



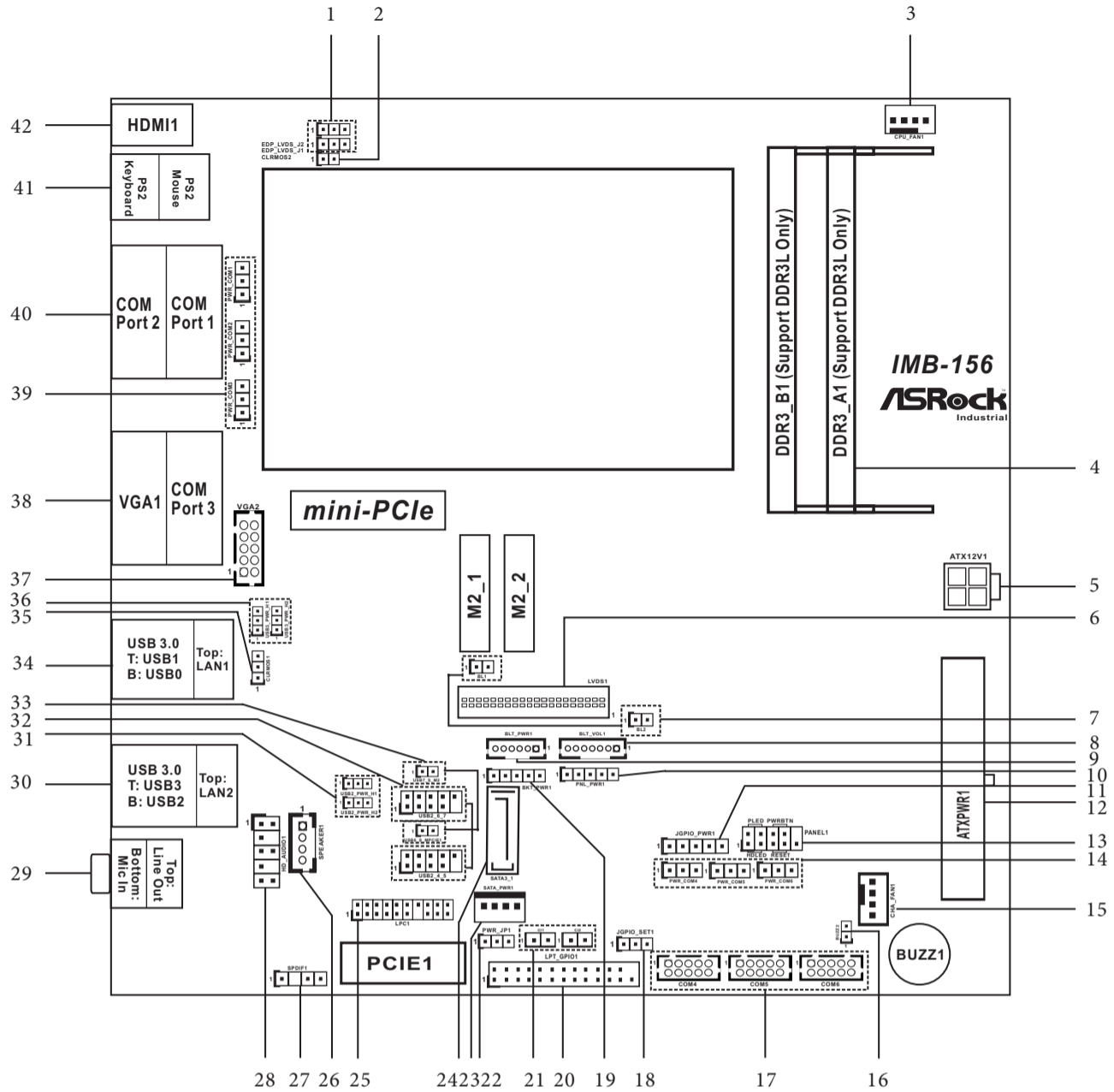
P/N: 15G06M054000AK V1.0

ASRock Industrial

# Jumpers and Headers Setting Guide

## IMB-156

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1 : EDP\_LVDS Jumpers  
EDP\_LVDS\_J1: 1 2 3

1-2: eDP  
2-3: LVDS  
EDP\_LVDS\_J2:  
1-2: eDP  
2-3: LVDS

\* Standard BOM supports LVDS output only.

