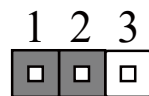


## List of Jumpers

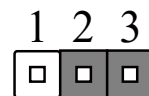
Jumpers allow users to manually customize system configurations to their suitable application needs.

The following chart consist the list of each jumper function:

### (JP6) Auto Power Button Enable/Disable Selection



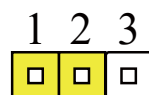
**Disable**



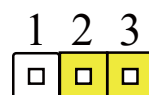
**Enable (Default)**

※ Disable Auto Power Button JP17(1-2) : Need to use power button JP19(1-2) to power on the system.

### (JP7) Clear CMOS Jumper



**Normal (Default)**



**Clear CMOS**

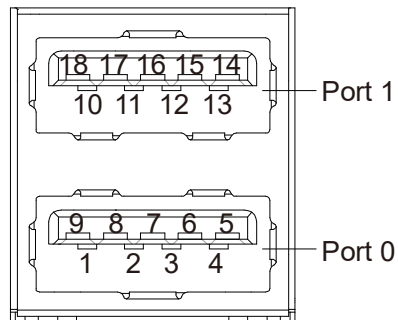
## List of Connectors

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Connectors on board access link to external devices such as hard disk drives, a keyboard.

Label	Function
CN11	USB Ports 0 and 1
CN9	RTC Battery
CN10	LAN (RJ-45)
CN55	M.2 E-key 2230
CN8	SATA Port
CN39	SATA PWR
CN56	M.2 B-Key 2280
CN12	Line In/ Line out/ Mic In
CN52	Speaker
CN5	SPI Debug Port
CN18	LPC Port
CN14	External +12V Input
CN13	HDMI Port
CN47 CN48	USB 2.0 connector
<a href="#">CN53</a>	<a href="#">Front Panel Header</a>
<a href="#">CN60</a>	<a href="#">DIO</a>
CN54	DIO/Clear CMOS/Auto Power on Header
CN51	COM port (RS-232)
<a href="#">CN61</a>	<a href="#">COM port (RS-232)</a>
CN32	MIPI-CSI X2
CN33	MIPI-CSI X4
CN43	eDP
CN7	BIO

## **(CN11) USB Ports 0 and 1**

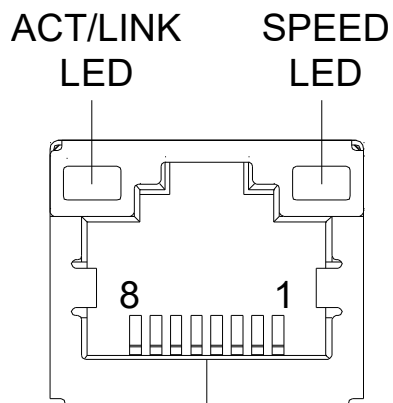


Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB0_D-	DIFF	
3	USB0_D+	DIFF	
4	GND	GND	
5	USB0_SSRX-	DIFF	
6	USB0_SSRX+	DIFF	
7	GND	GND	
8	USB0_SSTX-	DIFF	
9	USB0_SSTX+	DIFF	
10	+5VSB	PWR	+5V
11	USB1_D-	DIFF	
12	USB1_D+	DIFF	
13	GND	GND	
14	USB1_SSRX-		
15	USB1_SSRX+		
16	GND	GND	
17	USB1_SSTX-		
18	USB1_SSTX+		

### **(CN9) RTC Battery**

Pin	Pin Name	Signal Type	Signal level
1	+3.3V	PWR	3.3V
2	GND	GND	

### **(CN10) LAN (RJ-45)**



Pin	Pin Name	Signal Type	Signal level
1	MDI0+	DIFF	
2	MDI0-	DIFF	
3	MDI1+	DIFF	
4	MDI2+	DIFF	
5	MDI2-	DIFF	
6	MDI1-	DIFF	
7	MDI3+	DIFF	
8	MDI3-	DIFF	

