Networks that respond to reality

Intel® Ethernet Products, with speeds from 1 to 100Gbps, move data faster with innovative technologies and architecture that scale with business demands.

Introducing Intel® Ethernet 800 Series Controllers
Supports speeds up to 100Gbps and includes innovative and versatile capabilities to optimize workload performance.

Workload-optimized performance
Application Device Queues (ADQ) dedicates queues to high-priority applications to improve application response-time predictability, reduce latency, and improve throughput.

Versatility for changing network needs
Dynamic Device Personalization (DDP) adds on-demand support for new and advanced network protocols to reduce server CPU utilization, improve throughput, and reduce latency. Classify advanced and proprietary protocols on the adapter instead of the CPU.

Ethernet Port Configuration simplifies the configuration of port connections and speeds, making it easier to enable new services and optimize diverse workloads.

Flexibility to meet network requirements
Both Remote Direct Memory Access (RDMA) protocols, iWARP and RoCEv2, and NVMe over TCP are supported to provide flexibility and choice for scaling high-performance storage and HPC workloads.

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
- Outstanding global customer support
- Adherence to global regulatory, environmental, and market requirements
Intel Ethernet 800 Series Controllers

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.

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.

Versatile Port Configurations

Port speed, and the number of ports on demand, can be configured using the Ethernet Port Configuration Tool (EPCT). A 2x100GbE controller with maximum bandwidth of 100GbE can be configured as 1x100GbE, 2x50GbE, 4x25GbE, 4x10GbE or 8x10GbE. Learn more at intel.com/epct

<table>
<thead>
<tr>
<th>Product</th>
<th>Connection Speed</th>
<th>Ports</th>
<th>Host Interface</th>
<th>Package Size / Physical Package</th>
<th>Network Interfaces Supported</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Ethernet Controller E810-XXV AM2</td>
<td>25/10/1GbE Dual</td>
<td>PCIe 4.0</td>
<td>21 mm x 21 mm</td>
<td>50GbE: 50GAUI-2, -1; LAUI-2 25GbE: 25GBASE-KR, CR, CI/CR; AUI 10GbE: KR, SFI 1Gbe: KX 100M: SGMII</td>
<td>EYE810XXVAM2</td>
<td></td>
</tr>
</tbody>
</table>

Intel Ethernet 700 Series Controllers

The 700 Series provides broad interoperability, critical performance optimizations and increased agility for Communications, Cloud and the Data Center.

<table>
<thead>
<tr>
<th>Product</th>
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<th>Ports</th>
<th>Host Interface</th>
<th>Package Size / Physical Package</th>
<th>Network Interfaces Supported</th>
<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Ethernet Controller XL710-BM1/BM2</td>
<td>40/10/1GbE Single and Dual</td>
<td>PCIe 3.0 (8.0 GT/s)</td>
<td>25 mm x 25 mm 576-pin Flip-Chip</td>
<td>40GbE: QSFP+, KR4, CR4, XLPPI, XLAUI 10GbE: SFP+, KR, SFI, XAUI, KX4 1GbE: KX, SGMII</td>
<td>FTXL710-BM1 FTXL710-BM2</td>
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</tr>
<tr>
<td>Intel Ethernet Controller XXV710-AM2</td>
<td>25/10/1GbE Dual</td>
<td>PCIe 3.0 (8.0 GT/s)</td>
<td>25 mm x 25 mm FCBGA</td>
<td>SFI, KR, KR4, XAUI, KX, KX4, SGMII</td>
<td>FXV710-AM2</td>
<td></td>
</tr>
<tr>
<td>Intel Ethernet Controller X710-BM2</td>
<td>10/1GbE Dual</td>
<td>PCIe 3.0 (8.0 GT/s)</td>
<td>25 mm x 25 mm</td>
<td>SFI, KR, XAUI, KX, KX4, SGMII</td>
<td>FX710-BM2</td>
<td></td>
</tr>
<tr>
<td>Intel Ethernet Controller X710-AT2/ TM4</td>
<td>10/1GbE Dual and Quad</td>
<td>PCIe 3.0 (8.0 GT/s)</td>
<td>22 mm x 22 mm</td>
<td>X710-AT2: 10GBASE-T, NBASE-T, 1000BASE-T, 100BASE-TX X710-TM4: 10GBASE-T, NBASE-T, 1000BASE-T, 100BASE-TX, KR, SFI, KX, SGMII</td>
<td>EZX710AT2 EZX710TM4</td>
<td></td>
</tr>
<tr>
<td>Intel Ethernet Controller V710-AT2</td>
<td>5/2.5/1GbE and 100Mb Dual</td>
<td>PCIe 3.0</td>
<td>22 mm x 22 mm</td>
<td>NBASE-T and 802.3bz 5/2.5GBASE-T, 1000BASE-T, 100BASE-TX</td>
<td>EZV710AT2</td>
<td></td>
</tr>
</tbody>
</table>
Intel Ethernet 500 Series Controllers and PHYs

