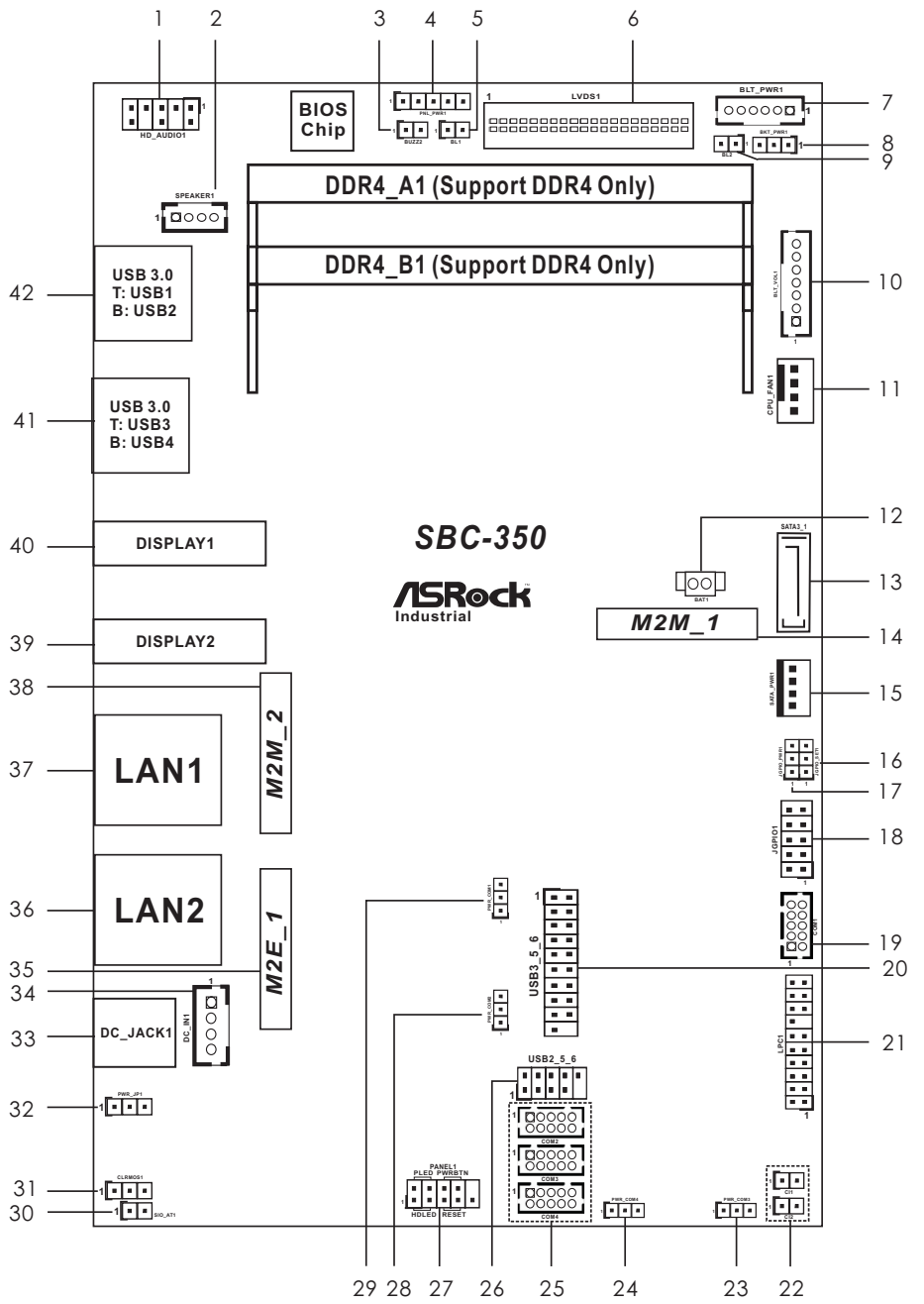
P/ N: 15G06M085000AK V1.0

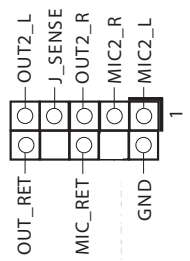
ASRock Industrial

SBC-350

Jumpers and Headers Setting Guide



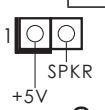
1 : Front Panel Audio Header



2 : 3W Audio AMP Output Wafer

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

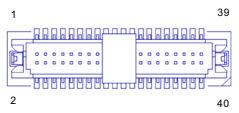
3 : Buzzer



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

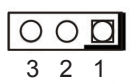


PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
2	LCD_VCC	1	LCD_VCC	3	+3.3V	5	LDDC_DATA
4	LDDC_CLK	6	LVDS_A_DATA0#	7	LVDS_A_DATA0	8	GND
10	LVDS_A_DATA1	9	LVDS_A_DATA1#	11	GND	12	LVDS_A_DATA2#
14	GND	13	LVDS_A_DATA2	15	LVDS_A_DATA3#	16	LVDS_A_DATA3
18	LVDS_A_CLK#	17	GND	19	LVDS_A_CLK	20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

7 : Inverter Power Control Wafer
(BLT_PWR1)

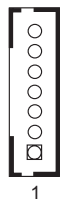
PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
6	LCD_BLT_VCC	5	LCD_BLT_VCC	4	CON_LBKLT_EN	3	CON_LBKLT_CTL	2	GND	1	GND

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



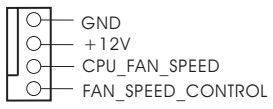
9 : BL2 :
Open : Protect LCD_VCC
Short : No Protect LCD_VCC

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)



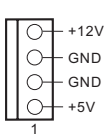
12 : Battery Connector

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	PERn3	NA	6
7	PERp3	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		

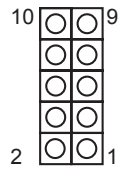
15 : SATA Power Output Connector



16 : GPIO Default Setting (JGPIO_SET1)
1-2 : Pull-High
2-3 : Pull-Low

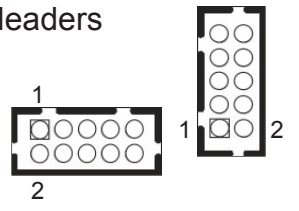
17 : Digital Input / Output Power Select
(JGPIO_PWR1)
1-2 : +12V
2-3 : +5V

