

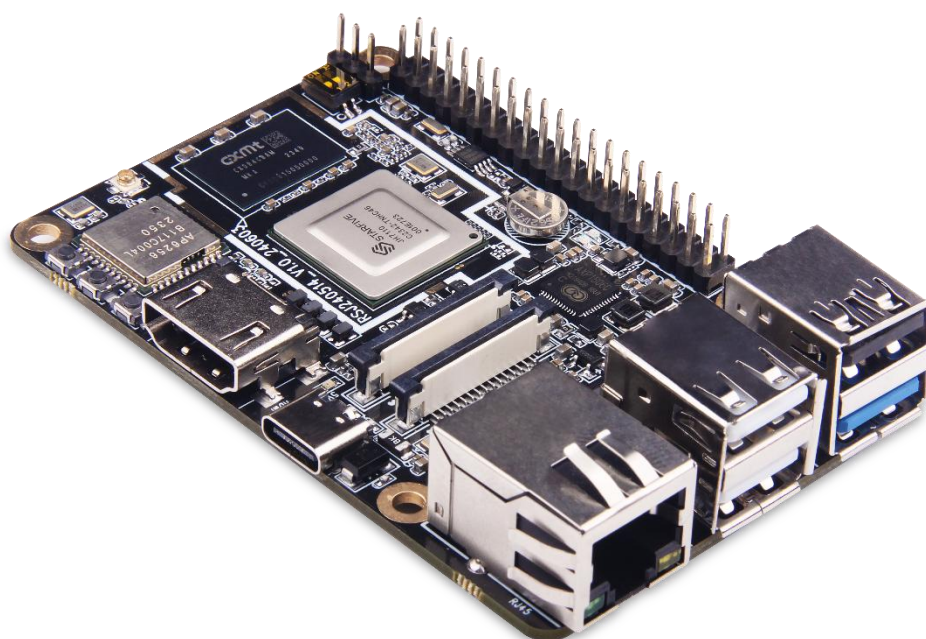
深圳金亚太科技有限公司



Shenzhen Geniatech Co.,Ltd.

