

MPX-M2EG

M.2(NGFF) to Mini-PCle adapter with Gigabit Ethernet

User's Manual

Edition 1.31

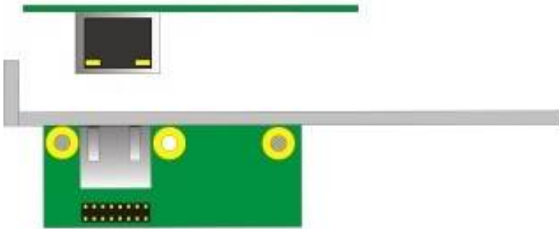
2025/01/08



Packing List:

Please check the package content before you starting using the card.

a.



1 x LAN Adapter
(BADPGLAND_A / 4120007011)
(Include Bracket)

b.



1 x Adapter LAN Cable
(OALGLAN-A-20S / 1040650)
(L=200mm)

Index

1 <Product Overview>	3
2 <Features>	4
3 <Block Diagram>	5
4 <Product Specifications>	6
4.1 < Recommended Operating Conditions > ..	6
5 <Component Placement>	7
5.1 < Connector Reference >	7
5.2 < Cable connection >	9
6 <Mechanical Drawing>	10
Contact information	13

1 <Product Overview>

MPX-M2EG M.2 (NGFF) to Mini_PCl_e Adapter with Key A-E PCIe interface, support 2230/3030 dimension M.2 module to Mini_PCl_e slot for easily Install in SBC.

MPX-M2EG provides PCIe & USB interface for support such IEEE 802.11 ac/a/b/g/n + Bluetooth M2 module.

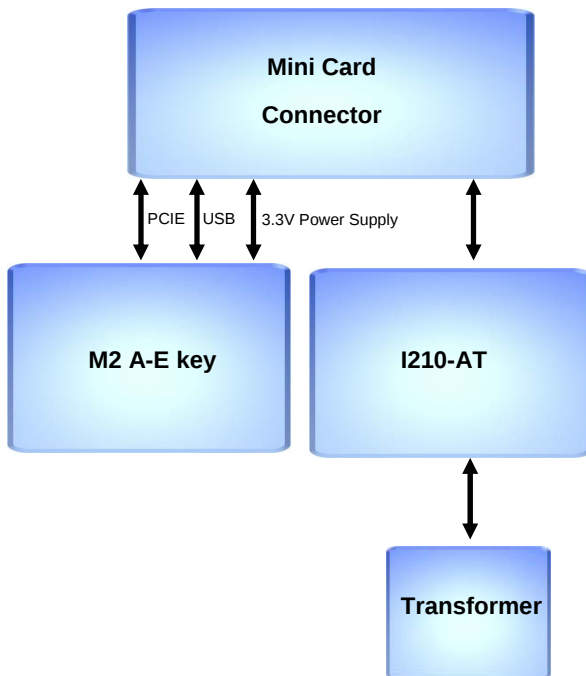
MPX-M2EG is no drivers needed for use M.2 module on this adapter.

MPX-M2EG module adopts Intel® Ethernet Controller I210 Family solution. The module design is based on the Intel® Ethernet Controller I210-AT.

2 <Features>

- ✧ **M.2 (NGFF) to Mini-PCIe**
- ✧ **Support 2230/3030 M.2 Card dimension**
- ✧ **Support M.2 Key A-E PCIe interface**
- ✧ **PCIe + USB interface**
- ✧ **Intel® I210-AT Giga LAN**

3 <Block Diagram>



4 <Product Specifications>

Product Description

Host Interface	PCIe + USB
Controller	Intel® Ethernet Controller I210-AT
Dimension	30.00mm x 50.95mm x 9.6mm (L x W x H)

Operating Conditions

Voltage	3.3V +/-5%
Temperature	0~60°C
Storage Temperature	-40~+85°C

General Specifications

M.2 Size	2230 / 3030
M.2 Key Type	A-E PCIe interface
mPCIe Size	Full Size
PCIe version	1.1
USB version	2.0

LAN

LAN transfer rate	1000 Mb/s, 100 Mb/s, 10 Mb/s
LAN OS support	Win7x86, Win7x64, Win8x86, Win8x64, Win8.1x86, Win8.1x64, Win2012, Win10x86, Win10x64

