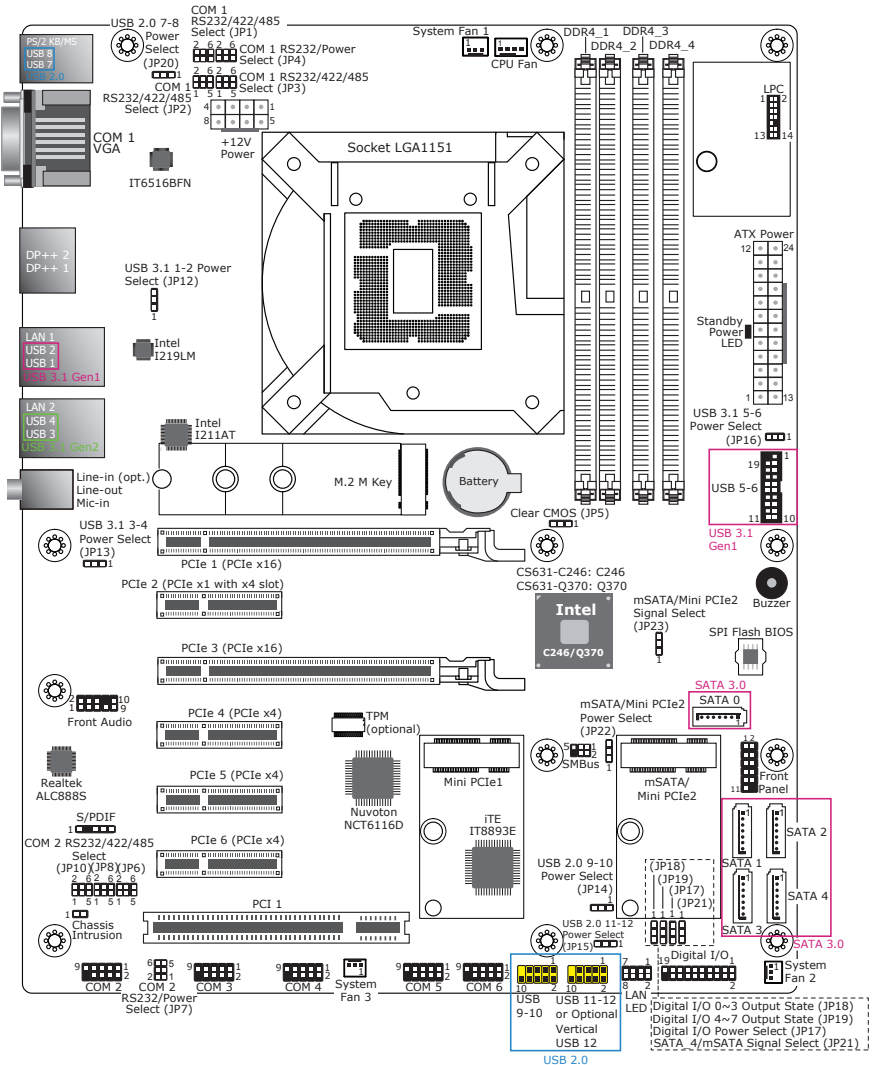


**Board Layout and Jumper Settings**



RS232/422/485 Select	JP3 (COM 1) JP10 (COM 2)	JP1/JP2 (COM 1) JP6/JP8 (COM 2)	RS232/Power Select	JP4 (COM 1) JP7 (COM 2)
RS232 (default)	1-3, 4-6 On	1-3, 2-4 On	RS232 (default)	1-3 (RI-), 2-4 (DCD-) On
RS422 Full Duplex	3-5, 4-6 On	3-5, 4-6 On	RS232 with power	3-5 (+5V), 4-6 (+12V) On
RS485	3-5, 2-4 On	3-5, 4-6 On		

<b>SATA_4/mSATA Signal Select</b>	<b>JP21</b>	
SATA_4	1-2 On	
mSATA/Mini PCIe2 (default)	2-3 On	
<b>mSATA/Mini PCIe2 Signal Select</b>	<b>JP21</b>	<b>JP23</b>
mSATA (default)	2-3 On	1-2 On
Mini PCIe2	2-3 On	2-3 On
<b>mSATA/Mini PCIe2 Power Select</b>	<b>JP22</b>	
3V3DU (default)	1-2 On	
3V3	2-3 On	
<b>USB Power Select: 3.1 1-2 (JP12), 3.1 3-4 (JP13), 3.1 5-6 (JP16), 2.0 7-8 (JP20), 2.0 9-10 (JP14), 2.0 11-12 (JP15)</b>		
+5VDU (default)	1-2 On	
+5V	2-3 On	

<b>Digital I/O Power Select</b>	<b>JP17</b>
+5VDU (default)	1-2 On
+5V	2-3 On
<b>Digital I/O Output State</b>	<b>JP18 (DIO 0~3) JP19 (DIO 4~7)</b>
Digital I/O Power (default)	1-2 On
GND	2-3 On
<b>Clear CMOS</b>	<b>JP5</b>
Normal (default)	1-2 On
Clear CMOS	2-3 On

**Notes:**

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

## Pin Assignment

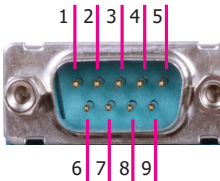
### Front Panel

	Pin	Assignment		Pin	Assignment
<b>HD-LED</b>	1	NC	<b>PWR-LED</b>	2	LED Power
	3	HDD Power		4	LED Power
	5	Signal		6	Signal
<b>RESET</b>	7	GND	<b>ATX-SW</b>	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 3/4/5/6 Headers: RS232**



**COM 1**

Pin	RS232	RS232 with Power	RS422 Full Duplex	RS485
1	DCD-	+12V	RX+	DATA+
2	RD	RD	RX-	DATA-
3	TD	TD	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	+5VDU
15	DIO1	16	+5VDU
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	5VDU	14	5V

### USB 2.0 9-10/11-12 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 Gen1 5-6 Header

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

### LAN LED

Pin	Assignment	Pin	Assignment
1	GBE_LED_1000-	2	GBE_LED_100-
3	GBE_LED_LINK_ACT-	4	3V3DU
5	LINK_1000_4	6	LINK_100_4
7	LINK_ACTIVITY_4	8	3V3DU

### 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 0~4

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/CS631](http://go.dfi.com/CS631) (CS631-C246 and CS631-Q370 share the same quick reference and manual).