SPECIFICATION

MODEL:XPI-7110



Confirmation

REVISION HISTORY					
VERSION	DATE	BOARD ID	PAGE	DESCRIPTION	AUTHOR
V1.0	2024/08/12	RSJ240514_V1.0	10	specification	

APPROVED BY GENIATECH		
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1. GENERAL DESCRIPTION

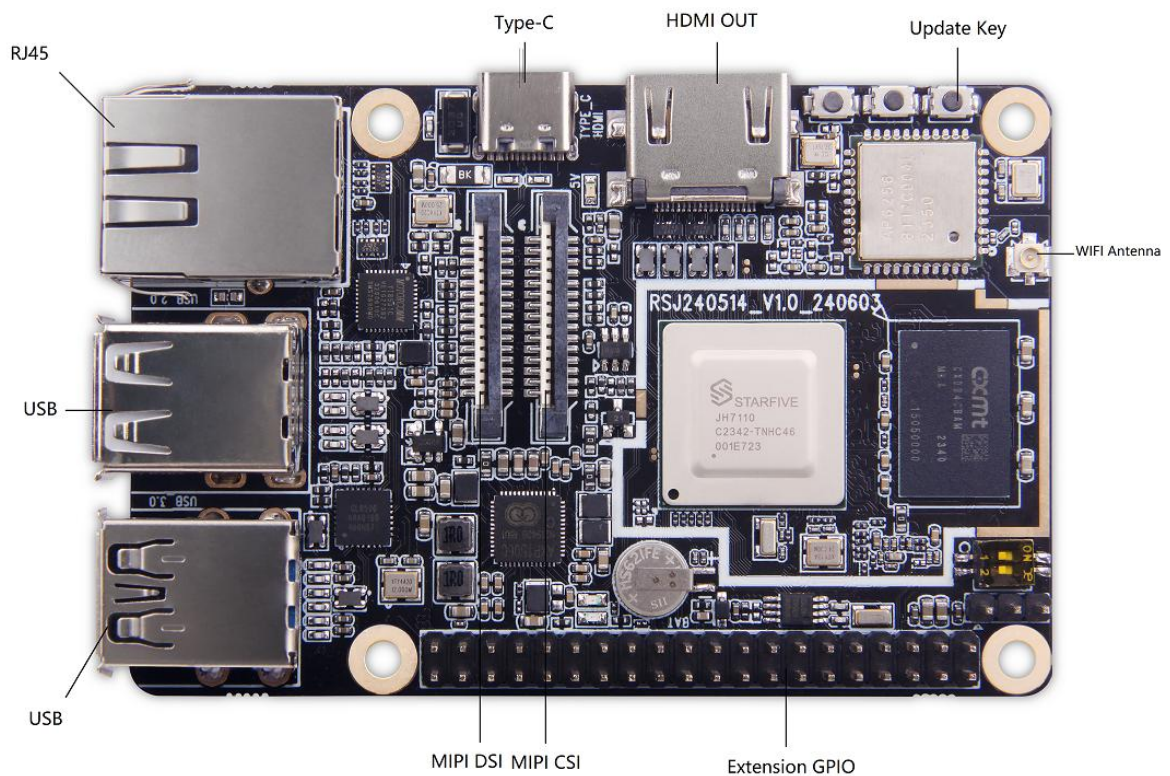
XPI-7110 is a DIY product made by Geniatech that uses the form factor of Raspberry Pi. According to the definition of Raspberry Pi. Below is the detailed specification:

- (I) 85mm*55mm, Only the size of a bank card
- (II) StarFive JH-7110 is equipped with a 64-bit high-performance quad-core RISC-V processor core sharing 2 MB of cache coherency, whose working frequency is 1.5 GHz
- (III) 2G RAM, 16GB eMMC flash
- (IV) USB HOST 3.0 * 1, USB Host 2.0*2, USB OTG 2.0*1, 1*HDMI Out, 1*Type-C, 1*UART, 1* Extension GPIO interface
- (V) Support **Linux Debian 11**
- (VI) WiFi (on board) and 1000M LAN interface
- (VII) Micro SD card(TF card : Max64G)