2 : Clear CMOS Jumper  
Open: Normal  
Short: Clear CMOS

3 : 4-Pin CPU FAN Connector (+12V)

4 : DDR3 SO-DIMM Slots

5 : 4-pin ATX PWR Con  
(Input +12V or +19V~+24V)  
1-2: GND  
3-4: DC Input

6 : LVDS Panel Connector

PIN	Signal Name	PIN	Signal Name
2	LCD_VCC	1	LCD_VCC
4	LDDC_CLK	3	+3.3V
6	LVDS_A_DATA0#	5	LDDC_DATA
8	GND	7	LVDS_A_DATA0
10	LVDS_A_DATA1	9	LVDS_A_DATA1#
12	LVDS_A_DATA2#	11	GND
14	GND	13	LVDS_A_DATA2
16	LVDS_A_DATA3	15	LVDS_A_DATA3#
18	LVDS_A_CLK#	17	GND
20	GND	19	LVDS_A_CLK
22	LVDS_B_DATA0	21	LVDS_B_DATA0#
24	LVDS_B_DATA1#	23	GND
26	GND	25	LVDS_B_DATA1
28	LVDS_B_DATA2	27	LVDS_B_DATA2#
30	LVDS_B_DATA3#	29	DPLVDD_EN
32	GND	31	LVDS_B_DATA3
34	LVDS_B_CLK	33	LVDS_B_CLK#
36	CON_LBKLT_EN	35	GND
38	LCD_BLT_VCC	37	CON_LBKLT_CTL
40	LCD_BLT_VCC	39	LCD_BLT_VCC

7 : BL1, BL2

8 : Backlight Volume Control (BLT\_VOL1)

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

9 : Backlight Power Connector (BLT\_PWR1)

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

10 : Panel Power Select (LCD\_VCC) (PNL\_PWR1)  
1-2: LVDD: +3V  
2-3: LVDD: +5V  
4-5: LVDD: +12V

11 : Digital Input / Output Power Select (JGPIO\_PWR1)  
1-2: +12V  
2-3: +5V  
3-4: +5V  
4-5: GND

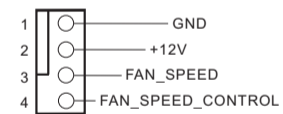
12 : 20-pin ATX Power Input Connector

13 : System Panel Header

14 : COM Port PWR Setting Jumpers  
PWR\_COM4 (For COM Port4)  
PWR\_COM5 (For COM Port5)  
PWR\_COM6 (For COM Port6)

1-2: +5V  
2-3: +12V

15 : 4-Pin Chassis FAN Connector (+12V)



