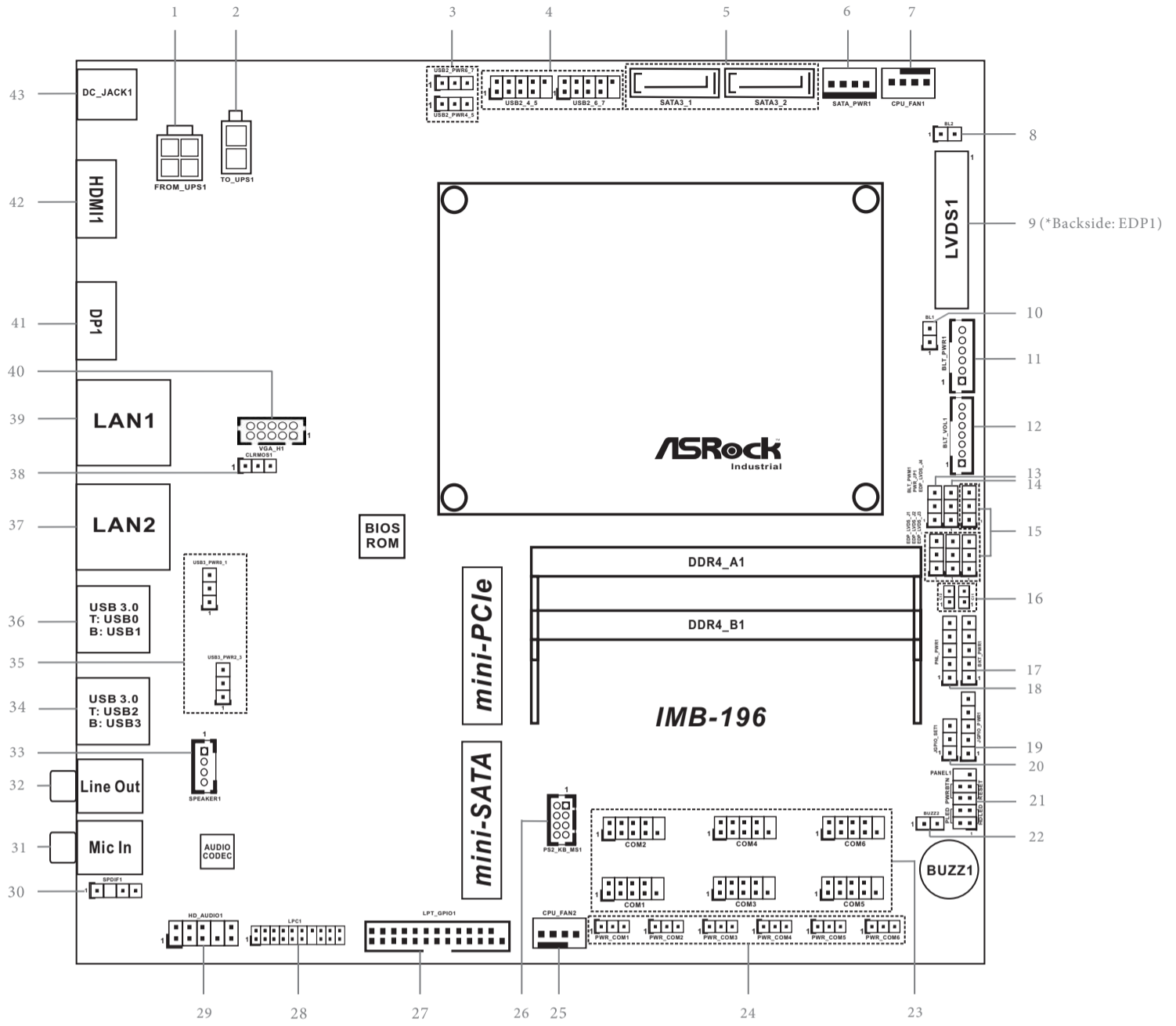




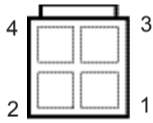
ASRock Jumpers and Headers Setting Guide

IMB-196-D

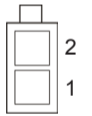
The terms HDMI™ and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



