

P/N: 15G065045001AK V1.1

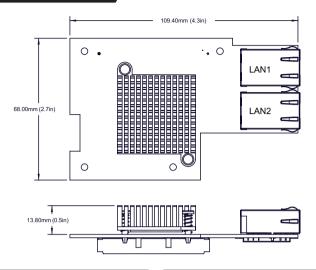
Quick Installation Guide Mezzanine Card Series



Introduction

Thank you for purchasing ASRock Rack mezzanine card, a reliable mezzanine card produced under ASRock Rack's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock Rack's commitment to quality and endurance.

Model	Dimension	Interface	/ Connector	LAN / Storage Controller
M350	2.7" x 4.3" (6.8 cm x 10.9 cm)	Gigabit LAN 10/100/1000 Mb/s	/ 2 x RJ45	1 x Intel® i350
M540	2.7" x 4.3" (6.8 cm x 10.9 cm)	10G/1G/100M/s	/ 2 x RJ45 (10G Base-T)	1 x Intel® X540
M599	2.7" x 4.3" (6.8 cm x 10.9 cm)	10G/s	/ 2 x SFP+ (Fiber)	1 x Intel® 82599ES
M350R	2.7" x 4.3" (6.8 cm x 10.9 cm)	Gigabit LAN 10/100/1000 Mb/s	/ 2 x RJ45	1 x Intel® i350
M540R	2.7" x 4.3" (6.8 cm x 10.9 cm)	10G/1G/100M/s	/ 2 x RJ45 (10G Base-T)	1 x Intel® X540
M599R	2.7" x 4.3" (6.8 cm x 10.9 cm)	10G/s	/ 2 x SFP+ (Fiber)	1 x Intel® 82599ES
M710	2.7" x 4.3" (6.8 cm x 10.9 cm)	10/40Gb/s	/ 2 x QSFP+ 40Gb/s	1 x Intel® XL710-AM2
M710S	2.7" x 4.3" (6.8 cm x 10.9 cm)	10/40Gb/s	/ 1 x QSFP+ 40Gb/s	1 x Intel® XL710-AM1
MCX3	2.7" x 4.3" (6.8 cm x 10.9 cm)	10/40Gb/s	/ 2 x QSFP+ 40Gb/s	1 x Mellanox ConnectX*-3 Pro EN
M3008S	2.7"x 4.3" (6.8 cm x 10.9 cm)	SAS 12G	/ 2 x SAS HD 4i (8 ports)	AvagoSAS3008 PowerPC 476 controller @ 1.2 GHz



Package Contents

- 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout





- 1 LAN RJ-45 Port (LAN1)
- 2 LAN RJ-45 Port (LAN2)

LAN Port LED Indications

Activity / Link LED

Status Description
Off No Link
Blinking Data Activity
On Link



Speed LED

StatusDescriptionOff10Mbps connectionOrange100Mbps connectionGreen1Gbps connection

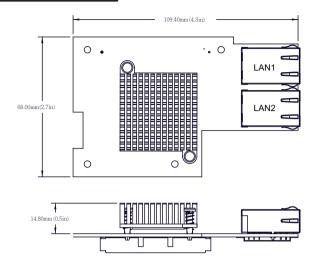
Onboard Header

Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.





Package Contents

- · 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- LAN RJ-45 Port (10G Base-T)(LAN1)
- 2 LAN RJ-45 Port (10G Base-T)(LAN2)

LAN Port LED Indications

Activity / Link LED

Status Description
Off No Link
Blinking Data Activity
On Link



Speed I	LED
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StatusDescriptionOff10Mbps connectionOrange100Mbps connectionGreen1Gbps connection

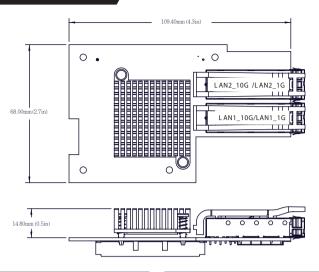
Onboard Header

Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.





