Customers say **it just works.** Here’s why:

**High compatibility and broad interoperability**
- Fully tested network adapters and accessories (optics and cables)
- Hardware and software is thoroughly validated across server and networking ecosystem
- Supports a broad selection of operating systems

**Ease of use**
- Works out of the box
- Automatic and highly optimized configuration setups
- Delivers the right traffic to the right VM via match filters

**Performance assurance**
- Optimized for Intel® architecture and broad OSV ecosystem
- Scales with CPU technology, leverages intelligent hardware offloads, network virtualization, and fast packet processing via Data Plane Development Kit (DPDK)

**Worldwide product support**
- Pre- and post-sales support
- Adheres to global regulatory, environmental, and market requirements
- Long product lifecycle support
- Limited lifetime warranty

**Broad product selection and accessories**
- Supports multiple speeds (1/10/25/40GbE) and media types (BASE-T, Fiber, SFP+, QSFP+, SFP28, QSFP28, KR, XAUI)
- Available in many different form factors: discrete controller, Intel® SoCs, and add-in cards (PCIe*, OCP, and custom form factors)
# Intel® Ethernet 700 Series Network Adapters

Accelerate the delivery of new services and capabilities by increasing the speed and efficiency of your network infrastructure. The Intel® Ethernet 700 Series is the foundation for server connectivity, providing broad interoperability, critical performance optimizations, and increased agility for Telecommunications, Cloud, and the Data Center.

- **Interoperability** – Multiple speeds and media types for broad compatibility backed by extensive testing and validation.
- **Optimization** – Intelligent offloads and accelerators to unlock network performance in servers with Intel® Xeon® processors.
- **Agility** – Both kernel and Data Plane Development Kit (DPDK) drivers for scalable packet processing.

## ONE ARCHITECTURE. MULTIPLE SPEEDS.

Intel® Ethernet 700 Series Network Adapters offer customers a common architecture.

- Greater intelligence and performance for NFV
- Enhanced network virtualization overlays (NVOs)
- Flexible and scalable I/O for virtualized infrastructures
- Improved performance and efficiency
- Flexible port partitioning (FPP)
- Advanced traffic steering

## Product Specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>Connector &amp; Cable Medium</th>
<th>Cabling Type</th>
<th>Intel® Ethernet Controller</th>
<th>Slot Type, Maximum Bus Speed &amp; Bus Width</th>
<th>Connection Speed</th>
<th>Ports</th>
<th>Supported Slot Heights</th>
<th>Network Virtualization &amp; Acceleration</th>
<th>Storage over Ethernet</th>
<th>RDMA</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>X722-DA2, X722-DA4</td>
<td>SFP+ Direct Attach Copper Twinaxial</td>
<td>Direct Attach Passive Twinaxial: - up to 15 m Multimode Fiber: - up to 300 m (OM3) - up to 400 m (OM4) Single-mode Fiber: - up to 10 km</td>
<td>Intel® C628 Chipset with integrated Intel® Ethernet Connection X722</td>
<td>PCI Express® v3.0 8.0 GT/s, x8 Lanes</td>
<td>1/10GbE</td>
<td>Dual and Quad Port</td>
<td>Low Profile and Full Height</td>
<td>Multi-Queue and Stateless Offloads for NVO, such as VXLAN, NVGRE, and GENEVE Enhanced DPDK packet-processing support</td>
<td>iSCSI, NFS, SMB Direct</td>
<td>IWRAP</td>
<td>XXV710DA1, XXV710DA1BLK XXV710DA2, XXV710DA2BLK</td>
</tr>
<tr>
<td>X710-DA2, X710-DA4FHBLK</td>
<td>SFP28 Direct Attach Copper Twinaxial</td>
<td>Direct Attach Passive Twinaxial 25GbE: - up to 5 m with RS-FEC - up to 3 m with no FEC Direct Attach Passive Twinaxial 10GbE: - up to 15 m Multimode Fiber: - up to 70 m (OM3) - up to 100 m (OM4) Single-mode Fiber: - up to 10 km</td>
<td>XL710</td>
<td>PCI Express® v3.0 8.0 GT/s, x8 Lanes</td>
<td>1GbE/10GbE/25GbE</td>
<td>Single and Dual Port</td>
<td>Low Profile and Full Height</td>
<td>Multi-Queue and Stateless Offloads for NVO, such as VXLAN, NVGRE, and GENEVE Enhanced DPDK packet-processing support</td>
<td>iSCSI, NFS, SMB</td>
<td></td>
<td></td>
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<tr>
<td>X710-DAQ1, X710-DAQ1BLK</td>
<td>SFP+ Direct Attach Copper Twinaxial</td>
<td>Direct Attach Passive Twinaxial: - up to 15 m Multimode Fiber: - up to 300 m (OM3) - up to 400 m (OM4) Single-mode Fiber: - up to 10 km</td>
<td>X710</td>
<td>PCI Express® v3.0 8.0 GT/s, x8 Lanes</td>
<td>1GbE/10GbE</td>
<td>Dual and Quad Port</td>
<td>Low Profile and Full Height</td>
<td>Multi-Queue and Stateless Offloads for NVO, such as VXLAN, NVGRE, and GENEVE Enhanced DPDK packet-processing support</td>
<td>iSCSI, NFS, SMB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X710-DQ2, X710-DQ2FHBLK</td>
<td>QSFP+ Direct Attach Copper Twinaxial</td>
<td>Direct Attach Passive Twinaxial: - up to 7 m Multimode Fiber: - up to 100 m (OM3) - up to 150 m (OM4) Single-mode Fiber: - up to 10 km</td>
<td>XL710</td>
<td>PCI Express® v3.0 8.0 GT/s, x8 Lanes</td>
<td>10GbE/40GbE</td>
<td>Single and Dual Port</td>
<td>Low Profile and Full Height</td>
<td>Multi-Queue and Stateless Offloads for NVO, such as VXLAN, NVGRE, and GENEVE Enhanced DPDK packet-processing support</td>
<td>iSCSI, NFS, SMB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X710-T4</td>
<td>RJ45 Copper Twisted-pair</td>
<td>Category 6: - up to 55 m Category 6A or better: - up to 100 m</td>
<td>XL710</td>
<td>PCI Express® v3.0 8.0 GT/s, x8 Lanes</td>
<td>100Mb/1GbE/10GbE</td>
<td>Quad Port</td>
<td>Low Profile and Full Height</td>
<td>Multi-Queue and Stateless Offloads for NVO, such as VXLAN, NVGRE, and GENEVE Enhanced DPDK packet-processing support</td>
<td>iSCSI, NFS, SMB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Learn more about DPDK at intel.com/dpdk