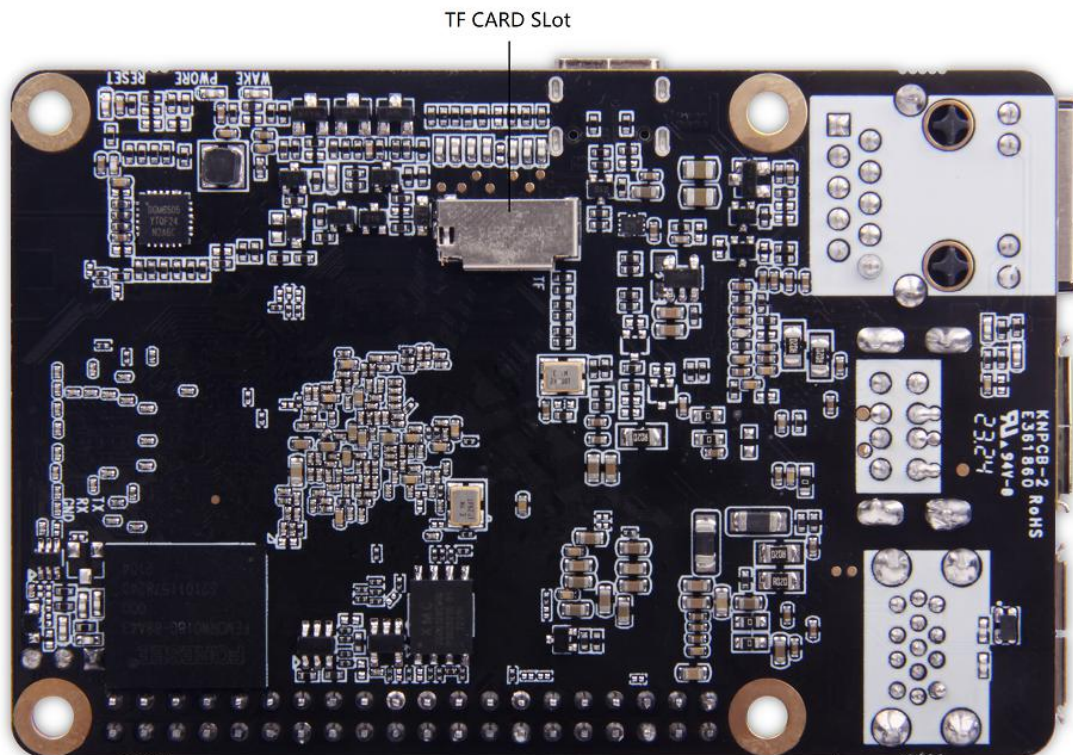
2. PRODUCT LAYOUT

Below pictures are for reference only:

