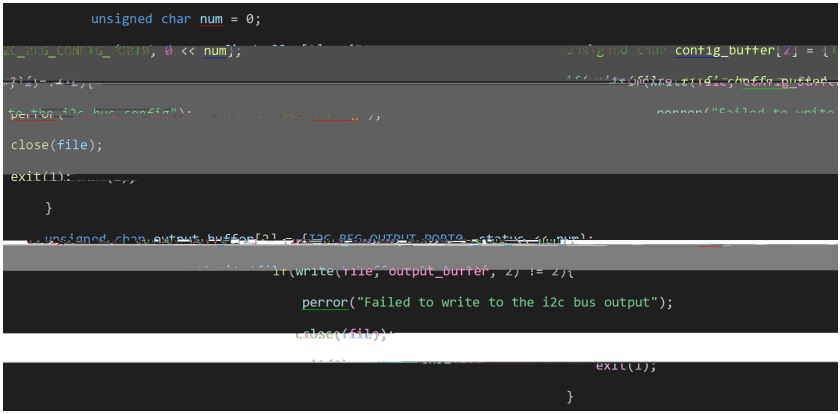


b. Hυ

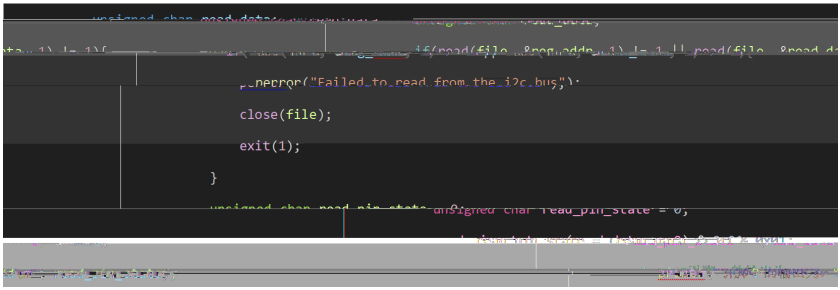




c. 6 GPIO0 h GPIO0 I0.0 ч



d. read ioctl ч



(9) ч

a.

```
#define I2C_SLAVE_ADDR 0x20  //定义从机地址

#define I2C_REG_INPUT_PORT0 0x00 //获取GPIO0输出状态的输入寄存器
```

b. Hu

```
int file;
char filename[20];
snprintf(filename, 19, I2C_DEV);
file = open(filename, O_RDWR);
if(file < 0){
        perror("Failed to open the i2c bus");
                exit(1);
                        }
```

```
if(ioctl(file, I2C_SLAVE, I2C_SLAVE_ADDR) < 0){
        perror("Failed to acquire bus access task to slave");
        close(file);
        exit(1);
        }
```

c. 6 GPIO0 h GPIO0 ч

```
if (i2c_smbus_write_byte_data(file, I2C_REG_CONFIG_PORT0, 0xFE) < 0)
                                                        {
                                                        perr
                        exit(1);
```

```
int Port0 = i2c_smbus_read_byte_data(file, I2C_REG_INPUT_PORT0);
```

d. GPIO h GPIO0 I0.0 ч

```
int Port0 = i2c_smbus_read_byte_data(file, I2C_REG_INPUT_PORT0);
```

10

10.1

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		ÿ Winpe ÿ h h
IҢO h		PCI ISA Ҩ Ҩ h
	BIOS	h BIOS Setup h BIOS Setup
BIOS h		
Boot device not found	BIOS h h	BIOS ɗ d (Boot) h
USB	USB 2.0 h USB 2.0	USB 2.0
	USB	1Ҩ USB Legacy Support Ÿ USB ÿ 2Ҩ h USB