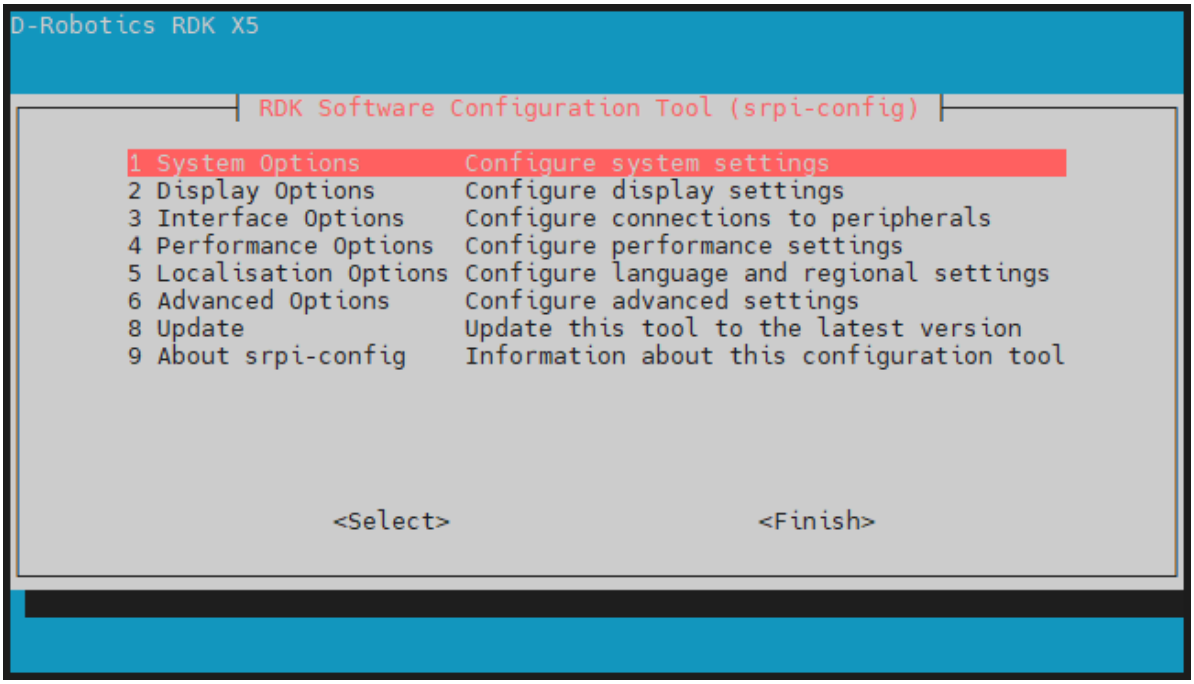
ReadMe

Pin multiplexing relationship configuration

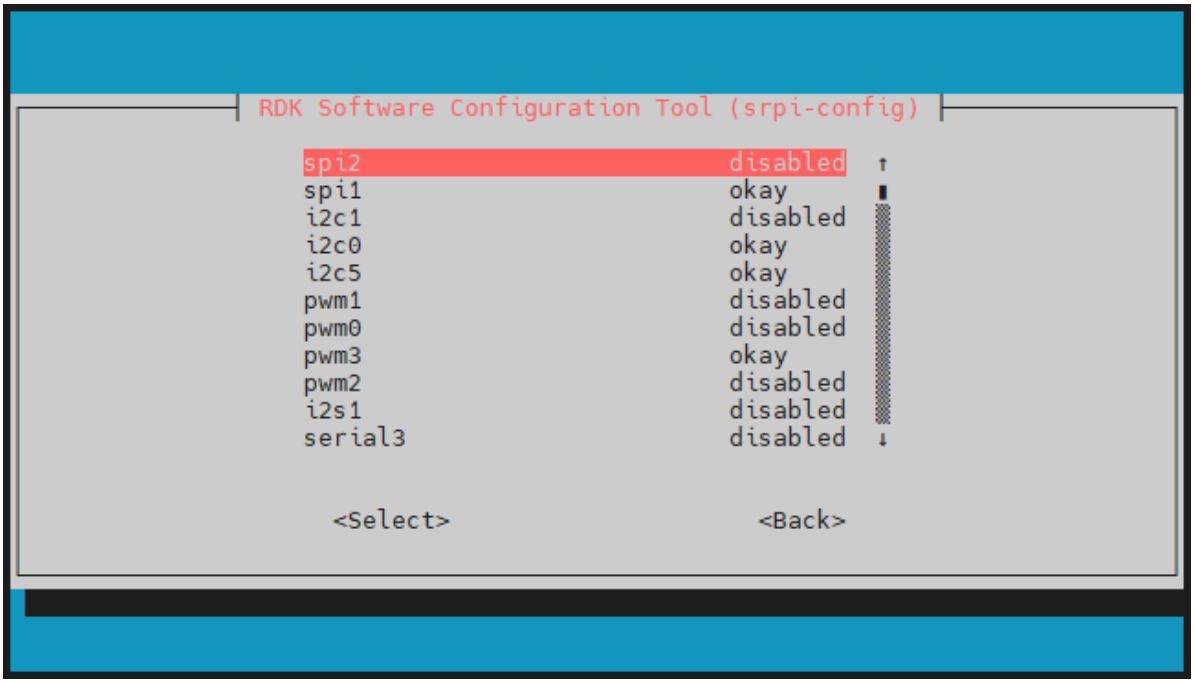
The 40PIN pins will enable UART, SPI, I2C, I2S and other special functions by default as shown in this section. If you need to configure specific pins as GPIO functions, you need to configure them through the `srpi-config` configuration tool.

