Superfast switches and routers offer advantages beyond their blistering speed

| Vendor | Product | Description | Features |
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| Alcatel Internetworking Inc. Calabasas, Calif. 800-995-2612 www.alcatel.com | OmniSwitch 8800 | An intelligent multilayer switch for enterprise core and backbone applications, high-density Gigabit Ethernet aggregation, large data centers, server farms and Gigabit Ethernet MANs | IO/IOO/I,000/IO-Gigabit Ethernet nonblocking, full-duplex multilayer security, authenticated VLANs and authentication services, enhanced ACLs, NAT and PAT, application-aware switching, embedded wire-speed server load balancing IP/IPX routing, IP multicast switching, MPLS and IPv6 support |
| Atrica Inc. Santa Clara, Calif. 408-562-9400 www.atrica.com | A-8000 Series | A high-speed core Metro switching solution featuring rapid serv- ice provisioning and reduced operational costs | The A-IOO is a I7-slot, high-density rack chassis supporting up to I5 I0-Gigabit Ethernet ports or up to I2O Gigabit Ethernet ports, MPLS-based architecture, sub-50-millisecond failure recovery, redundant DC power; the 8800 is a 34-slot chassis with I0-Gigabit interfaces and can multiplex up to 32 wavelengths of I0-Gigabit Ethernet on a single fiber |
| Broadcom Corp. Irvine, Calif. 949-450-8700 www.broadcom.com | BCM5673 | A IO-Gigabit Ethernet multilayer switch that delivers wire-speed Layer 2 through Layer 7 switching and routing over IOGBase-CX4 copper medium | Single IO-Gigabit Ethernet port, single IO-Gigabit Ethernet HiGig Uplink/Expansion port for stacking, integrated 512K packet buffer memory-on-chip, Layer 2 and 3 tables on-chip, wire-speed Layer 2 and 3 switching, linerate switching for all packet sizes, supports eight classes of service, advanced packet flow control, hardware support for IP multicasting and multicast replication, scalable up to 32 StrataXGS modules |
| Cisco Systems Inc. San Jose, Calif. 408-426-4000 www.cisco.com | Cisco 12000 Series Routers | Eleven models of intelligent routers that scale from 2.5 Gbps per slot to 40 Gbps per slot for carrier-class IP/MultiProtocol Label Switching (MPLS) core and edge networks | IP/MPL core (long-haul and regional), optical private-line aggregation (OC-48 to DSO), ATM and frame relay transport services over IP/MPLS core; OC-192/STM-64 and OC-48/STM-16 interfaces, new 2.5-Gbps slot that can be software-key upgraded to a IO-Gigabit Ethernet slot, an OC-I2/STM-4 channelized interface for high-density DSI/EI services and performance route processor |
| | Cisco Catalyst 6500 Series Switches | Six models deliver intelligent multilayer modular switching for secure and converged services from the wiring center to the core and from the data center to the WAN edge | Models in the series deliver from 48 to 576 IO/I00/I,000-Mbps ports to I,I52 IO/I00 Fast Ethernet ports with support for multiple Gigabit and IO-Gigabit trunks; IO-Gigabit Ethernet services provided by Cisco's Supervisor Engine 720 module for nonblocking 2-port and high-density 4-port IO-Gigabit Ethernet services |
| Enterasys Networks Inc. Andover, Mass. 978-684-1000 www.enterasys.com | X-Pedition ERIG Router with the X-Pedition ERIG-OSIG-OI 10-Gigabit Ethernet Module | The Gigabit Ethernet module is a single-slot line card for the X-Pedition ERIG router that lets it perform true core routing at true IO-Gbps and provide full-function Layer I, 2 and 3 switching | Quality of service for traffic control across the enterprise (allocates bandwidth on a per-port basis, assigns traffic to queues based on selectable priorities, supports policy-based routing); supports 100 percent availability with hot-swappable and redundant components; support for link aggregation and router redundancy, load-balancing for 100 percent content availability; security via access control lists; traffic filters and management authorization via Radius; full SNMP, RMON I and 2 support |
