

M2-350

Dual / Quad Gigabit Ethernet M2 Card

User's Manual

Edition 1.1
2021/12/24



M2-3502 Packing List:

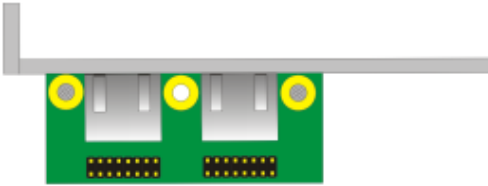
Please check the package content before you starting using the card.



1 x M2-3502



1 x CD Driver



1 x Dual LAN Adapter
(BADPGLAND2_A / 4120007021)
(Include Bracket)



2 x Adapter LAN Cable
(OALGLAN-A-20 / 1040617)
(L=200mm)

M2-3504 Packing List:

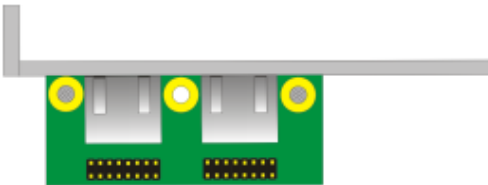
Please check the package content before you starting using the card.



1 x M2-3504



1 x CD Driver



2 x Dual LAN Adapter
(BADPGLAND2_A / 4120007021)
(Include Bracket)



4 x Adapter LAN Cable
(OALGLAN-A-20 / 1040617)
(L=200mm)

Index

1 <Product Overview>.....	3
2 <Block Diagram>.....	4
3 <Product Specifications>.....	5
4 <Pin-out Definition>.....	6
5 <Component Placement>	7
5.1 < Connector Reference >	7
5.2 < Cable connection >.....	10
Contact information	11

1 <Product Overview>

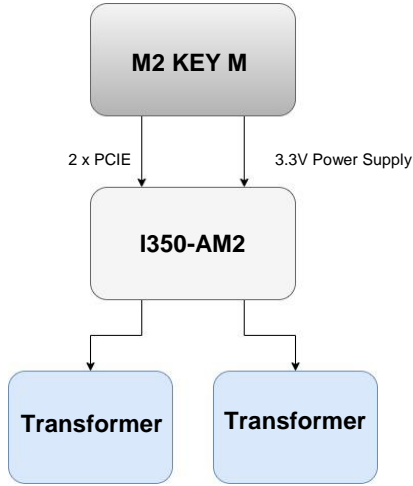
M2-350 M.2 KEY M module is the dual or quad port gigabit Ethernet solution with multiple interface options to let users. It enables a high performance, cost effective, low power.

Compliant with the standard IEEE 802.3 Ethernet interface for 1000BASE-T, 100BASE-TX, and 10BASE-T applications (802.3, 802.3u, and 802.3ab)

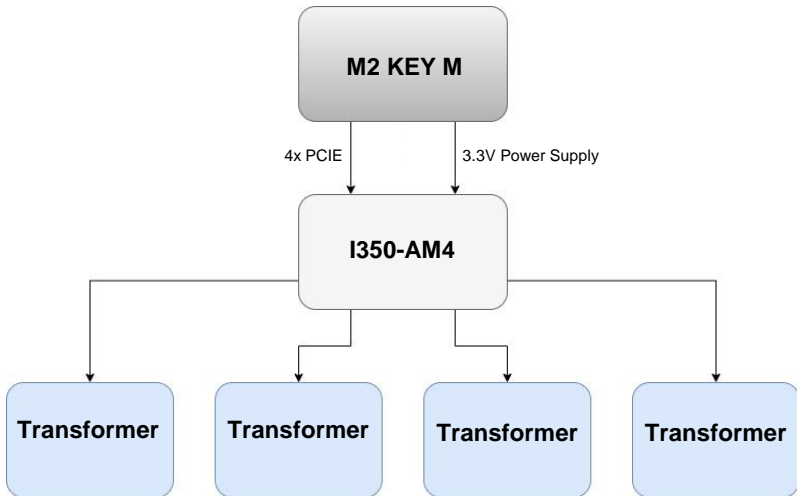
M2-350 run up to four 1GbE ports with enhanced power-saving and market-leading flexible I/O virtualization, including Virtual Machine Device Queues (VMDQ) and single root I/O virtualization (SR-IOV). Intel's software drivers and support are unmatched for virtual or non-virtualized environments.

