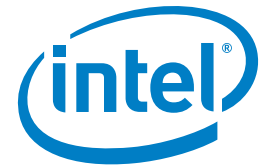


PRODUCT BRIEF

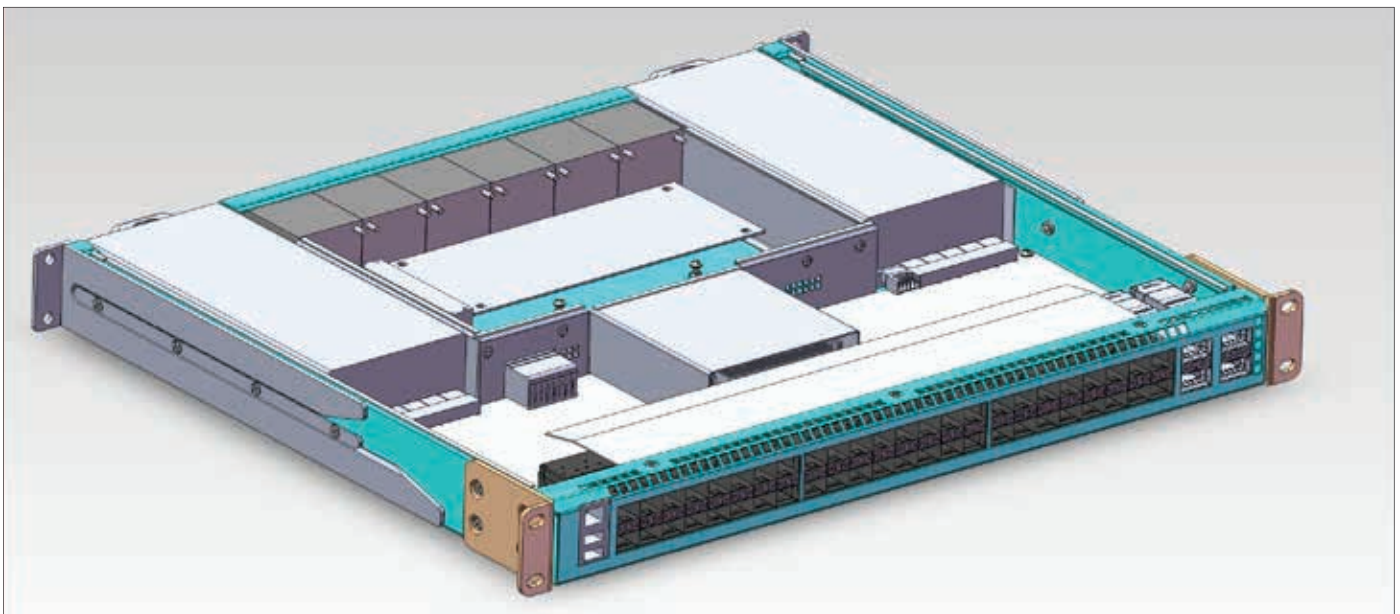
Intel® Open Network Platform
Switch Reference Design
Network Connectivity