### **(CN55) M.2 E Key(2230)**

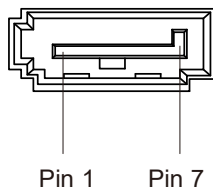
Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	+3.3V	PWR	3.3V
3	USB+	DIFF	
4	+3.3V	PWR	
5	USB-	DIFF	
6			

Pin	Pin Name	Signal Type	Signal level
7	GND	GND	
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33	GND	GND	

Pin	Pin Name	Signal Type	Signal level
34			
35	PCIE_TXP	DIFF	
36			
37	PCIE_TXN	DIFF	
38			
39	GND	GND	
40			
41	PCIE_RXP	DIFF	
42			
43	PCIE_RXN	DIFF	
44			
45	GND	GND	
46			
47	CLK_PCIE_P	DIFF	
48			
49	CLK_PCIE_N	DIFF	
50			
51	GND	GND	
52	RST#	OUT	
53	PCIE_CLKREQ#	IN	
54	BT_DISABLE#	OUT	
55	PCIE_WAKE#	IN	
56	WIFI_DISABLE#	OUT	
57	GND	GND	
58			
59			
60			

Pin	Pin Name	Signal Type	Signal level
61			
62			
63	GND	GND	
64			
65			
66			
67			
68			
69	GND	GND	
70			
71			
72	+3.3V	PWR	3.3V
73			
74	+3.3V	PWR	3.3V
75		GND	

### **(CN8) SATA Port**

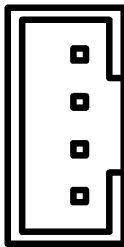


Pin	Pin Name	Signal Type	Signal level
1	+5V	PWR	+5V
2	GND	GND	
3	SATA_TX-	DIFF	



4	GND	GND	
5	SATA_RX-	DIFF	
6	SATA_RX+	DIFF	
7	GND	GND	

### **(CN39) SATA Power**



Pin	Pin Name	Signal Type	Signal level
1	+12V	PWR	+12V
2	GND	GND	
3	GND	GND	
4	+5V	PWR	+5V

### **(CN56) M.2 B-key (2280)**

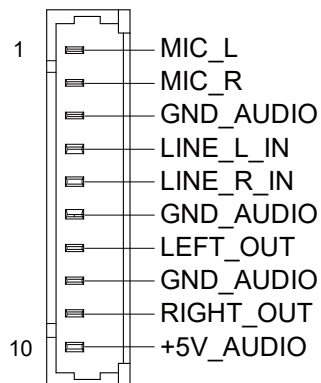
Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	+3.3V	PWR	3.3V
3	GND	GND	
4	GND	GND	
5	+3.3V	PWR	3.3V
6			
7	USB_DP	DIFF	
8			
9	USB_DN	DIFF	
10			
11	GND	GND	
12			

Pin	Pin Name	Signal Type	Signal level
13			
14			
15			
16			
17			
18			
19			
20			
21	GND	GND	
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33	GND	GND	
34			
35			
36			
37			
38			
39	GND	GND	

Pin	Pin Name	Signal Type	Signal level
40			
41	SATA_RXP	DIFF	
42			
43	SATA_RXN	DIFF	
44			
45	GND	GND	
46			
47	SATA_TXN	DIFF	
48			
49	SATA_TXP	DIFF	
50			
51	GND	GND	
52			
53			
54			
55			
56			
57	GND	GND	
58			
59			
60			
61			
62			
63			
64			
65			
66			

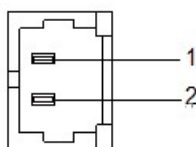
Pin	Pin Name	Signal Type	Signal level
67			
68			
69	GND	GND	
70	+3.3V	PWR	3.3V
71	GND	GND	
72	+3.3V	PWR	3.3V
73	GND	GND	
74	+3.3V	PWR	3.3V
75	GND	GND	

### **(C12) Audio I/O Port**



Pin	Pin Name	Signal Type	Signal level
1	MIC_L	Audio	
2	MIC_R	Audio	
3	GND_AUDIO	AGND	
4	LINE_L_IN	Audio	
5	LINE_R_IN	Audio	
6	GND_AUDIO	AGND	
7	LEFT_OUT	Audio	
8	GND_AUDIO	AGND	
9	RIGHT_OUT	Audio	
10			