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

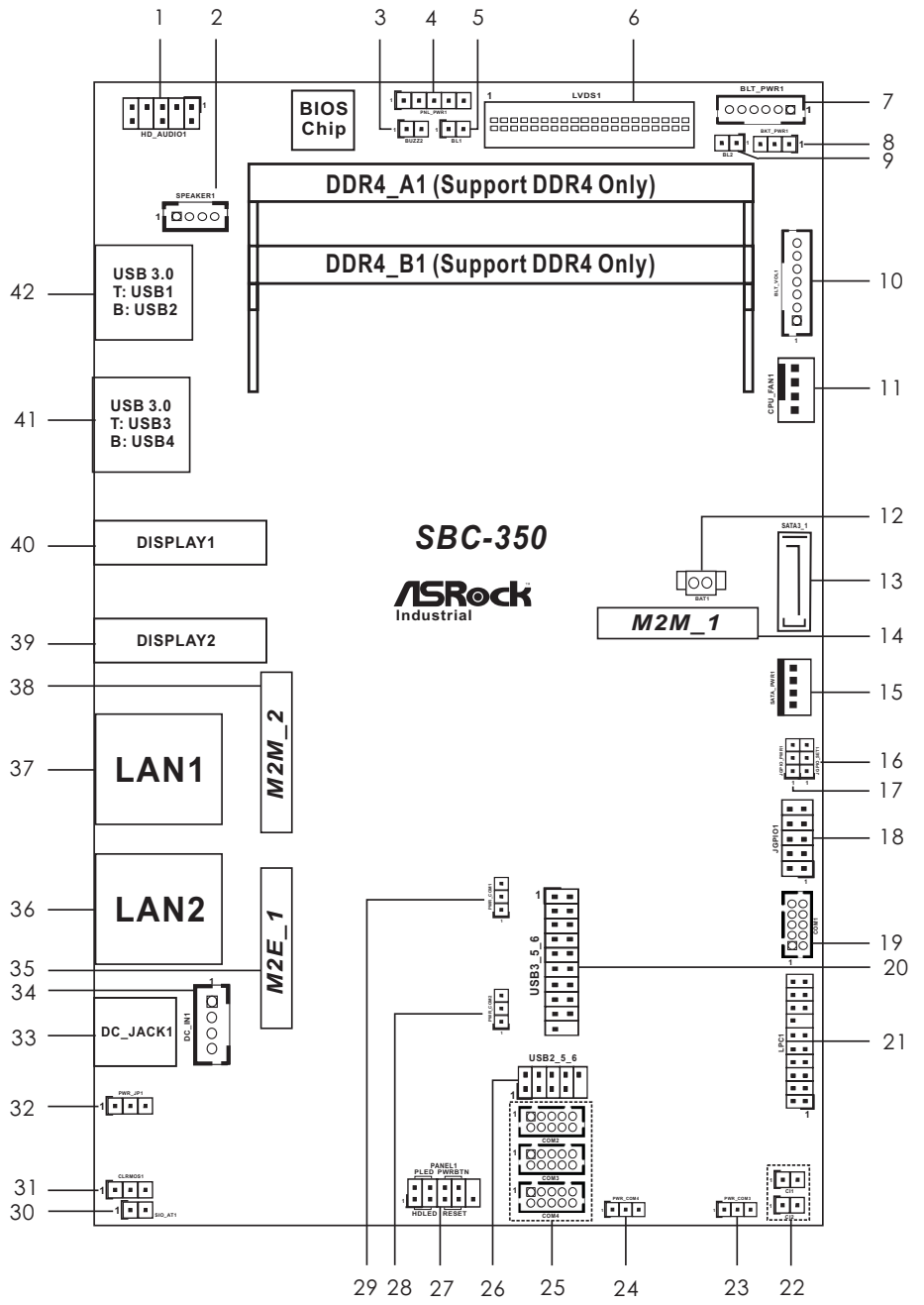


PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name	PIN	Signal Name
1	DDCD#	3	TTXD	5	GND	7	RRTS#	9	DUMMY
2	RRXD	4	DDTR#	6	DDSR#	8	CCTS#	10	DUMMY

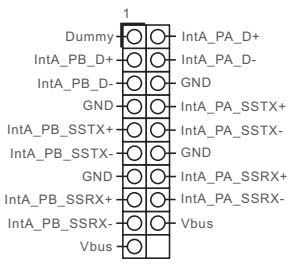
* This motherboard supports RS232/422/485 on COM1 port. Please refer to below table for the pin definition. In addition, COM1 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to our user manual for details.

COM1 Port Pin Definition

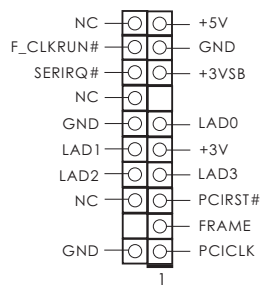
PIN	RS232	RS422	RS485
1	DCD	TX-	RTX-
2	RXD	RX+	N/A
3	TXD	TX+	RTX+
4	DTR	RX-	N/A
5	GND	GND	GND
6	DSR	N/A	N/A
7	RTS	N/A	N/A
8	CTS	N/A	N/A
9	NA/+5V/+12V	N/A	N/A



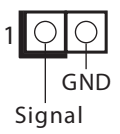
20 : USB3.0 Connector (USB3_5_6)



21 : LPC Header



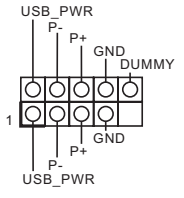
22 : Chassis Intrusion Headers
CI1 :
Close : Active case open
Open : Normal
CI2 :
Close : Normal
Open : Active case open



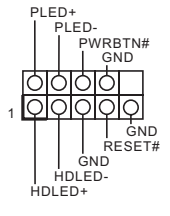
COM Port Pin9 PWR Setting Jumpers
29 : PWR_COM1 (For COM Port1)
28 : PWR_COM2 (For COM Port2)
23 : PWR_COM3 (For COM Port3)
24 : PWR_COM4 (For COM Port4)

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

26 : USB2.0 Connector (USB2_5_6)

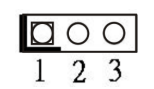


27 : System Panel Header

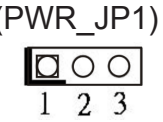


30 : SIO_AT1
Open : ATX Mode
Short : AT Mode

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

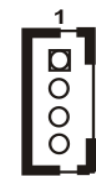


32 : ATX/AT Mode Select (PWR_JP1)
1-2 : AT Mode
2-3 : ATX Mode



33 : DC Jack (DC_JACK1)

34 : ATX Power Connector (Input 9V-36V)
1-4 : GND
2-3 : DC Input



35 : M.2 Key-E Socket (M2E_1)

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+		
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#	PERST0#	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

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)

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		