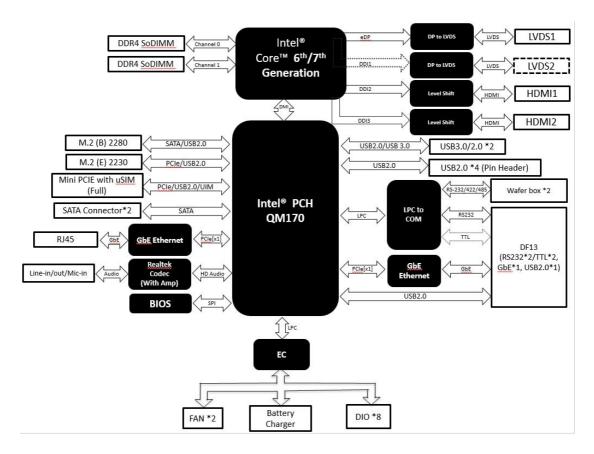


EPIC-SKH7 Rev A1.0_0_0 Jumper and Connector Setting User Manual

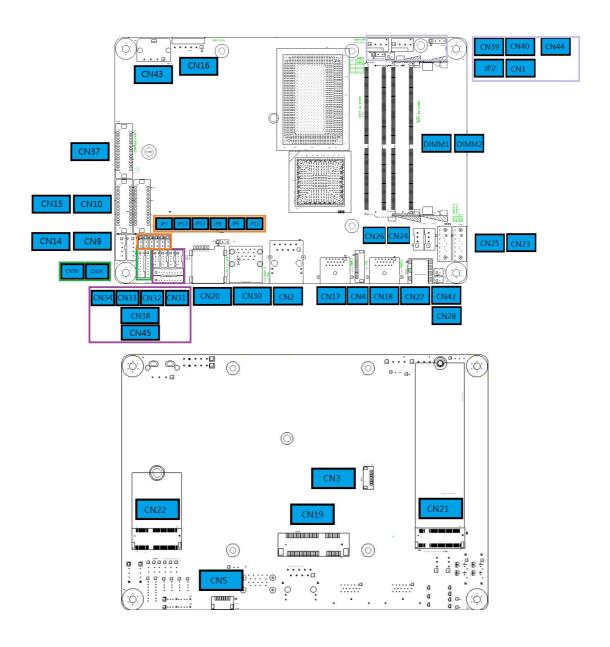
Block Diagram



Features

- 1. Intel® CPU.Skylake-H.2-2.8GHz.8M.i7-6822EQ
- 2. DDR4 SODIMM x 2
- 3. HDMI x 2, LVDS(18/24bits 2CH) x 2
- 4. Audio
- 5. Giga LAN x 2
- 6. SATA 2.0 x 2
- 7. Digital I/O(8bits)
- 8. COM x 4
- 9. USB3.0 x2(Rear I/O)
- 10. USB2.0 x5(Internal wafer box)
- 11. Mini Card1 slot x 1 (PCle Full Size)
- 12. M.2 slot 2280(B-Key)
- 13. M.2 slot 2230(E-Key)
- 14. DC 9-36V (AT or ATX)

Location of Connectors and Jumpers



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:

Label	Function	Description
JP2	Clear CMOS Jumper	3 x 1 pin header, 2.0mm
JP3	Auto Power Button Enable/Disable Selection	3 x 1 pin header, 2.0mm
JP6	LVDS1 Port Operating VDD Selection	3 x 1 pin header, 2.0mm
JP7	LVDS1 Port Backlight VCC Selection	3 x 1 pin header, 2.0mm
JP8	LVDS1 Port Backlight Lightness Control Mode Selection	3 x 1 pin header, 2.0mm
JP11	LVDS2 Port Operating VDD Selection	3 x 1 pin header, 2.0mm
JP12	LVDS2 Port Backlight VCC Selection	3 x 1 pin header, 2.0mm
JP13	LVDS2 Port Backlight Lightness Control Mode Selection	3 x 1 pin header, 2.0mm

(JP2) Clear CMOS Jumper

Normal (Default)

Clear CMOS

(JP3) Auto Power Button Enable/Disable Selection



Disable (Default)



Enable

Disable Auto Power Button JP3(1-2): Need to use power button to power on the system.