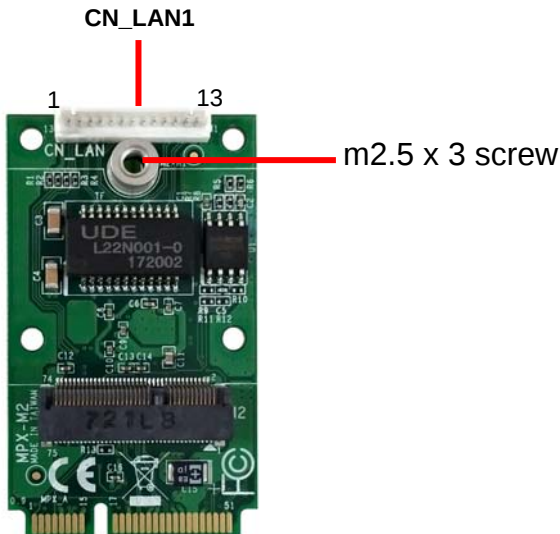
4.1 < Recommended Operating Conditions >

Symbol	Parameter	Rating	Unit
Vdd33	I/O voltage	3.135~3.465	V

5 <Component Placement>

5.1 < Connector Reference >

MPX-M2EG:



Connector: CN_LAN1

Connector Type:

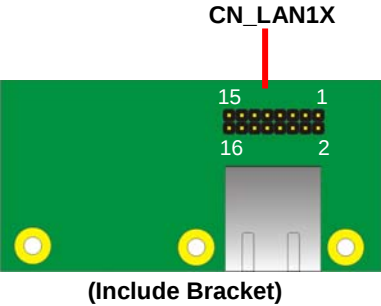


13-pin (13 x 1), pitch: 1.25 mm, DIP type

Straight P.C.B Connector

Pin	Description(LAN1)
1	RTD00+
2	RTD00-
3	RTD01+
4	RTD01-
5	RTD02+
6	RTD02-
7	RTD03+
8	RTD03-
9	GND
10	RLINK1G0-
11	RLINK1H0-
12	RACTLED0-
13	RLINK0-

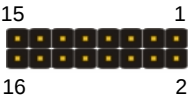
LAN Adapter:



CN_LAN1X

Connector Type:

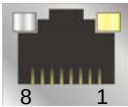
16-pin (8 x 2) 2.0 x 2.0 mm Straight Type Header



Pin	Description	Pin	Description
1	RTD0+	2	RTD1+
3	RTD0-	4	RTD1-
5	NC	6	GND
7	RTD2+	8	RTD3+
9	RTD2-	10	RTD3-
11	GND	12	GND
13	LINK1	14	Link100
15	ACTLED1	16	Link1000