2 <Block Diagram>

M2-3502



M2-3504



3 <Product Specifications>

M2-3502 Product Description

Controller	Intel® I350-AM2 Dual Gigabit Ethernet Controller
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M2-3504 Product Description

Controller	Intel® I350-AM4 Quad Gigabit Ethernet Controller
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Operating Conditions

Voltage	3.3V +/-5%
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Temperature	0~55°C (Note)
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Storage Temperature	-40~+85°C
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General Specifications

Host Interface	M.2 KEY M
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Dimension	22.00mm x 80.00mm
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Compliance	IEEE 802.3 Ethernet interface for 1000Base-T, 100Base-TX, and 10Base-T applications (802.3, 802.3u, 802.3ab).
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Transfer Rate	1000 Mb/s, 100 Mb/s, or 10 Mb/s
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Support OS	Win7 x32&x64, Win8 x32&x64, Win8.1 x32&x64, Win10 x32&x64, Win server 2012 R2. Linux (kernel versions 2.6.30 or newer)
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Note: Airflow required for operation when the integrated system is used together.

4 <Pin-out Definition>

Pin	Signal	Pin	Signal
1	NC	2	3.3V
3	GND	4	3.3V
5	PCIe3_TX-	6	NC
7	PCIe3_TX+	8	NC
9	GND	10	NC
11	PCIe3_RX-	12	3.3V
13	PCIe3_RX+	14	3.3V
15	GND	16	3.3V
17	PCIe2_TX-	18	3.3V
19	PCIe2_TX+	20	NC
21	GND	22	NC
23	PCIe2_RX-	24	NC
25	PCIe2_RX+	26	NC
27	GND	28	NC
29	PCIe1_TX-	30	NC
31	PCIe1_TX+	32	NC
33	GND	34	NC
35	PCIe1_RX-	36	NC
37	PCIe1_RX+	38	NC
39	GND	40	NC
41	PCIe0_TX-	42	NC
43	PCIe0_TX+	44	NC
45	GND	46	NC
47	PCIe0_RX-	48	NC
49	PCIe0_RX+	50	PERST#
51	GND	52	CLKREQ#
53	PCIe_CLK-	54	PEWAKE#
55	PCIe_CLK+-	56	NC
57	GND	58	NC