(JP6) LVDS1 Power Selection

+5V

+3.3V (Default)

(JP7) LVDS1 LVDS BKLT Power Selection

+12V

+5V (Default)

(JP8) LVDS1 BKLT Control Selection

VR Mode

PWM Mode(Default)

(JP11) LVDS2 Power Selection

+5V

+3.3V (Default)

(JP12) LVDS2 LVDS BKLT Power Selection

+12V

+5V (Default)

(JP13)LVDS2 BKLT Control Selection

VR Mode

PWM Mode(Default)

List of Connectors

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

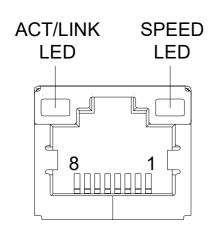
CN1 RTC Battery CN2 LAN1 (RJ-45) Port CN3 SPI Programming Header (Debug ONLY) CN4 LPC Port CN9 LVDS1 Port Inverter / Backlight Connector CN10 LVDS2 Port Inverter / Backlight Connector CN14 LVDS2 Port Inverter / Backlight Connector CN15 LVDS2 Port CN16 Battery CN17 HDMI1 CN18 HDMI2 CN19 Mini Card Slot (Full size for PCIe) CN20 Micro SIM Card Socket(Push Pull Type) CN21 M.2(B-Key) CN22 M.2(E-Key) CN21 M.2(B-Key) CN22 M.2(E-Key) CN23 SATA3.0 Port CN24 +5V/+12V Output for SATA Port HDD or External +12V CN25 SATA3.0 Port CN26 +5V/+12V Output for SATA Port HDD or External +12V CN27 Audio Jack connector CN28 Speaker L CN30 USB3.0 Port CN31 USB2.0 (Internal wafer box) CN32 USB2.0	Label	Function	
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CN16	CN10	LVDS1 Port	
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CN36 COM Port 2 CN37 Internal DF13 UART/USB/LAN2 CN38 Digital IO Port CN39 CPU FAN	CN34	USB2.0 (Internal wafer box)	
CN37 Internal DF13 UART/USB/LAN2 CN38 Digital IO Port CN39 CPU FAN	CN35	COM Port 1	
CN38 Digital IO Port CN39 CPU FAN	CN36	COM Port 2	
CN39 CPU FAN	CN37	Internal DF13 UART/USB/LAN2	
	CN38	Digital IO Port	
CN40 SYSTEM FAN	CN39	CPU FAN	
	CN40	SYSTEM FAN	

CN42	Speaker R
CN43	DC Power Input
CN44	Battery status LED
CN45	Front Panel Header

(CN1) RTC Battery

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

(CN2) LAN1 (RJ-45) Port

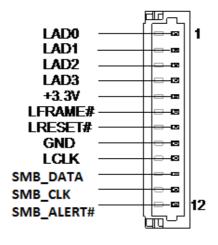


Pin	Pin Name	Signal Type	Signal level
1	MDI0+	DIFF	
2	MDI0-	DIFF	
3	MDI1+	DIFF	
4	MDI2+	DIFF	
5	MDI2-	DIFF	
6	MDI1-	DIFF	
7	MDI3+	DIFF	
8	MDI3-	DIFF	

(CN3) SPI Programming Header

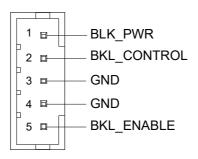
Pin	Pin Name	Signal Type	Signal level
1	SPI_MISO	OUT	
2	GND	GND	
3	SPI_CLK	IN	
4	+3.3VSB	PWR	+3.3V
5	SPI_MOSI	IN	
6	SPI_CS	IN	
7	NC		

(CN4) 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	SMB_DATA	IN	
11	SMB_CLK	IN	
12	SMB_ALERT#	I/O	+3.3V

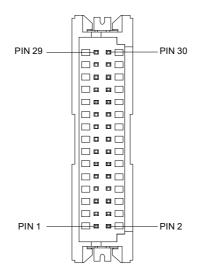
(CN9) LVDS1 Port Inverter / Backlight Connector



