Manuals+ — User Manuals Simplified.

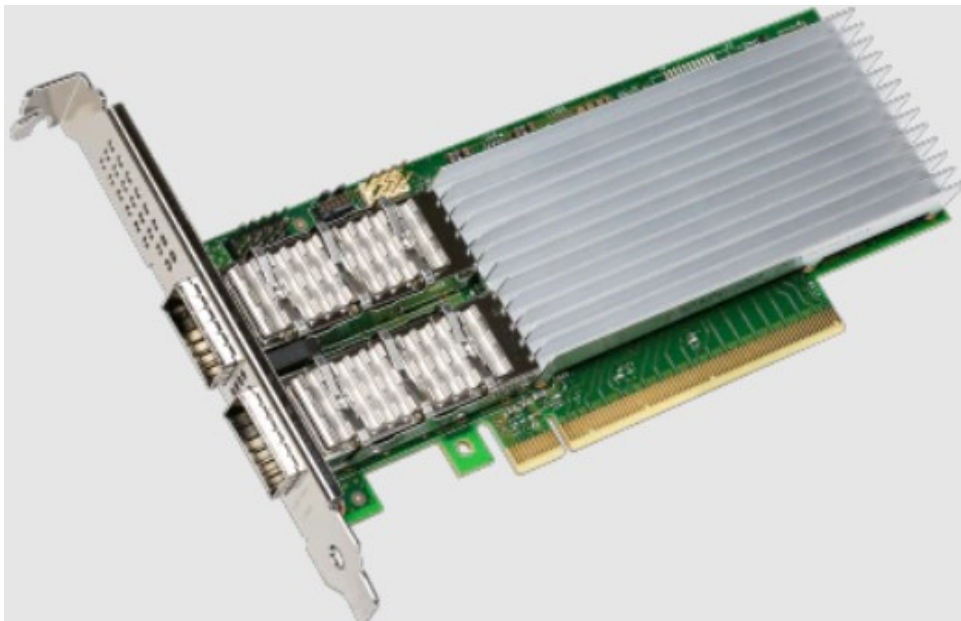# Intel 800 Series E810 Ethernet Network Adapters User Guide

Intel 800 Series E810 Ethernet Network Adapters User Guide

Contents

Introduction

Introducing the Intel® Ethernet 800 Series

Intel® Ethernet 800 Series Network Adapters support speeds up to 100Gbps and include innovative and versatile capabilities to optimize workload performance.

Performance for Cloud Applications

Delivers the bandwidth and increased application throughput required for demanding cloud workloads including edge services, web servers, database applications, caching servers, and storage targets.

Optimizations for Communications Workloads

Provides packet classification and sorting optimizations for high-bandwidth network and communications workloads, including mobile core, 5G RAN, and network appliances.

Supports Hyperconverged Solutions

The 800 Series broad portfolio of adapters, with different port counts and form factors, delivers performance with efficient use of server processors.

Move Data Faster

Intel's evolving Ethernet product portfolio consistently delivers a reliable experience and proven interoperability. Whether migrating from 1 to 10GBASE-T, or from 1 to 100Gbps, Intel Ethernet Products and technologies help move data faster.

Compatibility and interoperability

- Extensive conformance testing to IEEE and Ethernet Technology Consortium standards
- Broad network interoperability testing of different media types and Ethernet switches for best-in-class compatibility
- Comprehensive operating system and hypervisor support

Performance assurance

- Optimized for Intel® architecture
- Data Plane Development Kit (DPDK) enabled for faster network functions virtualization (NFV), advanced packet forwarding, and highlyefficient packet processing

Worldwide product support

- Limited lifetime warranty for retail Ethernet Products
- Adherence to global regulatory, environmental, and market requirements

Intel Ethernet 800 Series Network Adapters

Improve application efficiency and network performance with innovative and versatile capabilities that optimize high-performance server workloads such as NFV, storage, HPC-AI, and hybrid cloud.

Product	Connection	Cabling Type and Range	Speed	Ports	Order Codes
E810-2CQDA2	QSFP28	DAC: up to 5 m SMF: up to 10 km MMF: up to 100 m	100/50/25/10/1GbE **Note**: 100Gbps per port for total bandwidth of 200Gbps	Dual	E8102CQDA2G1P5
E810-CQDA1*, -CQDA2*	QSFP28	DAC: up to 5 m SMF: up to 10 km MMF: up to 100 m	100/50/25/10/1GbE	Single and Dual	E810CQDA1 E810CQDA2
E810-XXVDA4* (FH)	SFP28	DAC: up to 5 m SMF: up to 10 km MMF: up to 100 m	25/10/1GbE	Quad	E810XXVDA4
E810-XXVDA2*	SFP28	DAC: up to 5 m SMF: up to 10 km MMF: up to 100 m	25/10/1GbE	Dual	E810XXVDA2
E810-XXVDA4T for high-precision timing synchronization	SFP28	DAC: up to 5 m SMF: up to 10 km MMF: up to 100 m	25/10/1GbE	Quad	E810XXVDA4T

DAC – direct attach copper, SMF – single-mode fiber, MMF – multi-mode fiber

Versatility and Flexibility for the Data Center

The Ethernet Port Configuration Tool is available on 100GbE Intel Ethernet 800 Series Network Adapters[1], and offers a versatile solution for high-density, port-constrained network environments. One port becomes eight

10GbE ports, four 25GbE ports, and more—up to six configurations to choose from.

