

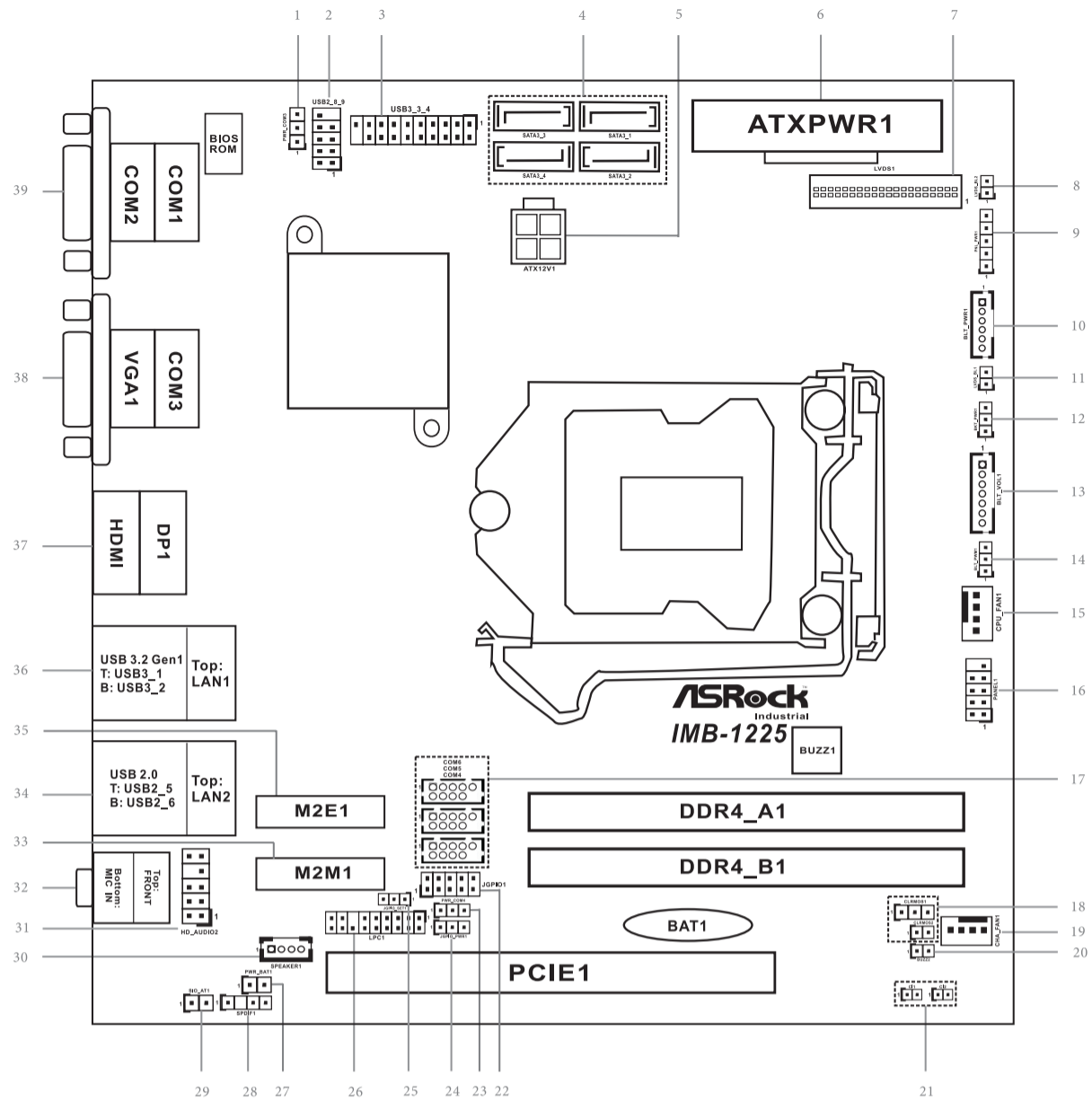
IMB-1225

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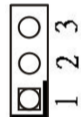
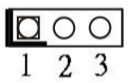
Revision History

Date	Description
November 19, 2020	First Release

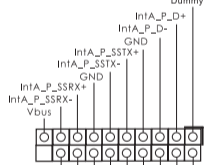
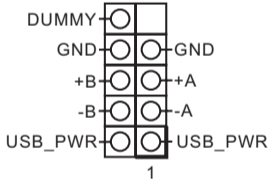


