

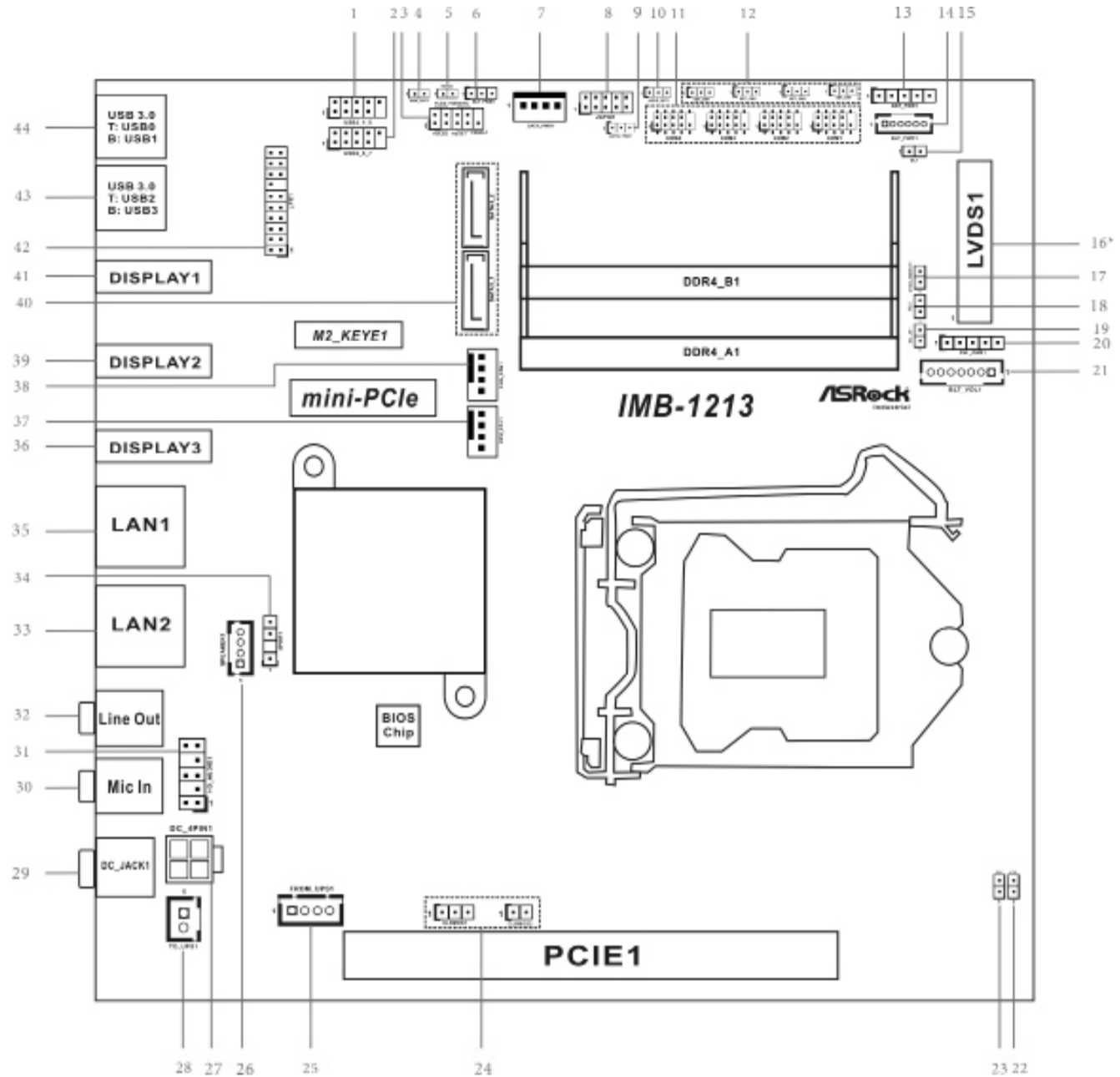


ASRock® Jumpers and Headers Setting Guide

IMB-1213

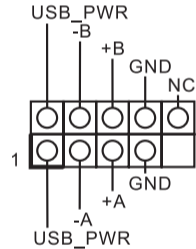
Revision History

Date	Description
April 8, 2020	First Release

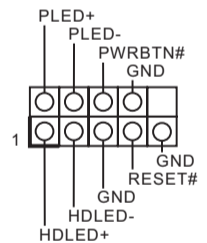


USB2.0 Headers

- 1 : USB2_4_5
- 2 : USB2_6_7



3 : System Panel Header



4 : PWR_BAT2



Open: Normal
Short: Charge Battery

5 : Buzzer

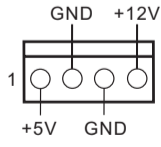


6 : BLT_PWM1

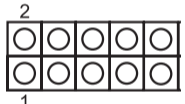


1-2: eDP
2-3: LVDS

7 : SATA Power Output Connector

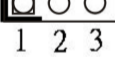


8 : Digital Input / Output Pin Header (JGPIO1)



