3 Module pin assignments

3.1 Hardware pin assignment

Hardware IO port	function
IO_RST	RESET K210
IO_1	Unused
IO_2	Unused
IO_3	Unused
IO_4	ISP_TX，connect microUSB TX
IO_5	ISP_RX，connect microUSB RX
IO_6	RXD，The receiving pin(RX) of the expansion interface
IO_7	Unused
IO_8	TXD，The send pin(TX) of the expansion interface
IO_9	Unused
IO_10	Unused
IO_11	Unused
IO_12	Unused
IO_13	Unused
IO_14	Unused
IO_15	Unused
IO_16	BOOT，connect key K1
IO_17	Unused
IO_18	Unused
IO_19	Unused
IO_20	Unused

Hardware IO port	function
IO_21	Unused
IO_22	FT_INT，Connect the interrupt pin to the touch screen
IO_23	LCD-RST，Connect to the reset pin of the touch screen
IO_24	I2C-SCL，Connect the I2C-SCL pin of the touchpad
IO_25	I2C-SDA，Connect the I2C-SDA pin of the touchpad
IO_26	RGB-G，Connect to the G pin of the RGB lamp
IO_27	RGB-R，The R pin is connected to the RGB lamp
IO_28	LCD-WR，Connect to the WR(CLK) pin of the LCD
IO_29	RGB-B，The B pin is connected to the RGB lamp
IO_30	LCD-CS，The CS pin is connected to the LCD
IO_31	LCD-RS，The RS(DC) pin connected to the LCD
IO_32	SPI-CLK，The CLK pin connected to the TF card slot
IO_33	SPI-MISO，The MISO pin connected to the TF card slot
IO_34	SPI-CS，The CS pin connected to the TF card slot
IO_35	SPI-MOSI，The MOSI pin connected to the TF card slot
IO_36	Unused
IO_37	Unused
IO_38	Unused
IO_39	Unused
IO_40	DVP-SDA，Connect to the camera DVP-SDA pin
IO_41	DVP-SCL，Connect to the camera DVP-SCL pin
IO_42	DVP-RST，Connect to the camera DVP-RST pin
IO_43	DVP-VSYNC，Connect to the camera DVP-VSYNC pin
IO_44	DVP-PWDN，Connect to the camera DVP-PWDN pin
IO_45	DVP-HSYNC，Connect to the camera DVP-HSYNC pin
IO_46	DVP-XCLK，Connect to the camera DVP-XCLK pin
IO_47	DVP-PCLK，Connect to the camera DVP-PCLK pin

Fixed IO port	function
SPI0_D7	LCD-D7，Connect to the LCD-D7 pin
SPI0_D6	LCD-D6，Connect to the LCD-D6 pin
SPI0_D5	LCD-D5，Connect to the LCD-D5 pin
SPI0_D4	LCD-D4，Connect to the LCD-D4 pin
SPI0_D3	LCD-D3，Connect to the LCD-D3 pin
SPI0_D2	LCD-D2，Connect to the LCD-D2 pin
SPI0_D1	LCD-D1，Connect to the LCD-D1 pin
SPI0_D0	LCD-D0，Connect to the LCD-D0 pin
DVP_D7	DVP-D7，Connect to the DVP-D7 pin
DVP_D6	DVP-D6，Connect to the DVP-D6 pin
DVP_D5	DVP-D5，Connect to the DVP-D5 pin
DVP_D4	DVP-D4，Connect to the DVP-D4 pin
DVP_D3	DVP-D3，Connect to the DVP-D3 pin
DVP_D2	DVP-D2，Connect to the DVP-D2 pin
DVP_D1	DVP-D1，Connect to the DVP-D1 pin
DVP_D0	DVP-D0，Connect to the DVP-D0 pin

3.2 Software GPIO allocation

GPIOHS Default	function	Binding hardware IO
GPIOHS31	LCD-RS，LCD read and write signal pin	IO_31
GPIOHS30	LCD_RST，LCD reset pin	IO_23
GPIOHS29	SPI-CS，TF card SPI slice selection pin	IO_34
GPIOHS25	RGB-B，RGB light blue pin	IO_29
GPIOHS24	RGB-G，RGB light green pin	IO_26
GPIOHS23	RGB-R，RGB lamp red pin	IO_27