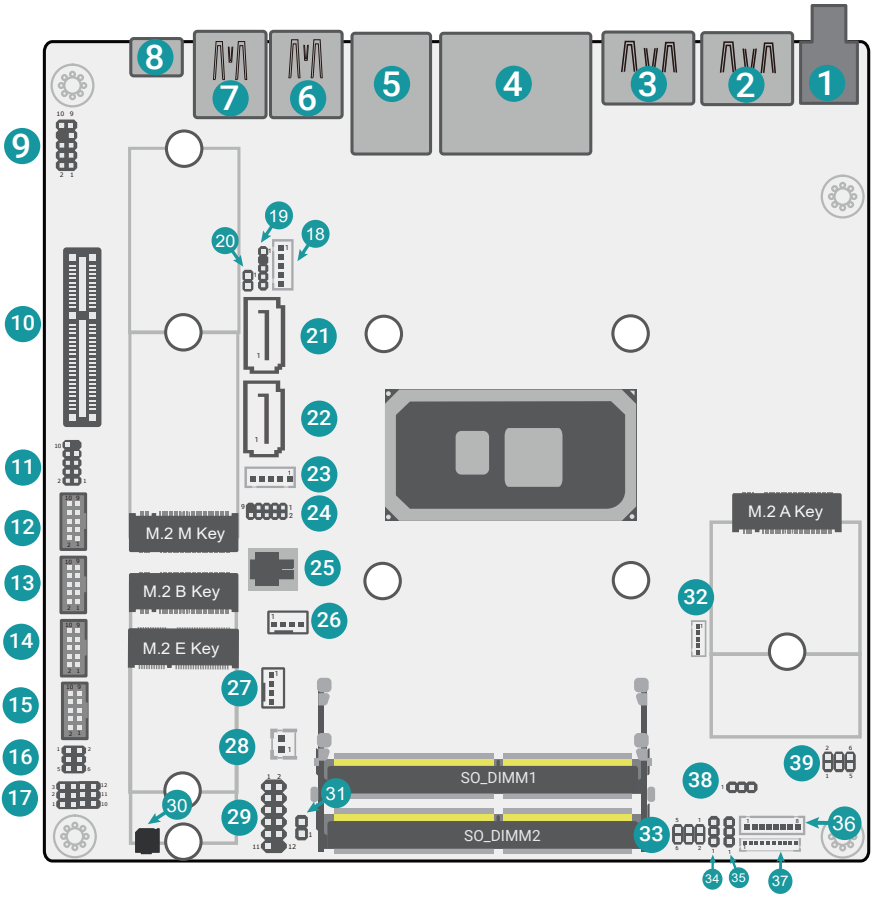
RPP171_RPP173

Board Layout

Top View



1. DC-in
2. DP++
3. DP++
4. LAN1 & LAN2
5. LAN3
6. USB3.2 Gen2
7. USB3.2 Gen2
8. USB Type C
9. Front Audio
10. PCIE Gen 4x4
11. USB2.0
12. COM1
13. COM2
14. COM3
15. COM4
16. COM3 Power Select
17. COM4 DIO & COM4 Select
18. SATA Power
19. UART Header (Debug)
20. Clear CMOS Data
21. SATA0
22. SATA1
23. SATA Power
24. USB2.0
25. SPI
26. CPU Fan
27. System Fan
28. RTC Battery
29. Front Panel
30. Buzzer
31. Case Open
32. SMBus
33. VCC Panel Power Select
34. Inverter Panel Power Select
35. Panel Backlight ON Level Select
36. Backlight CON
37. DIO
38. M.2 A Key Panel Power
39. BKL , VDDEN Jumper

Jumper Settings

20 Clear CMOS Data	SW1
Normal (Default)	1-2 Open
Clear CMOS Data	1-2 Short

35 Panel Backlight ON Level Select	DPJP4
3V3 (Default)	1-2 Short
5V	2-3 Short

34 Inverter Panel Power Select	DPJP2
12V	1-2 Short
5V (Default)	2-3 Short

33 VCC Panel Power Select	DPJP3
12V	1-2 Short
5V	3-4 Short
3V3 (Default)	5-6 Short

17 COM4 DIO & COM4 Select	JP1
COM Port Function (Default)	1-2,4-5,7-8,10-11 Short
4bit DIO Function	2-3,5-6,8-9,11-12 Short

38 M.2 A Key Panel Power	DPJP5
Panel Power	1-2 Short
NC	2-3 Short

16 COM3 Power Select	JP2
RS232 Standard (Default)	1-3, 2-4 Short
RS232 with Power	3-5, 4-6 Short

39 BKL , VDDEN Jumper	DPJP6
LVDS	1-3, 2-4 Short
eDP	3-5, 4-6 Short

PIN Assignment

28 ▶ RTC Battery (J1)

Pin	Assignment
1	V_BAT
2	GND

31 ▶ Case Open (J24)

