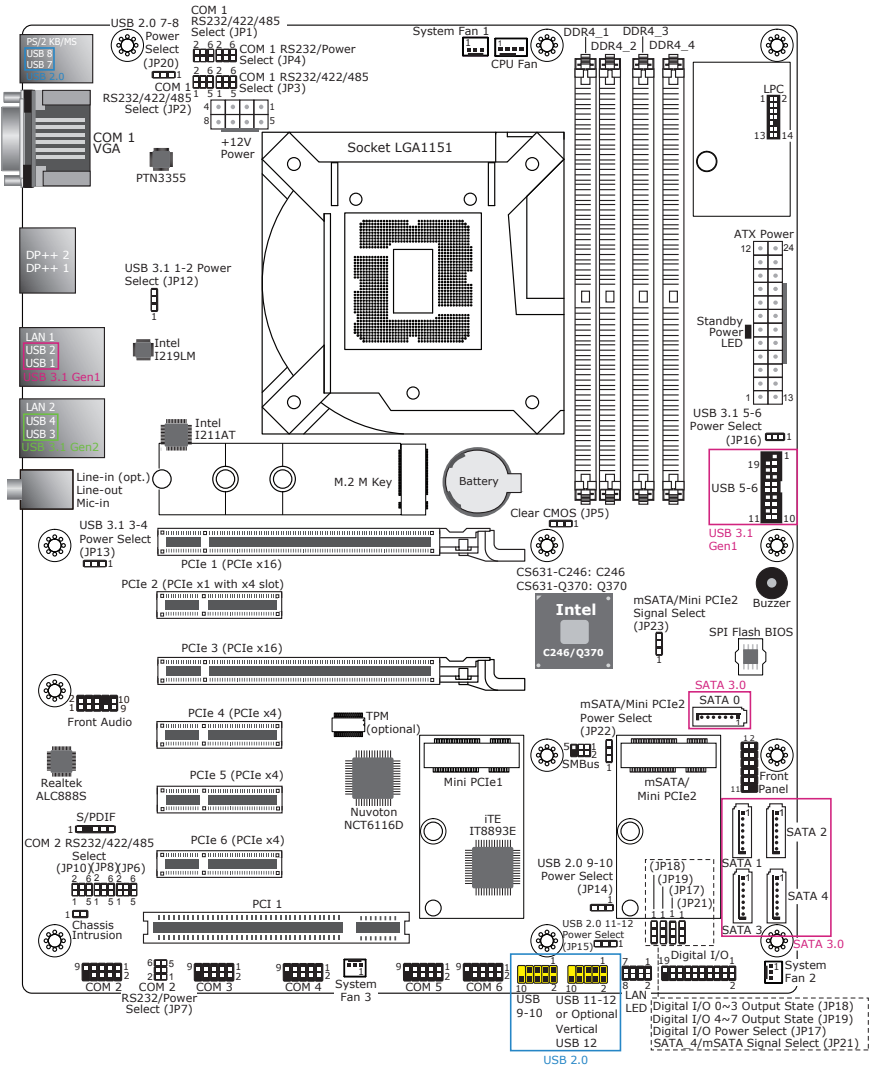


Board Layout and Jumper Settings



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		

SATA_4/mSATA Signal Select	JP21	
SATA_4	1-2 On	
mSATA/Mini PCIe2 (default)	2-3 On	
mSATA/Mini PCIe2 Signal Select	JP21	JP23
mSATA (default)	2-3 On	1-2 On
Mini PCIe2	2-3 On	2-3 On
mSATA/Mini PCIe2 Power Select	JP22	
3V3DU (default)	1-2 On	
3V3	2-3 On	
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)		
+5VDU (default)	1-2 On	
+5V	2-3 On	

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

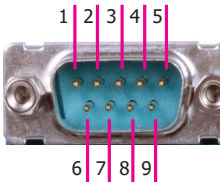
Front Panel

	Pin	Assignment		Pin	Assignment
HD-LED	1	NC	PWR-LED	2	LED Power
	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 3/4/5/6 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 (CS631-C246 and CS631-Q370 share the same quick reference and manual).

