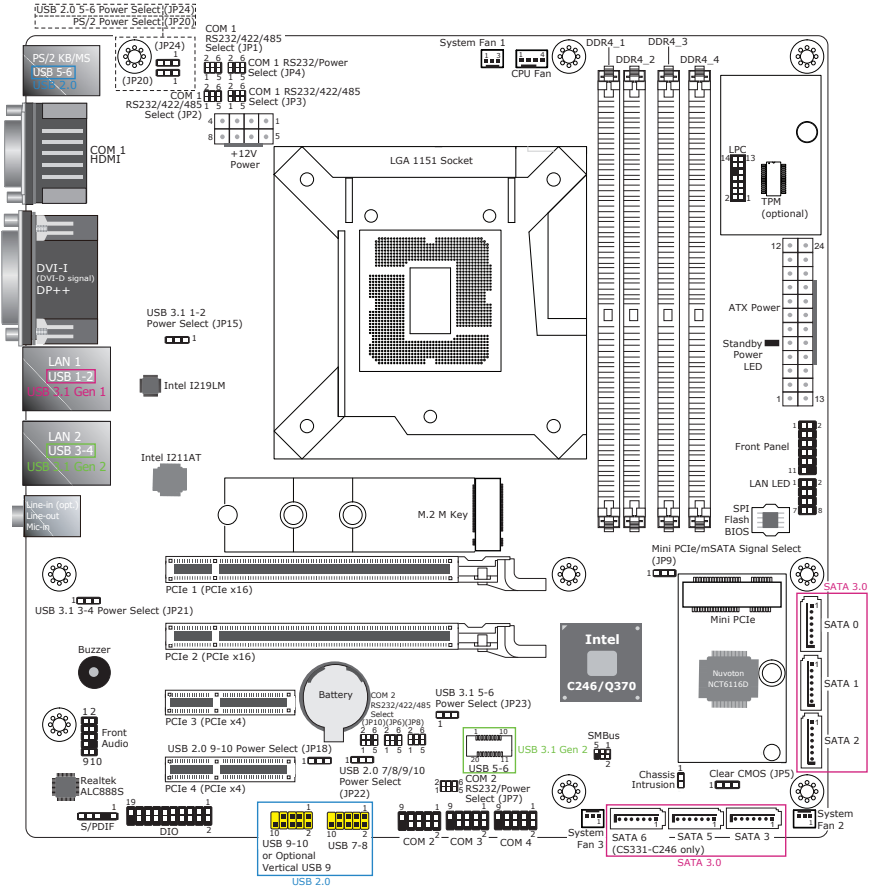


**Board Layout and Jumper Settings**



**USB Power Select: 3.1 1-2 (JP15), 3.1 3-4 (JP21), 3.1 5-6 (JP23), 2.0 7/8/9/10 (JP22), 2.0 5/6 (JP24)**

+5VDU (default)	1-2 On
+5V	2-3 On

RS232/422/485 Select	JP3 (COM 1) JP10 (COM 2)	JP1/JP2 (COM 1) JP6/JP8 (COM 2)
RS232 (default)	1-3, 4-6 On	1-3, 2-4 On
RS422 Full Duplex	3-5, 4-6 On	3-5, 4-6 On
RS485	3-5, 2-4 On	3-5, 4-6 On

**RS232/Power Select JP4 (COM 1), JP7 (COM 2)**

RS232 (default)	1-3 (RI-), 2-4 (DCD-) On
RS232 with power	3-5 (+5V), 4-6 (+12V) On

**Mini PCIe/mSATA Signal Select JP9**

Mini PCIe (default)	1-2 On
mSATA	2-3 On

**PS/2 Power Select JP20**

+5VDU (default)	1-2 On
+5V	2-3 On

**Notes:**

1. When COM 1 RS232/422/485 is selected, JP1 and JP2 must be set in accordance to JP3.
2. When COM 2 RS232/422/485 is selected, JP6 and JP8 must be set in accordance to JP10.

