ADS310-R680E/Q670E

Board Layout and Jumper Settings

CPU_FAN

VGA
HDMI

+12V Power

SYS_FAN3

DP++
DP++

LGA 1700

Battery

2.5G LAN 1
USB3_1/2
USB2_1/2

2.5G LAN 2
USB3_3/4
USB2_3/4

ATX Power

10G LAN 1
10G LAN 2

Front Panel

USB 3 10/9/8/7

InnoAGE HDR1

SYS_FAN2

Mic-in
Line-out
Line-in (opt.)

M.2 M Key
M2CN4

JP31

PCIE1 (PCIe x16)

J36

eSPI

PCIE2 (PCIe x4)

Intel

R680E/Q670E

JP25 JP5

PS/2

Front LAN
LED

PCIE3 (PCIe x4)

SPI

SOJ1

SMBus

JP33

JP32

USB3_5/6
USB2_5/6

Front Audio

CN1

PCIE4 (PCIe x4)

M.2 M Key
M2CN3

TSJP3 TSJP8 TSJP6

M.2 E Key

M2CN2

TSJP4 TSJP2 TSJP7

TSJP1 TSJP5

JP29/30/28

S/PDIF   DIO   DIO   SYS_FAN1   COM1   COM2 USB2_13   SATA0(R4)/SATA1(R5)/SATA2(R6)/SATA3(R7)
               Power

USB2_11/12

Clear CMOS Data	JP5
Normal (default)	1-2 On
Clear CMOS Data	2-3 On

PS/2 and USB Wake up select	JP25
Control by BIOS (default)	1-2 On
Wake up disable	2-3 On

DIO power select(5V_DIO)	JP28
5VDU(default)	1-2 On
5V	2-3 On

DIO0~3 power select	JP29
5V_DIO(default)	1-2 On
GND	2-3 On

DIO4~7 power select	JP30
5V_DIO(default)	1-2 On
GND	2-3 On

M2CN4 Power Select	JP31
3V3(default)	1-2 On
3V3DU	2-3 On

M2CN3 Power Select	JP32
3V3(default)	1-2 On
3V3DU	2-3 On

M.2 E Key Power Select	JP33
3V3DU(default)	1-2 On
3V3	2-3 On

M2CN3 Power Select	JP32
3V3(default)	1-2 On
3V3DU	2-3 On

M.2 E Key Power Select	JP33
3V3DU(default)	1-2 On
3V3	2-3 On

Power Selection COM1	TSJP1
RS232 Standard (default)	1-3/2-4 On
RS232 with Power	3-5/4-6 On

Selection for COM1	TSJP2
RS232 (default)	1-3/2-4 On
RS422	3-5/4-6 On
RS485	3-5/2-4 On

Power Selection COM2	TSJP5
RS232 Standard (default)	1-3/2-4 On
RS232 with Power	3-5/4-6 On

Selection for COM1	TSJP3/TSJP4
RS232 (default)	1-3/2-4 On
RS422	3-5/4-6 On
RS485	3-5/4-6 On

Selection for COM2	TSJP6
RS232 (default)	1-3/4-6 On
RS422	3-5/4-6 On
RS485	3-5/4-6 On

Selection for COM2	TSJP7/TSJP8
RS232 (default)	1-3/2-4 On
RS422	3-5/4-6 On
RS485	3-5/4-6 On

Pin Assignment

J34 Digital I/O (DIO)