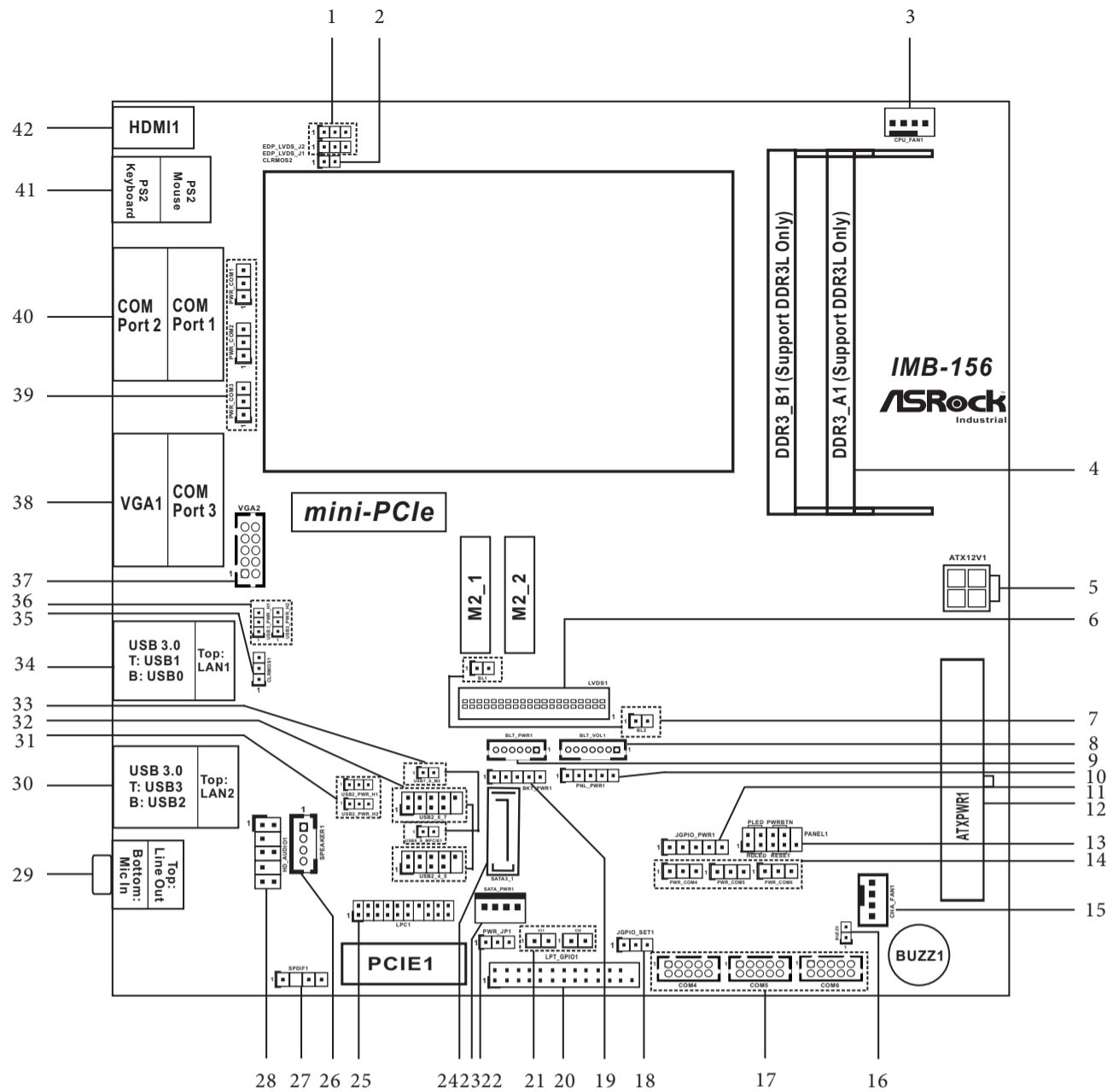
16 : 2-Pin Buzzer Header

17 : COM4, 5, 6 Headers (RS232)

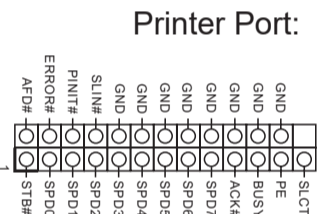
PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
1	DDCD#	3	TTXD	5	GND	7	RRTS#	9	PWR
2	RRXD	4	DDTR#	6	DDSR#	8	CCTS#	10	N/A

18 : Digital Input / Output Default Value Setting (JGPIO\_SET1)   
1-2: Pull-High  
2-3: Pull-Low

19 : Backlight Power Select (LCD\_BLT\_VCC) (BKT\_PWR1)  
1-2: LCD\_BLT\_VCC: +5V  
2-3: LCD\_BLT\_VCC: +12V  
4-5: LCD\_BLT\_VCC: DC\_IN



20 : Printer Port / GPIO Header (LPT\_GPIO1)

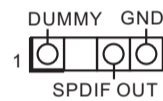


GPIO:

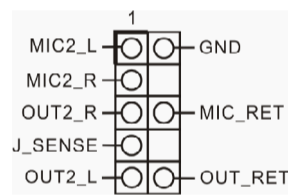
PIN	Signal Name	PIN	Signal Name
26	NC	25	NA
24	GND	23	SIO_GP30
22	GND	21	SIO_GP31
20	GND	19	SIO_GP32
18	GND	17	SIO_GP33
16	GND	15	SIO_GP34
14	GND	13	SIO_GP35
12	JGPIO_PWR	11	SIO_GP36
10	JGPIO_PWR	9	SIO_GP37
8	SIO_GP43	7	SIO_GP40
6	SIO_GP44	5	SIO_GP41
4	SIO_GP45	3	SIO_GP42
2	SIO_GP46	1	SIO_GP47

\* If you want to use the printer port function, please short pin4 and pin5 on Digital Input / Output Power Select (JGPIO\_PWR1).