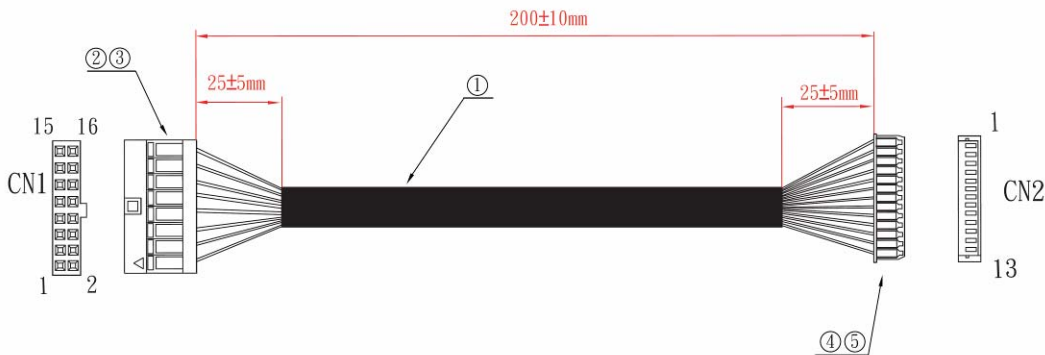
Adapter LAN Connector: RJ45_1

RJ45 10/100/1000Mbps connector



Pin	1	2	3	4	5	6	7	8
Description	MDI0+	MDI0-	MDI1+	MDI2+	MDI2-	MDI1-	MDI3+	MDI3-

5.2 < Cable connection >

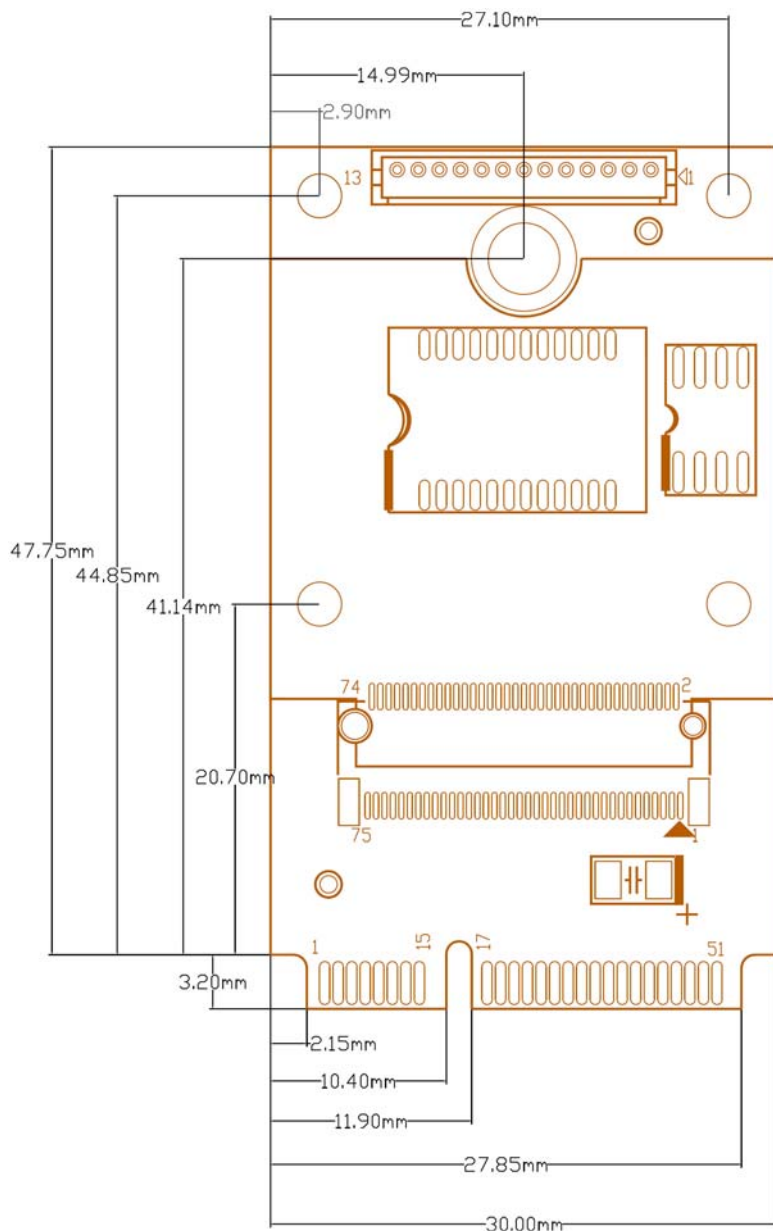


CN1	CN2	CN1	CN2
1	1	12	9
3	2	16	10
2	3	14	11
4	4	13	12
7	5	15	13
9	6		
8	7		
10	8		

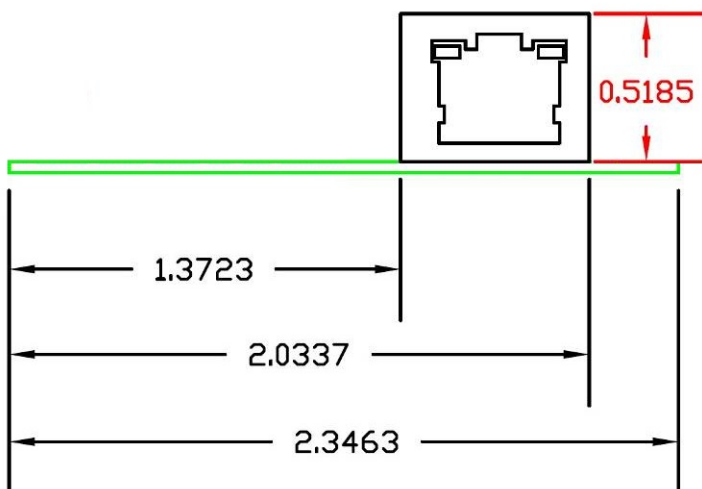
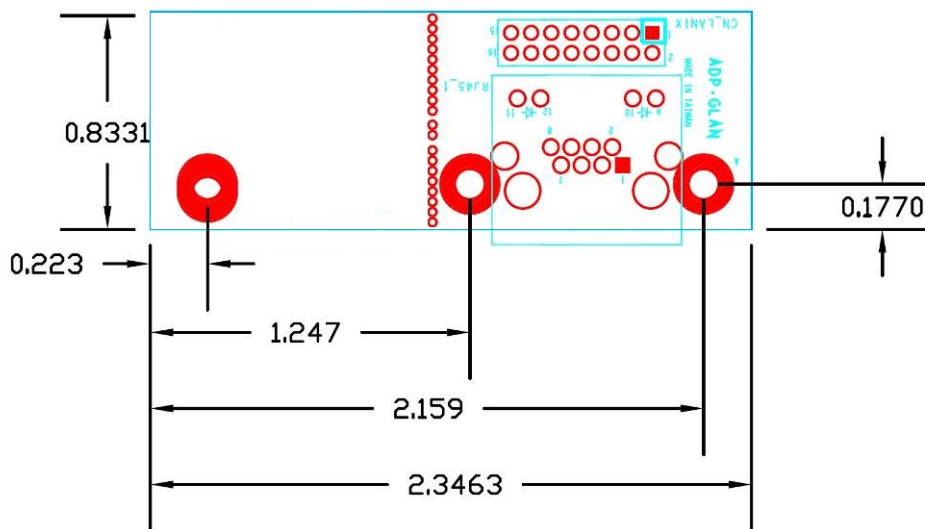
NO	DESCRIPTION	COLOR	Q' TY	UNIT
1	UL1571 28AWG		13	PCS
2	HOUSING DP2.0 2*8P	BLACK	1	PCS
3	TERMINAL DP2.0		13	PCS
4	HOUSING MOLEX1.25 13PIN	WHITE	1	PCS