COM Port PWR Setting Jumpers
1 : PWR_COM3 (For COM Port3)
23 : PWR_COM4 (For COM Port4)

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



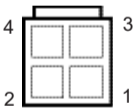
2 : USB2.0 Header (USB2_8_9)



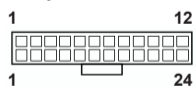
3 : USB3.2 Gen1 Header (USB3_3_4)

4 : SATA3 Connectors (SATA3_1~4)

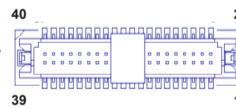
5 : 4-pin ATX Power Input/Output Connector



6 : 24-pin ATX Power Input Connector



7 : LVDS Panel Connector



PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
39	LCD_BLT_VCC	40	LCD_BLT_VCC	37	CON_LBKLT_CTL	38	LCD_BLT_VCC	35	CON_LBKLT_EN
33	LVDS_B_CLK#	34	LVDS_B_CLK	31	LVDS_B_DATA3	32	GND	29	DPLVDD_EN
27	LVDS_B_DATA2#	28	LVDS_B_DATA2	25	LVDS_B_DATA1	26	GND	21	LVDS_B_DATA#
19	LVDS_A_CLK#	20	GND	15	LVDS_A_DATA3#	16	LVDS_A_DATA3	13	LVDS_A_DATA2#
9	LVDS_A_DATA#	10	LVDS_A_DATA1	7	LVDS_A_DATA0	8	IPD (Panel Deflection)	5	LVDS_A_DATA#
3	+3.3V	4	LDIOC_CLK	1	LCD_VCC	2	LCD_VCC		

8 : LVDSBL2

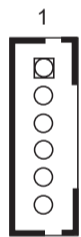
Open : Protect LCD_BLT_VCC
Short : No Protect LCD_BLT_VCC



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



10 : Inverter Power Control Wafer (BLT_PWR1)



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

11 : LVDSBL1

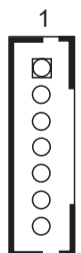
Open : Protect LCD_VCC
Short : No Protect LCD_VCC



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



13 : Backlight Volume Control (BLT_VOL1)

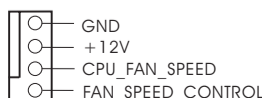


PIN	Signal Name
1	GPIO_VOL_UP
2	GPIO_VOL_DW
3	PWRDN
4	BLT_UP
5	BLT_DW
6	GND
7	GND

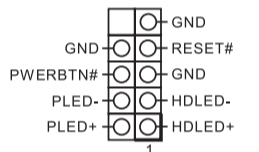
14 : Backlight Control Level (CON_LBKLT_CTL) (BLT_PWM1)
1-2 : From eDP PWM to CON_LBKLT_CTL
2-3 : From LVDS PWM to CON_LBKLT_CTL



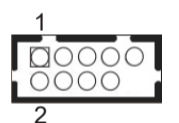
15 : 4-Pin CPU FAN Connector (+12V) (CPU_FAN1)



16 : System Panel Header



17 : COM Port Headers (COM4, 5, 6) (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#		

18 : Clear CMOS Headers

CLRMOSS1 :

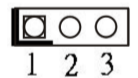
1-2 : Normal

2-3 : Clear CMOS

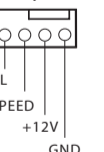
CLRMOSS2 :

Open : Normal

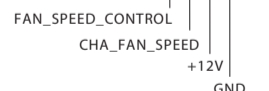
Short : Auto Clear CMOS (Power Off)



19 : 4-Pin Chassis FAN Connector (+12V) (CHA_FAN1)



20 : Buzzer



21 : Chassis Intrusion Headers (CI1, CI2)

CI1 :

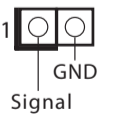
Open : Normal

Short : Active Case Open

CI2 :

