ASRock Jumpers and headers setting guide

IMB-181-D
IMB-181-L

Board layout labels: HDMI1, DISPLAY1*, COM1, COM2, COM3, VGA1/DVI1*, USB 3.0 T: USB1 B: USB0 LAN1, USB 3.0 T: USB3 B: USB2 LAN2, Bottom: Mic in Top: Line Out, ATXPWR1, BLT_VOL1, BLT_PWR1, PNL_PWR1, BLT_PWM1, LVDS1, USB10_11, USB9_5, USB6_7, USB4_5, BIOS Chip, mini-PCIe / mini-SATA, IMB-181, RoHS, ASRock, DDR3_B1, DDR3_A1, PS2_KB_MS1, COM5, COM4, CPU_FAN1, CI2, CI1, SATA_0, SATA_1, SATA_4, SATA_5, BUZZ1, PWR_JP1, CLRCMOS1, CMOS Battery, CON1, CHA_FAN1, JGPIO1, TPM1, PLED PWRBTN, HDLED RESET PANEL 1, SPEAKER1, PCIE1

Reference numbers: 1* 2* 3 4*5*6* 7 8 9 10 11 12 13 14* 15 16 17 18 19 20 21 22 23 24* 25 26 27* 28*

1* : Backlight Power Connector
(For IMB-181-L only)

PIN	Signal Name
1	GND
2	GND
3	BL EN
4	BL CTL
5	LCD_BLT_VCC
6	LCD_BLT_VCC

2* : Backlight Volume Control
(For IMB-181-L only)

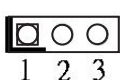| PIN	Signal Name
1	GPIO_VOL_UP
2	GPIO_VOL_DW
3	PWRDN
4	LVDS1 BLUP
5	LVDS1 BLDW
6	GND
7	GND

3 : 24-pin ATX Power Input Connector

4* : PNL_PWR1 (For IMB-181-L only)
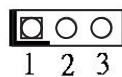1-2 : LVDD: +3V
2-3 : LVDD: +5V
4-5 : LVDD: +12V

5* : Backlight Power Selection
(For IMB-181-L only)
1-2 : +5V
2-3 : +12V

6* : BLT_PWM1 (For IMB-181-L only)
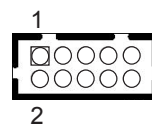1-2 : +3V Level
2-3 : +5V Level

7 : PS2_KB_MS1

PIN	Signal Name
1	KBCLK
2	+5V
3	KBDATA
4	+5V
5	MSDATA
6	GND
7	MSCLK
8	GND

8 : RS-232 Port 4 Pin Headers

PIN	Signal Name	PIN	Signal Name
2	RRXD1	1	DDCD#1
4	DDTR#1	3	TTXD1
6	DDSR#1	5	GND
8	CCTS#1	7	RRTS#1
10	NC	9	COM PWR

9 : 4-Pin Chassis FAN Connector (+12V)
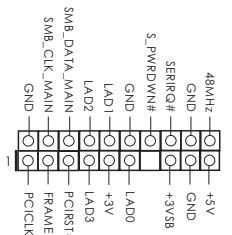GND
+12V
CPU_FAN_SPEED
FAN_SPEED_CONTROL
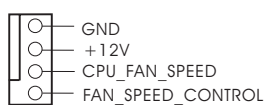
10 : Chassis Intrusion Headers
CI1:
Close: Active case open
Open: Normal
CI2:
Close: Normal
Open: Active case open
GND
Signal

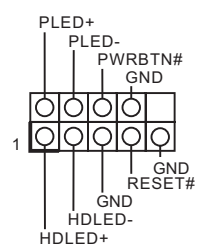**11 : 4-pin ATX Power Input Connector**

12 : TPM Header

TPM1 signals: SMB_DATA_MAIN, SMB_CLK_MAIN, GND, PCICLK, FRAME, PCIRST#, LAD3, +3V, LAD2, LAD1, GND, LAD0, S_PWRDWN#, SERIRQ#, GND, +3V3B, 48MHz, GND, +5V

