

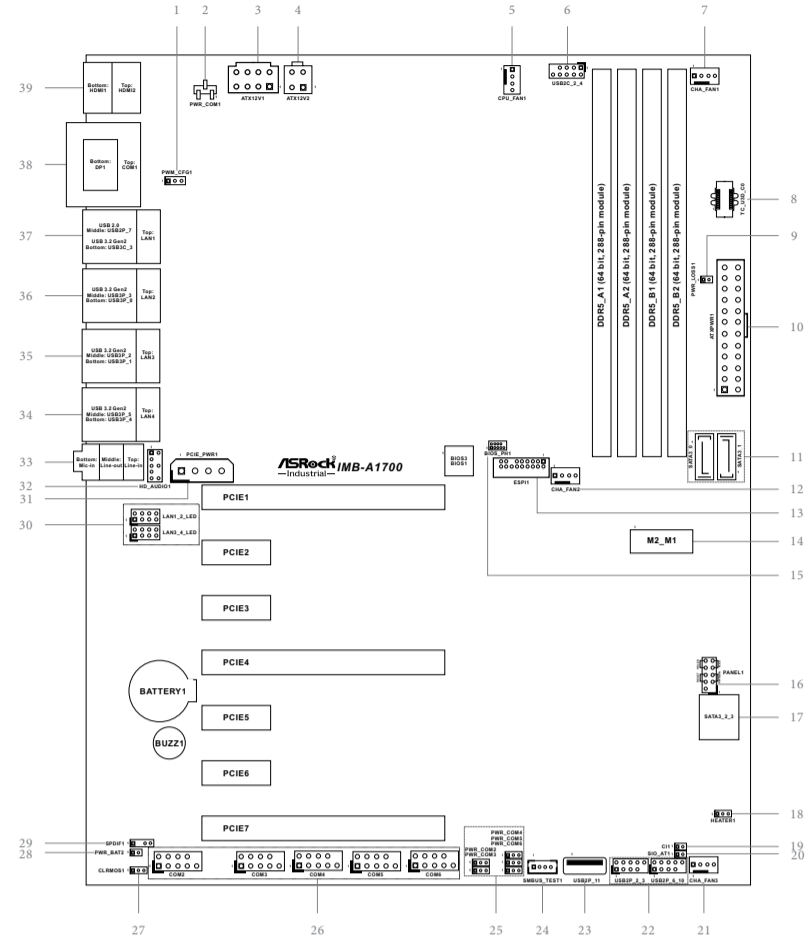
## IMB-A1700

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
### Revision History

Date	Description
November 26, 2025	First Release
April 8, 2026	Second Release
April 28, 2026	Third Release



### 1 : PWM\_CFG1 (for internal test)

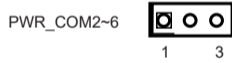
Pin	Signal Name
1	GND
2	VCORE_SDA
3	VCORE_SCL



### COM Port PWR Setting Jumpers

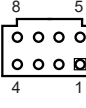
- 2 : PWR\_COM1 (For COM Port1)
- 25 : PWR\_COM2 (For COM Port2)
- PWR\_COM3 (For COM Port3)
- PWR\_COM4 (For COM Port4)
- PWR\_COM5 (For COM Port5)
- PWR\_COM6 (For COM Port6)

1-2: +5V (Default)  
2-3: +12V




### 3 : 8-pin ATX 12V Power Connector (ATX12V1)

Pin	Signal Name	Signal Name	Pin
1	GND	ATX12V	5
2	GND	ATX12V	6
3	GND	ATX12V	7
4	GND	ATX12V	8



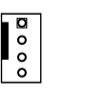
### 4 : 4-pin ATX 12V Power Connector (ATX12V2)

Pin	Signal Name	Signal Name	Pin
1	GND	GND	2
3	ATX12V	ATX12V	4



### 5 : CPU FAN Connector (+12V) (CPU\_FAN1)

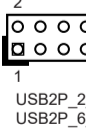
Pin	Signal Name
1	GND
2	+12V
3	CPU_FAN_SPEED
4	FAN_SPEED_CONTROL



