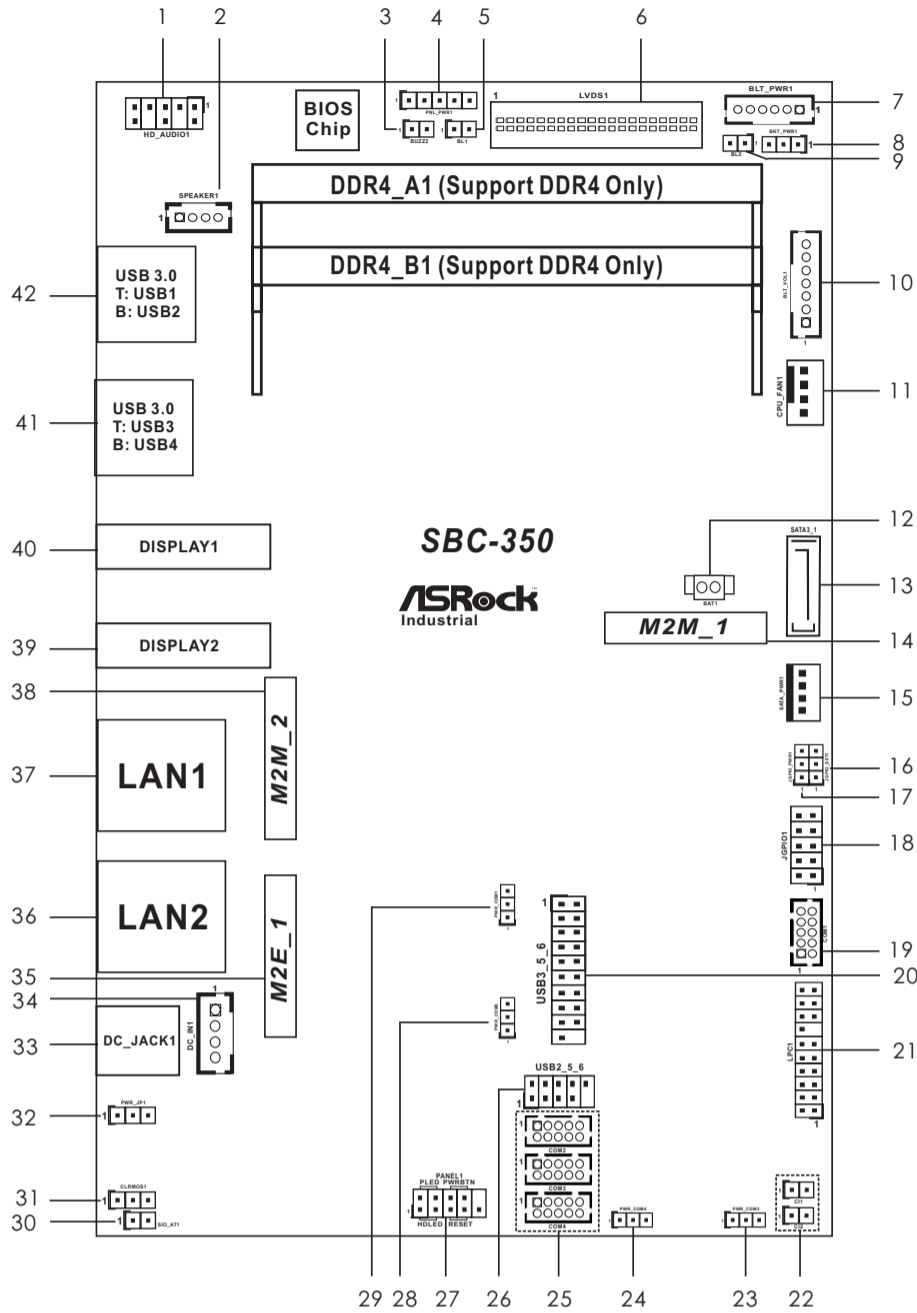




P/N: 15G06M085000AK V1.0

ASRock Industrial SBC-350

# Jumpers and Headers Setting Guide



1 : Front Panel Audio Header

2 : 3W Audio AMP Output Wafer

PIN	Signal Name
1	SPK L-
2	SPK L+
3	SPK R+
4	SPK R-

3 : Buzzer

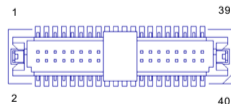
4 : Panel Power Select (LCD\_VCC) (PNL\_PWR1)

