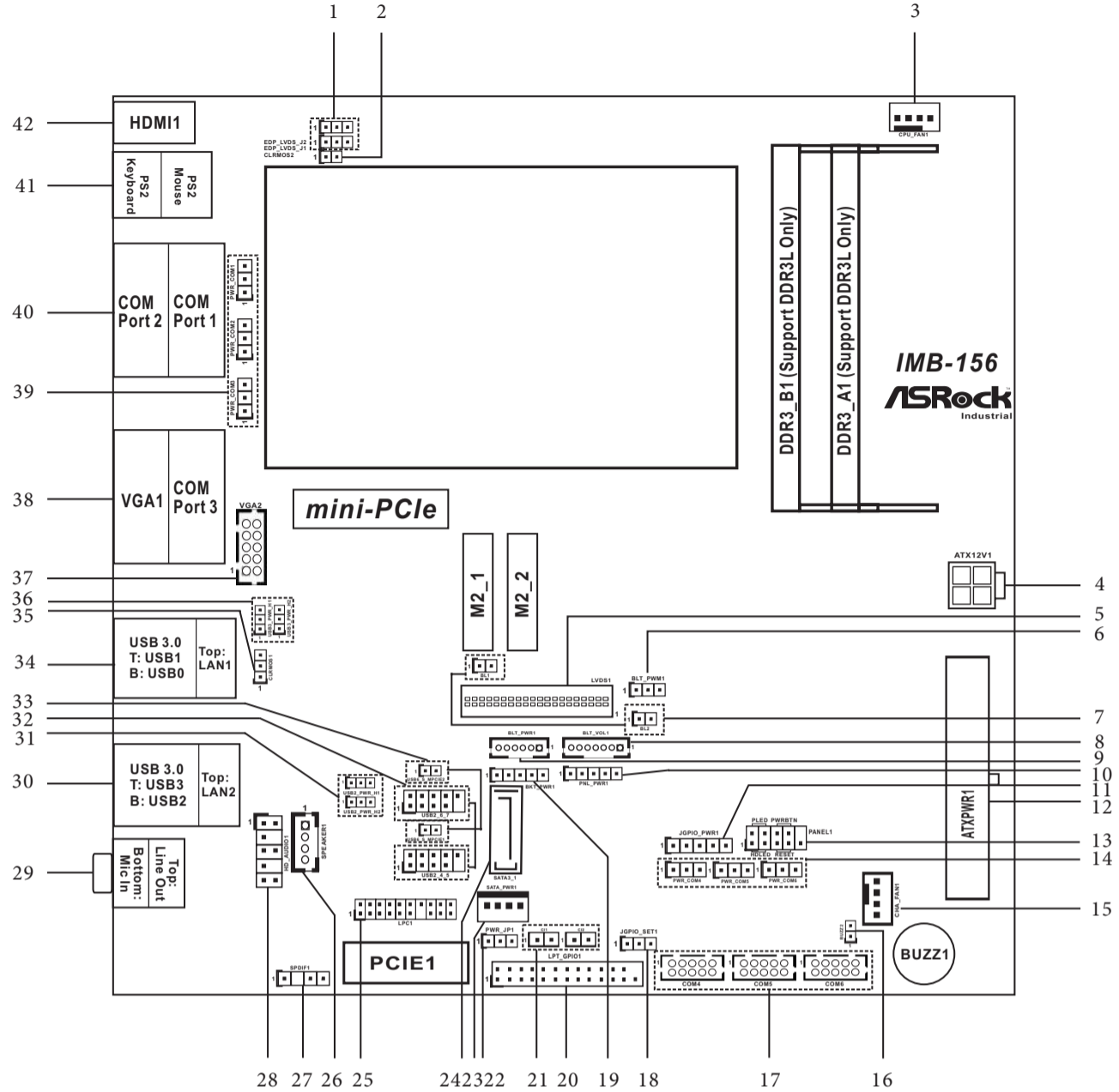



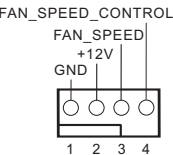
## IMB-156

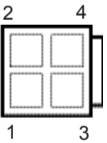
The terms HDMI™ and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

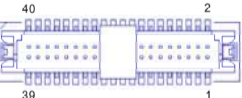


**1 : EDP\_LVDS Jumpers**   
 EDP\_LVDS\_J1:  1 2 3  
 1-2: eDP  
 2-3: LVDS  
 EDP\_LVDS\_J2:  1 2 3  
 1-2: eDP  
 2-3: LVDS