### USB 2.0 Headers

- 6 : USB2C\_2\_4
- 22 : USB2P\_2\_3, USB2P\_6\_10


Pin	Signal Name	Signal Name	Pin
1	USB_PWR	USB_PWR	2
3	P-	P-	4
5	P+	P+	6
7	GND	GND	8
9	DUMMY	DUMMY	10



### Chassis FAN Connectors (+12V)

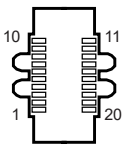
- 7 : CHA\_FAN1
- 12 : CHA\_FAN2
- 21 : CHA\_FAN3

Pin	Signal Name
1	GND
2	+12V
3	CHA_FAN_SPEED
4	FAN_SPEED_CONTROL



### 8 : Front Panel Type-C USB 3.2 Gen2 Header (TC\_U3D\_C0)

Pin	Signal Name	Signal Name	Pin
1	USB_PWR	USB_PWR	11
2	RE_USBC2_ TX1P/DP3_ TX2P	RE_USBC2_ TX2P/DP3_ TX1P	12
3	RE_USBC2_ TX1N/DP3_ TX2N	RE_USBC2_ TX2N/DP3_ TX1N	13
4	GND	GND	14
5	RE_USBC2_ RX1P/DP3_ TX0P	RE_USBC2_ RX2P/DP3_ TX3P	15
6	RE_USBC2_ RX1N/DP3_ TX0N	RE_USBC2_ RX2N/DP3_ TX3N	16
7	USB_PWR	GND	17
8	CC1	USB_D-	18
9	USBC2_SBU1	USB_D+	19
10	USBC2_SBU2	CC2	20

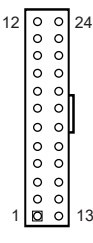


### 9 : Power Loss Header (PWR\_LOSS1) Open : No Power Loss (Default) Short : Power Loss



### 10 : 24-pin ATX Power Input Connector (ATXPWR1)

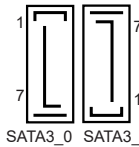
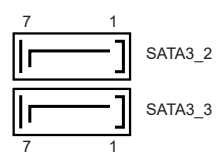
Pin	Signal Name	Signal Name	Pin
1	+3V	+3V	13
2	+3V	-12V	14
3	GND	GND	15
4	+5V	PSON#	16
5	GND	GND	17
6	+5V	GND	18
7	GND	GND	19
8	PWROK PS	NA	20
9	ATX+5VSB	+5V	21
10	+12V	+5V	22
11	+12V	+5V	23
12	+3V	GND	24



### SATA3 Connectors

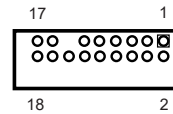
- 11 : SATA3\_0, SATA3\_1
- 17 : SATA3\_2\_3  
Top: SATA3\_2  
Bottom: SATA3\_3

Pin	Signal Name
1	GND
2	SATA-A+
3	SATA-A-
4	GND
5	SATA-B-
6	SATA-B+
7	GND

### 13 : ESPI Header (ESPI1)

Pin	Signal Name	Signal Name	Pin
1	ESPI_CLK	GND	2
3	ESPI_CS#	SMB_CLK_MAIN	4
5	ESPI_RST#	SMB_DATA_MAIN	6
7	ESPI_IO3	ESPI_IO2	8
9	+3V	ESPI_IO1	10
11	ESPI_IO0	GND	12
13	NA	NA	14
15	+3VSB	ESPI_ALERT#	16
17	GND	GND	18

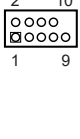


### 14 : M.2 Key-M Socket (M2\_M1)

Pin	Signal Name	Signal Name	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	USB_D+	34
35	PETn1	USB_D-	36
37	PETp1	NA	38
39	GND	SMB_CLK	40
41	PERn0	SMB_DATA	42
43	PERp0	NA	44
45	GND	NA	46
47	PETn0	NA	48
49	PETP0	PERST#	50
51	GND	CLKREQ#	52
53	PEFCLKn	NA	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	NA	76