- 1-2 : +3V
- 2-3 : +5V
- 3-4 : +5V
- 4-5 : +12V

5 : BL1 :

- Open : Protect LCD\_BLT\_VCC
- Short : No Protect LCD\_BLT\_VCC

6 : LVDS Panel Connector



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

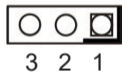
7 : Inverter Power Control Wafer (BLT\_PWR1)



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

8 : Backlight Power Select (LCD\_BLT\_VCC) (BKT\_PWR1)

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



9 : BL2 :

- Open : Protect LCD\_VCC
- Short : No Protect LCD\_VCC



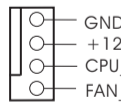
10 : Backlight & Amp Volume Control (BLT\_VOL1)

PIN	Signal Name
7	GND
6	GND
5	GPIO_BLT_DW
4	GPIO_BLT_UP
3	PWRDN
2	GPIO_VOL_DW
1	GPIO_VOL_UP



11 : 4-Pin CPU FAN Connector (+12V)

- GND
- +12V
- CPU\_FAN\_SPEED
- FAN\_SPEED\_CONTROL



12 : Battery Connector



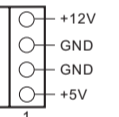
13 : SATA3 Connector (SATA3\_1)



14 : M.2 Key-M Socket (M2M\_1)

Pin	Signal	Signal	Pin
1	GND	+3.3V	2
3	GND	+3.3V	4
5	PER#3	NA	6
7	PER#3	NA	8
9	GND	SATA_LED	10
11	PET#3	+3.3V	12
13	PET#3	+3.3V	14
15	GND	+3.3V	16
17	PER#2	+3.3V	18
19	PER#2	NA	20
21	GND	NA	22
23	PET#2	NA	24
25	PET#2	NA	26
27	GND	NA	28
29	PER#1	NA	30
31	PER#1	NA	32
33	GND	NA	34
35	PET#1	NA	36
37	PET#1	DEVSLP	38
39	GND	SMB_CLK	40
41	PER#0/SATA-B+	SMB_DATA	42
43	PER#0/SATA-B-	NA	44
45	GND	NA	46
47	PET#0/SATA-A-	NA	48
49	PET#0/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		

15 : SATA Power Output Connector



16 : GPIO Default Setting (JGPIO\_SET1)

- 1-2 : Pull-High
- 2-3 : Pull-Low

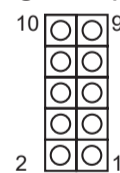


17 : Digital Input / Output Power Select (JGPIO\_PWR1)

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



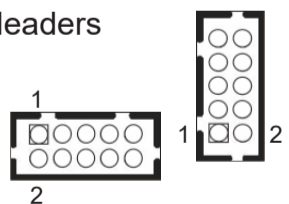
18 : Digital Input / Output Pin Header (JGPIO1)



PIN	Signal Name	PIN	Signal Name
10	GND	9	JGPIO_PWR
8	SIO_GP83	7	SIO_GP87
6	SIO_GP82	5	SIO_GP86
4	SIO_GP81	3	SIO_GP85
2	SIO_GP80	1	SIO_GP84