27 : SPDIF Header



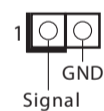
28 : Front Panel Audio Header



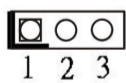
29 : Audio Output  
Green – Line Out  
Pink – Mic In

30 : Top: RJ45 LAN Port (LAN2)  
Bottom: USB3.0 Ports (USB3\_2\_3)

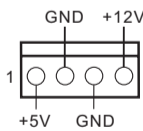
21 : Chassis Intrusion Headers  
C11:  
Close: Active Case Open  
Open: Normal  
C12:  
Close: Normal  
Open: Active Case Open



22 : ATX/AT Mode Select (PWR\_JP1)  
1-2: AT Mode  
2-3: ATX Mode



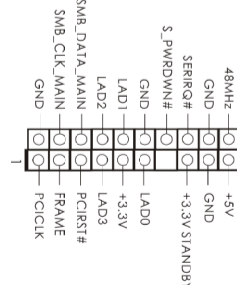
23 : SATA Power Output Connector



24 : SATA3 Connector (SATA3\_1)

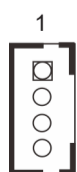


25 : LPC Header

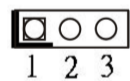


26 : 3W Audio AMP Output Wafer

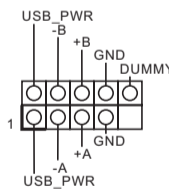
PIN	Signal Name
1	OUTLN
2	OUTLP
3	OUTRP
4	OUTRN



31 : USB Power Setting Jumpers (USB2\_PWR\_H1, USB2\_PWR\_H2)  
1-2: +5V  
2-3: +5VSB



32 : USB2.0 Connectors (USB2\_4\_5, USB2\_6\_7)



33 : USBPort7\_S\_M2\_2 Slot:  
Open: USB2.0 Connector  
Short: M2\_2 slot Function



USBPort6\_S\_Mini-PCIE Slot:  
Open: USB2.0 Connector  
Short: Mini-PCIE Function



34 : Top: RJ45 LAN Port (LAN1)  
Bottom: USB3.0 Ports (USB3\_0\_1)

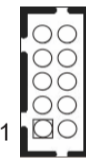
35 : Clear CMOS Header  
1-2: Normal  
2-3: Clear CMOS



36 : USB Power Setting Jumpers (USB3\_PWR\_H1, USB3\_PWR\_H2)  
1-2: +5V  
2-3: +5VSB



37 : VGA Header



PIN	Signal Name	PIN	Signal Name
9	DDC_CLK	10	DDC_DATA
7	HSYNC	8	VSYNC
5	BLUE	6	GND
3	GREEN	4	GND
1	RED	2	GND

38 : Top: COM Port 3 (RS232/422/485)\*  
Bottom: VGA/D-Sub Port

39 : COM Port PWR Setting Jumpers  
PWR\_COM1 (For COM Port1)  
PWR\_COM2 (For COM Port2)  
PWR\_COM3 (For COM Port3)  
1-2: +5V  
2-3: +12V



40 : Top: COM Port 1 (RS232/422/485)\*  
Bottom: COM Port 2 (RS232/422/485)\*

\* This motherboard supports RS232/422/485 on COM1~3 ports. Please refer to below table for the pin definition. In addition, COM1~3 ports (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to our user manual for details.

COM1~3 Ports Pin Definition

PIN	RS232	RS422	RS485
1	DCD	TX-	RTX-
2	RXD	RX+	N/A
3	TXD	TX+	RTX+
4	DTR	RX-	N/A
5	GND	GND	GND
6	DSR	N/A	N/A
7	RTS	N/A	N/A
8	CTS	N/A	N/A
9	COM1: +5V/+12V/+5VSB COM2, 3: +5V/+12V	COM1: +5V/+12V/+5VSB COM2, 3: +5V/+12V	COM1: +5V/+12V/+5VSB COM2, 3: +5V/+12V

41 : Top (Green) – PS/2 Mouse Port  
Bottom (Purple) – PS/2 Keyboard Port  
42 : HDMI Port