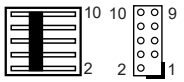
### 15 : BIOS\_PH1

Pin	Signal Name	Signal Name	Pin
1	F1_SPI_CS#	+1.8VSB_SPI_FLASH	2
3	F1_SPI_MISO	F1_SPI_DQ3	4
5	F1_SPI_DQ2	F1_SPI_CLK	6
7	RSMRST#	F1_SPI_MOSI	8
9	GND	NA	10




### 16 : System Panel Header (PANEL1)

Pin	Signal Name	Signal Name	Pin
1	GND	+5VSB	2
3	GND	RESET#	4
5	PWRBTN#	GND	6
7	PLED-	HDLED-	8
9	PLED+	HDLED+	10



### 18 : HEATER1 Header (HEATER1) (Preheat function)

Pin	Signal Name
1	Heater PWR (5V/1A)
2	GND
3	NTC (Negative Temperature Coefficient) thermistors

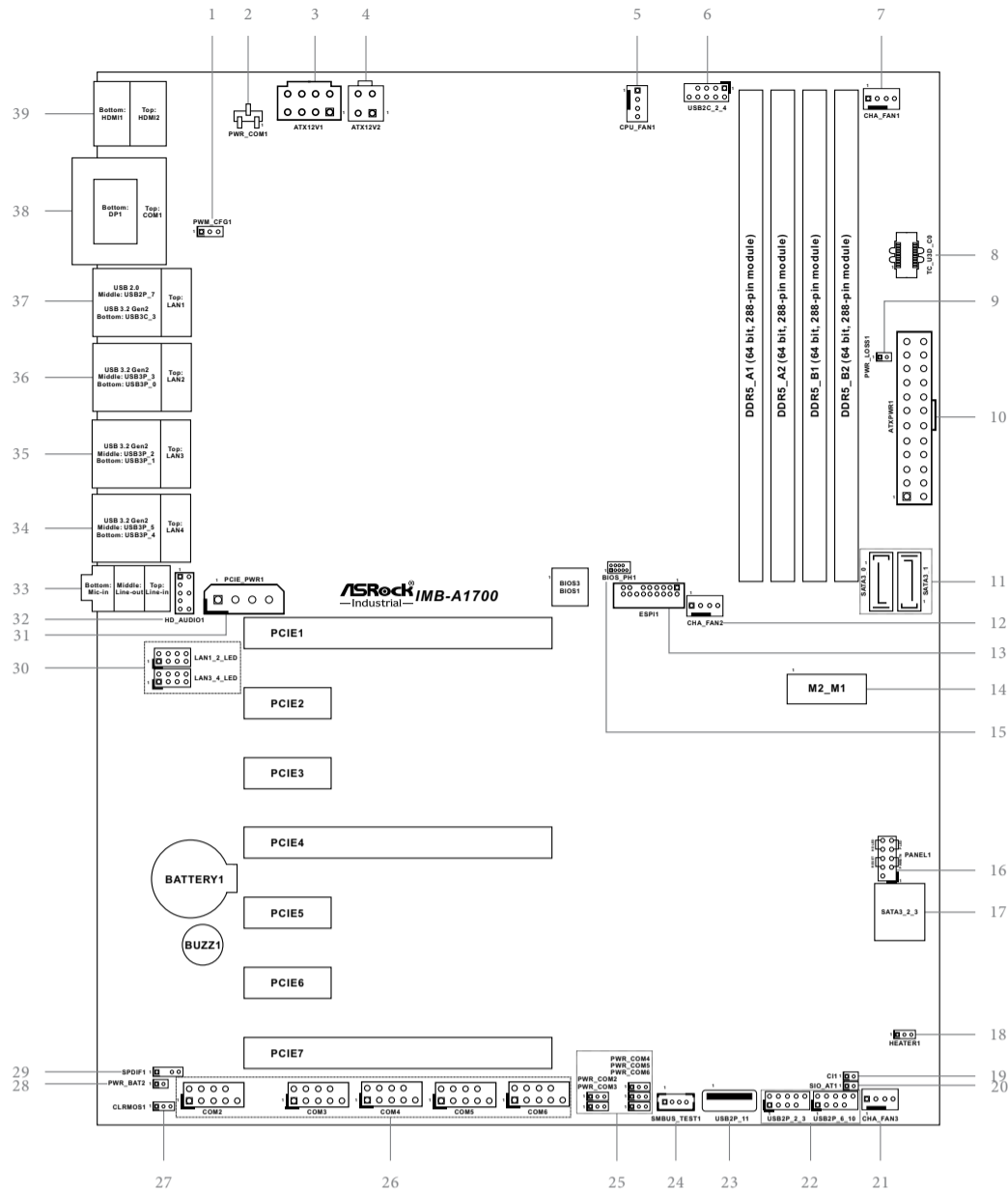


- The 10k Ohm NTC thermistor is suggested.
- Deep mode is not supported when the preheat function is enabled.

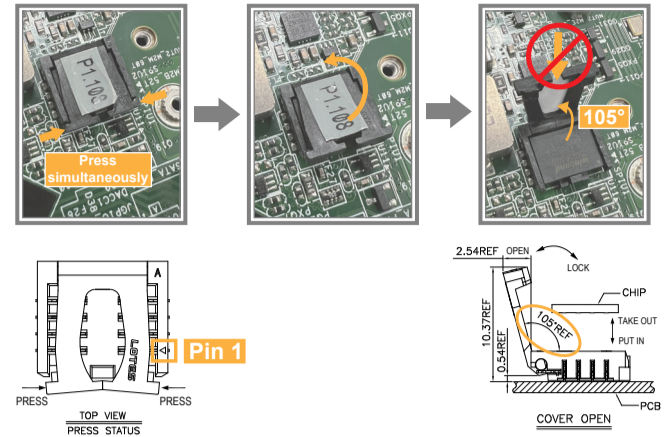
### 19 : Chassis Intrusion Header (CI1)

- Open: Normal (Default)
- Short: Active Case Open





### Installation of LOTES ROM Socket



- Do not press one side of the actuator cover at a time. Always apply even and simultaneous force to both sides to avoid damage.
- Do not apply force to the actuator cover after the IC is inserted, especially when it is fully opened at 105 degrees. Pressing vertically at this angle may cause the cover to break.



- The white dot (Pin 1) on the ROM must align with the Pin 1 position of the socket (white arrow area).