COM1, 2, 3, 4 Headers

- 19 : COM1\*
- 25 : COM2, 3, 4

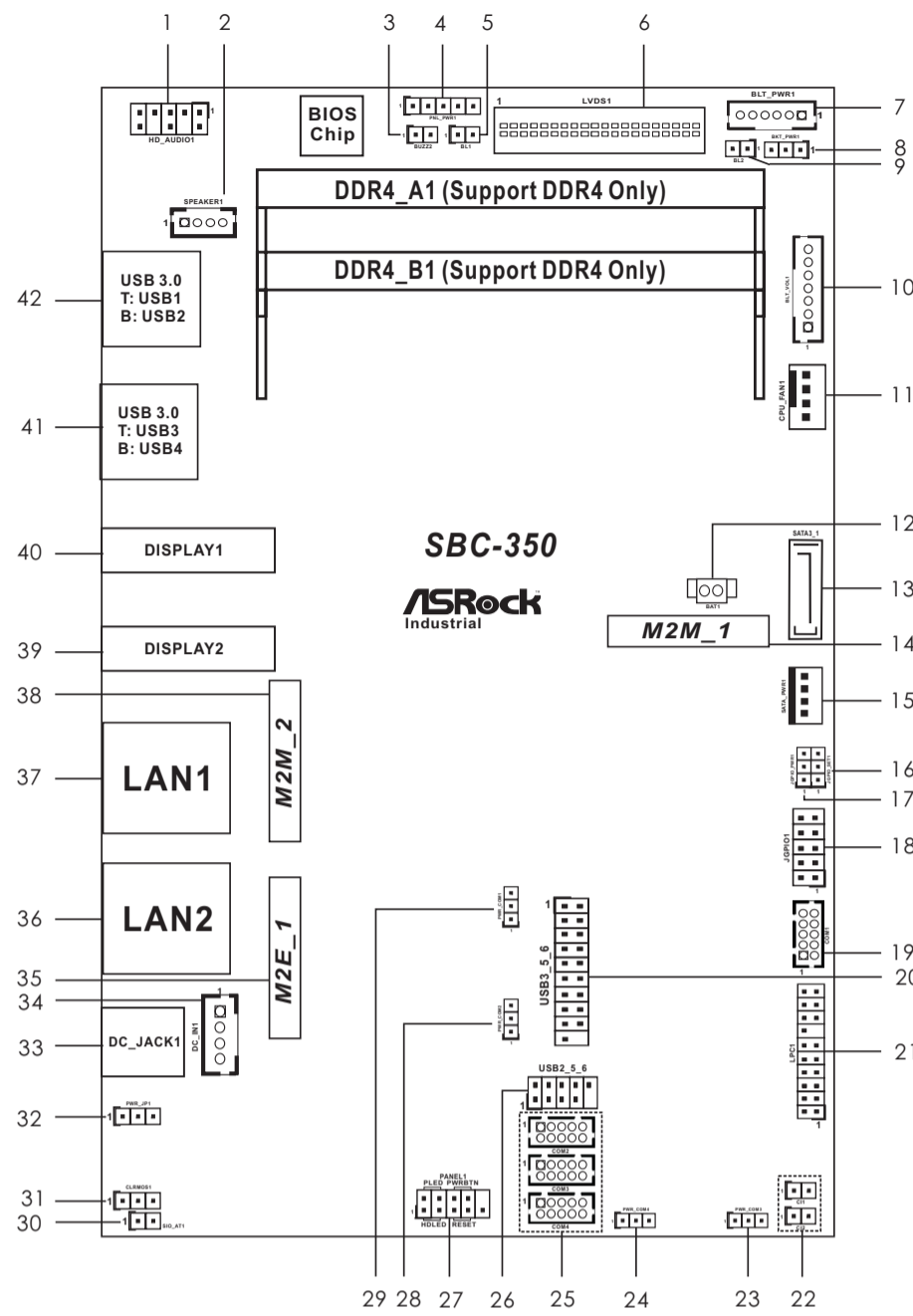


PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
1	DDCD#	3	TTXD	5	GND	7	RRTS#	9	DUMMY
2	RRXD	4	DDTR#	6	DDSR#	8	CCTS#	10	DUMMY

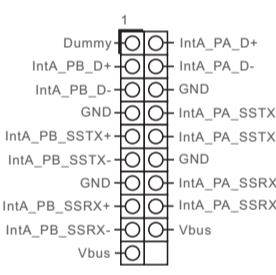
\* This motherboard supports RS232/422/485 on COM1 port. Please refer to below table for the pin definition. In addition, COM1 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to our user manual for details.