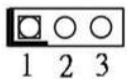
1 : ATX Power Connector (Input 12V or 19-24V)
1-2 : GND
3-4 : DC Input



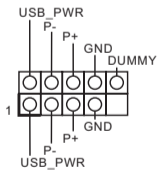
2 : 2-pin UPS Module Power Input Connector
Pin1 : GND
Pin2 : DC Input



3 : USB Power Setting Jumpers (USB2_PWR4_5 (For USB2_4_5)) (USB2_PWR6_7 (For USB2_6_7))
1-2 : +5V
2-3 : +5VSB



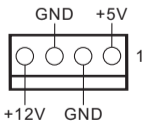
4 : USB2.0 Headers (USB2_4_5, USB2_6_7)



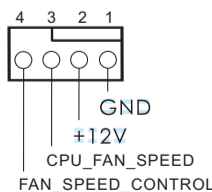
5 : SATA3 Connectors (SATA3_1, SATA3_2)



6 : SATA Power Output Connector



7 : 4-Pin CPU FAN Connector (+12V)



8 : BL2

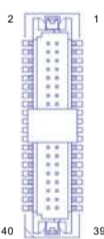


10 : BL1



9 : 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



* eDP Connector (on the Backside of PCB)



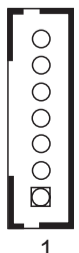
11 : Backlight Power Connector (BLT_PWR1)

PIN	Signal Name
6	LCD_BLT_VCC
5	LCD_BLT_VCC
4	CON_LBKLT_EN
3	CON_LBKLT_CTL
2	GND
1	GND



12 : Backlight Volume Control (BLT_VOL1)

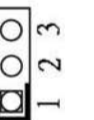
PIN	Signal Name
7	GND
6	GND
5	BLT_DW
4	BLT_UP
3	PWRDN
2	GPIO_VOL_DW
1	GPIO_VOL_UP



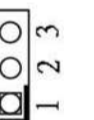
13 : Backlight Control Level (CON_LBKLT_CTL) (BLT_PWM1)
1-2 : +3V
2-3 : +5V



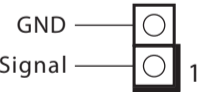
14 : ATX/AT Mode Select (PWR_JP1)
1-2 : AT Mode
2-3 : ATX Mode



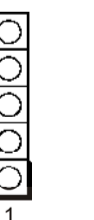
15 : EDP_LVDS_J1~EDP_LVDS_J4
1-2 : LVDS
2-3 : eDP



16 : Chassis Intrusion Headers
CI1
Close : Active case open
Open : Normal
CI2
Close : Normal
Open : Active case open



