Intel® Media Switch IXE5416 and IXE5216 16-port Gigabit Devices

Product Description

The Intel® Media Switch IXE5216 and IXE5416 16-port Gigabit Devices facilitate the design of high port density, high-performance, and media-ready 10/100/1000 switching systems. The single-chip 16-port Gigabit devices offer Layer 2 Gigabit Ethernet switching in the IXE5216, and Layer 2/3/4 Gigabit Ethernet switching and routing in the IXE5416, enabling you to design systems that deliver high-bandwidth applications at wirespeed for voice, video and data to the desktop.

The IXE5416 supports wire-speed switching and IP routing, along with traffic classification, Quality of Service (QoS), filtering, and prioritization based on Layer 2/3/4 information. The IXE5416 and IXE5216 offer non-blocking performance on all ports, switching packets at the rate of 24 Mpps (64-byte packet size).

The Intel Media Switch 16-port Gigabit devices are suited for standalone switches and switch/routers and stackable solutions when combined with other Intel Media Switch Devices—offering solutions for workgroup, enterprise, campus backbone switching/routing, Storage Area Networks, and edge-to-core router interconnects. A CPU and physical interfaces/transceivers are the only additional components you need to deliver a wire-speed 16-port Gigabit Ethernet switch or switch/router with classification,



prioritization and guaranteed bandwidth.

Optional Intel® Media Switch IXE5417

Content-Addressable Memory (CAM) device is available for extending the address table size.

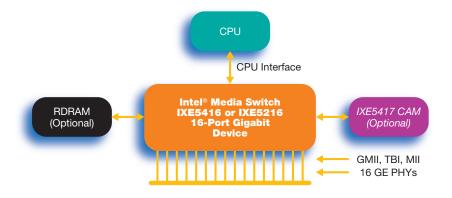
Applications

Key applications for the IXE5416 and IXE5216 include:

- 16–24 port Gigabit Layer 2 or Layer 2/3/4 workgroup switch
- Daisy chain or Star stackable 10/100/1000 Layer 2 or Layer 2/3/4 switch
- High port count Layer 2 switch and Layer 2/3/4 switch/router solution suitable for stackable and chassis switches. (Can be incorporated into stacking solutions with the Intel® Media Switch IXE2424 or IXE2426 10/100+Gigabit Devices)



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Features	Benefits
■ Single-chip, 16-port Gigabit switch for Layer 2 support (IXE5216) or switch/router with Layer 2/3/4 support (IXE5416)	 High integration, compact footprint, and low power dissipation enable the design of high port density systems at low per-port cost
■ Integrated 10/100/1000 Ethernet MACs	■ Enables easy migration from 10/100 to Gigabit
■ Wire-speed performance across all ports in switching mode (IXE5216) or switching and IP routing mode (IXE5416)	■ Delivers congestion-free performance through enterprise switches during peak load periods
■ Link aggregation	■ Enables meshed configurations with redundant paths for fail-safe networks
 VLAN support according to IEEE 802.1Q standards, ports, and protocol 	■ Enables flat plug-and-play networks that are easy to maintain
Advanced Features	Benefits
■ Advanced multicast, broadcast, and filtering capabilities	 Enables video and voice multicasting over IP networks Protects from broadcast storms Enables high-performance intranet firewalls
 Advanced traffic prioritization, QoS, and bandwidth management capabilities 	■ Enables the convergence of voice, video, and data traffic over Ethernet/IP networks

Support Collateral/Tools

Item	Description	Order Number
Manuals	■ Intel® Media Switch IXE5416/IXE5216 16-port Gigabit Switch Device Developer's Manual	Contact local sales rep
	 Intel® Media Switch IXE5417 Content-Addressable Memory Developer's Manual 	Contact local sales rep

Intel in Communications

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