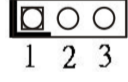
PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
2	SIO_GP20	4	SIO_GP21	6	SIO_GP22	8	SIO_GP23	10	GND
1	SIO_GP24	3	SIO_GP25	5	SIO_GP26	7	SIO_GP27	9	JGPIO_PWR

9 : Digital Input / Output Power Select (JGPIO_PWR1)



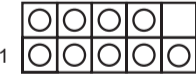
1-2: +12V
2-3: +5V

10 : Digital Input / Output Default Value Setting (JGPIO_SET1)



1-2: Pull-High (+3V)
2-3: Pull-Low

11 : COM Port Headers (COM1, 2, 3, 4)



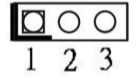
PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
2	RRXD	4	DDTR#	6	DDSR#	8	CCTS#	10	NC
1	DDCD#	3	TTXD	5	GND	7	RRTS#	9	PWR

* This motherboard supports RS232/422/485 on COM3, 4 ports. Please refer to below table for the pin definition. In addition, COM3, 4 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.

COM3, 4 Ports Pin Definition

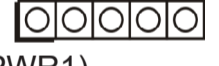
PIN	RS232	RS422	RS485
1	DCD	TX-	RTX-
2	RXD	RX+	N/A
3	TXD	TX+	RTX+
4	DTR	RX-	N/A
5	GND	GND	GND
6	DSR	N/A	N/A
7	RTS	N/A	N/A
8	CTS	N/A	N/A
9	PWR	PWR	PWR

12 : COM Port PWR Setting Jumpers (SET_CM1, 2, 3, 4)



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

13 : 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

14 : 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

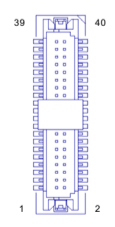
15 : BL1



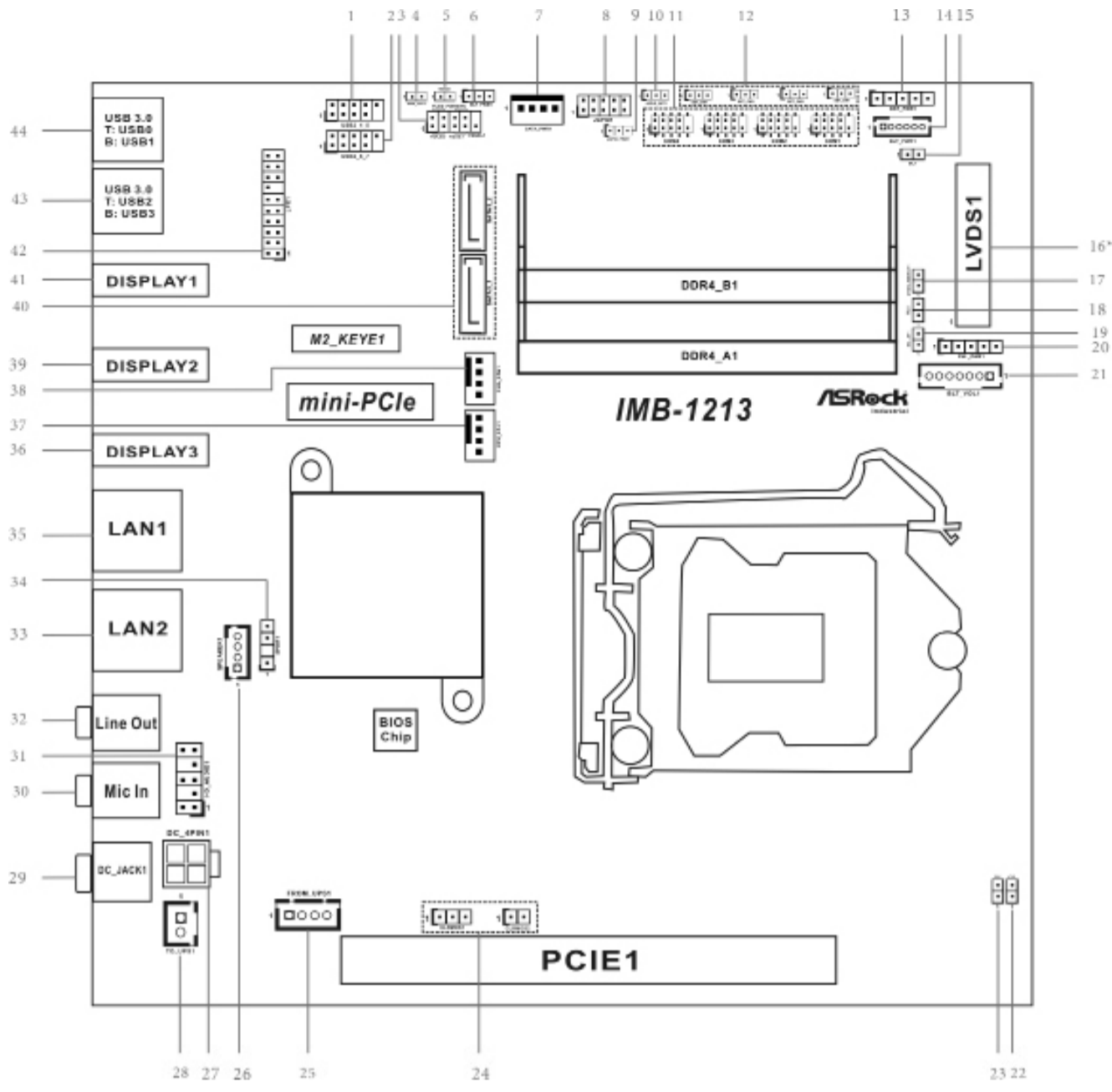
Open: Protect LCD_BLT_VCC
Short: No Protect LCD_BLT_VCC