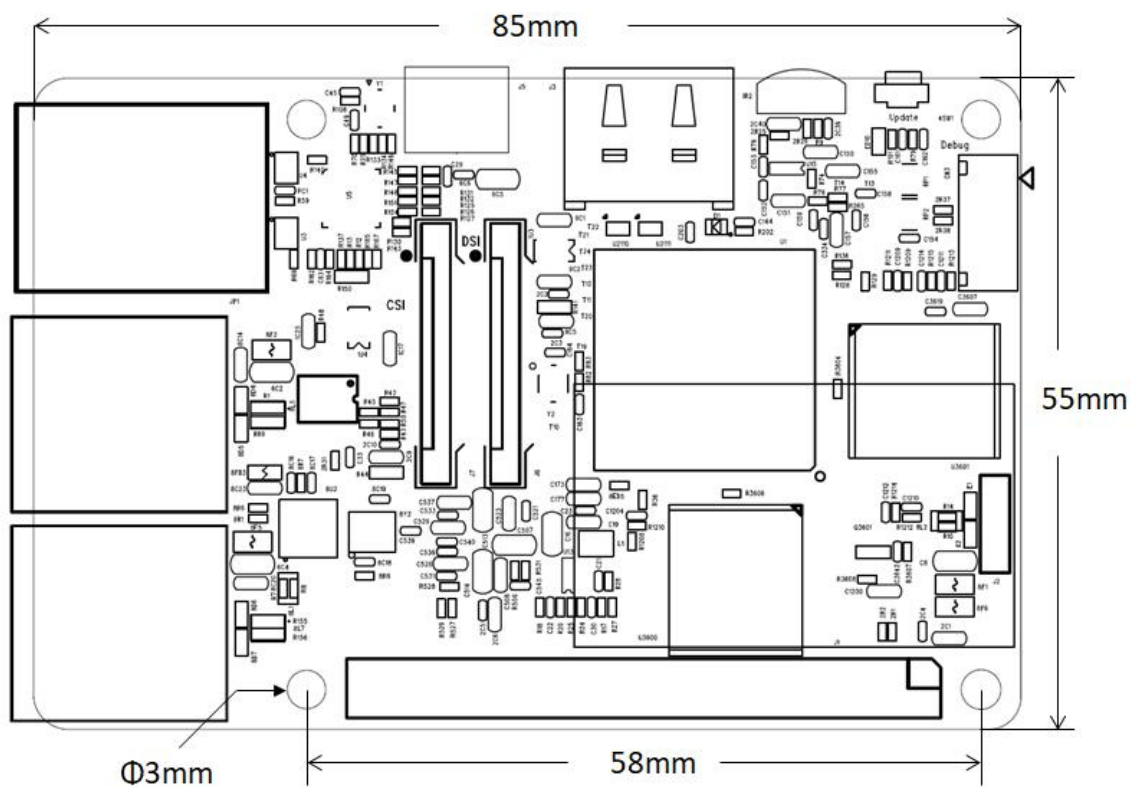
2.1 BOARD FRONT VIEW



2.2 BOARD BACK VIEW



2.3 STRUCTURE VIEW



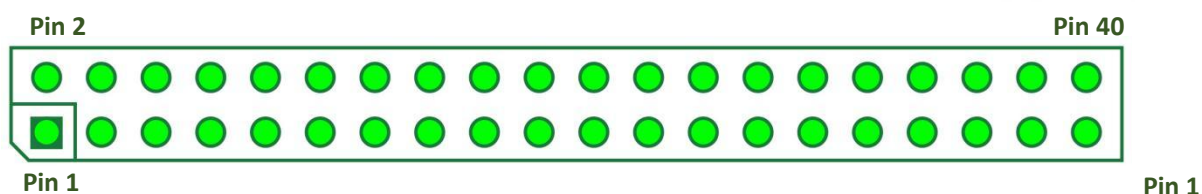
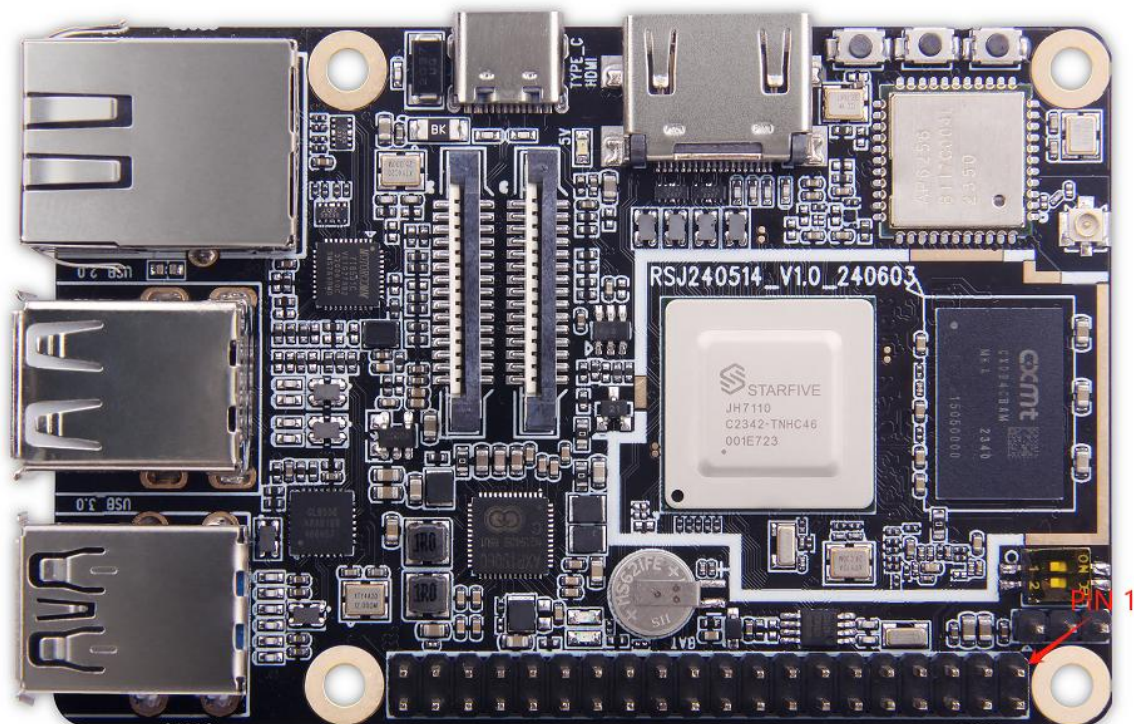
3.FEATURES