1 x 100GbE

2 x 1 x 100GbE
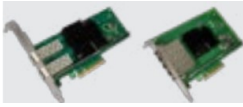
2 x 50GbE

2 x 2 x 25GbE

4 x 25GbE

8 x 10GbE

Intel Ethernet 700 Series Network Adapters

Broad interoperability, critical performance optimizations, and increased agility make 700 Series Network Adapters a good choice for communications, cloud, and data center applications.

Product	Connection	Cabling Type and Range	Speed	Ports	Order Codes
XL710-QDA1, -QDA2	QSFP+ (DAC and Fiber Optic)	DAC: up to 7 m SMF: up to 10 km MMF: up to 100 m (OM3), up to 150 m (OM4)	40/10/1GbE	Single and Dual	XL710QDA1 XL710QDA2
XXV710-DA2*	SFP28 (DAC and Fiber Optic)	DAC: 25GbE up to 5 m with RS FEC, up to 3 m with no FEC DAC: 10GbE up to 15 m SMF: up to 10 km MMF: up to 70 m (OM3), up to 100 m (OM4)	25/10/1GbE	Dual	XXV710DA2

XXV710-DA2T	SFP28 (DAC and Fiber Optic) Includes two coaxial SMA connectors for 1PPS input/output	DAC: 25GbE up to 5 m with RS FEC, up to 3 m with no FEC DAC: 10GbE up to 15 m SMF: up to 10 km MMF: up to 70 m (OM3), up to 100 m (OM4)	25/10/1GbE	Single and Dual	XXV710DA2 TLG1P5
X710-DA2*, -DA4* (FH)	SFP+ (DAC and Fiber Optic)	DAC: 10 up to 15 m SMF: up to 10 km MMF: up to 300 m (OM3), up to 400 m (OM4)	10/1GbE	Dual and Quad	X710DA2 X710DA4FH X10DA4G2P5

DAC – direct attach copper, SMF – single-mode fiber, MMF – multi-mode fiber

Simplify Migration to 10GbE with these 700 and 500 Series Network Adapters

10GBASE-T is one of the least-disruptive paths for upgrading from 1000BASE-T. The familiar RJ45 interface simplifies migration, and backwards compatibility allows for a staged approach to higher-speed networks. With 10X performance improvement, migrating from 1 to 10GbE is a solid financial decision that is also budget friendly.

Product	Connection	Cabling Type and Range	Speed	Ports	Order Codes
X710-T2L*, -T4L*	RJ45	CAT6 up to 55 m CAT6A or better up to 100 m	10/1GbE/100Mb	Dual and Quad	X710T2L X710T4L
X710-T4	RJ45	CAT6 up to 55 m CAT6A or better up to 100 m	10/1GbE/100Mb	Quad	X710T4
X550-T2	RJ45	CAT6 up to 55 m (10GbE) CAT6A or better, up to 100 m (10GbE) CAT5 or better, up to 100 m (5/2.5/1GbE)	10/5/2.5/1GbE/100Mb	Dual	X550T2

2.5Gb Intel Ethernet Network Adapter

The ultra-compact Intel Ethernet I225-T1 is ideally suited for PC's and workstations used for enterprise, gaming, and home networks needing bandwidth beyond 1Gbps.

Product	Connection	Cabling Type and Range	Speed	Ports	Order Codes
I225-T1	RJ45	CAT5e, CAT6, CAT6A up to 100 m	2.5/1GbE/100Mb/10Mb	Single	I225T1

1Gb Intel Ethernet Network Adapters

Get performance-enhancing features and power management technologies with these 1GbE network adapters.

Product	Connection	Cabling Type and Range	Speed	Ports	Order Codes
 I210-T1	RJ45	CAT5 or better up to 100 m	1GbE/100Mb/10 Mb	Single	I210T1
 I350-T4*	RJ45	CAT5 or better up to 100 m	1GbE/100Mb/10 Mb	Quad	I350T4V2

Contact an Account Manager for more information.
1.800.800.0014 ▪ **www.connection.com/Intel**

*OCP form factors are also available for these adapters.
[1] EPCT is available on QSFP28 connection-based 100GbE 800 Series Network Adapters.

Documents / Resources

Intel 800 Series E810 Ethernet Network Adapters [pdf] User Guide
800 Series, E810, Ethernet Network Adapters, 800 Series E810 Ethernet Network Adapters

References

- ⌒ **Intel Products Showcase: Intel-Powered Computers**

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