13 : System Panel Header
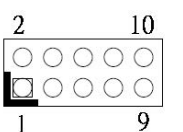
PLED+, PLED-, PWRBTN#, GND, GND, RESET#, HDLED-, HDLED+, GND

14* : 3W Audio AMP Output Wafer
(For IMB-181-L only)

15 : Digital Input / Output Pin Header

PIN	Signal Name	PIN	Signal Name
1	Digital Output 0	2	Digital Input 0
3	Digital Output 1	4	Digital Input 1
5	Digital Output 2	6	Digital Input 2
7	Digital Output 3	8	Digital Input 3
9	JGPIO_PWR1	10	GND

16 : 4-Pin Chassis FAN Connector (+12V)
CHA_FAN_SPEED
GND
+12V
FAN_SPEED_CONTROL

IMB-181

RoHS

ASRock

ATXPWR1

DDR3_B1
DDR3_A1
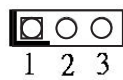
PCIE1
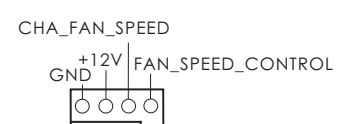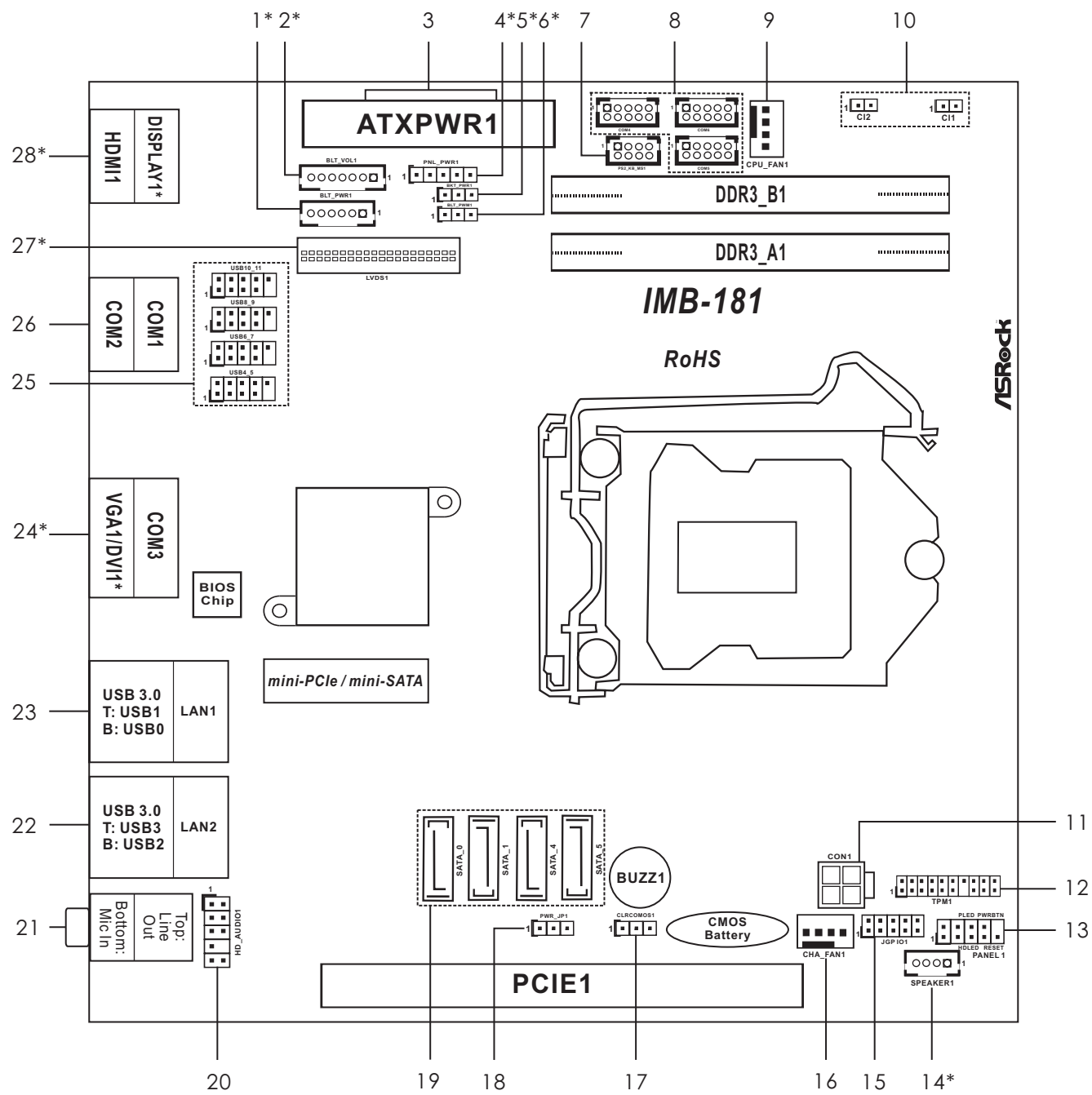
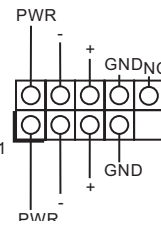17 : Clear CMOS Header
1-2: Normal
2-3: Clear CMOS