Pin	Pin Name	Signal Type	Signal level
1	BKL_PWR	PWR	+5V / +12V
2	BKL_CONTROL	OUT	
3	GND	GND	
4	GND	GND	
5	BKL_ENABLE	OUT	+3.3V

^{X LVDS1 BKL_PWR can be set to +5V or +12V by CN7}

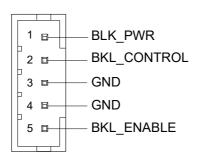
(CN10) LVDS1 Port



Pin	Pin Name	Signal Type	Signal level
1	BKL_ENABLE	OUT	
2	BKL_CONTROL	OUT	
3	LCD_PWR	PWR	+3.3V/+5V
4	GND	GND	
5	LVDS_A_CLK-	DIFF	
6	LVDS_A_CLK+	DIFF	
7	LCD_PWR	PWR	+3.3V/+5V
8	GND	GND	
9	LVDS_DA0-	DIFF	
10	LVDS_DA0+	DIFF	
11	LVDS_DA1-	DIFF	
12	LVDS_DA1+	DIFF	
13	LVDS_DA2-	DIFF	
14	LVDS_DA2+	DIFF	

Pin	Pin Name	Signal Type	Signal level
15	LVDS_DA3-	DIFF	
16	LVDS_DA3+	DIFF	
17	DDC_DATA	I/O	+3.3V
18	DDC_CLK	I/O	+3.3V
19	LVDS_DB0-	DIFF	
20	LVDS_DB0+	DIFF	
21	LVDS_DB1-	DIFF	
22	LVDS_DB1+	DIFF	
23	LVDS_DB2-	DIFF	
24	LVDS_DB2+	DIFF	
25	LVDS_DB3-	DIFF	
26	LVDS_DB3+	DIFF	
27	LCD_PWR	PWR	+3.3V/+5V
28	GND	GND	
29	LVDS_B_CLK-	DIFF	
30	LVDS_B_CLK+	DIFF	

(CN14) LVDS2 Port Inverter / Backlight Connector



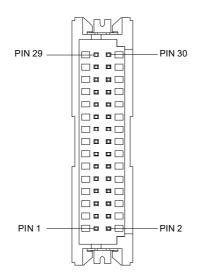
Pin	Pin Name	Signal Type	Signal level
1	BKL_PWR	PWR	+5V / +12V

2	BKL_CONTROL	OUT	
3	GND	GND	
4	GND	GND	
5	BKL_ENABLE	OUT	+3.3V

X LVDS1 BKL_PWR can be set to +5V or +12V by CN12

LVDS1 BKL_CONTROL can be set by CN13

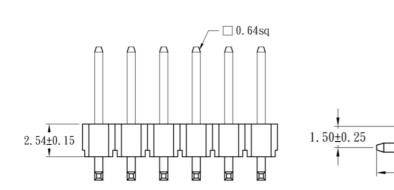
(CN15) LVDS2 Port



Pin	Pin Name	Signal Type	Signal level
1	BKL_ENABLE	OUT	
2	BKL_CONTROL	OUT	
3	LCD_PWR	PWR	+3.3V/+5V
4	GND	GND	
5	LVDS_A_CLK-	DIFF	
6	LVDS_A_CLK+	DIFF	
7	LCD_PWR	PWR	+3.3V/+5V
8	GND	GND	
9	LVDS_DA0-	DIFF	

Pin	Pin Name	Signal Type	Signal level
10	LVDS_DA0+	DIFF	
11	LVDS_DA1-	DIFF	
12	LVDS_DA1+	DIFF	
13	LVDS_DA2-	DIFF	
14	LVDS_DA2+	DIFF	
15	LVDS_DA3-	DIFF	
16	LVDS_DA3+	DIFF	
17	DDC_DATA	I/O	+3.3V
18	DDC_CLK	I/O	+3.3V
19	LVDS_DB0-	DIFF	
20	LVDS_DB0+	DIFF	
21	LVDS_DB1-	DIFF	
22	LVDS_DB1+	DIFF	
23	LVDS_DB2-	DIFF	
24	LVDS_DB2+	DIFF	
25	LVDS_DB3-	DIFF	
26	LVDS_DB3+	DIFF	
27	LCD_PWR	PWR	+3.3V/+5V
28	GND	GND	
29	LVDS_B_CLK-	DIFF	
30	LVDS_B_CLK+	DIFF	