Note that the `srpi-config` program needs to be run in a **full-screen command line window**, as follows:

```
sudo srpi-config
```



Select `3 Interface Options` -> `I3 Peripheral bus config` to enter the following bus configuration interface.



`okay` configures the corresponding pin as a dedicated function, `disabled` turns off the dedicated function of the pin and can be used as GPIO. The configuration takes effect after **restart**.

- Use the up and down keys on the keyboard to select function items, and the Enter key to switch functions
- Use the left and right keys on the keyboard to select Select and Exit, and the Enter key to confirm

40PIN pin definition

The development board provides a 40PIN standard interface to facilitate users to expand peripherals, and the digital IO uses a 3.3V level design. The 40PIN interface definition is as follows:

RDX X5 Board 40Pin Table

Reuse function3	Reuse function2	Reuse function1	Reuse function 0	Function Description	X5 Pin Number	BCM Encoding	CVM Function	Physical Pin Board Encoding		CVM Function	BCM Encoding	X5 Pin Number	Function Description	Reuse function 0	Reuse function1	Reuse function2	Reuse function3
				3.3V power signal			VDD_3V3	1	2	VDD_5V			5V power signal				
	LSIO_GPIO0_11	SDA5	UART3_TXD	I2C0 data signal	387	2	I2C5_SDA	3	4	VDD_5V			5V power signal				
	LSIO_GPIO0_10	SCL5	UART3_RXD	I2C0 clock signal	389	3	I2C5_SCL	5	6	GND			GND signal				
		DSP_GPIO_09	DSP_MCLK1	I2S0 MCLK clock signal	420	4	I2S1_MCLK	7	8	UART_TXD	14	383	UART1 send signal	UART1_TXD		LSIO_GPIO0_5	
				GND signal			GND	9	10	UART_RXD	15	384	UART1 receive signal	UART1_RXD		LSIO_GPIO0_4	
	LSIO_GPIO0_1		UART7_TXD	GPIO17 signal	380	17	GPIO17	11	12	I2S1_BCLK	18	421	I2S1 BCLK clock signal	I2S1_BCLK	DSP_GPIO_10		
	LSIO_GPIO0_0		UART7_RXD	GPIO27 signal	379	27	GPIO27	13	14	GND			GND signal				
	LSIO_GPIO0_9		UART2_TXD	GPIO22 signal	388	22	GPIO22	15	16	GPIO23	23	382	GPIO23 signal	UART0_RTS	UART6_TXD	LSIO_GPIO0_3	
				3.3V power signal			VDD_3V3	17	18	GPIO24	24	402	GPIO24 signal	SPI2_MOSI	LSIO_GPIO0_23		LSIO_PWM_OUT3
	JTG_TDO	LSIO_GPIO0_19	SPI1_MOSI	SPI1 MOSI signal	398	10	SPI1_MOSI	19	20	GND			GND signal				
	JTG_TDI	LSIO_GPIO0_18	SPI1_MISO	SPI1 MISO signal	397	9	SPI1_MISO	21	22	GPIO25	25	387	GPIO25 signal	UART2_RXD		LSIO_GPIO0_8	
	JTG_TCK	LSIO_GPIO0_16	SPI1_SCLK	SPI1 CLK signal	395	11	SPI1_SCLK	23	24	SPI_CSN0	8	394	SPI1 SSN1 signal	SPI1_CSN1	LSIO_GPIO0_15	JTG_TMS	
				GND signal			GND	25	26	SPI_CSN1	7	396	SPI1 SSN0 signal	SPI1_CSN0	LSIO_GPIO0_17	JTG_TRSTN	
LSIO_PWM_OUT5		LSIO_GPIO1_8	SDA0	I2C3 clock signal	355	0	I2C0_SDA	27	28	I2C0_SCL	1	354	I2C0 signal	SCL0	LSIO_GPIO1_7		LSIO_PWM_OUT4
LSIO_PWM_OUT0		LSIO_GPIO0_20	SPI2_SCLK	GPIO5 signal	399	5	GPIO5	29	30	GND			GND signal				
LSIO_PWM_OUT1	TIME_SYNC2	LSIO_GPIO0_21	SPI2_SSN	GPIO6 signal	400	6	GPIO6	31	32	PWM6	12	356	PWM6 signal	SCL1	LSIO_GPIO1_9	TIME_SYNC1	LSIO_PWM_OUT6
LSIO_PWM_OUT7		LSIO_GPIO1_10	SDA1	PWM0 signal	357	13	PWM7	33	34	GND			GND signal				
		DSP_GPIO_11	I2S1_LRCK	I2S0 LRCK signal	422	19	I2S1_LRCK	35	36	GPIO16	16	381		UART0_CTS	UART6_RXD	LSIO_GPIO0_2	
LSIO_PWM_OUT2		LSIO_GPIO0_22	SPI2_MISO	GPIO26 signal	401	26	GPIO26	37	38	I2S1_SDIN	20	423	I2S1 DI signal	I2S1_DIN	DSP_GPIO_12		
				GND signal			GND	39	40	I2S1_SDOUT	21	424	I2S1 DO signal	I2S1_DOUT	DSP_GPIO_13		