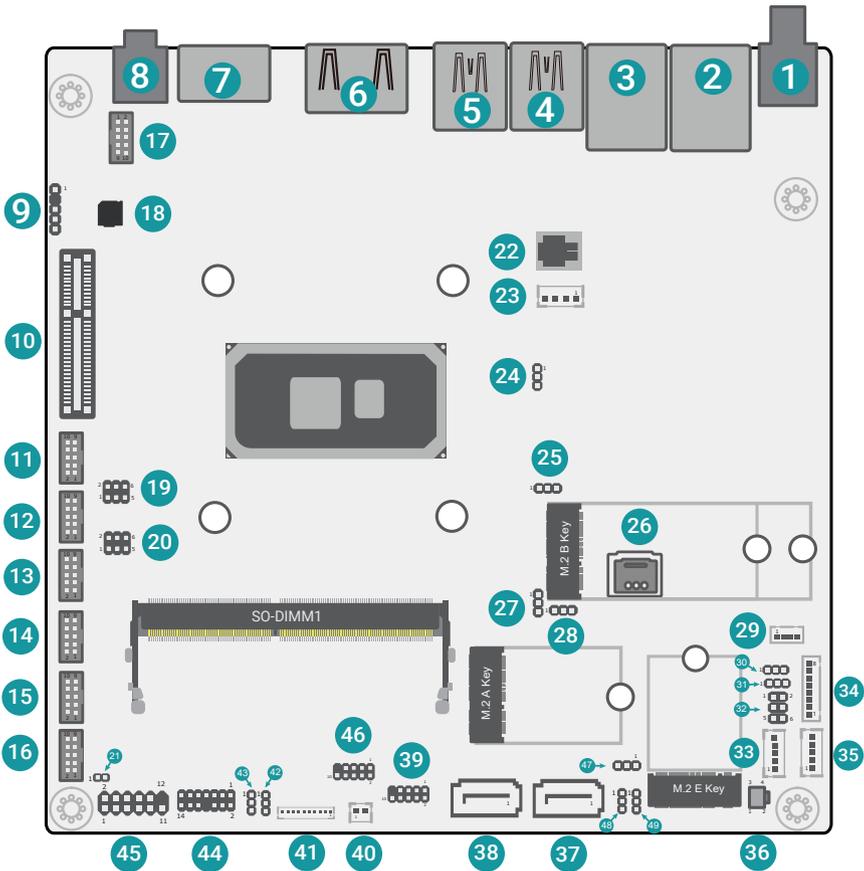


## Board Layout

Top View



1	DC-in	21	Case Open
2	2.5G LAN 1	22	SPI
3	2.5G LAN 2	23	CPU Fan
4	USB3.2 Gen2	24	UART Header (Debug)
5	USB3.2 Gen2	25	SATA1 CONN/ M.2 B-KEY
6	DP++	26	SIM Card Slot
7	HDMI	27	USB3-A/ M.2 B-KEY
8	Line-out	28	PCIe Slotx2/ M.2 E-KEY
9	S/PDIF	29	System Fan
10	PCIe1	30	Panel Backlight ON Level Select
11	COM1	31	Panel Inverter Power Select
12	COM2	32	VCC Panel Power Select
13	COM3	33	SATA Power
14	COM4	34	Backlight CON
15	COM5	35	SATA Power
16	COM6	36	Clear CMOS Data
17	Front Audio	37	SATA1
18	Buzzer	38	SATA0
19	COM1 Power Select	39	USB2.0 Pin Header
20	COM2 Power Select	40	RTC Battery

- 41 DIO

---

- 42 DIO\_4~7 Power Select

---

- 43 DIO\_0~3 Power Select

---

- 44 eSPI Header(Debug)

---

- 45 Front Panel

---

- 46 USB2.0 Pin Header

---

- 47 M2A Panel Power Selection

---

- 48 LVDS/eDP Backlight Enable  
(base on M.2 A-KEY SKU)

---

- 49 LVDS/eDP VCC Panel Power Enable  
(base on M.2 A-KEY SKU)