Intel® ONP Switch Reference Design

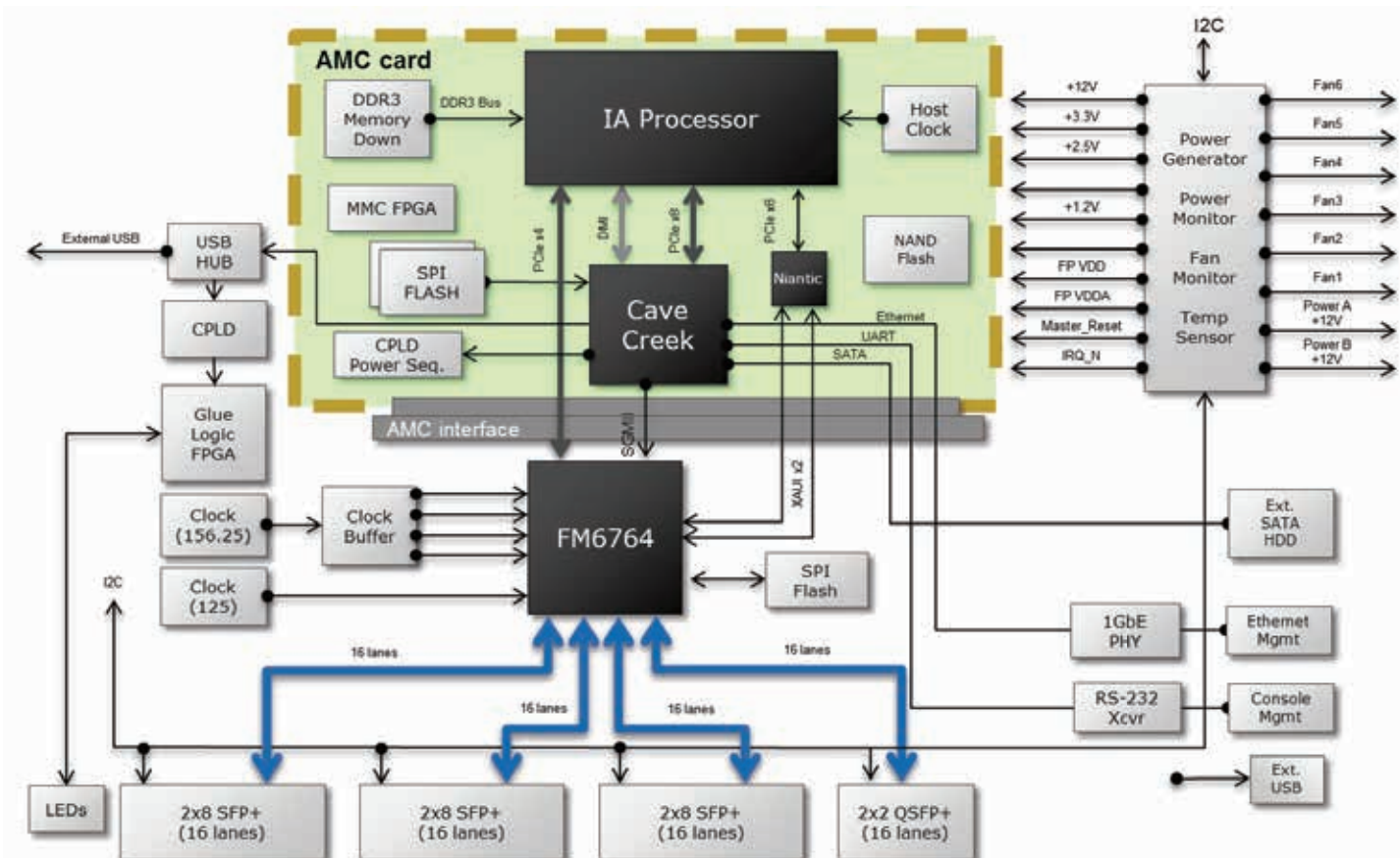
48 10 GbE ports plus four 40 GbE ports in a 1U, SDN-enabled ToR Switch

The Intel® Open Network Platform Switch Reference Design provides 48 SFP+ 10GbE and four QSFP 40GbE ports in a 1U top of rack (ToR) switch form factor. It includes the Intel® FM6764 Ethernet switch silicon, which supports enhanced features critical for today's SDN-enabled data center switching environments including low latency, scalability, L3 routing, data center bridging, as well as support for load balancing, NAT, NVGRE, VXLAN, TRILL, 802.1Qbg, 802.1Qbh, FCoE and DCBx. The Intel® FM6764 delivers tremendous flexibility using the advanced FlexPipe™ technology, while maintaining best-in-class latency and throughput. The reference platform also includes the Intel control plane processor codenamed Crystal Forest with the Cave Creek chip set on a pluggable AMC module.



Intel® ONP Switch Reference Design Features

- Intel® Ethernet FM6764 switch silicon
- Intel® control processor Crystal Forest on a separate AMC card
 - IA processor with “Cave Creek” chipset
 - 4 GB DDR3 DRAM
 - 8 GB NAND Flash storage device
 - 8 MB SPI Flash for boot BIOS
 - SPI EEPROM for PCH MAC and PCIe configuration
 - Intel® 82599 10 Gbps LAN controller
- CPU card interface to switch board
 - 4 lane PCIe Gen2
 - USB for switch board management and external communication
- 1 GbE port for external host management
- 1 GbE SGMII connection to switch device
- Two 10GbE XAU1 connections to switch device
- RS232 console management
- CPLD for board management (Altera MAX series)
- FPGA for board management (Altera Cyclone-IV series)
- One console interface for management via external RJ45 RS232 interface
- One Ethernet 10/100/1G BaseT interface for management
- Dual 460 W load-sharing power supplies—redundant under typical conditions
- Size: 17.8” W x 1.75” H x 15.6” D



Intel® ONP Switch Reference Design Block Diagram

Customer Support

Intel® Customer Support Services offers a broad selection of programs including phone support and warranty service. For more information, contact us at [support.intel.com/support/go/network/ adapter/home.htm](http://support.intel.com/support/go/network/adapter/home.htm)

(Service and availability may vary by country.)

For Product Information

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for the telephone number in your area. For additional product information on Intel Networking Connectivity products, visit: www.intel.com/go/ethernet

For more information on the Intel® ONP Switch Series of 10/40 GbE low-latency switching silicon, visit www.intel.com/go/ethernet

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