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 highly-efficient 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Connection</th>
<th>Cabling Type and Range</th>
<th>Speed</th>
<th>Ports</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>E810-2CQDA2</td>
<td>QSFP28</td>
<td>DAC: up to 5 m</td>
<td>100/50/25/10/1GbE¹</td>
<td>Dual</td>
<td>E8102CQDA2G1P5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF: up to 10 km</td>
<td>Note: 100Gbps per port for total bandwidth of 200Gbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MMF: up to 100 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E810-CQDA1*, -CQDA2*</td>
<td>QSFP28</td>
<td>DAC: up to 5 m</td>
<td>100/50/25/10/1GbE¹</td>
<td>Single and Dual</td>
<td>E810CQDA1 E810CQDA2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF: up to 10 km</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MMF: up to 100 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E810-XXVDA4* (FH)</td>
<td>SFP28</td>
<td>DAC: up to 5 m</td>
<td>25/10/1GbE</td>
<td>Quad</td>
<td>E810XXVDA4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF: up to 10 km</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MMF: up to 100 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E810-XXVDA2*</td>
<td>SFP28</td>
<td>DAC: up to 5 m</td>
<td>25/10/1GbE</td>
<td>Dual</td>
<td>E810XXVDA2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF: up to 10 km</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MMF: up to 100 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E810-XXVDA4T</td>
<td>SFP28</td>
<td>DAC: up to 5 m</td>
<td>25/10/1GbE</td>
<td>Quad</td>
<td>E810XXVDA4T</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMF: up to 10 km</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MMF: up to 100 m</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 Adapters², 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 100GbE
- 2 x 50GbE
- 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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Connection</th>
<th>Cabling Type and Range</th>
<th>Speed</th>
<th>Ports</th>
<th>Order Codes</th>
</tr>
</thead>
</table>
| 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  
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  
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 | XXV710DA2TLG1P5 |
| 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 |
| I710-T4L | RJ45                  | CATS or better for 100BASE-TX  
CATS or better for 1000BASE-T | 1GbE/100Mb  | Quad         | I710T4L      |

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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Connection</th>
<th>Cabling Type and Range</th>
<th>Speed</th>
<th>Ports</th>
<th>Order Codes</th>
</tr>
</thead>
</table>
| 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 (S/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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Connection</th>
<th>Cabling Type and Range</th>
<th>Speed</th>
<th>Ports</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I225-T1</td>
<td>RJ45</td>
<td>CAT5e, CAT6, CAT6A up to 100 m</td>
<td>2.5/1GbE/100Mb/10Mb</td>
<td>Single</td>
<td>I225T1</td>
</tr>
</tbody>
</table>

1Gb Intel Ethernet Network Adapters

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

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

Move data faster with Intel® Ethernet products

Learn more at intel.com/ethernet

*OCP form factors are also available for these adapters. Learn more at intel.com/ocepnic
1. For 100GbE adapters, 1GbE will be supported in a future release.
2. EPCT is available on QSFP28 connection-based 100GbE 800 Series Network Adapters.