

Application Note

ADQ10GBE

10 Gb Ethernet PXIe/cPCIe Adaptor

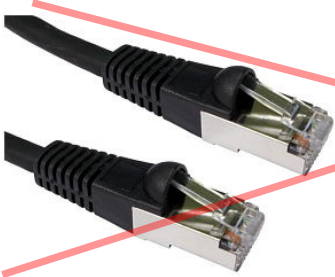


Copper Cable types



What is compatible with ADQ10GBE?

SFP+ direct attached cable up to 15 Meters
aka 10GSFP+Cu, 10GBASE-CR, 10GBASE-CX1
Compatible with ADQ10GBE



~~RJ45 Copper cable
aka 10GBASE-T
Not compatible with ADQ10GBE~~

Optical Cable types



What is compatible with ADQ10GBE?

Optical short range up to 300 Meters
aka 10GBASE-SR

Multi-mode fiber and uses 850 nm lasers

Connector type: LC

Compatible with ADQ10GBE

~~Optical long range up to 10 Km~~

~~aka 10GBASE-LR~~

~~Single-mode fiber and uses 1310 nm lasers~~

~~Not compatible with ADQ10GBE~~

SFP+ Module

What is compatible with ADQ10GBE?

When using optical cables with ADQ10GBE an SFP+ module is required. Make sure that it supports 10GBASE-SR and has LC type connectors.

Recommended modules for ADQ10GBE

- Avago AFBR-709SMZ
- Intel SFP+ E10GSFPSR

Non SP Devices PCIe cards used together with ADQ10GBE may also require a module or accept optical connection directly. Please check compatibility with the vendor of you card.



Cable Considerations

Main Pros and Cons

SFP+ direct attached:

- Low cost
- Short range (up to 15 m).

Optical short range fiber:

- Higher cost than SFP+ direct attached
- Better range than SFP+ direct attached (up to 300 m)
- Not Affected by EMI or RFI.

ADQ10GBE

ADQ10GBE Compatible PCIe Cards

Board	Intel Product id	Cable Type
OK Intel X520-DA1	X520DA1OCP	SFP+ direct attach copper (Single port)
OK Intel X520-DA2*	E10G42BTDA	SFP+ direct attach copper (Dual ports)
OK Intel X520-SR1	E10G41BFSR	Fiber optic short range (Single port)
OK Intel X520-SR2	E10G42BFSR	Fiber optic short range (Dual ports)
NOT OK Intel X520-T2	E10G42BT	RJ-45 copper
NOT OK Intel X520-LR1	E10G41BFLR	Fiber optic long range
NOT OK Intel X520-DA2*	X520DA2OCP	RJ-45 copper
NOT OK Intel X540-T1	X540-T1	RJ-45 Copper
NOT OK Intel X540-T2	X540-T2	RJ-45 Copper

Attention: * Note that there are two versions of the Intel X520-DA2!

ADQ10GBE

Operating Systems

NOT OK Windows XP

NOT OK Windows Vista

OK Windows 7 (32 or 64 bit)

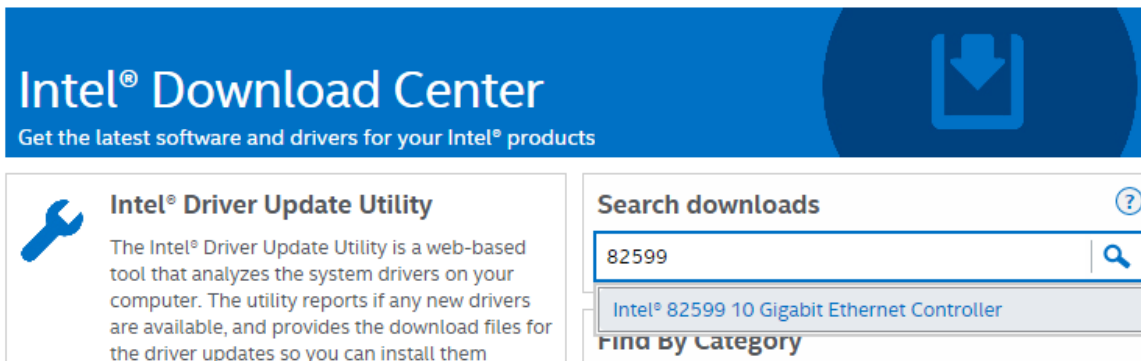
OK Windows 8/8.1

OK Windows 10

OK Linux (native support or ixgbe source code)

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