---

# Jumper Settings

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

31 Inverter Panel Power Select	DPJP4
12V (Default)	1-2 Short
5V	2-3 Short

25 SATA1 CONN/M.2 B-KEY	PBJP1
M.2 B-KEY, SATA (Default)	1-2 Short
SATA1 CONN	2-3 Short

47 M2A Panel Power Selection	DPJP5
Panel Power (Default)	1-2 Short
NC	2-3 Short

28 PCIE Slotx2/M.2 E-KEY	PBJP2
M.2 E-KEY, PCIe1 (Default)	1-2 Short
PCIEx2 Slotx2 (Optional)	2-3 Short

48 LVDS/eDP Backlight Enable (base on M.2 A-KEY SKU)	DPJP6
LVDS (Default)	1-2 Short
eDP	2-3 Short

27 USB3-A/M.2 B-KEY	PBJP3
M.2 B-KEY, USB3 (Default)	1-2 Short
USB3-TYPE-A	2-3 Short

49 LVDS/eDP VCC panel power Enable (base on M.2 A-KEY SKU)	DPJP7
LVDS (Default)	1-2 Short
eDP	2-3 Short

30 Panel Backlight ON Level Select	DPJP1
3V3 (Default)	1-2 Short
5V	2-3 Short

43 DIO_0~3 Power Select	JP2
Normal (Default)	1-2 Short to 5VSB
GND	2-3 Short to GND

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

42 DIO_4~7 Power Select	JP5
Normal (Default)	1-2 Short to 5VSB
GND	2-3 Short to GND

# PIN Assignment

## 40 ▶ RTC Battery (J19)

Pin	Assignment
1	V_BAT
2	GND

## 21 ▶ Case Open (J2)

Pin	Assignment
1	CASEOPEN-
2	GND

## 24 ▶ UART Header (Debug) (JP4)

Pin	Assignment
1	DEBUG_UART_TX
2	DEBUG_UART_RX
3	GND

## 23 ▶ CPU Fan (J20)

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

## 29 ▶ System Fan (J10)

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

## 41 ▶ DIO (J16)

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

### 33 ▶ SATA POWER (CN8)

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

### 35 ▶ SATA POWER (CN12)

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

### 9 ▶ S/PDIF (AUJ2)

Pin	Assignment
1	5V
2	NC
3	SPDIF OUT
4	GND
5	SPDIF IN

### 37 ▶ SATA1 (J12)

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

### 38 ▶ SATA0 (J4)

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

### 34 ▶ Backlight CON (DPJ2)

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

### 19 ► COM1 Power Select (TSJP1)

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

### 20 ► COM2 Power Select (TSJP2)

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

### 11 ► COM1 RS232/RS422/RS485 (TSJ1)

Pin	RS232	RS422 Full Duplex	RS485
1	DCD-	TX-	Data-
2	RD	TX+	Data+
3	TD	RX+	N.C
4	DTR-	RX-	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

### 12 ► COM2 (TSJ2)

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

### 13 ► COM3 (TSJ3)

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

### 14 ► COM4 (TSJ4)

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

**15 ▶ COM5 (TSJ5)**

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

**16 ▶ COM6 (TSJ6)**

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

**17 ▶ 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

**39 ▶ USB2.0 Pin Header (J3)**

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

**46 ▶ USB2.0 Pin Header (J21)**

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	USB2_1_HUB_C_N	4	USB2_2_HUB_C_N
5	USB2_1_HUB_C_P	6	USB2_2_HUB_C_P
7	GND	8	GND
9	----	10	NC

## 45 ► 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	---

## 44 ► eSPI Header(Debug) (J5)

Pin	Assignment	Pin	Assignment
1	3V3SB	2	ESPI_CLK
3	ESPI_RESET#	4	GND
5	ESPI_ALT#	6	GND
7	ESPI_D0	8	---
9	ESPI_D1	10	ESPI_CS
11	ESPI_D2	12	3V3SB
13	ESPI_D3	14	3V3SB



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](http://www.dfi.com/downloadcenter), or via the QR codes to the right.