### COM1 Port Pin Definition

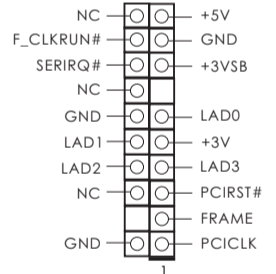
PIN	RS232	RS422	RS485
1	DCD	TX-	RTX-
2	RXD	RX+	N/A
3	TXD	TX+	RTX+
4	DTR	RX-	N/A
5	GND	GND	GND
6	DSR	N/A	N/A
7	RTS	N/A	N/A
8	CTS	N/A	N/A
9	NA/+5V/+12V	N/A	N/A



20 : USB3.0 Connector (USB3\_5\_6)

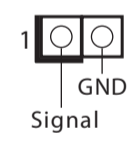


21 : LPC Header



22 : Chassis Intrusion Headers

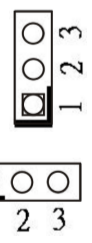
C11 :  
Close : Active case open  
Open : Normal  
C12 :  
Close : Normal  
Open : Active case open



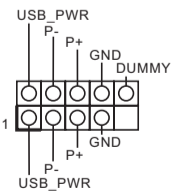
COM Port Pin9 PWR Setting Jumpers

29 : PWR\_COM1 (For COM Port1)  
28 : PWR\_COM2 (For COM Port2)  
23 : PWR\_COM3 (For COM Port3)  
24 : PWR\_COM4 (For COM Port4)

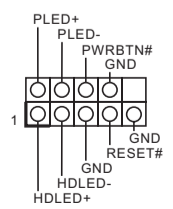
1-2 : +5V  
2-3 : +12V



26 : USB2.0 Connector (USB2\_5\_6)



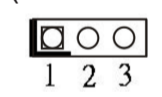
27 : System Panel Header



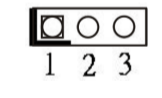
30 : SIO\_AT1  
Open : ATX Mode  
Short : AT Mode



31 : Clear CMOS Header (CLRMOS1)  
1-2 : Normal  
2-3 : Clear CMOS



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



33 : DC Jack (DC\_JACK1)

34 : ATX Power Connector  
(Input 9V-36V (Default);  
12V only (by BOM option))  
1-4 : GND  
2-3 : DC Input



35 : M.2 Key-E Socket (M2E\_1)

36 : RJ45 LAN Port (LAN2)

37 : RJ45 LAN Port (LAN1)

39 : DisplayPort (DP2)

40 : DisplayPort (DP1)

41 : USB3.0 Ports (USB34)

42 : USB3.0 Ports (USB12)

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
22	CNV_WGR_CLK+		
33	GND	CNV_BGI_DT	32
35	PETp	CNV_RGI_RSP	34
37	PETn	CNV_BRI_DT	36
39	GND	NA	38
41	PERp	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_DISABLE1#	54
57	GND	W_DISABLE2#	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

38 : M.2 Key-M Socket (M2M\_2)

Pin	Signal	Signal	Pin
1	GND	+3.3V	2
3	GND	+3.3V	4
5	NA	NA	6
7	NA	NA	8
9	GND	SATA_LED	10
11	NA	+3.3V	12
13	NA	+3.3V	14
15	GND	+3.3V	16
17	NA	+3.3V	18
19	NA	NA	20
21	GND	NA	22
23	NA	NA	24
25	NA	NA	26
27	GND	NA	28
29	NA	NA	30
31	NA	NA	32
33	GND	NA	34
35	NA	NA	36
37	NA	DEVSLP	38
39	GND	SMB_CLK	40
41	SATA-B+	SMB_DATA	42
43	SATA-B-	NA	44
45	GND	NA	46
47	SATA-A-	NA	48
49	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		

\* The thermal solution of whole system needs to be designed additionally.