Chipset	StarFive JH-7110	
OSD Language	English (multi language OSD)	
Processor	CPU	A 64-bit high-performance quad-core RISC-V processor core sharing 2 MB of cache coherency, whose working frequency is 1.5 GHz
	DDR	2GB (1G/4G/8G Optional)
	EMMC FLASH	16GB (8G/32G/64GB Optional)
Network	Ethernet	RJ45, 1000M
	WiFi	2.4G/5G Dual Band
	Bluetooth	BT5.0
Interface	TF Card Slot	TF card *1(max. 64GB)
	HDMI	HDMI out*1
	USB Host	USB HOST 3.0 * 1, USB Host 2.0*2, USB OTG 2.0*1
	TYPE-C	Power IN*1
	GPIO	GPIO*28
Dimensions	85 mm * 55 mm	
OS	Linux Debian 11	
Adapter	DC5V / 3A	
Accessory	N/A, XPI only	

4 INTERFACE SPECIFICATION

4.1 Extension GPIO definition

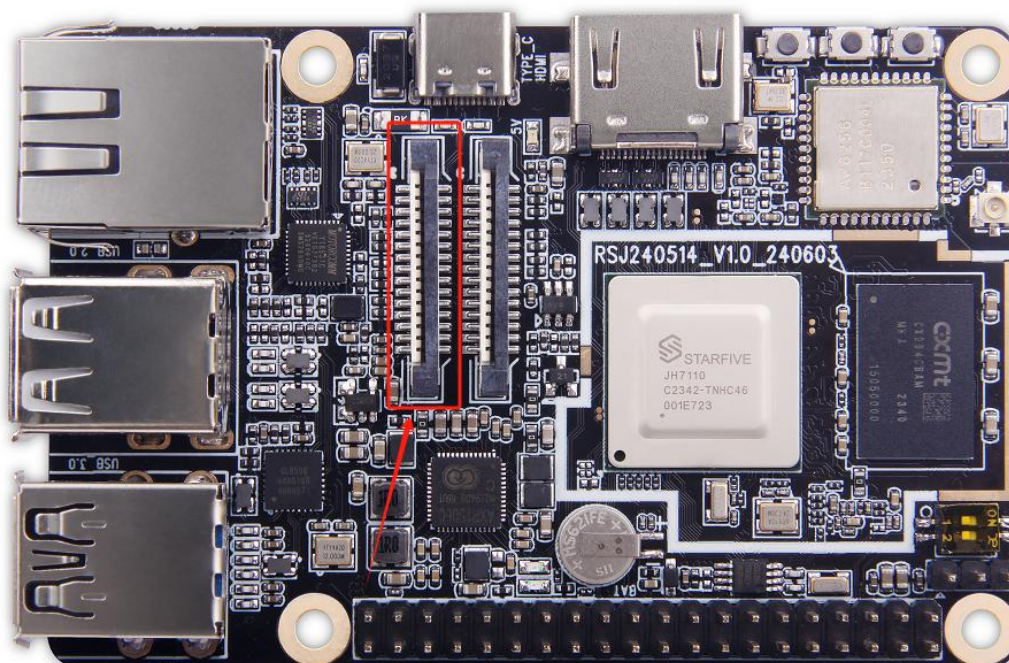
*Please note that the missing corner in the lower left corner identifies Pin No. 1



No.	Definition	No.	Definition
1	VCC_3_3V	2	VCC_5V
3	I2C4_SDA/GPIO37	4	VCC_5V
5	I2C4_SCL/GPIO36	6	GND
7	REFCLK_OUT/GPIO25	8	UART1_TX/GPIO41
9	GND	10	UART1_RX/GPIO40
11	SPI0_CLK/UART4CTSN/GPIO47	12	I2S2_SCLK/GPIO28
13	SPI0_TXD/UART4TX/GPIO45	14	GND
15	SPI0_RXD/UART4RX/GPIO44	16	UART1_CTSn/GPIO43
17	VCC_3_3V	18	UART1_RTSn/GPIO42
19	SPI3_MISO/GPIO50	20	GND
21	SPI3_MOSI/GPIO51	22	GPIO60
23	SPI3_CLK/GPIO49	24	SPI3_CS0/GPIO48
25	GND	26	SPI3_CS1/ GPIO52
27	I2C3_SDA/GPIO39	28	I2C3_SCL/GPIO38
29	SPI0_CSN0/UART4RTSN /GPIO46	30	GND
31	SPI0_CS1 /GPIO61	32	UART9_TX /GPIO63
33	UART9_RX/GPIO62	34	GND
35	I2S2_FS/GPIO34	36	UART7_RX /GPIO58