### **(CN8) Speaker**

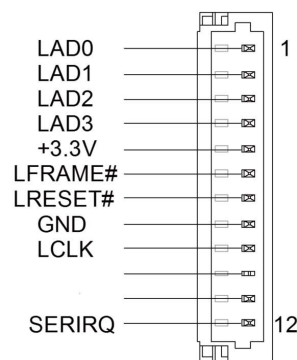


Pin	Pin Name	Signal Type	Signal level
1	SPK+	Audio	
2	SPK-	Audio	

### **(CN5) SPI Debug Port**

Pin	Pin Name	Signal Type	Signal level
1	SPI_MISO	OUT	
2	GND	GND	
3	SPI_CLK	IN	
4	+3.3VSB	PWR	
5	SPI_MOSI	IN	
6	SPI_CS	IN	
7	NC	NC	
8	GND	GND	
9	GND	GND	

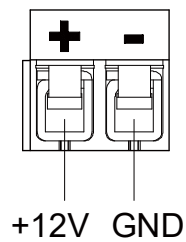
### **(CN18) LPC Port**



Pin	Pin Name	Signal Type	Signal level
1	LAD0	I/O	+3.3V
2	LAD1	I/O	+3.3V
3	LAD2	I/O	+3.3V
4	LAD3	I/O	+3.3V
5	+3.3V	PWR	+3.3V

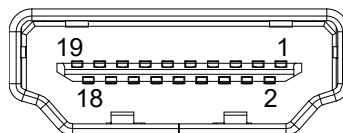
6	LFRAME#	IN	
7	LRESET#	OUT	+3.3V
8	GND	GND	
9	LCLK	OUT	
10	Reserved		
11	Reserved		
12	SERIRQ	I/O	+3.3V

### (CN14) External +12V Input



Pin	Pin Name	Signal Type	Signal level
1	+12V	PWR	+12V
2	GND	GND	

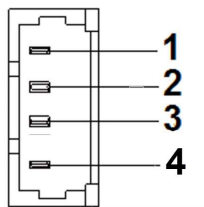
### (CN13) HDMI Port



Pin	Pin Name	Signal Type	Signal level
1	TMDS_DAT2+	DIFF	
2	GND	GND	

Pin	Pin Name	Signal Type	Signal level
3	TMDS_DAT2-	DIFF	
4	TMDS_DAT1+	DIFF	
5	GND	GND	
6	TMDS_DAT1-	DIFF	
7	TMDS_DAT0+	DIFF	
8	GND	GND	
9	TMDS_DAT0-	DIFF	
10	TMDS_CLK+	DIFF	
11	GND	GND	
12	TMDS_CLK-	DIFF	
13	NC		
14	NC		
15	DDC_CLK	I/O	+5V
16	DDC_DATA	I/O	+5V
17	GND	GND	
18	+5V	I/O	+5V
19	HPLG_DETECT	IN	

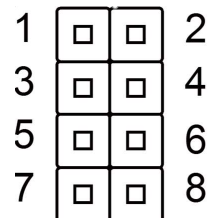
### **(CN47; CN48) USB**



Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	USB_PWR	PWR	5V

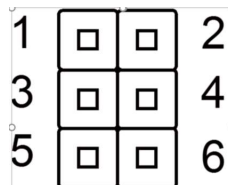
<b>3</b>	USB-	Diff	
<b>4</b>	USB+	Diff	

### **(CN53) Front Panel Header**



<b>Pin 1</b>	GND	<b>Pin 2</b>	PWR Button
<b>Pin 3</b>	FP_IDELED#	<b>Pin 4</b>	+3.3V
<b>Pin 5</b>	FP_BUZZER	<b>Pin 6</b>	+V5S
<b>Pin 7</b>	GND	<b>Pin 8</b>	RESET Button