  - Ensure the white dot on the ROM is facing outward from the socket.
- Warning: Incorrect installation may damage the chipset and motherboard. Refer to the picture for proper orientation.**

20 : ATX/AT Mode Jumper (SIO\_AT1)  
 Open : AT Mode  
 Short : ATX Mode (Default)



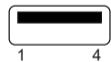
28 : PWR\_BAT2  
 Open : Normal (Default)  
 Short : Charge Battery\*



\* Only supported by chargeable battery.

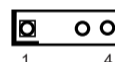
23 : USB 2.0 Type-A port (Vertical) (USB2P\_11)

Pin	Signal Name
1	USB_PWR
2	USB_D-
3	USB_D+
4	GND



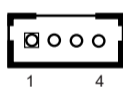
29 : SPDIF Header (SPDIF1)

Pin	Signal Name
1	+5V
2	SPDIF OUT
4	GND



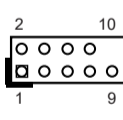
24 : SMBUS\_TEST1

Pin	Signal Name
1	SMB_W_GPIO_PROM21
2	SMB_CLK_MAIN
3	SMB_DATA_MAIN
4	GND



26 : COM Port Headers (COM2) (RS232/422/485)\* (COM3~6) (RS-232)

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



\* This motherboard supports RS232/422/485 on COM2 port. Please refer to the table below for the pin definition. In addition, COM2 port (RS232/422/485) can be adjusted by Jumper Setting. You may refer to our user manual for details.