(CN16) Battery

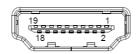


Pin	Pin Name	Signal Type	Signal level
1	VCC_BAT	PWR	
2	VCC_BAT	PWR	
3	I2C_PM_DTA_3V	I/O	
4	I2C_PM_CK_3V	I/O	
5	GND	GND	
6	GND	GND	

6. 00±0. 25

3.00±0.25

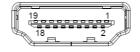
(CN17) HDMI1



Pin	Pin Name	Signal Type	Signal level
1	HDMI_D2+	DIFF	
2	GND	GND	
3	HDMI_D2-	DIFF	
4	HDMI_D1+	DIFF	
5	GND	GND	
6	HDMI_D1-	DIFF	

Pin	Pin Name	Signal Type	Signal level
7	HDMI_D0+	DIFF	
8	GND	GND	
9	HDMI_D0-	DIFF	
10	HDMI_CLK+	DIFF	
11	GND	GND	
12	HDMI_CLK-	DIFF	
13	NC		
14	NC		
15	HDMIC_OB_SCL	I/O	
16	HDMIC_OB_SDA	I/O	
17	GND	GND	
18	+5V	PWR	+5V
19	HDMIC_OB_HPD	IN	

(CN18) HDMI2



Pin	Pin Name	Signal Type	Signal level
1	HDMI_D2+	DIFF	
2	GND	GND	
3	HDMI_D2-	DIFF	
4	HDMI_D1+	DIFF	
5	GND	GND	
6	HDMI_D1-	DIFF	
7	HDMI_D0+	DIFF	

Pin	Pin Name	Signal Type	Signal level
8	GND	GND	
9	HDMI_D0-	DIFF	
10	HDMI_CLK+	DIFF	
11	GND	GND	
12	HDMI_CLK-	DIFF	
13	NC		
14	NC		
15	HDMIC_OB_SCL	I/O	
16	HDMIC_OB_SDA	I/O	
17	GND	GND	
18	+5V	PWR	+5V
19	HDMIC_OB_HPD	IN	

(CN19) Mini-Card Slot (Full size for PCle)

Pin	Pin Name	Signal Type	Signal level
1	PCIE_WAKE#	IN	
2	+3.3VSB	PWR	+3.3V
3	NC		
4	GND	GND	
5	NC		
6	+1.5V	PWR	+1.5V
7	PCIE_CLK_REQ#	IN	
8	UIM_PWR	PWR	
9	GND	GND	
10	UIM_DATA	I/O	
11	PCIE_REF_CLK-	DIFF	

Pin	Pin Name	Signal Type	Signal level
12	UIM_CLK	IN	
13	PCIE_REF_CLK+	DIFF	
14	UIM_RST	IN	
15	GND	GND	
16	UIM_VPP	PWR	
17	NC		
18	GND	GND	
19	NC		
20	W_DISABLE#	OUT	+3.3V
21	GND	GND	
22	PCIE_RST#	OUT	+3.3V
23	PCIE_RX-	DIFF	
24	+3.3VSB	PWR	+3.3V
25	PCIE_RX+	DIFF	
26	GND	GND	
27	GND	GND	
28	+1.5V	PWR	+1.5V
29	GND	GND	
30	SMB_CLK	I/O	+3.3V
31	PCIE_TX-	DIFF	
32	SMB_DATA	I/O	+3.3V
33	PCIE_TX+	DIFF	
34	GND	GND	
35	GND	GND	
36	USB_D-	DIFF	
37	GND	GND	
38	USB_D+	DIFF	

Pin	Pin Name	Signal Type	Signal level
39	+3.3VSB	PWR	+3.3V
40	GND	GND	
41	+3.3VSB	PWR	+3.3V
42	NC		
43	GND	GND	
44	NC		
45	NC		
46	NC		
47	NC		
48	+1.5V	PWR	+1.5V
49	NC		
50	GND	GND	
51	NC		
52	+3.3VSB	PWR	+3.3V

(CN20) Micro SIM Card Socket (Push Pull Type)