Open : Active Case Open

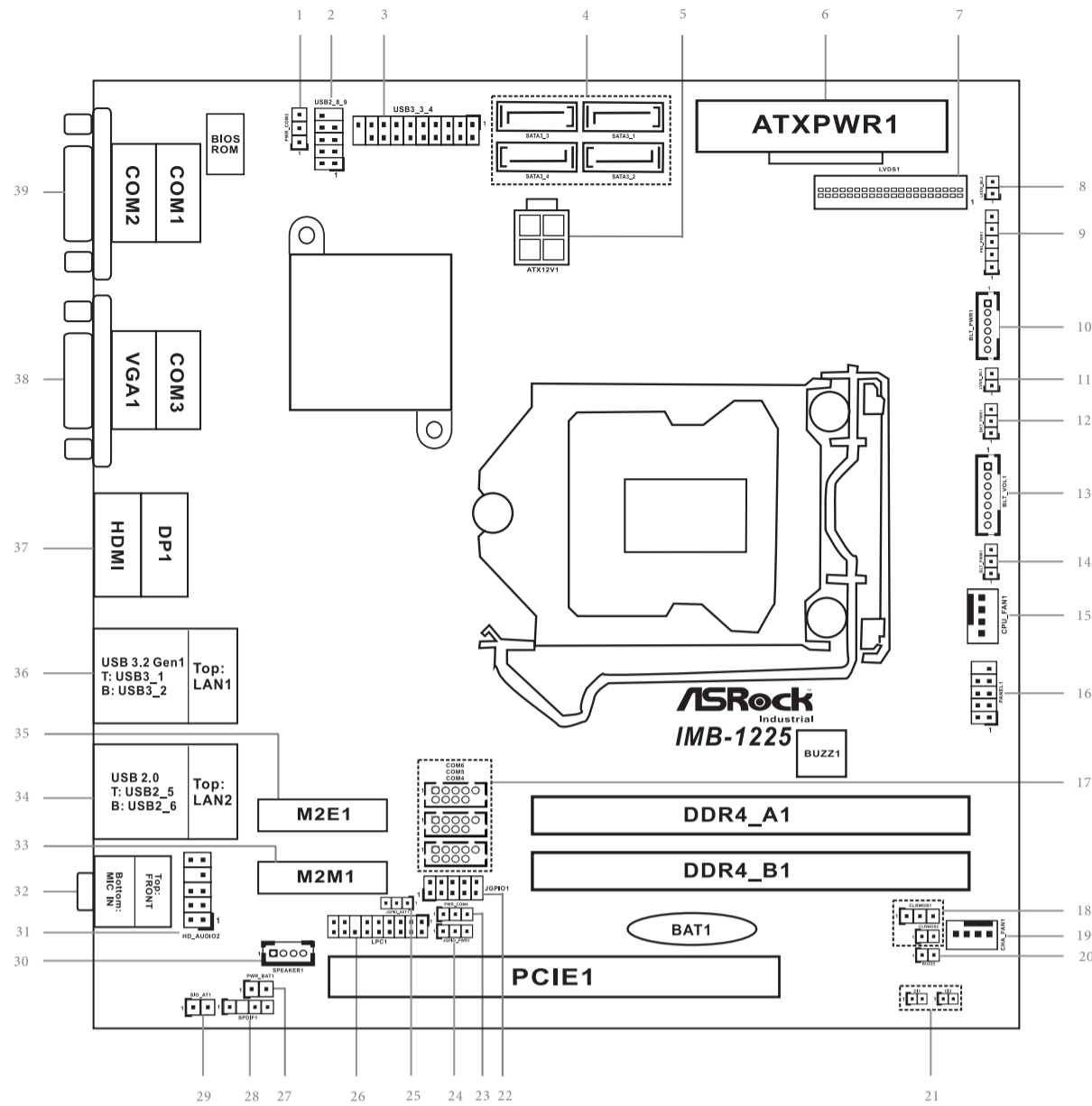
Short : Normal



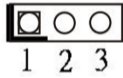
22 : Digital Input/Output Pin Header (JGPIO1)



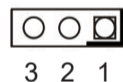
PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
2	SIO_GP71	4	SIO_GP72	6	SIO_GP73	8	SIO_GP74	10	GND
1	SIO_GP75	3	SIO_GP76	5	SIO_GP77	7	SIO_GP80	9	JGPIO_PWR



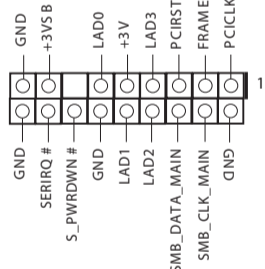
24 : Digital Input / Output Power Select (JGPIO_PWR1)
 1-2 : +12V
 2-3 : +5V