16* : LVDS Panel Connector

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



* PD (Panel Detection): Connect this pin to LVDS Panel's Ground pin to detect Panel detection.



* M.2 Socket (Key-E) (With CNVi)

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	CNV_WGR_D1-	CNV_RF_RESET	10
11	CNV_WGR_D1+	NA	12
13	GND	MODEM_CLKREQ	14
15	CNV_WGR_D0-	NA	16
17	CNV_WGR_D0+	GND	18
19	GND	NA	20
21	CNV_WGR_CLK-	CNV_BRI_RSP	22
23	CNV_WGR_CLK+	NA	24
33	GND	CNV_BGI_DT	32
35	PETp	CNV_RGI_RSP	34
37	PETn	CNV_BRI_DT	36
39	GND	NA	38
41	PEPp	NA	40
43	PERn	NA	42
45	GND	NA	44
47	PEFCLKp	NA	46
49	PEFCLKn	NA	48
51	GND	SUSCLK	50
53	CLKREQ#	PERST#	52
55	WAKE#	W_DISABLE#	54
57	GND	W_DISABLE#	56
59	CNV_WT_D1-	SMB_DATA	58
61	CNV_WT_D1+	SMB_CLK	60
63	GND	NA	62
65	CNV_WT_D0-	CLKIN_XTAL_LCP	64
67	CNV_WT_D0+	NA	66
69	GND	NA	68
71	CNV_WT_CLK-	NA	70
73	CNV_WT_CLK+	+3.3V	72
75	GND	+3.3V	74

Back Side :

- * eDP Connector : Refer to No.16
- * M.2 Socket (Key-M) (With PCIe x4)

Pin	Signal	Signal	Pin
1	GND	+3.3V	2
3	GND	+3.3V	4
5	PERn3	NA	6
7	PERn3	NA	8
9	GND	SATA_LED	10
11	PETn3	+3.3V	12
13	PETp3	+3.3V	14
15	GND	+3.3V	16
17	PERn2	+3.3V	18
19	PERp2	NA	20
21	GND	NA	22
23	PETn2	NA	24
25	PETp2	NA	26
27	GND	NA	28
29	PERn1	NA	30
31	PERp1	NA	32
33	GND	NA	34
35	PETn1	NA	36
37	PETp1	DEVSLP	38
39	GND	SMB_CLK	40
41	PERn0/SATA-B+	SMB_DATA	42
43	PERp0/SATA-B-	NA	44
45	GND	NA	46
47	PETn0/SATA-A-	NA	48
49	PETp0/SATA-A+	PERST#	50
51	GND	CLKREQ#	52
53	PEFCLKn	WAKE#	54
55	PEFCLKp	NA	56
57	GND	NA	58
67	NA	NA	68
69	PEDET	+3.3V	70
71	GND	+3.3V	72
73	GND	+3.3V	74
75	GND		

* eDP Connector (on the Backside of PCB)