| | Matrix N-Series Enterprise Switches | The 3-slot Matrix N3 and the 7-slot Matrix N7 switches are designed for premium edge, collapsed backbone, distribution switching and server farm aggregation implementations | Multiple interfaces including I/I00Base-TX, I0/I00/I,000Base-TX, I00Base-TX, I,000Base-X and I0-Gigabit Ethernet; used with Enterasys' Platinum DFE; both models offer at least two I0-Gigabit Ethernet I0GBase Optics slots; the total aggregate switching capacity is 240 Gbps for the N3 and I.6 Tbps for the N7, with up to six I0-Gigabit Ethernet ports for the N3 and I4 Gigabit Ethernet ports for the N7; both models provide advanced multilayer packet classification, switching/VLAN services, distributed IP routing, several levels of security (user, network, host) and multiple management, control and analysis tools including support for SNMP versions I, 2c and 3, RMON, HC RMON, RMON II and SMON |
| Extreme Networks Inc. Santa Clara, Calif. 408-579-2800 www.extremenetworks.com | BlackDiamond 10808 | A true IO-Gigabit Ethernet switch designed to provide services for enterprise backbones, enterprise data centers, high-performance cluster computing, metro core, and distribution and Internet exchanges | I.6-Tbps total switching capacity with only nine-microsecond packet latency for 64-byte packets; 48 ports of I0-Gigabit Ethernet, 480 I0/I00/I,000Base-T ports; multiple management modules; hardware line-rate support for IPv4, IPv6, MPLS, NAT and GRE tunneling, multiple quality-of-service guarantees, multiple security levels, self-healing system monitoring software, future support for emerging 40-and I00-Gigabit Ethernet standards |
| | BlackDiamond 6800 Series with the BlackDiamond (OGX3 Module | The BlackDiamond IOGX3 Module is a standards-compliant IO- Gigabit Ethernet module for the BlackDiamond 6800 core switch- ing platform; Model 6816 can accept 16 IO-Gigabit Ethernet ports, Model 6808 accepts eight and Model 6804 accepts four IO-Giga- bit Ethernet ports | BlackDiamond 6800 Series provides between 256-Gbps and 768-Gbps of switching capacity; all models have policy-based quality of service, wire-speed Layer 2 and 3 switching, integrated server load balanacing, network login and EAPS, access control lists link aggregation, redundant power supplies, SNMP, Web CLI and four RMON groups |
| Force10 Networks Inc. Milpitas, Calif. 408-571-3500 www.force10networks.com | Force(0 E-Series | High-performance switch/routers for server and cluster consoli- dation, grid computing, campus backbones, next-generation Inter- net exchanges and metro Ethernet services | ForceIO E-Series EI200/E600 provides 50 Gbps per slot and the E300 delivers 25 Gbps per slot; all deliver predictable line-rate performance with any combination of features enabled, deterministic low latency and jitter, Layer 2 and 3 functionality and robust security features; the EI200 can support 336 Gigabit Ethernet ports and 28 IO-Gigabit Ethernet ports; the E600 can support 168 Gigabit Ethernet and I4 IO-Gigabit ethernet ports, and the E300 can support 72 Gigabit Ethernet and six IO-Gigabit Ethernet ports per chassis |
| Foundry Networks Inc. San Jose, Calif. 408-586-1881 www.foundrynet.com | NetIron Metro Router Series | A modular routing series ranging from 4-slot to 8-slot to 15-slot systems that enable standardization on a single product family for Multi Tenant Unit (MTU), Provider Edge (PE), Provider Core (P) to Internet Edge (IE) services | The NetIron 40 with four slots offers I44 I0/I00 ports, 56 Gigabit Ethernet ports, six I0-Gigabit Ethernet ports and six OC-3/I2/48c Sonet/SDH ports per system; the NetIron 800 with eight slots offers 336 I0/I00 Ethernet, I20 Gigabit Ethernet, I4 I0GbE and I4 00-3/I2/48c ports; the NetIron I500 with I5 slots offers 672 I0/I00 Ethernet, 232 Gigabit Ethernet, 28 I0-Gigabit Ethernet, 28 I0-Gigabit Ethernet, 28 In Oedge offer high-availability redundant management and interface modules, Multi-Protocol Label Switching (MPLS) and a robust Layer 3 feature set |