5	TERMINAL MOLEX 1.25		13	PCS

6 <Mechanical Drawing>

MPX-M2EG: (Units: mm)



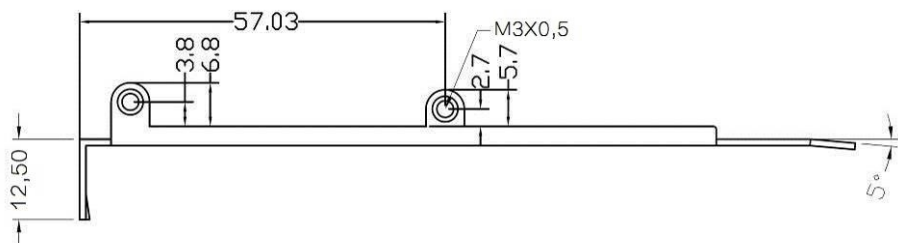
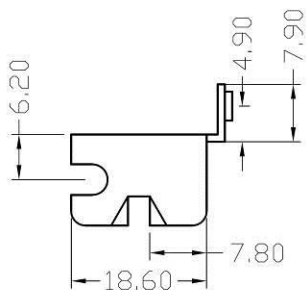
LAN Adapter: (Units: inch)

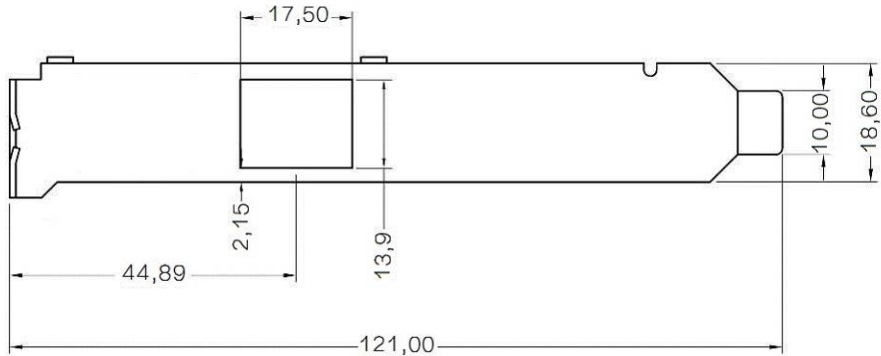


Mechanical height: (Units: mm)



Bracket: (Units: mm)





Contact information

Any advice or comment about our products and service, or anything we can help you please don't hesitate to contact with us. We will do our best to support you for your products, projects and business.

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