



NA226401

Silicom Hybrid Networking Application Switch

Product Description

Silicom Hybrid Networking Application Switch with E5-2600 v3 Haswell Processor, combines Intel Network switching in a standard rack mount server chassis. It includes Main Switching Board, built around the Intel® Alta chip set with up to 44 SFP I/Os.



The switch is based on Intel® FM6000 family placed on the Main Switching Board, while the Host interface is implemented as PCIe device, based on the Intel XL710 Network controller set located on the PCIe.

Silicom Networking Application Switch brings highest industry standard server grade reliability, while enabling high versatility with configurable I/O port options.

Key Features

- Combine server capabilities together with a top of the rack switch
- Front connectivity: Supports up to 44x 10G IO port
- Provides Intel® x86 processor and network switching in a standard rack mount server
- Enables unparalleled connectivity between host and switch
- Hybrid solution that saves a box in the data center
 - Saves power and Simple to maintain
 - Saves volume in the rack mount
 - Saves cabling and routing of cables
 - Reduce CAPEX and OPEX
- Silicom API: Easiest “local SW management” (no need to develop on top of an external switch)
- Targeted to standard rack mount servers (2U, 3U, 4U)
- Supports Intel® Alta (67Xx) and Fortville (XL710 PCI E controller)
- Fits any standard M/B with adjacent PCI E slots
- Based on standard server grade reliability
- High versatility with configurable I/O port options
- Up to 640 Gbps Switch capability

- Host interface: up to 5 x 40GbE through PCI Express Gen 3.0 (8Gbps) X8 lanes

Switch performance:

- Up to 72x10GbE or 18 x40GbE ports, up to 640 Gbps BW
- KR4, KR, XFI, XLPPI interfaces

Layer 2:

- 64K-entry MAC table
- Efficient MAC table utilization with 16-way hash
- 64-port LAG filtering
- 36K multicast groups with wire-speed replication
- Multiple Spanning Tree support
- Independent and shared VLAN learning

Layer 3:

- IPv4, IPv6 lookups
- Up to 64K IPv4 entries or up to 16K IPv6 entries
- Fully-provisioned IP multicast routing
- CEE and DCB support
- QoS and congestion management
- Switch virtualization and scaling
- Security – Port-based security (802.1X), MAC address security

I/O Interfaces:

- 10Gigabit Ethernet: SFP+ connector supporting
 - SR: Fiber 10 Gigabit Ethernet 10GBASE-SR
 - LR: Fiber 10 Gigabit Ethernet 10GBASE-LR
 - XR: Copper 10SFP+Cu (Passive Direct Attach Cable)

Technical Specifications

General Technical Specifications	
Chassis	2U
Mother Board	SuperMicro X10DRH-I

Power Supply	2U 1200W redundant Power Supply
CPU	Dual Socket Intel® Xeon® processor E5-2687W v3(25M Cache, 3.10 GHz)
Memory	Up to16x 240/288-pin DDR4 DIMM sockets 1866/1600/1333/1066/800MHz* ECC DDR4 SDRAM 72-bit, 240-pin gold-plated DIMMs
HDD / SSD	Up to two 2.5" SATA HDD or SSD HD in the Front
Expansion slots	1x PCI-E 3.0 x16, free slot for future use 6x PCI-E 3.0 x8, used to connect MB to switch
Server remote management	Support for IPMI v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
FANS	3 Rear FANs
I/O	44 SFP I/O on the front
Chassis Dimensions	Height: 3.5" (89mm) Width: 17.2" (437mm) Depth: 26.3" (668mm)

Order Information

P/N	Description	Notes
NA226401	2U Hybrid Application Switch	<p>2U chassis</p> <p>X8 Gen3, based on Intel FM6764 640GBps and 5x XL710</p> <p>Mother board: 1x X10DRH-I</p> <p>CPU: 2x Intel® Xeon® Processor E5-2687W v3 (25M Cache, 3.10 GHz)</p> <p>Memory: 8x 8GB 1600MHz DDR4</p> <p>SSD: 1x SOLID STATE DISK, SATA 80G (0~70°C)</p> <p>HDD: 1x 2.5" 500GB SATA HDD</p> <p>PSU: 1200W redundant</p> <p>Rack mount rails</p> <p>RoHS Compliant</p>