Pin	Function
1	DIO0
2	DIO1
3	DIO2
4	DIO3
5	DIO4
6	DIO5
7	DIO6
8	DIO7

J33 Digital I/O (DIO) Power

Pin	Function
1	12V
2	GND
3	5VDU
4	5V

J7 SYSTEM FAN1

Pin	Function
1	GND
2	PWM
3	TACH

J22 SYSTEM FAN2

Pin	Function
1	GND
2	PWM
3	TACH

J30 SYSTEM FAN3

Pin	Function
1	GND
2	PWM
3	TACH

J8 CPU FAN

Pin	Function
1	GND
2	12V
3	RPM
4	CTRL

J12 SMBus Header

Pin	Function	Pin	Function
1	3V3DU	2	GND
3	SMB_CLK	4	SMB_DATA
5	SMB_ALERT-		

SOJ2 PS2

Pin	Function	Pin	Function
1	PS2_KCLK	2	PS2_MCLK
3	PS2_KDAT	4	PS2_MDAT
5	GND	6	GND
7	--	8	GND
9	BVCC	10	BVCC
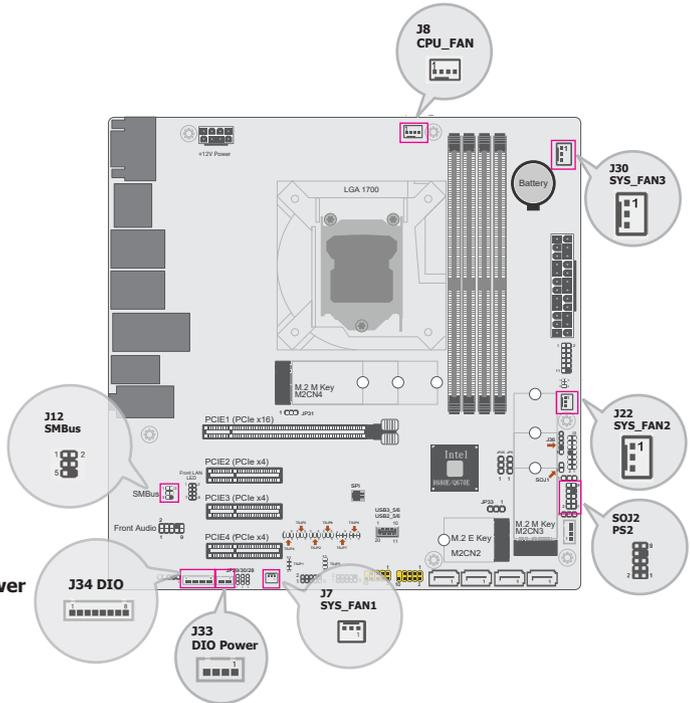
TSJ1 COM1/ TSJ2 COM2

Pin	RS232	RS232 with PWR	RS422 Full Duplex	RS485
1	DCD-	+12V	RX+	Data+
2	SIN-	SIN-	RX-	Data-
3	SO-	SO-	TX+	---
4	DTR-	DTR-	TX-	---
5	GND	GND	GND	GND
6	DSR-	DSR-	---	---
7	RTS-	RTS-	---	---
8	CTS-	CTS-	---	---
9	RI-	+5V	---	---

AUJ2 Front Audio

Pin	Function	Pin	Function
1	MIC2-L	2	GND
3	MIC2-R	4	--
5	LINE2-R	6	MIC2-JD
7	GND	8	--
9	LINE2-L	10	LINE2-JD

J35 ESPI Header

Pin	Function	Pin	Function
1	3V3SB_1	2	ESPI_CLK
3	ESPI_RST#	4	GND_1
5	ESPI_ALT#	6	GND_2
7	ESPI_D0		
9	ESPI_D1	10	ESPI_CS
11	ESPI_D2	12	3V3SB_2
13	ESPI_D3	14	3V3SB_3
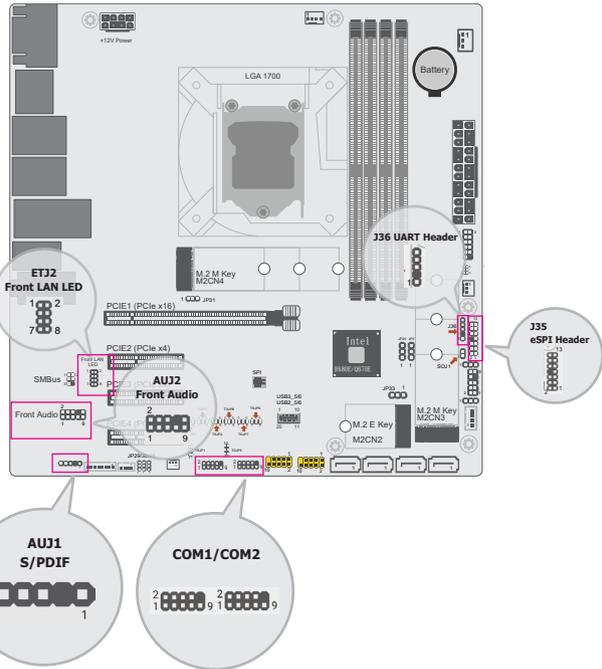
J36 UART Header