Pin	Pin Name	Signal Type	Signal level
1	UIM_PWR	PWR	
2	UIM_RST	IN	
3	UIM_CLK	IN	
4	NC		
5	GND	GND	
6	UIM_VPP	PWR	
7	UIM_DATA	I/O	
8	NC		

(CN21) M.2 (B-Key)

Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	+V3.3S	PWR	
3	GND	GND	
4	+V3.3S	PWR	
5	GND	GND	
6	NC		
7	USB_PP7		
8	NC		
9	USB_PN7		
10	SSD_LED#		
11	GND	GND	
12	NC		
13	NC		
14	NC		
15	NC		
16	NC		
17	NC		
18	NC		
19	NC		
20	NC		
21	GND	GND	
22	NC		
23	NC		
24	NC		
25	NC		
26	NC		

Pin	Pin Name	Signal Type	Signal level
27	GND	GND	
28	NC		
29	USB3_RX2_N		Reserved
30	NC		
31	USB3_RX2_P		Reserved
32	NC		
33	GND	GND	
34	NC		
35	USB3_TX2_N		Reserved
36	NC		
37	USB3_TX2_P		Reserved
38	CB_SLP_S3#		Reserved
39	GND	GND	
40	NC		
41	SATA_RXP2		
42	NC		
43	SATA_RXN2		
44	NC		
45	GND	GND	
46	NC		
47	SATA_TXN2		
48	NC		
49	SATA_TXP2		
50	NC		
51	GND	GND	
52	NC		
53	NC		

Pin	Pin Name	Signal Type	Signal level
54	NC		
55	NC		
56	NC		
57	GND	GND	
58	NC		
59	NC		
60	NC		
61	NC		
62	NC		
63	NC		
64	NC		
65	NC		
66	NC		
67	NC		
68	NC		
69	GND	GND	
70	+V3.3S	PWR	
71	GND	GND	
72	+V3.3S	PWR	
73	GND	GND	
74	+V3.3S	PWR	
75	NC		

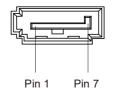
(CN22) M.2 (E-Key)

Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	+V3.3A	PWR	
3	USB_PP8		
4	+V3.3A	PWR	
5	USB_PN8		
6	NC		
7	GND	GND	
8	NC		
9	NC		
10	NC		
11	NC		
12	NC		
13	NC		
14	NC		
15	NC		
16	NC		
17	NC		
18	GND	GND	Reserved
19	NC		
20	NC		
21	NC		
22	NC		
23	NC		
24	NC		
25	NC		
26	NC		

Pin	Pin Name	Signal Type	Signal level
27	NC		
28	NC		
29	NC		
30	NC		
31	NC		
32	NC		
33	GND	GND	
34	NC		
35	PCIE_TXP8		
36	NC		
37	PCIE_TXN8		
38	NC		
39	GND		
40	NC	GND	
41	PCIE_RXP8		
42	NC		
43	PCIE_RXN8		
44	NC		
45	GND	GND	
46	NC		
47	CLK_PCIE_M2E_P		
48	NC		
49	CLK_PCIE_M2E_N		
50	NC		
51	GND	GND	
52	BUF_PLT_RST#		
53	M2E_CLKREQ#		

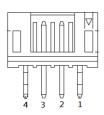
Pin	Pin Name	Signal Type	Signal level
54	W_DISABLE2#		Reserved
55	PCIE_WAKE#		
56	W_DISABLE1#		Reserved
57	GND	GND	
58	NC		
59	GND	GND	
60	NC		
61	GND	GND	
62	NC		
63	GND	GND	
64	NC		
65	NC		
66	NC		
67	NC		
68	NC		
69	GND	GND	
70	NC		
71	NC		
72	+V3.3A	PWR	
73	NC		
74	+V3.3A	PWR	
75	GND	GND	

(CN23) SATA3.0 Port



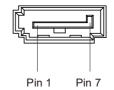
Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	SATA_TX+	DIFF	
3	SATA_TX-	DIFF	
4	GND	GND	
5	SATA_RX-	DIFF	
6	SATA_RX+	DIFF	
7	GND	GND	