Package Contents

- · 1 x Mezzanine Card
- · 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- 1 SFP+ Port (Fiber) (LAN1)
- 2 SFP+ Port (Fiber) (LAN2)

LAN Port LED Indications

Activity / Link LED

Status	Description
Off	No Link
Blinking	Data Activity
On	Link



Speed L	.ED
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Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection

Onboard Header

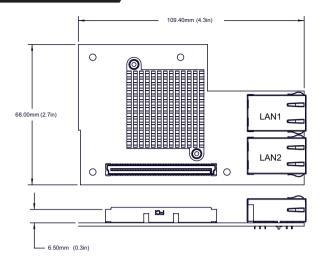
Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.



M350R



Package Contents

- 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- LAN RJ-45 Port (LAN1)
- LAN RJ-45 Port (LAN2)

LAN Port LED Indications

Activity / Link LED

Status Description Off No Link Blinking Data Activity

On Link

ACT/LINK LED
SPEED LEI
LAN Port

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Speed LED

Status Description Off 10Mbps connection Orange 100Mbps connection Green 1Gbps connection

Onboard Header

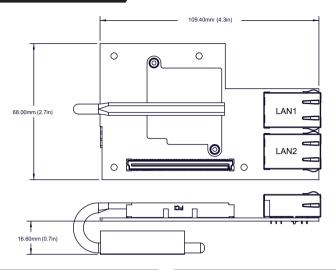
Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.



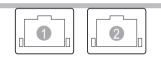
M540R



Package Contents

- · 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- LAN RJ-45 Port (10G Base-T)(LAN1)
- LAN RJ-45 Port (10G Base-T)(LAN2) 2

LAN Port LED Indications

Activity / Link LED

Status Description Off No Link Blinking Data Activity

On Link



Speed LED

Status Description Off 10/100Mbps connection

Orange 1Gbps connection Green 10Gbps connection

Onboard Header

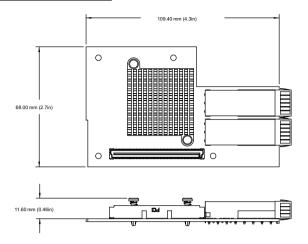
Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.



M599R



Package Contents

- 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- 1 SFP+ Port (Fiber) (LAN1)
- 2 SFP+ Port (Fiber) (LAN2)

LAN Port LED Indications

Activity / Link LED

Status Description
Off No Link

Blinking 10G Data Activity

On 10G Link



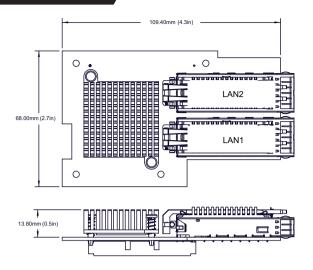
Onboard Header

Front LAN LED Connector (LAN_LED_1)



This 4-pin connector is used for the front LAN status indicator.





Package Contents

- · 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- · 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- 1 QSFP+ 40Gb/s (LAN1)
- 2 QSFP+ 40Gb/s (LAN2)

LAN Port LED Indications

Activity / Link LED

Status Description
Off No Link
Blinking Data Activity
On Link

ACT/LINK LED
SPEED LED
SPEED LED
LAN Port

Speed LED

Status Description
Off 10/100Mbps conn

Off 10/100Mbps connection
Off 1Gbps connection
Green 10/40Gbps connection

Onboard Header

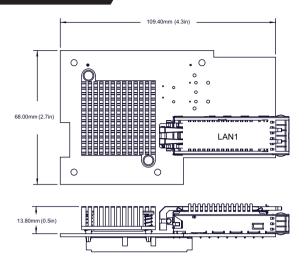
Front LAN LED Connector (XL_LAN_LED)



This 4-pin connector is used for the front LAN status indicator.