1 2 3
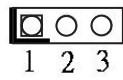
18 : ATX/AT Mode Jumper
1-2: AT Mode
2-3: ATX Mode

1 2 3

19 : SATA3 Connectors
(SATA_5 (orange) is shared with
mini-PCIe / mini-SATA slot)

20 : Front Panel Audio Header
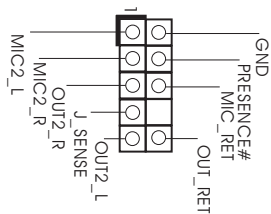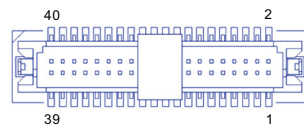
21 : Audio Jacks
Green - Line Out
Pink - Mic In

22 : Top : RJ45 LAN Port2
Bottom : USB3.0 (USB_2_3)

23 : Top : RJ45 LAN Port1
Bottom : USB3.0 (USB_0_1)

24* : Top : COM3
Bottom : VGA1 (IMB-181-L)
DVI1 (IMB-181-D)

25 : USB2.0 Connectors

26 : Top : COM1
Bottom : COM2

27* : LVDS Panel Connector
(For IMB-181-L only)

28* : Top : DisplayPort
(For IMB-181-D only)
Bottom : HDMI1

PIN	Signal Name	PIN	Signal Name
1	LVDD	2	LVDD
3	+3V	4	N/A
5	N/A	6	LVDS_A_DATA0#
7	LVDS_A_DATA0	8	GND1
9	LVDS_A_DATA1#	10	LVDS_A_DATA1
11	GND6	12	LVDS_A_DATA2#
13	LVDS_A_DATA2	14	GND2
15	LVDS_A_DATA3#	16	LVDS_A_DATA3
17	GND7	18	LVDS_A_CLK#
19	LVDS_A_CLK	20	GND3
21	LVDS_B_DATA0#	22	LVDS_B_DATA0
23	GND8	24	LVDS_B_DATA1#
25	LVDS_B_DATA1	26	GND4
27	LVDS_B_DATA2#	28	LVDS_B_DATA2
29	DPLVDD_EN	30	LVDS_B_DATA3#
31	LVDS_B_DATA3	32	GND5
33	LVDS_B_CLK#	34	LVDS_B_CLK
35	GND9	36	CON_LBKLT_EN_R
37	CON_LBKLT_CTR_R	38	LCD_BLT_VCC
39	LCD_BLT_VCC	40	LCD_BLT_VCC