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



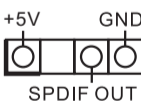
26 : LPC Header



27 : PWR_BAT1
 Open : Normal
 Short : Charge Battery



28 : SPDIF Header
 +5V GND
 SPDIF OUT



29 : SIO_AT1
 Open : ATX Mode
 Short : AT Mode

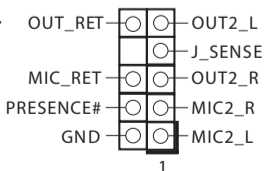


30 : 3W Audio AMP Output Wafer



PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
1	OUTLN	2	OUTLP	3	OUTRP	4	OUTRN

31 : Front Panel Audio Header
 32 : Audio Output
 Green - Line Out
 Pink - Mic In



34 : Top : RJ45 LAN Port (LAN2)
 Bottom : USB2.0 Ports (USB2_5_6)

36 : Top : RJ45 LAN Port (LAN1)
 Bottom : USB3.2 Gen1 Ports (USB3_1_2)

37 : Top : DisplayPort (DP1)
 Bottom : HDMI Port (HDMI)
 38 : Top : COM Port (COM3) (RS232)
 Bottom : D-Sub Port (VGA1)
 39 : Top : COM Port (COM1) (RS232/422/485)*
 Bottom : COM Port (COM2) (RS232/422/485)*

* This motherboard supports RS232/422/485 on COM1, 2 ports.
 Please refer to below table for the pin definition. In addition, COM1, 2 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, 2 Port 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	+5V / +12V	N/A	N/A

M.2 Socket Pin Definition

33 : M.2 Key-M Socket (M2M1)

Pin	Signal	Signal	Pin
1	GND	+3.3V	2
3	GND	+3.3V	4
5	PERA3	NA	6
7	PERA3	NA	8
9	GND	SATA_LED	10
11	PETA3	+3.3V	12
13	PETA3	+3.3V	14
15	GND	+3.3V	16
17	PERA2	+3.3V	18
19	PERA2	NA	20
21	GND	NA	22
23	PETA2	NA	24
25	PETA2	NA	26
27	GND	NA	28
29	PERA1	NA	30
31	PERA1	NA	32
33	GND	NA	34
35	PETA1	NA	36
37	PETA1	GENSLP	38
39	GND	SMB_CLK	40
41	PERA/SATA-B+	SMB_DATA	42
43	PERA/SATA-B-	NA	44
45	GND	NA	46
47	PETA/SATA-A-	NA	48
49	PETA/SATA-A+	PERSTP	50
51	GND	CLKREQ#	52
53	PERCLK#	WAKE#	54
55	PERCLK#	NA	56
57	GND	NA	58
67	NA	NA	68
69	PERST	+3.3V	70
71	GND	+3.3V	72
73	GND	+3.3V	74
75	GND		

35 : M.2 Key-E Socket (M2E1)

Pin	Signal	Signal	Pin
1	GND	+3.3V	2
3	USB_D+	+3.3V	4
5	USB_D-	NA	6
7	GND	NA	8
9	ENV_WGR_D1-	CNV_RF_RESET	10
11	ENV_WGR_D1+	NA	12
13	GND	MODEM_CLKREQ	14
15	ENV_WGR_D0-	NA	16
17	ENV_WGR_D0+	GND	18
19	GND	NA	20
21	ENV_WGR_CLK-	CNV_BRI_RSP	22
23	ENV_WGR_CLK+		
33	GND	CNV_BQ_DT	34
35	PETP	CNV_RGI_RSP	36
37	PETA1	CNV_BRI_DT	38
39	GND	NA	40
41	PERP	NA	42
43	PERM	NA	44
45	GND	NA	46
47	PERCLK#	NA	48
49	PERCLK#	NA	50
51	GND	SUSCLK	52
53	CLKREQ#	PERSTW	54
55	WAKE#	W_DISABLE#	56
57	GND	W_DISABLE#	58
59	CNV_WT_D1-	SMB_DATA	60
61	CNV_WT_D1+	SMB_CLK	62
63	GND	NA	64
65	CNV_WT_D0-	CLKIN_XTAL_LCP	66
67	CNV_WT_D0+	NA	68
69	GND	NA	70
71	CNV_WT_CLK-	NA	72
73	CNV_WT_CLK+	+3.3V	74
75	GND	+3.3V	