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

**3 : 4-Pin CPU FAN Connector (+12V)**   
 FAN\_SPEED\_CONTROL  
 FAN\_SPEED  
 +12V  
 GND

**4 : ATX Power Connector**   
 (Input 12V-24V)  
 1-2: GND  
 3-4: DC Input

**5 : LVDS Panel Connector** 

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

**6 : BLT\_PWM1**   
 1-2: +3V Level  
 2-3: +5V Level


**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)**

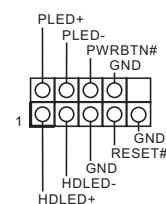
PIN	Signal Name
1	GND
2	GND
3	BL CTL
4	BL EN
5	LCD_BLT_VCC
6	LCD_BLT_VCC


**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

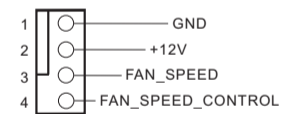
**12 : 20-pin ATX Power Input Connector**


**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** 

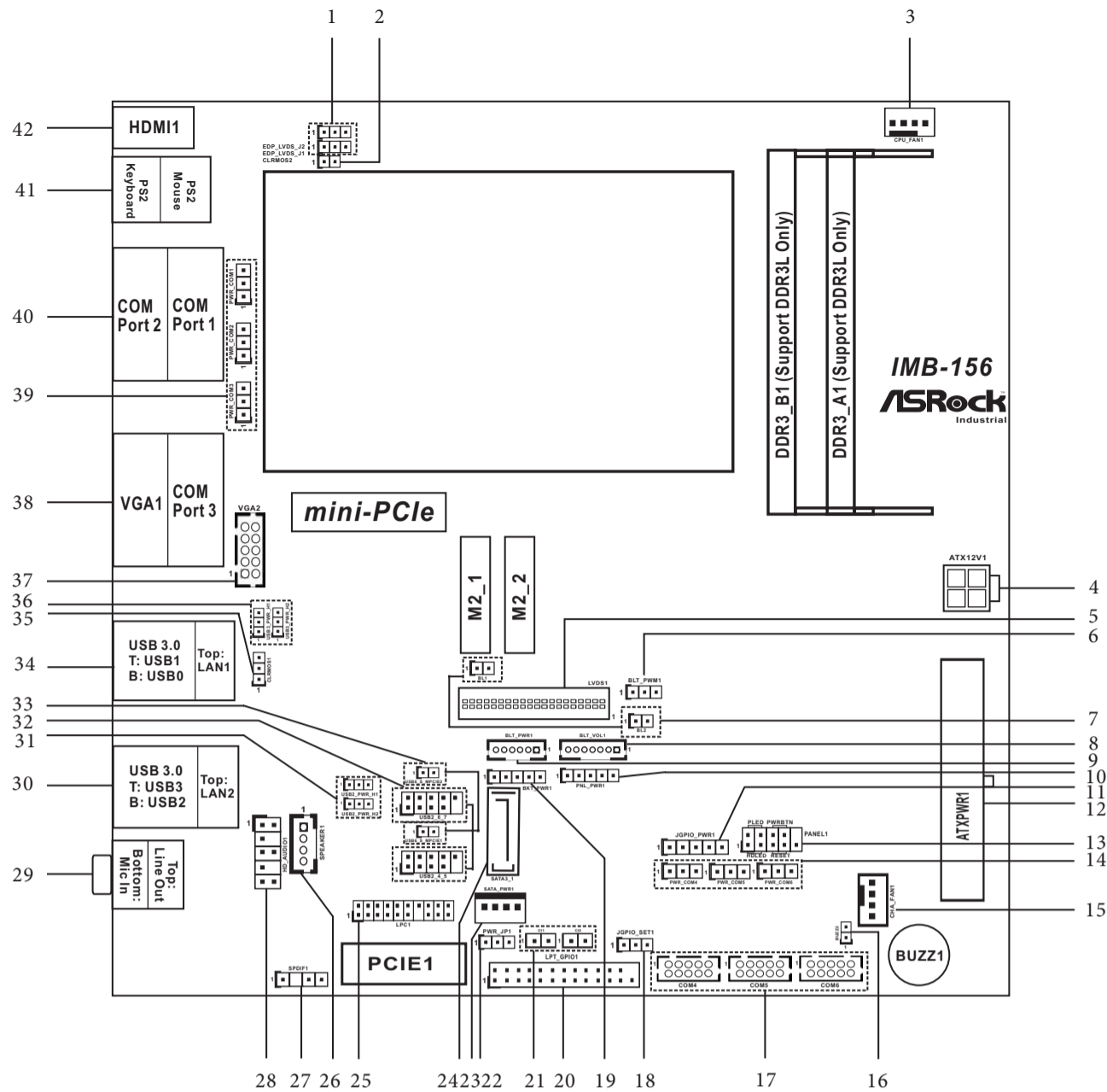
**17 : COM4, 5, 6 Headers (RS232)** 

PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
1	DDCD#	3	TTXD	5	GND	7	RRTS#	9	+5V
2	RRXD	4	DDTR#	6	DDSR#	8	CCTS#	10	+12V