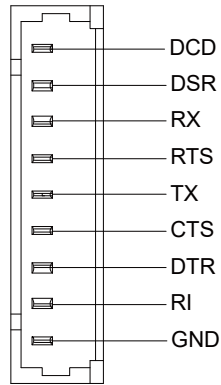
### **(CN60) DIO**



<b>Pin 1</b>	DIO_PWR(+3.3V or 5V)	<b>Pin 2</b>	GPO0
<b>Pin 3</b>	GPI0	<b>Pin 4</b>	GPO1
<b>Pin 5</b>	GPI1	<b>Pin 6</b>	GND



### **(CN51&CN61) COM Port 1**



RS-232			
Pin	Pin Name	Signal Type	Signal level
1	DCD	IN	
2	DSR	IN	
3	RX	IN	
4	RTS	OUT	
5	TX	OUT	
6	CTS	IN	
7	DTR	OUT	
8	RI	IN/ PWR	
9	GND	GND	

### **(CN32) MIPI-CSI X2(TBD)**

### **(CN53) MIPI-CSI X4 (TBD)**

### **(CN43) eDP (TBD)**

Pin	Pin Name	Signal Type	Signal level
1	VCC_PWR	PWR	3.3V
2	VCC_PWR	PWR	3.3V
3	GND	GND	
4	GND	GND	
5	EDP_TX2_N	Diff	
6	EDP_TX2_P	Diff	
7	GND	GND	
8	EDP_TX1_N	Diff	

9	EDP_TX1_P	Diff	
10	GND	GND	
11	EDP_TX0_N	Diff	
12	EDP_TX0_P	Diff	
13	GND	GND	
14	EDP_TX3_N	Diff	
15	EDP_TX3_P	Diff	
16	GND	GND	
17	EDP_AUXN	Diff	
18	EDP_AUXP	Diff	
19	GND	GND	
20	Backlight Brightness	OUT	3.3V
21	NC	NC	
22	Backlight Enable	OUT	3.3V
23	Hot Plug Detect	IN	3.3V
24	GND	GND	
25	GND	GND	
26	GND	GND	
27	VCC_Backlight	PWR	12V
28	VCC_Backlight	PWR	12V
29	VCC_Backlight	PWR	12V
30	VCC_Backlight	PWR	12V

### **(CN7) BIO (Board-Board Connector)**

Pin	Pin Name	PIN	Pin Name
1	+12VSB	2	GND
3	GND	4	PCIE_TXN0

Pin	Pin Name	PIN	Pin Name
5	PCIE_RXN0	6	PCIE_TXP0
7	PCIE_RXP0	8	GND
9	GND	10	PCIE_TXN1
11	PCIE_RXN1	12	PCIE_TXP1
13	PCIE_RXP1	14	GND
15	GND	16	PS_ON#
17	DDIO_DDCCLK	18	DDIO_DDCDAT
19	+5VSB	20	+5VSB
21	+5VSB	22	+5VSB
23	PCIE_REF_CLK0	24	RESET#
25	PCIE_REF_CLK0#	26	GND
27	GND	28	DDIO_TX1_N
29	DDIO_TX0_N	30	DDIO_TX1_P
31	DDIO_TX0_P	32	GND
33	GND	34	DDIO_TX3_N
35	DDIO_TX2_N	36	DDIO_TX3_P
37	DDIO_TX2_P	38	GND
39	GND	40	DDIO_HPD
41	DDIO_AUXN	42	GND
43	DDIO_AUXP	44	USB3_TX2_N
45	GND	46	USB3_TX2_P
47	USBN0	48	GND
49	USBP0	50	USB3_RX2_N
51	GND	52	USB3_RX2_P
53	SMB_CLK	54	GND
55	SMB_DATA	56	WAKE#
57	GND	58	USB_OC0#
59	+5V	60	USB_OC1#
61	+5V	62	+5V
63	+5V	64	+5V
65	LPC_AD0	66	LPC_FRAME#
67	LPC_AD1	68	SERIRQ
69	LPC_AD2	70	LPC_DRQ
71	LPC_AD3	72	GPIO0/PWR_CB_GD
73	GND	74	NC
75	LPC_CLK	76	NC

Pin	Pin Name	PIN	Pin Name
77	PME#	78	NC
79	GND	80	GND