(CN24) +5V/+12V Output for SATA HDD or External +12V



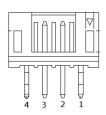
Pin	Pin Name	Signal Type	Signal level
1	+12V	PWR	+12V
2	GND	GND	
3	GND	GND	
4	+V5V	PWR	+V5V

(CN25) SATA3.0 Port



Pin	Pin Name	Signal Type	Signal level
1	GND	GND	
2	SATA_TX+	DIFF	
3	SATA_TX-	DIFF	
4	GND	GND	
5	SATA_RX-	DIFF	
6	SATA_RX+	DIFF	
7	GND	GND	

(CN26) +5V/+12V Output for SATA HDD or External +12V



Pin	Pin Name	Signal Type	Signal level
1	+12V	PWR	+12V
2	GND	GND	
3	GND	GND	
4	+V5V	PWR	+V5V

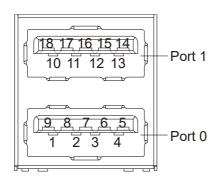
(CN27) Audio Jack connector

Pin	Pin Name	Signal Type	Signal level
1	AUD_GND	GND	
2	MIC_FB	IN	
3	LOUT_L_CON	OUT	
4	LOUT_R_CON	OUT	
5	NA	NA	
6	NA	NA	

(CN28) Speaker L

Pin	Pin Name	Signal Type	Signal level
1	SPK-L+	OUT	
2	SPK-L-	OUT	

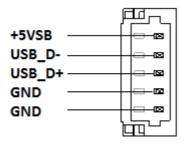
(CN30) USB3.0 Port



Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB0_D-	DIFF	
3	USB0_D+	DIFF	

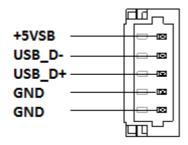
4	GND	GND	
5	USB0_SSRX-	DIFF	
6	USB0_SSRX+	DIFF	
7	GND	GND	
8	USB0_SSTX-	DIFF	
9	USB0_SSTX+	DIFF	
10	+5VSB	PWR	+5V
11	USB1_D-	DIFF	
12	USB1_D+	DIFF	
13	GND	GND	
14	USB1_SSRX-	NC	
15	USB1_SSRX+	NC	
16	GND	GND	
17	USB1_SSTX-	NC	
18	USB1_SSTX+	NC	

(CN31) USB2.0 Port



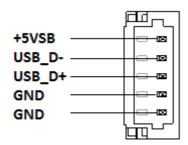
Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB2_D-	DIFF	
3	USB2_D+	DIFF	
4	GND	GND	
5	GND	GND	

(CN32) USB2.0 Port



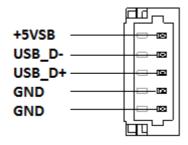
Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB3_D-	DIFF	
3	USB3_D+	DIFF	
4	GND	GND	
5	GND	GND	

(CN33) USB2.0 Port



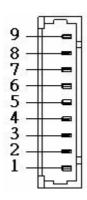
Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB2_D-	DIFF	
3	USB2_D+	DIFF	
4	GND	GND	
5	GND	GND	

(CN34) USB2.0 Port



Pin	Pin Name	Signal Type	Signal level
1	+5VSB	PWR	+5V
2	USB4_D-	DIFF	
3	USB4_D+	DIFF	
4	GND	GND	
5	GND	GND	

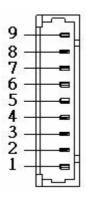
(CN35) COM Port1



RS-232/422/485				
Pin	Pin Name	Signal Type	Signal level	
1	DCD1	IN		
2	DSR1	IN		
3	RX1	IN		
4	RTS1	OUT	±9V	
5	TX1	OUT	±9V	
6	CTS1	IN		
7	DTR1	OUT	±9V	
8	RI1	IN		
9	GND	GND		

RS-232/422/485 can be set by BIOS setting. Default is RS-232.