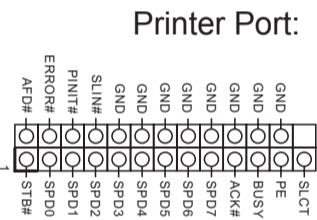
**18 : Digital Input / Output Default Value Setting (JGPIO\_SET1)**   
 1-2: Pull-High  
 2-3: Pull-Low

**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





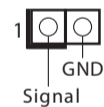
20 : Printer Port / GPIO Header (LPT\_GPIO1)



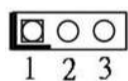
PIN	Signal Name	PIN	Signal Name
1	SIO_GP46	11	SIO_GP36
2	SIO_GP45	12	SIO_GP37
3	SIO_GP44	13	SIO_GP38
4	SIO_GP43	14	SIO_GP39
5	SIO_GP42	15	SIO_GP40
6	SIO_GP41	16	SIO_GP41
7	SIO_GP40	17	SIO_GP42
8	SIO_GP39	18	SIO_GP43
9	SIO_GP38	19	SIO_GP44
10	SIO_GP37	20	SIO_GP45
11	SIO_GP36	21	SIO_GP46
12	SIO_GP35	22	GND
13	SIO_GP34	23	GND
14	SIO_GP33	24	GND
15	SIO_GP32	25	NC
16	SIO_GP31	26	NC
17	SIO_GP30	27	NC
18	SIO_GP29	28	NC
19	SIO_GP28	29	NC
20	SIO_GP27	30	NC
21	SIO_GP26	31	NC
22	SIO_GP25	32	NC
23	SIO_GP24	33	NC
24	SIO_GP23	34	NC
25	SIO_GP22	35	NC
26	SIO_GP21	36	NC
27	SIO_GP20	37	NC
28	SIO_GP19	38	NC
29	SIO_GP18	39	NC
30	SIO_GP17	40	NC
31	SIO_GP16	41	NC
32	SIO_GP15	42	NC
33	SIO_GP14		
34	SIO_GP13		
35	SIO_GP12		
36	SIO_GP11		
37	SIO_GP10		
38	SIO_GP9		
39	SIO_GP8		
40	SIO_GP7		
41	SIO_GP6		
42	SIO_GP5		
43	SIO_GP4		
44	SIO_GP3		
45	SIO_GP2		
46	SIO_GP1		

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

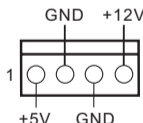
- 21 : Chassis Intrusion Headers  
 C11:  
 Close: Active Case Open  
 Open: Normal  
 C12:  
 Close: Normal  
 Open: Active Case Open



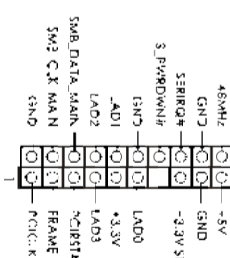
- 22 : ATX/AT Mode Select (PWR\_JP1)  
 1-2: AT Mode  
 2-3: ATX Mode



- 23 : SATA Power Output Connector



- 24 : SATA3 Connector (SATA3\_1)



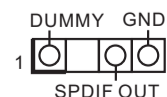
- 25 : LPC Header

- 26 : 3W Audio AMP Output Wafer

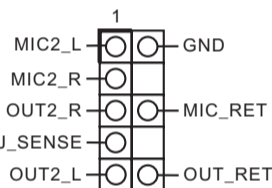
PIN	Signal Name
1	OUTLN
2	OUTLP
3	OUTRP
4	OUTRN



- 27 : SPDIF Header

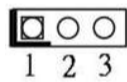


28 : Front Panel Audio Header

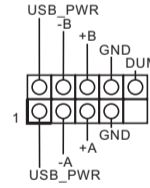


- 29 : Audio Output  
 Green – Line Out  
 Pink – Mic In  
 30 : Top: RJ45 LAN Port (LAN2)  
 Bottom: USB3.0 Ports (USB3\_2\_3)

- 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)



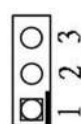
- 33 : USB6\_S\_MPCIE1:  
 Pin1 short USB2\_4\_5 pin4 and pin6  
 short USB2\_4\_5 pin5: share USB port 5 of USB2\_4\_5 header to MPCIE1  
 USB6\_S\_MPCIE2:  
 Pin1 short USB2\_6\_7 pin4 and pin6  
 short USB2\_6\_7 pin5: share USB port 7 of USB2\_6\_7 header to MPCIE2

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

- 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