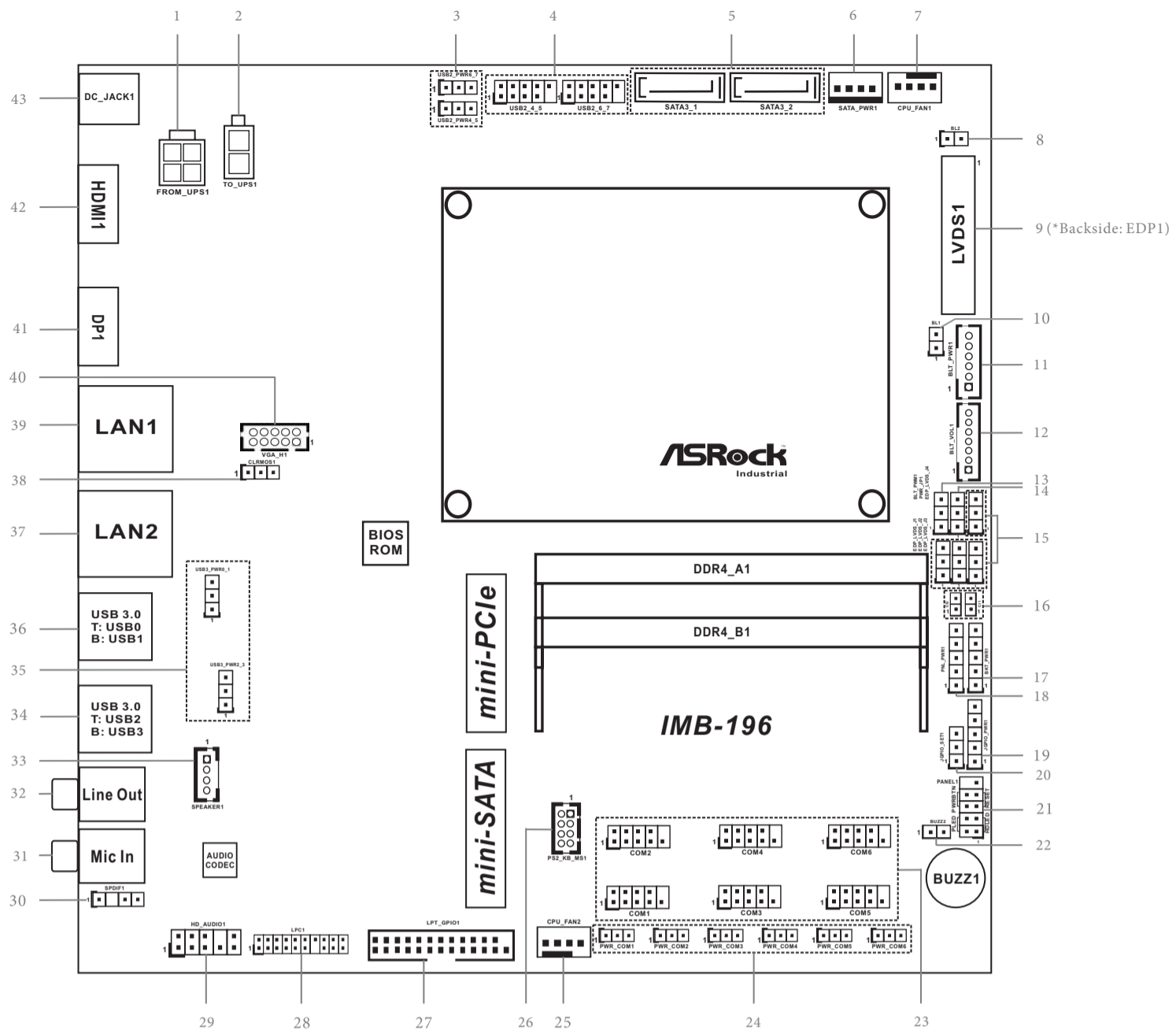
17 : Backlight Power Select (LCD_BLT_VCC) (BKT_PWR1)
1-2 : LCD_BLT_VCC : +5V
2-3 : LCD_BLT_VCC : +12V
4-5 : LCD_BLT_VCC : DC_IN



18 : Panel Power Select (LCD_VCC) (PNL_PWR1)
1-2 : LCD_VCC : +3V
2-3 : LCD_VCC : +5V
4-5 : LCD_VCC : +12V



PIN	Signal Name
40	NA
39	LCD_BLT_VCC
38	LCD_BLT_VCC
37	LCD_BLT_VCC
36	LCD_BLT_VCC
35	NA
34	NA
33	CON_LBKLT_CTL
32	CON_LBKLT_EN
31	GND
30	GND
29	GND
28	GND
27	eDP_HPDCON
26	GND
25	GND
24	GND
23	GND
22	NA
21	LCD_VCC
20	LCD_VCC
19	LCD_VCC
18	LCD_VCC
17	GND
16	eDP_AUX#_CON
15	eDP_AUX_CON
14	GND
13	eDP_TX0_CON
12	eDP_TX0_CON
11	GND
10	eDP_TX1_CON
9	eDP_TX#1_CON
8	GND
7	eDP_TX2_CON
6	eDP_TX#2_CON
5	GND
4	eDP_TX3_CON
3	eDP_TX#3_CON
2	GND
1	NA



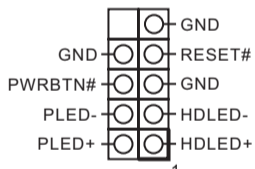
19 : Digital Input / Output Power Select (JGPIO_PWR) (JGPIO_PWR1)
 1-2 : +12V
 2-3 : +5V
 3-4 : +5V
 4-5: GND



20 : Digital Input / Output Default Value Setting (JGPIO_SET1)
 1-2 : Pull-High
 2-3 : Pull-Low



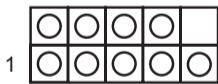
21 : System Panel Header



22 : Buzzer



23 : COM1, 2, 3, 4, 5, 6 Headers



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

* This motherboard supports RS232/422/485 on COM1, 2 ports. Please refer to below table for the pin definition. In addition, COM1, 2 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to our user manual for details.