PIN	Signal Name
1	NA
2	GND
3	eDP_TX#3_CON
4	eDP_TX3_CON
5	GND
6	eDP_TX#2_CON
7	eDP_TX2_CON
8	GND
9	eDP_TX#1_CON
10	eDP_TX1_CON
11	GND
12	eDP_TX#0_CON
13	eDP_TX0_CON
14	GND
15	eDP_AUX_CON
16	eDP_AUX#_CON
17	GND
18	LCD_VCC
19	LCD_VCC
20	LCD_VCC
21	LCD_VCC
22	NA
23	GND
24	GND
25	GND
26	GND
27	eDP_HPD_CON
28	GND
29	GND
30	GND
31	GND
32	CON_LBKLT_EN
33	CON_LBKLT_CTL
34	SMB_DATA
35	SMB_CLK
36	LCD_BLT_VCC
37	LCD_BLT_VCC
38	LCD_BLT_VCC
39	LCD_BLT_VCC
40	NA

17 : LVDS Switch (LVDS_SWITCH1)
Open: LVDS
Short: eDP



18 : BL2
Open: Protect LCD_VCC
Short: No Protect LCD_VCC



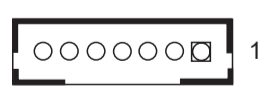
19 : ATX/AT Mode Jumper (SIO_AT1)
Open: ATX Mode
Short: AT Mode



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



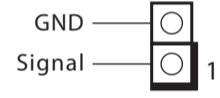
21 : Backlight Volume Control (BLT_VOL1)



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

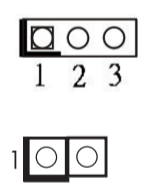
Chassis Intrusion Headers

- 22 : CI2 :
Close: Normal
Open: Active Case Open
- 23 : CI1 :
Close: Active Case Open
Open: Normal



24 : Clear CMOS Headers

- CLRMO1 :
1-2: Normal
2-3: Clear CMOS
- CLRMO2 :
Open: Normal
Short: Auto Clear CMOS (Power Off)



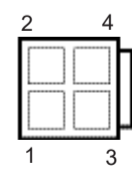
25 : 4-pin UPS Module Power Input Connector (Input +12V & +19V~+28V)



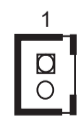
26 : 3W Audio AMP Output Wafer

PIN	Signal Name
4	OUTRN
3	OUTRP
2	OUTLP
1	OUTLN

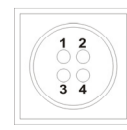
27 : ATX Power Connector (Input +12V & +19V~+28V)
1-2: GND
3-4: DC Input



28 : 2-pin UPS Module Power Input Connector
Pin1: GND
Pin2: DC Input



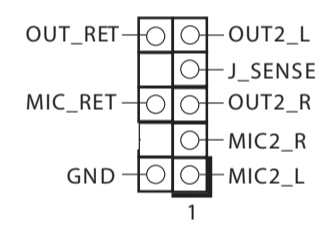
29 : DC Jack (DC_JACK1)



PIN	Signal Name	PIN	Signal Name
1	Power	2	Power
3	GND	4	GND

Audio Jacks
32 : Green - Line Out
30 : Pink - Mic In

31 : Front Panel Audio Header



RJ45 LAN Ports

- 33 : LAN2
- 35 : LAN1



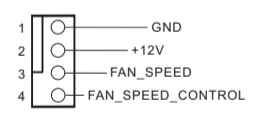
34 : SPDIF Header



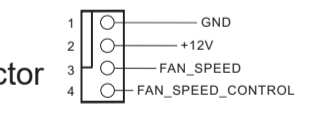
DisplayPorts

- 36 : DISPLAY3
- 39 : DISPLAY2
- 41 : DISPLAY1

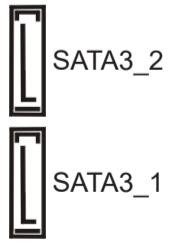
37 : CPU FAN Connector (+12V)



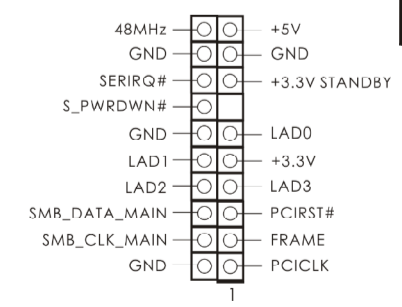
38 : Chassis FAN Connector (+12V)



40 : SATA3 Connectors (SATA3_1, SATA3_2)



42 : LPC Header



USB3.0 Ports
43 : USB3_2_3
44 : USB3_0_1