All Intel® Ethernet 700 Series and 500 Series Network Adapters include intelligent offloads, are optimized for Data Plane Development Kit (DPDK) and Intel® Ethernet Flow Director, and include these server virtualization attributes: on-chip QoS and traffic management, Flexible Port Partitioning, Virtual Machine Device Queues (VMDq), PCI-SIG® SR-IOV capable.
**INTEL® ETHERNET 500 SERIES NETWORK ADAPTERS**

The best choice for 10GBASE-T, the Intel® Ethernet 500 Series is backward compatible with existing 1000BASE-T networks, simplifying the transition to 10Gb Ethernet when more bandwidth is needed.

- Supports 100Mb, and 1/2.5/5/10GBASE-T
- Low cost, low power
- Optimized for network virtualization overlays

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**INTEL® ETHERNET OPTICS AND CABLES FOR INTEL® ETHERNET 700 SERIES AND 500 SERIES NETWORK ADAPTERS**

Combine these accessories with Intel Ethernet 700 Series and 500 Series Network Adapters, for dependable interoperability and consistent performance across the network.

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1. Learn more about DPDK at intel.com/dpdk
2. Support for new operating systems will not be added to FCoE. The last operating system versions supporting FCoE are: Microsoft Windows Server* 2012 R2, Red Hat Enterprise Linux* 7.2 & 6.7, SUSE Linux Enterprise Server 11 SP4, 12 SP1; VMware ESX* 6.0

All Intel® Ethernet 700 Series and 500 Series Network Adapters include intelligent offloads, are optimized for Data Plane Development Kit (DPDK) and Intel® Ethernet Flow Director, and include these server virtualization attributes: on-chip QoS and traffic management, Flexible Port Partitioning, Virtual Machine Device Queues (VMDq), PCI-500* SR-I/OV capable.
## 1Gbe Intel® Ethernet Network Adapters

