



## HDMI

Pin	Pin Description	Pin	Pin Description
1	TMDS Data2+	2	TMDS Data2 GND
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 GND	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 GND
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock GND	12	TMDS Clock-

13	CEC	14	NC
15	DDC clock	16	DDC data
17	DDC GND	18	+5V
19	Hot Plug Detect		

#### USB 3.0

Pin	Pin Description	Pin	Pin Description
1	VBUS	2	USB 2.0 D-
3	USB 2.0 D+	4	GND
5	SSRX-	6	SSRX+
7	GND	8	SSTX-
9	SSTX+		

#### Micro USB

Pin	Pin Description	Pin	Pin Description
1	VBUS	2	USB 2.0 D-
3	USB 2.0 D+	4	USB ID
5	GND		

Note:Micro USB debug please use: /dev/ttyGS0

#### USB 2,0

Pin	Pin Description	Pin	Pin Description
1	VBUS	2	USB 2.0 D-
3	USB 2.0 D+	4	USB ID
5	GND		

#### Button

Pin	Pin Description	Pin	Pin Description
1	3.3V 上拉	2	GND
3	RECOVERY	4	POWER

## FAN

Pin	Pin Description	Pin	Pin Description
1	GND	2	+5V
3	FAN_TACH_CON	4	FAN_PWM

## Ethernet

Pin	Pin Description	Pin	Pin Description
1	TP0+	2	TP0-
3	TP1+	4	TP2+
5	TP2-	6	TP1-
7	TP3+	8	TP3-

## 12V DC

Pin	Pin Description	Pin	Pin Description
1	VDD_12V	2	GND
3	VDD_12V	4	GND
Input range: +12V			

## J4 20-pin multifunctional port

Pin	Pin Description	Pin	Pin Description
1	AUDIO_MCLK01	2	I2S1_CLK
3	I2S1_LRCLK	4	I2S1_SDO UT
5	I2S1_SDIN	6	I2C2_SDA
7	I2C2_SCL	8	GPIO03
9	I2S2_FS	10	VDD_3V3
11	-	12	-
13	-	14	-
15	GPIO10_CODEEC_	16	GPIO12

	INT		
17	I2S2_SDIN	18	I2S2_SDO UT
19	I2S2_CLK	20	GND

J5 20-pin multifunctional port

Pin	Pin Description	Pin	Pin Description
1	SPI0_SCK	2	SPI0_MISO
3	SPI0_MOSI	4	SPI0_CS0
5	SPI0_CS1	6	-
7	-	8	VDD_1V8
9	VDD_3V3	10	VDD_3V3
11	SPI1_SCK	12	SPI1_MISO
13	SPI1_MOSI	14	SPI1_CS0
15	SPI1_CS1	16	-
17	-	18	-
19	GND	20	GND

J1520-pin multifunctional port

Pin	Pin Description	Pin	Pin Description
1	VDD_3V3	2	RTC_BAT_IN
3	I2C0_SCL_3V3	4	I2C0_SDA_3 V3
5	UART0_TX	6	UART0_RX
7	UART1_TX	8	UART1_RX
9	UART2_TX	10	UART2_RX
11	GPIO01_3V3	12	GPIO07_3V3
13	GPIO11_3V3	14	GPIO13_3V3
15	I2C1_SCL_3V3	16	I2C1_SDA_3 V3

17	CAN0L	18	CAN0H
19	GND	20	GND

Note: URAT2 could use as debug port : /dev/ttyTCU0(NX); /dev/ttyS0(NANO),

Debugging tool could use 'cutecom' : sudo apt-get install cutecom,

When connecting TX2 NX, set port rate as 11520/8N1 could transfer data,

URAT0: /dev/ttyTHS1(NX); /dev/ttyTHS2(NANO),

URAT1: /dev/ttyTHS0(NX); /dev/ttyTHS1(NANO),

GPIO\_1: 421(NX);149(NANO); could set as Input,

GPIO\_7: 424(NX);168(NANO);could set as Output,

GPIO\_11: 422(NX);200(NANO);could set as Output,

GPIO\_13: 393(NX);38(NANO);could set as Input.