M710S



Package Contents

- · 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



1 QSFP+ 40Gb/s (LAN1)

LAN Port LED Indications

Activity / Link LED

Status Description
Off No Link
Blinking Data Activity
On Link

ACI/LINK LE	LD.
SPEED	LED
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	1
LAN Port	,

Speed LED

StatusDescriptionOff10/100Mbps connectionOff1Gbps connectionGreen10/40Gbps connection

Onboard Header

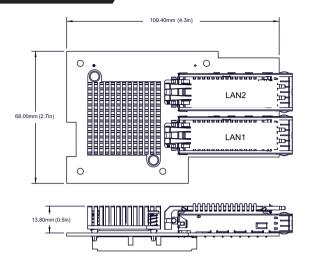
Front LAN LED Connector (XL_LAN_LED)



This 4-pin connector is used for the front LAN status indicator.



MCX3



Package Contents

- 1 x Mezzanine Card
- 4 x Screws
- 4 x Standoffs
- 4 x Nuts
- 1 x Support CD
- · 1 x Quick Installation Guide

Layout



- 1 QSFP+ 40Gb/s (LAN1)
- 2 QSFP+ 40Gb/s (LAN2)

LAN Port LED Indications

Activity / Link LED			PHYSICAL CONNECTION	Physical Connection LED	
Status Off Blinking	Description No Link Data Activity	ACT/LINK LED	LED	Status On Off	Description Connected Disconnected
Dillikilig	Data Activity	L	AN Port	Oli	Disconnected

Onboard Header

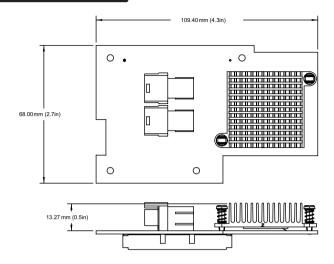
Front LAN LED Connector (LAN_LED1)



This 4-pin connector is used for the front LAN status indicator.



M3008S



Layout



- 1 MINI SAS HD (SLI_SAS4_7)
- 2 MINI SAS HD (SLI_SAS0_3)

Details

Storage Controller AvagoSAS3008 PowerPC 476 controller @ 1.2 GHz

Data Transfer Rates Up to 12Gb/s per port

Internal Connectors SAS 12G x8 (2 x SAS HD 4i)

Support OS

Microsoft® Windows®

- Server 2008 R2 SP1 (64 bit)
- Server 2012 (64 bit)
- Server 2012 R2 (64 bit)

Linux®

- RedHat Enterprise Linux Server 7.0 (64 bit)
- CentOS 7. 0 (64 bit)
- SUSE Enterprise Linux Server 12 (64 bit)

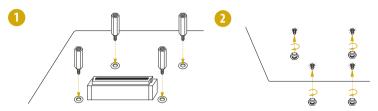
Environment

Operating Temperature 0°C ~ 70°C

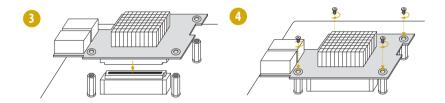
Mezzanine Card Installation

Before installing a mezzanine card to a motherboard, remove the motherboard from the chassis. To do so, be sure to power down the system and remove all connected cables first. For more details, refer to the user manual that comes with your system.

*The illustrations are for reference only and may be slightly different from the real products due to different models.



- Install the four standoffs into the motherboard around the mezzanine card slot.
- 2. Install the four lock nuts on the bolts under the motherboard. Hand-tighten the nuts.



- Gently insert the mezzanine card into the mezzanine card slot on the motherboard
- 4. Use screws to secure the mezzanine card to the motherboard standoffs.

When the mezzanine card is well installed, horizontally slide the motherboard back to the chassis so the I/O connectors fit through the I/O openings at the rear of the chassis. Well install the motherboard to the chassis with screws. For more details, refer to the user manual that comes with your motherboard.