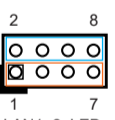
#### COM2 Port Pin Definition

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

30 : LAN LED Headers  
 LAN1\_2\_LED (For LAN1, LAN2 Ports)  
 LAN3\_4\_LED (For LAN3, LAN4 Ports)

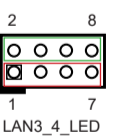
#### LAN1\_2\_LED:

Pin	Signal Name	Signal Name	Pin
1	LAN1_ACT+	LAN2_ACT+	2
3	210_1_LED_LNK#_ACT	226_2_LED_LNK#_ACT	4
5	LAN1_100#_C	LAN2_1000#_C	6
7	LAN1_1000#_C	LAN2_2500#_C	8



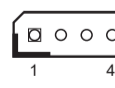
#### LAN3\_4\_LED:

Pin	Signal Name	Signal Name	Pin
1	LAN3_ACT+	LAN4_ACT+	2
3	RTL8125BG_3_ACT#	RTL8125BG_4_ACT#	4
5	LAN3_100#_C	LAN4_1000#_C	6
7	LAN3_1000#_C	LAN4_2500#_C	8



31 : PCIe Power Connector (PCIE\_PWR1)

Pin	Signal Name
1	NA
2	GND
3	GND
4	+12V



\* The connector provides additional power for PCIe slot devices.

33 : Audio Jacks  
 Top : Blue: Line-in  
 Middle : Green: Line-out  
 Bottom : Pink: Mic-in

34 : Top : RJ45 LAN Port (LAN4)  
 Middle: USB 3.2 Gen2 Port (USB3P\_5)  
 Bottom: USB 3.2 Gen2 Port (USB3P\_4)

35 : Top : RJ45 LAN Port (LAN3)  
 Middle: USB 3.2 Gen2 Port (USB3P\_2)  
 Bottom: USB 3.2 Gen2 Port (USB3P\_1)

36 : Top : RJ45 LAN Port (LAN2)  
 Middle: USB 3.2 Gen2 Port (USB3P\_3)  
 Bottom: USB 3.2 Gen2 Port (USB3P\_0)

37 : Top : RJ45 LAN Port (LAN1)  
 Middle: USB 2.0 Port (USB2P\_7)  
 Bottom: USB 3.2 Gen2 Port (USB3C\_3)

38 : Top : COM Port (COM1) (RS232/422/485)\*  
 Bottom : DisplayPort (DP1)

\* This motherboard supports RS232/422/485 on COM1 port. Please refer to the table below for the pin definition. In addition, COM1 port (RS232/422/485) can be adjusted by Jumper Setting. You may refer to our user manual for details.

#### COM1 Port Pin Definition

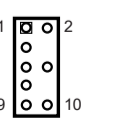
Pin	RS232	RS422	RS485
1	DCD	TX-	RTX-
2	RXD	TX+	RTX+
3	TXD	RX+	NA
4	DTR	RX-	NA
5	GND	GND	GND
6	DSR	NA	NA
7	RTS	NA	NA
8	CTS	NA	NA
9	PWR	PWR	PWR

27 : Clear CMOS Header (CLRMOS1)  
 Short Pin 1-2 : Clear CMOS  
 Short Pin 2-3 : Normal (Default)



32 : Front Panel Audio Header (HD\_AUDIO1)

Pin	Signal Name	Signal Name	Pin
1	MIC2_L	GND	2
3	MIC2_R		4
5	OUT2_R	MIC_RET	6
7	J_SENSE		8
9	OUT2_L	OUT_RET	10



39 : HDMI Ports  
 Top: HDMI2  
 Bottom: HDMI1