Pin	Assignment
1	CASEOPEN-
2	GND

27 ▶ System Fan (CN25)

Pin	Assignment
1	GND
2	+12V
3	RPM
4	PWM

26 ▶ CPU Fan (CN24)

Pin	Assignment
1	GND
2	+12V
3	RPM
4	PWM

19 ▶ UART Header (Debug) (J21)

Pin	Assignment
1	GND
2	NC
3	3V3SB
4	DEBUG_UART_TX
5	DEBUG_UART_RX

32 ▶ SMBus (J16)

Pin	Assignment
1	3V3SB
2	GND
3	SMB_CLK_RESUME
4	SMB_DATA_RESUME
5	SMB_ALERT#

23 ▶ SATA POWER (J18)

Pin	Assignment
1	5V
2	5V
3	12V
4	GND
5	GND

18 ▶ SATA POWER (J19)

Pin	Assignment
1	5V
2	5V
3	12V
4	GND
5	GND

21 ▶ SATA0 (J12)

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

22 ▶ SATA1 (J13)

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

36 ▶ Backlight CON (DPJ1)

Pin	Assignment
1	GND
2	GND
3	PWM
4	VCC_PANEL_PWR
5	LVDS_3V3
6	BLONOFF
7	INV_PWR
8	INV_PWR

37 ▶ DIO (J15)

Pin	Assignment
1	D_IOA7
2	D_IOA6
3	D_IOA5
4	D_IOA4
5	D_IOA3
6	D_IOA2
7	D_IOA1
8	D_IOA0
9	5VSB
10	GND

9 ▶ Front Audio (AUJ1)

Pin	Assignment	Pin	Assignment
1	MIC2_L	2	GND
3	MIC2_R	4	NC
5	LINE2_R	6	MIC2_JD
7	GND	8	NC
9	LINE2_L	10	LINE2_JD

24 ▶ USB2.0 Pin Header (UBJ1)

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	USB2_4_C_N	4	USB2_3_C_N
5	USB2_4_C_P	6	USB2_3_C_P
7	GND	8	GND
9	----	10	NC

11 ▶ USB2.0 Pin Header (UBJ2)

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	USB2_4_C_N	4	USB2_3_C_N
5	USB2_4_C_P	6	USB2_3_C_P
7	GND	8	GND
9	----	10	NC

16 ▶ COM3 Power Select (JP2)

Pin	Assignment	Pin	Assignment
1	MRI-	2	MDCD-
3	X_MRI-	4	X_MDCD-
5	5V	6	12V

12 ▶ COM1 RS232/RS422/RS485 (TSJ1)

Pin	RS232	RS422 Full Duplex	RS485
1	DCD-	TXD-	Data-
2	RD	TXD+	Data+
3	TD	RXD+	N.C
4	DTR-	RXD-	N.C
5	GND	GND	GND
6	DSR-	N.C	N.C
7	RTS-	N.C	N.C
8	CTS-	N.C	N.C
9	RI-	N.C	N.C
10	N.C	N.C	N.C

13 ▶ COM2 RS232/RS422/RS485 (TSJ2)

Pin	RS232	RS422 Full Duplex	RS485
1	DCD-	TXD-	Data-
2	RD	TXD+	Data+
3	TD	RXD+	N.C
4	DTR-	RXD-	N.C
5	GND	GND	GND
6	DSR-	N.C	N.C
7	RTS-	N.C	N.C
8	CTS-	N.C	N.C
9	RI-	N.C	N.C
10	N.C	N.C	N.C

14 ▶ COM3 RS232 (J5)

Pin	Assignment	Pin	Assignment
1	MDCD-	2	MSIN-
3	MSO-	4	MDTR-
5	GND	6	MDSR-
7	MRTS-	8	MCTS-
9	MRI-	10	NC

15 ▶ COM4 RS232 (J6)

Pin	Assignment	Pin	Assignment
1	MDCD-	2	MSIN-
3	MSO-	4	MDTR-
5	GND	6	MDSR-
7	MRTS-	8	MCTS-
9	MRI-	10	NC

17 ▶ COM4 DIO & COM4 Select (JP1)

Pin	Assignment	Pin	Assignment
1	MDCD4#	2	X_MDCD4#
3	SIO_DIO0	4	MSIN4#
5	X_MSIN4#	6	SIO_DIO1
7	MSO4#	8	X_MSO4#
9	SIO_DIO2	10	MDTR4#
11	X_MDTR4#	12	SIO_DIO3

29 ▶ Front Panel (J17)

Pin	Assignment	Pin	Assignment
1	NC	2	3V3SB
3	3V3	4	3V3SB
5	HD_LED#	6	SUS_LED#
7	GND	8	GND
9	SYS_RST0	10	PWR_BTN0
11	NC	12	---

DFI reserves the right to change the specifications at any time prior to the product's release. This QR may be based on the product's revision. For more documentation and drivers, please visit the download page at www.dfi.com/downloadcenter, or via the QR codes to the right.