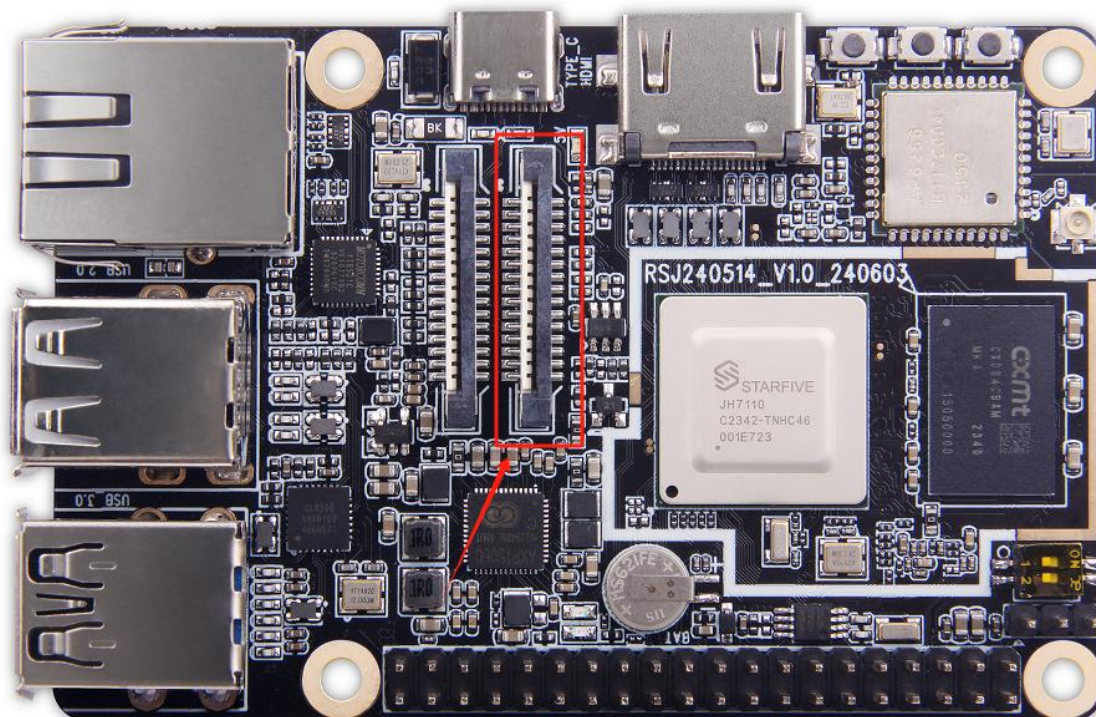
37	UART7_TX/GPIO59	38	I2S2_SDI/GPIO26
39	GND	40	I2S2_SDO/GPIO27