<table>
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<tr>
<th>Product</th>
<th>Connector &amp; Cable Medium</th>
<th>Cabling Type</th>
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<th>Ports</th>
<th>Supported Slot Heights</th>
<th>Halogen Free</th>
<th>Intelligent Offloads</th>
<th>Intel® Virtualization Technology for Connectivity</th>
<th>Storage over Ethernet</th>
<th>Intel Ethernet Power Management†</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I210-T1</td>
<td>RJ45 Copper Twisted-pair</td>
<td>Category 5 or better: - up to 100 m</td>
<td>I210</td>
<td>PCI Express® v2.1 2.5 GT/s, x1 Lane</td>
<td>Single Port</td>
<td>Low Profile and Full Height</td>
<td>Yes</td>
<td>Yes</td>
<td>Includes Audio-Video Bridging (AVB) support (802.1Qav)</td>
<td>iSCSI, NFS, SMB</td>
<td>Yes</td>
<td>I210T1</td>
</tr>
<tr>
<td>I350-T4</td>
<td>RJ45 Copper Twisted-pair</td>
<td>Category 5 or better: - up to 100 m</td>
<td>I350</td>
<td>PCI Express® v2.1 5 GT/s, x4 Lanes</td>
<td>Quad Port</td>
<td>Low Profile and Full Height</td>
<td>Yes</td>
<td>Yes</td>
<td>On-chip QoS and traffic management Flexible Port Partitioning (PPP) Virtual Machine Device Queues (VMDq) PCI-SIG® SR-IOV capable</td>
<td>iSCSI, NFS, SMB</td>
<td>Yes</td>
<td>I350T4V2</td>
</tr>
<tr>
<td>I350-T2</td>
<td>RJ45 Copper Twisted-pair</td>
<td>Category 5 or better: - up to 100 m</td>
<td>I350</td>
<td>PCI Express® v2.1 5 GT/s, x4 Lanes</td>
<td>Dual Port</td>
<td>Low Profile and Full Height</td>
<td>Yes</td>
<td>Yes</td>
<td>On-chip QoS and traffic management Flexible Port Partitioning (PPP) Virtual Machine Device Queues (VMDq) PCI-SIG® SR-IOV capable</td>
<td>iSCSI, NFS, SMB</td>
<td>Yes</td>
<td>I350T2V2</td>
</tr>
<tr>
<td>I350-F2</td>
<td>LC Fiber Optic</td>
<td>Multimode Fiber OM1 (62.5 μm): - up to 275 m Multimode Fiber OM2 or better (50 μm): - up to 550 m</td>
<td>I350</td>
<td>PCI Express® v2.1 5 GT/s, x4 Lanes</td>
<td>Dual Port</td>
<td>Low Profile and Full Height</td>
<td>N/A</td>
<td>Yes</td>
<td>On-chip QoS and traffic management Flexible Port Partitioning (PPP) Virtual Machine Device Queues (VMDq) PCI-SIG® SR-IOV capable</td>
<td>iSCSI, NFS, SMB</td>
<td>Yes</td>
<td>I350F2</td>
</tr>
<tr>
<td>I350-F4</td>
<td>LC Fiber Optic</td>
<td>Multimode Fiber OM1 (62.5 μm): - up to 275 m Multimode Fiber OM2 or better (50 μm): - up to 550 m</td>
<td>I350</td>
<td>PCI Express® v2.1 5 GT/s, x4 Lanes</td>
<td>Quad Port</td>
<td>Full Height</td>
<td>N/A</td>
<td>Yes</td>
<td>On-chip QoS and traffic management Flexible Port Partitioning (PPP) Virtual Machine Device Queues (VMDq) PCI-SIG® SR-IOV capable</td>
<td>iSCSI, NFS, SMB</td>
<td>Yes</td>
<td>I350F4</td>
</tr>
</tbody>
</table>

### 1Gbe for Desktop

<table>
<thead>
<tr>
<th>Product</th>
<th>Connector &amp; Cable Medium</th>
<th>Cabling Type</th>
<th>Intel® Ethernet Controller</th>
<th>Slot Type, Maximum Bus Speed &amp; Bus Width</th>
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<th>Supported Slot Heights</th>
<th>Halogen Free</th>
<th>Intelligent Offloads</th>
<th>Intel® Virtualization Technology for Connectivity</th>
<th>Storage over Ethernet</th>
<th>Intel Ethernet Power Management†</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Gigabit CT Desktop Adapter</td>
<td>RJ45 Copper Twisted-pair</td>
<td>Category 5 or better: - up to 100 m</td>
<td>82574</td>
<td>PCI Express® v1.1 2.5 GT/s, x1 Lane</td>
<td>Single Port</td>
<td>Low Profile and Full Height</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>iSCSI, NFS, SMB</td>
<td>N/A</td>
<td>EXPi9301CT</td>
</tr>
</tbody>
</table>

3. Intel Ethernet Power Management includes Energy Efficient Ethernet (EEE) and DMA Coalescing.

### Make the Connection with Intel® Ethernet Adapters at intel.com/ethernet