(CN36) COM Port2

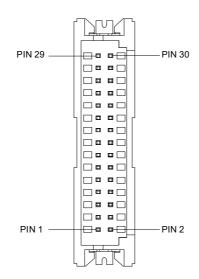


RS-232/422/485				
Pin	Pin Name	Signal Type	Signal level	
1	DCD2	IN		
2	DSR2	IN		
3	RX2	IN		
4	RTS2	OUT	±9V	
5	TX2	OUT	±9V	
6	CTS2	IN		
7	DTR2	OUT	±9V	
8	RI2	IN		
9	GND	GND		

[™] COM2

RS-232/422/485 can be set by BIOS setting. Default is RS-232.

(CN37) Internal DF13 UART/USB/LAN2

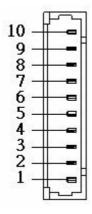


Pin	Pin Name	Signal Type	Signal level
1	DCD3	IN	
2	DCD4	IN	

Pin	Pin Name	Signal Type	Signal level
3	DSR3	IN	
4	DSR4	IN	
5	RX3	IN	
6	RX4	IN	
7	RTS3	OUT	
8	RTS4	OUT	
9	TX3	OUT	
10	TX4	OUT	
11	CTS3	IN	
12	CTS4	IN	
13	DTR3	OUT	
14	DTR4	OUT	
15	RI3	IN	
16	RI4	IN	
17	USB9+	I/O	
18	USB9-	I/O	
19	GND	GND	
20	+V5A_USB_6_7	PWR	+5V
21	LAN2_MDI0P	I/O	
22	LAN2_MDI2P	I/O	
23	LAN2_MDI0N	I/O	
24	LAN2_MDI2N	I/O	
25	LAN2_MDI1P	I/O	
26	LAN2_MDI3P	I/O	
27	LAN2_MDI1N	I/O	
28	LAN2_MDI3N	I/O	
29	LAN GND	GND	

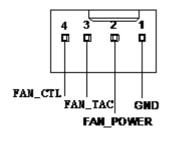
Pin	Pin Name	Signal Type	Signal level
30	+V3.3_LAN2	PWR	+3.3V

(CN38) Digital IO Port



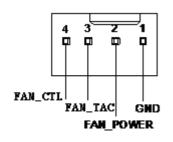
Pin	Pin Name	Signal Type	Signal level
1	DIO0	I/O	
2	DIO1	I/O	
3	DIO2	I/O	
4	DIO3	1/0	
5	DIO4	I/O	
6	DIO5	I/O	
7	DIO6	1/0	
8	DIO7	I/O	
9	+5V	PWR	+5V
10	GND	GND	

(CN39) CPU FAN



Pin	Pin Na me	Signal Type	Signal level
1	GND	GND	
2	FAN_POWER	PWR	+12V
3	FAN_TAC	OUT	
4	FAN_CTL	IN	

(CN40) SYSTEM FAN

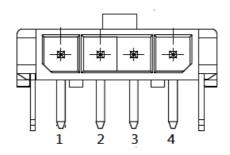


Pin	Pin Na me	Signal Type	Signal level
1	GND	GND	
2	FAN_POWER	PWR	+12V
3	FAN_TAC	OUT	
4	FAN_CTL	IN	

(CN42) Speaker R

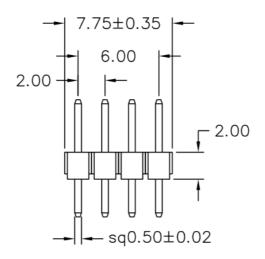
Pin	Pin Name	Signal Type	Signal level
1	SPK-R+	OUT	
2	SPK-R-	OUT	

(CN43) DC Power Input



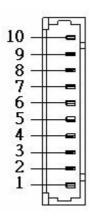
Pin	Pin Name	Signal Type	Signal level
1	+9V~+36V	PWR	+9~+36V
2	+9V~+36V	PWR	+9~+36V
3	GND	GND	
4	GND	GND	

(CN44) Battery status LED



Pin	Pin Name	Signal Type	Signal level
1	LED_G	I/O	
2	LED_O	I/O	
3	LED_R	I/O	
4	GND	GND	

(CN45) Front Panel header



Pin 1	Power Button	Pin 2	Power Button#
Pin 3	SPEAKER	Pin 4	SPEAKER#
Pin 5	FP_HDLED+	Pin 6	FP_HDLED-
Pin 7	POWER LED+	Pin 8	POWER LED-
Pin 9	RESET	Pin 10	RESET#