Pin	Function
1	GND
2	NC
3	VCC
4	CPU TX
5	CPU RX

AUJ1 S/PDIF

Pin	Function
1	A5V
2	--
3	SPOUT
4	GND
5	SPIN

ETJ2 Front LAN LED

Pin	Function	Pin	Function
1	LED_SPEED_1000#	2	LED_SPEED_1000#
3	GBE_LED_LINK_ACT#	4	3V3DU
5	LED_SPEED_2500#_2	6	LED_SPEED_1000#2
7	GBE_LED_LINK_ACT#_2	8	3V3DU

UBJ1 USB 3.0 Headers

Pin	Function	Pin	Function
10	SBV3	11	GND
9	USBP_C_5N	12	USB3_TX6_DN
8	USBP_C_5P	13	USB3_TX6_DP
7	GND	14	GND
6	USB3_RX5_DN	15	USB3_RX6_DN
5	USB3_RX5_DP	16	USB3_RX6_DP
4	GND	17	GND
3	USB3_TX5_DN	18	USBP_C_6P
2	USB3_TX5_DP	19	USBP_C_6N
1	GND	20	SBV3

UBJ2 USB 2.0 Headers

Pin	Function	Pin	Function
1	SBV6	2	SBV6
3	USBP_C_11N	4	USBP_C_12N
5	USBP_C_11P	6	USBP_C_12P
7	GND	8	GND
		10	N.C

UBJ3 USB 2.0 Headers

Pin	Function	Pin	Function
1	SBV6	2	SBV6
3	USBP_C_13N	4	N.C
5	USBP_C_13P	6	N.C
7	GND	8	GND
		10	N.C
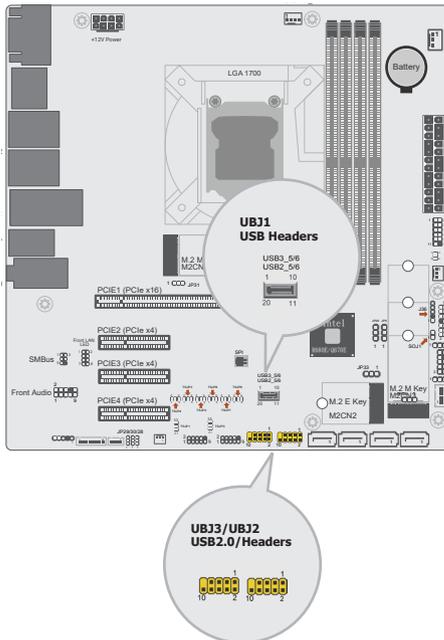
J31 SATA0

Pin	Function
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

J17 SATA2

Pin	Function
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

J32 SATA1

Pin	Function
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

J23 SATA3

Pin	Function
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND
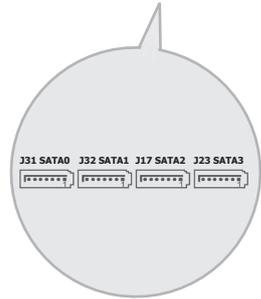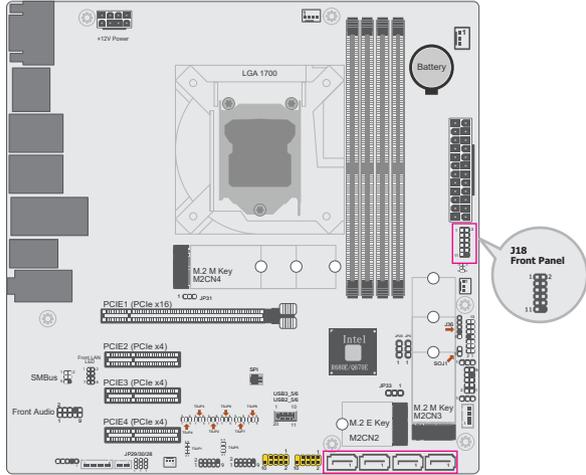
J18 Front Panel

	Pin	Assignment		Pin	Assignment
HDD-LED	1	NC	PWR-LED	2	V_SUS_LED
	3	3V3		4	V_SUS_LED
	5	HDD_LED		6	SUS_LED
RESET	7	GND	ATX-SW	8	GND
	9	SYS_RST-		10	PWR_BTN-
	11	NC		12	---