

AI-OOB-LITE kit

Revision History

Date	Description	Date	Description
August 26, 2025	First Release	June 17, 2026	Seventh Release
September 19, 2025	Second Release		
September 25, 2025	Third Release		
October 16, 2025	Fourth Release		
February 2, 2026	Fifth Release		
February 12, 2026	Sixth Release		

Package Content

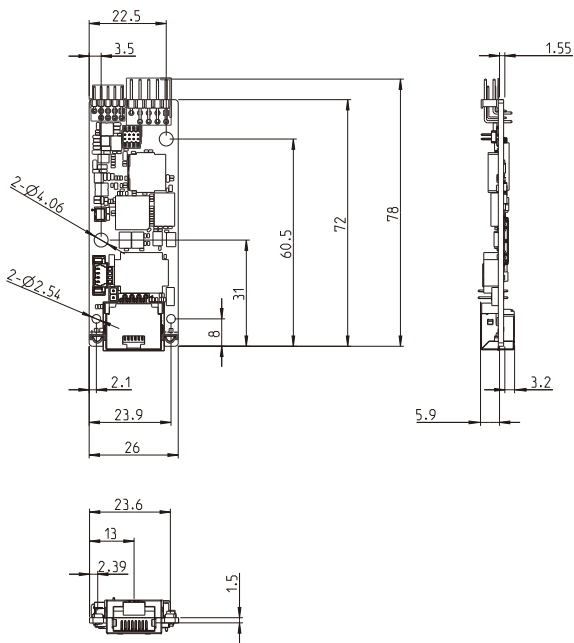
- AI-OOB-LITE: 1 x front panel cable, 3 x Power cable (optional), 1 x IO Bracket
- M2E-OOB: 1 x M2E-OOB cable

Specifications

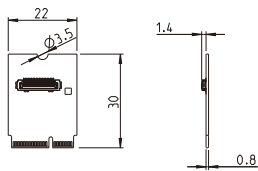
Model	AI-OOB-LITE	M2E-OOB
Form Factor	Customized	M.2 Key-E 2230
Function	Out-of-band Remote Management Module	
Dimensions (W x L x H/mm)	26 x 78 x 9.9	22 x 30 x 2.2
Input Interface/Power	• +5VSB • RJ45 (MDI) • 20-pin Header (PCIe x1, USB 2.0, GPIO x3)	• PCIe x1 • USB 2.0 • GPIO x3
Output Interface/Power	• Remote Power Control • 1 x Gigabit LAN	
Output Connector	• 1 x 2.00mm Panel Header • 1 x 2.54mm Panel Header • 1 x RJ45	20-pin Header x1
Operating Temperature	• -20°C ~ 70°C (I210-AT) • -40°C ~ 85°C (I210-IT)	
Storage Temperature	-40°C ~ 85°C	

Mechanical Drawing

- AI-OOB-LITE:



- M2E-OOB:

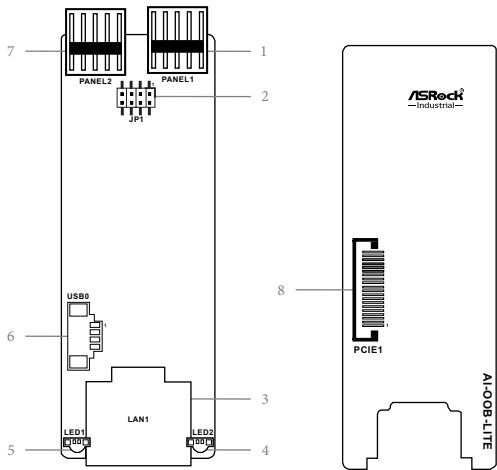


Card Layout

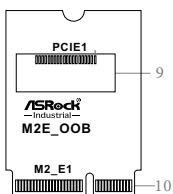
- AI-OOB-LITE:

Top:

Bottom:



- M2E-OOB:



Jumpers/Header Definition

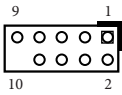
- AI-OOB-LITE:

System Panel Headers

1 : PANEL1 (2.54mm)

7 : PANEL2 (2.00mm)

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



2 : JP1

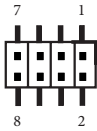
1-3: Power input from PANEL1, PANEL2 (Default)

3-5: Power input from USB0

2-4: MPU boot from SPI mode (Default)

4-6: MPU boot from USB mode

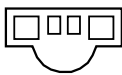
7-8: Factory Reset



3 : RJ45 LAN Port (LAN1)

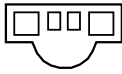
4 : LED2 (LAN1 Speed LED)

Status	Description
Off	10Mbps connection
Red	100Mbps connection
Blue	1000Mbps connection



5 : LED1 (LAN1 Act/Link LED)

Status	Description
Off	No link
Blinking	Data activity
On	Link



- M2E-OOB:

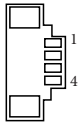
9 : PCIE1

Pin	Signal Name
1	NA
2	MPU_RESET
3	PLT_RST#
4	GND
5	PCIE_CLKP
6	PCIE_CLKN
7	GND
8	PCIE_TXP
9	PCIE_TXN
10	GND
11	PCIE_RXP
12	PCIE_RXN
13	GND
14	HEARTBEAT
15	GND
16	USB_D-
17	USB_D+
18	GND
19	BOOT_SOURCE
20	NA



6 : USB 2.0 Header (USB0)

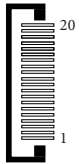
Pin	Signal Name
1	USB_PWR
2	USB-
3	USB+
4	GND



Backside:

8 : PCIE Connector (PCIE1)

Pin	Signal Name
1	NA
2	MPU_RESET
3	PLT_RST#
4	GND
5	PCIE_CLKP
6	PCIE_CLKN
7	GND
8	PCIE_TXP
9	PCIE_TXN
10	GND
11	PCIE_RXP
12	PCIE_RXN
13	GND
14	HEARTBEAT
15	GND
16	USB_D-
17	USB_D+
18	GND
19	BOOT_SOURCE
20	NA



10 : M.2 Key E Socket (M2_E1)

Pin	Signal Name	Signal Name	Pin
1	GND	NA	2
3	USB_D+	NA	4
5	USB_D-	NA	6
7	GND	NA	8
9	NA	NA	10
11	NA	NA	12
13	NA	NA	14
15	NA	NA	16
17	NA	GND	18
19	NA	NA	20
21	NA	NA	22
23	NA		
		NA	32
33	GND	NA	34
35	PETp	NA	36
37	PETn	NA	38
39	GND	NA	40
41	PERp	NA	42
43	PERn	NA	44
45	GND	NA	46
47	PEFCLKp	NA	48
49	PEFCLKn	NA	50
51	GND	PERST0#	52
53	HEARTBEAT	MPU_RESET	54
55	NA	BOOT_SOURCE	56
57	GND	NA	58
59	NA	NA	60
61	NA	NA	62
63	GND	NA	64
65	NA	NA	66
67	NA	NA	68
69	GND	NA	70
71	NA	NA	72
73	NA	NA	74
75	GND		