These low-cost, low-power controllers are backwards compatible with existing 1000BASE-T networks, simplifying the transition to 10GbE when more bandwidth is needed.

### Intel Ethernet Connection X557-AT2/AT4
- **Connection Speed:** 10/1GbE (PHY only)
- **Host Interface:** Dual and Quad
- **Network Interfaces Supported:**
  - KR, KK, 100BASE-T, 1000BASE-T, 10GBASE-T, SGMII
- **Order Codes:** EZX557AT2, EZX557AT4

### Intel Ethernet Controller X550-AT2
- **Connection Speed:** 10/5/2.5/1GbE (NBASE-T in Linux only)
- **Host Interface:** Dual
- **Network Interfaces Supported:**
  - 100BASE-T, 1000BASE-T, 10GBASE-T
- **Order Codes:** JL82599ES

### Intel® 82599 10 Gigabit Ethernet Controller
- **Connection Speed:** 10/1GbE
- **Host Interface:** Single and Dual
- **Network Interfaces Supported:**
  - 100BASE-T, 1000BASE-T, 10GBASE-T
  - SFI, KR, XAUI, KX, KX4, BX, BX4, CX4
  - SFF-8431, SFI, KR
- **Order Codes:** JL82599ES

### Retimers

### Gigabit Ethernet Controllers

#### Intel Ethernet Connection C827-AM1/IM1
- **Connection Speed:** 25GbE
- **Host Interface:** Quad
- **Network Interfaces Supported:**
  - 100GbE: KR4/CR4, CAUI-4
  - 50GbE: KR2/CR2 (Consortium)
  - 40GbE: XLAUI, XLPPI, KR4/CR4
  - 10GbE: SFF-8431, SFI, KR
- **Order Codes:** EZC827AM, EZC827IM

#### Intel Ethernet Controller I226-LM/V/IT
- **Connection Speed:** 2.5GbE
- **Host Interface:** Single
- **Network Interfaces Supported:**
  - NBASE-T
- **Order Codes:** KTI226LM, KTI226V

#### Intel Ethernet Controller I225-IT/K/LM/V
- **Connection Speed:** 2.5GbE
- **Host Interface:** Single
- **Network Interfaces Supported:**
  - NBASE-T
- **Order Codes:** KTI225IT, KTI225K, KTI225LM, KTI225V

#### Intel Ethernet Controller I350-AM2/AM4
- **Connection Speed:** 1GbE
- **Host Interface:** Dual
- **Network Interfaces Supported:**
  - 1000BASE-T, SGMII, SERDES
- **Order Codes:** NH1350AM2, NH1350AM4

#### Intel Ethernet Controller I210-A T/IS/IT/CL/CS
- **Connection Speed:** 1GbE
- **Host Interface:** Single
- **Network Interfaces Supported:**
  - i210-IS, -CS and -CL: SGMII, SERDES
  - i210-AT and -IT: 1000BASE-T
- **Order Codes:** WGI210AT, WGI210IS, WGI210IT
  - Automotive: WGI210CL, WGI210CS
## Gigabit Ethernet PHY Connections

<table>
<thead>
<tr>
<th>Product</th>
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<th>Ports</th>
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<th>Package Size / Physical Package</th>
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<th>Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Ethernet Connection I219</td>
<td>1GbE</td>
<td>Dual</td>
<td>Proprietary</td>
<td>6 mm x 6 mm</td>
<td>1000BASE-T</td>
<td>WGI219LM, WGI219V</td>
</tr>
</tbody>
</table>

Move data faster with Intel® Ethernet Products

Learn more about Intel Ethernet Products and Technologies at [intel.com/ethernet](http://intel.com/ethernet)

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