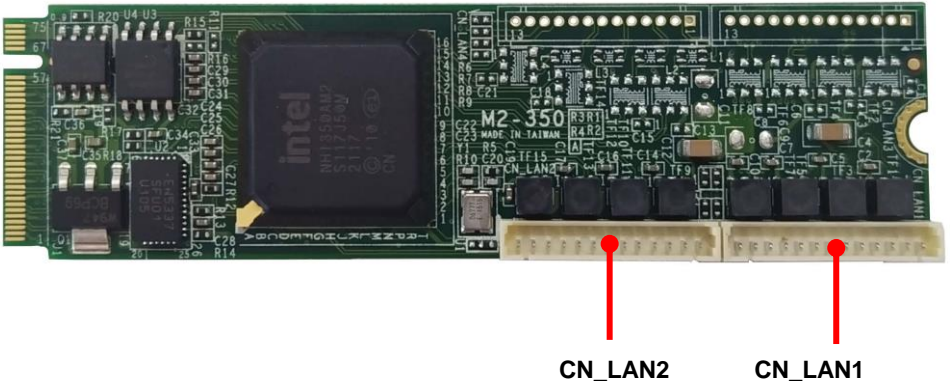
KEY M

67	NC	68	NC
69	NC	70	3.3V
71	GND	72	3.3V
73	GND	74	3.3V
75	GND		

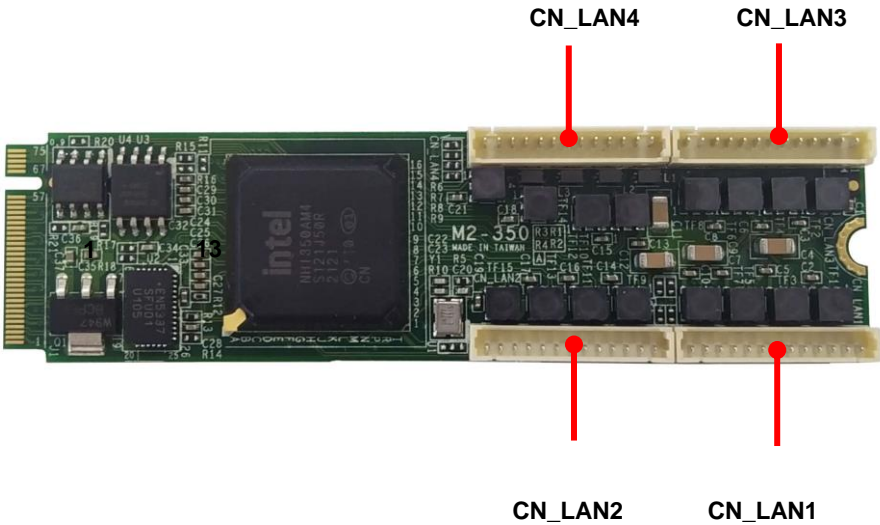
5 <Component Placement>

5.1 < Connector Reference >

M2-3502:



M2-3504:



Connector:

CN_LAN1 / 2/ 3/ 4

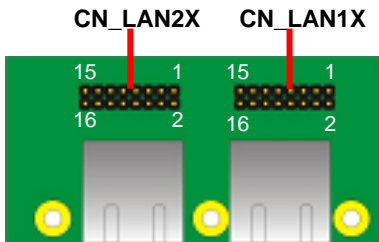
Connector Type:

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

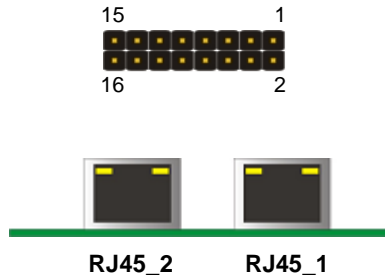
Straight P.C.B Connector



Pin	Description	Pin	Description
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-		



(Include Bracket)



LAN Adapter:

Connector:

CN_LAN1X / CN_LAN2X

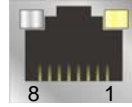
Connector Type:

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

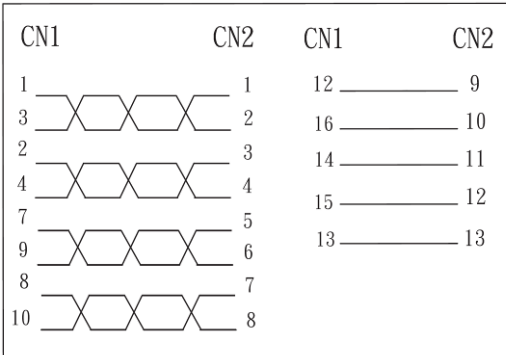
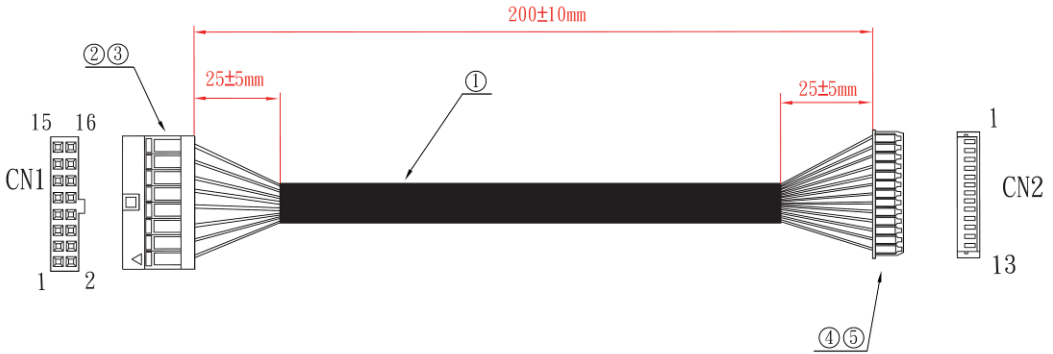
Adapter LAN Connector: RJ45_1/2

RJ45 10/100/1000Mbps connector



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

5.2 < Cable connection >



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

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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