**Clear CMOS JP5**

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

# Pin Assignment

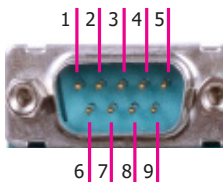
## Front Panel

	Pin	Assignment		Pin	Assignment
	1	NC	PWR-LED	2	LED Power
HD-LED	3	HDD Power		4	LED Power
	5	Signal		6	Signal
RESET	7	GND	ATX-SW	8	GND
	9	Signal		10	Signal
	11	NC		12	---

COM 1 Port: RS232/RS232 with Power/RS422/RS485

COM 2 Header: RS232/RS232 with Power/RS422/RS485

COM 3/4 Headers: RS232



COM 1

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

### Front Audio

Pin	Assignment	Pin	Assignment
1	Mic2-L	2	GND
3	Mic2-R	4	NC
5	Line2-R	6	Mic2-JD
7	GND	8	---
9	Line2-L	10	Line2-JD

### Digital I/O

Pin	Assignment	Pin	Assignment
1	GND	2	+12V
3	DIO7	4	+12V
5	DIO6	6	GND
7	DIO5	8	+5V
9	DIO4	10	+5V
11	DIO3	12	GND
13	DIO2	14	+5V <sub>DU</sub>
15	DIO1	16	+5V <sub>DU</sub>
17	DIO0	18	GND
19	GND	20	---

### LPC

Pin	Assignment	Pin	Assignment
1	CLK	2	LAD1
3	RST#	4	LAD0
5	FRAME#	6	3V3
7	LAD3	8	GND
9	LAD2	10	---
11	INT_SERIRQ	12	GND
13	5V <sub>DU</sub>	14	5V

### USB 2.0 7-8/9-10 Headers

Pin	Assignment	Pin	Assignment
1	PWR	2	PWR
3	DATA-	4	DATA-
5	DATA+	6	DATA+
7	GND	8	GND
9	---	10	NC

### USB 3.1 Gen 2 5-6 Header

Pin	Assignment	Pin	Assignment
1	GND	20	PWR
2	TX+	19	DATA-
3	TX-	18	DATA+
4	GND	17	GND
5	RX+	16	RX+
6	RX-	15	RX-
7	GND	14	GND
8	DATA+	13	TX+
9	DATA-	12	TX-
10	PWR	11	GND

### LAN LED

Pin	Assignment	Pin	Assignment
1	GBE_LED_1000-	2	GBE_LED_100-
3	GBE_LED_LINK_ACT-	4	3V3 <sub>DU</sub>
5	LINK_1000_4	6	LINK_100_4
7	LINK_ACTIVITY_4	8	3V3 <sub>DU</sub>

### CPU Fan

Pin	Assignment
1	GND
2	+12V
3	Sense
4	Speed Control

### System Fan 1/2/3

Pin	Assignment
1	GND
2	Power
3	Sense

### +12V Power

Pin	Assignment	Pin	Assignment
1	GND	5	+12V
2	GND	6	+12V
3	GND	7	+12V
4	GND	8	+12V

### SATA 3.0 0/1/2/3/5/6 (CS331-C246 only)

Pin	Assignment
1	GND
2	TX+
3	TX-
4	GND
5	RX-
6	RX+
7	GND

### S/PDIF

Pin	Assignment
1	+5V
2	---
3	SPDIF out
4	GND
5	SPDIF in

### ATX Power

Pin	Assignment	Pin	Assignment
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	GND	15	GND
4	+5V	16	PS_ON#
5	GND	17	GND
6	+5V	18	GND
7	GND	19	GND
8	PWR_OK	20	NC
9	+5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND

### SMBus

Pin	Assignment	Pin	Assignment
1	3V3DU	2	GND
3	SMB_CLK	4	SMB_DATA
5	SMB_ALERT	6	---

### Chassis Intrusion

Pin	Assignment
1	Signal
2	GND



DFI reserves the right to change the specifications at any time prior to the product's release. For the latest information about the product, please refer to the user's manual at [go.dfi.com/CS331](http://go.dfi.com/CS331) (CS331-C246 and CS331-Q370 share the same quick reference and manual).