4.2 MIPI DSI



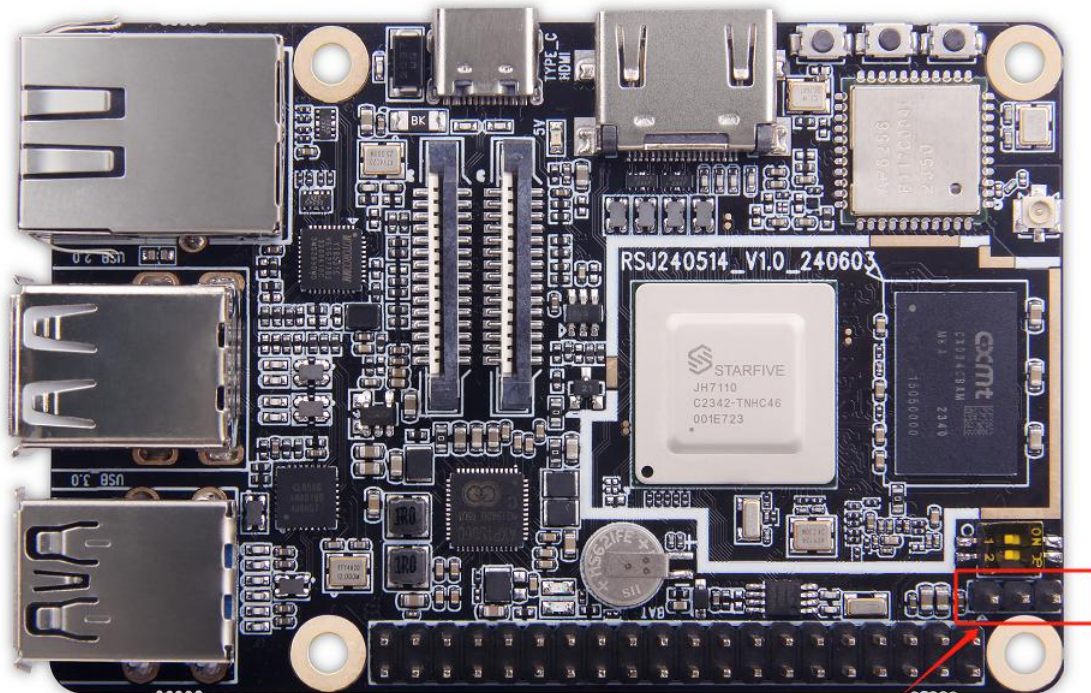
No.	Definition	No.	Definition
1	GND	2	MIPI_TX_D1N
3	MIPI_TX_D1P	4	GND
5	MIPI_TX_CLKN	6	MIPI_TX_CLKP
7	GND	8	MIPI_TX_D0N
9	MIPI_TX_D0P	10	GND
11	DSI_I2C_SCK_GPIO3	12	DSI_I2C_SDA_GPIO2
13	GND	14	VCC_3_3V
15	VCC_3_3V	16	NC
17	NC	18	GND
19	NC	20	NC
21	GND	22	NC
23	NC	24	GND
25	MIPI_TX_D2P	26	MIPI_TX_D2N
27	GND	28	MIPI_TX_D3P
29	MIPI_TX_D3N	30	GND

4.3 MIPI CSI



No.	Definition	No.	Definition
1	GND	2	MIPI_RX_DN0
3	MIPI_RX_DP0	4	GND
5	MIPI_RX_DN1	6	MIPI_RX_DP1
7	GND	8	MIPI_RX_CLKON
9	MIPI_RX_CLKOP	10	GND
11	CSI_MCLK	12	NC
13	CSI_I2C_SCK	14	CSI_I2C_SDA
15	VCC_3_3V	16	NC
17	NC	18	NC
19	GND	20	NC
21	GND	22	NC
23	NC	24	GND
25	MIPI_RX_DP3	26	MIPI_RX_DN3
27	GND	28	MIPI_RX_DP2
29	MIPI_RX_DN2	30	GND

4.4 DEBUG



No.	Definition	No.	Definition
1	UART1_TX_Debug	2	UART1_RX_Debug
3	GND		

5. Precautions for use

1. Relative humidity: 10% ~ 90% .
2. Storage temperature: -20 ~ 95°C
3. Operation temperature: -20 °C ~ 85°C
4. Do not squeeze、 distort or disassemble the board.
5. Keep the board away from static electricity .
6. Keep the board away from water and other liquid.
7. Clean the board with soft and clean dry cloth when it's dirty.
8. Don't use long connect wires which may affect performance and image quality.