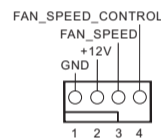
COM1, 2 Ports Pin Definition

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	PWR	PWR	PWR

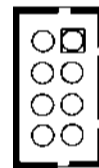
24 : COM Port Pin9 PWR Setting Jumpers
 PWR_COM1 (For COM Port1)
 PWR_COM2 (For COM Port2)
 PWR_COM3 (For COM Port3)
 PWR_COM4 (For COM Port4)
 PWR_COM5 (For COM Port5)
 PWR_COM6 (For COM Port6)



25 : 4-Pin CPU FAN Connector (+12V)



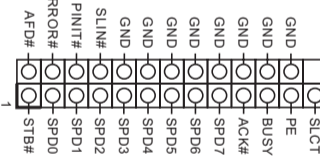
26 : PS2 Keyboard/Mouse Header



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

27 : Printer Port / GPIO Header (LPT_GPIO1)

Printer Port:

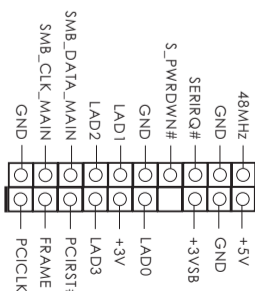


GPIO:

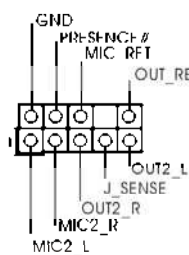
PIN	Signal Name	PIN	Signal Name
2	SIO_Gp46	1	NC
4	SIO_Gp45	25	NA
6	SIO_Gp44	26	NC
8	SIO_Gp43	27	SIO_Gp30
10	JGPIO_PWR	28	GND
12	JGPIO_PWR	29	GND
14	GND	30	SIO_Gp31
16	GND	31	SIO_Gp32
18	GND	32	SIO_Gp33
20	GND	33	SIO_Gp34
22	GND	34	SIO_Gp35
24	GND	35	SIO_Gp36
26	NC	36	SIO_Gp37
28	GND	37	SIO_Gp38
30	SIO_Gp30	38	SIO_Gp39
32	SIO_Gp32	39	SIO_Gp40
34	SIO_Gp34	40	SIO_Gp41
36	SIO_Gp36	41	SIO_Gp42
38	SIO_Gp38	42	SIO_Gp43
40	SIO_Gp40	43	SIO_Gp44
42	SIO_Gp42	44	SIO_Gp45
44	SIO_Gp44	45	SIO_Gp46
46	SIO_Gp46	46	SIO_Gp47

* If you want to use the printer port function, please short pin4 and pin5 on Digital Input / Output Power Select (JGPIO_PWR1).

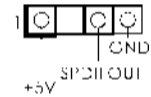
28 : LPC Header



29 : Front Panel Audio Header



30 : SPDIF Header



Audio Jacks

31 : Pink - Mic In
 32 : Green - Line Out

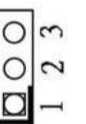
33 : 3W Audio AMP Output Wafer

PIN	Signal Name
1	OUTLN
2	OUTLP
3	OUTRP
4	OUTRN



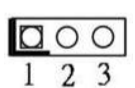
34 : USB3.0 Ports (USB3_2_3)

35 : USB Power Setting Jumpers (USB3_PWR0_1 (For USB3_0_1)) (USB3_PWR2_3 (For USB3_2_3))
 1-2 : +5V
 2-3 : +5VSB



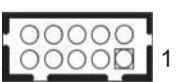
36 : USB3.0 Ports (USB3_0_1)
 37 : RJ45 LAN Port (LAN2)

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



39 : RJ45 LAN Port (LAN1)

40 : VGA Connector (Optional)



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

* VGA Connector is shared with DisplayPort. If you enable one, the other one will not function.

41 : DisplayPort
 42 : HDMI Port
 43 : DC Jack