| | 10 Gigabit Ethenet Module | Two-port IO-Gigabit Ethernet card designed to deliver 20 Gbps in NetIron, BigIron and FastIron modular chassis products | Wire-speed hardware-based Layer 2 switching, IP and IPX-based Layer 3 routing, Access Control Lists, traffic classification, prioritization and marking, support for jumbo frames, comes in a single port-optic version, and a single-port fixed and dual-port Xenpak version |
| | BigIron 4000/8000/15000 Series | Modular, chassis-based Layer 3 switches for campus, MAN and LAN/WAN environments | Delivers up to I2O Gigabit Ethernet ports and I7O million-packet-per-second performance; I0-Gigabit-ready if used with one of Foundry's I0-Gigabit Ethernet modules; high-density Packet-over-Sonet (0C-3c to 0C-48c), Global Ethernet (Ethernet over Sonet) and ATM; hardware-based Layer 2, 3 and 4 switching, multiprotocol routing, policy-based VLANs, eight levels of quality of service, server multihoming, link aggregation, full IP multicast support |
| | BigIron MG8 | IO-Gigabit Ethernet Layer 2 and 3 switch with terabit capacity, LAN switching and routing for high-end IP networks, especially on the backbone and aggregation points | I.28 Tbps delivering 40 Gbps of swiching performance per slot; up to 32 IO-Gigabit Ethernet ports per system or 320 Gigabit Ethernet ports within a chassis, or 960 Gigabit Ethernet ports in a standard 7-foot rack; wirespeed Layer 2 and 3 switching with policy-based routing, advanced quality of service delivery with advanced bandwidth management, low switching latency of less than IO microseconds, carrier-class reliability, ASIC-based sFlow technology for wire-speed traffic accounting and monitoring |
| Hewlett-Packard Co. Palo Alto, Calif. 650-857-I501 www.hp.com | HP ProCurve Network Routing Switch 9300m Series | Three models (9315m, 9308m, 9304m) provide a highly scalable routing switch for high-availability networks | IO/IOO/I,000/IO-Gigabit Ethernet managed modular routing switches with four, eight or I5 open module slots for up to 232 Gigabit Ethernet ports; up to 672 auto-sensing IO/IOO ports or a combination, and a maximum of 28 IO-Gigabit Ethernet ports; extended port density, sFlow traffic monitoring, T-Flow traffic management with simultane-ous processing of access control lists (ACLs); policy-based routing, network address translation (NAT), Layer 4 proritization; IP/IPX/AppleTalk routing, IP multicast routing, advanced security, policy-based VLANs, optional redundant power supplies, hot-swappable chassis modules, Web interface for configuring the switches |
| Nortel Networks Ltd. Richardson, Texas 972-684-1000 www.nortelnetworks.com | Passport 8600 Routing Switch | A chassis-based routing switch for enterprise, carrier and service provider networks | Wire-speed Layer 2 to 7 traffic classification, multilayer redundancy; integrated, intelligent bandwidth connectivity for IO/IOO/IOOO Ethernet, ATM, IO-Gigabit Ethernet and WDM; seamless LAN/MAN/WAN connectivity; eight policy-enabled hardware queues per port, 5I2-Gbps backplane switch capacity |
| Riverstone Networks Ltd. Santa Clara, Calif. 408-878-6500 www.riverstonenet.com | 15008 Ethernet Edge Router | Blends IO-Gigabit Ethernet routing and switching with advanced services support, fine-grained traffic management and ultrareliability to meet the needs of carriers and service providers | All Riverstone enterprise technology and rights were acquired by Hewlett-Packard Co. to be used in the development of HP's ProCurve EDGE Fabric, a family of Ethernet LAN devices designed to optimize networks based on the ProCurve Adaptive EDGE Architecture |
| 3Com Corp. Santa Clara, Calif. 408-326-5000 www.3com.com | Switch 7700 | Delivers high-performance, multilayer IO-Gigabit Ethernet and Fast Ethernet switching in an integrated chassis platform; three chassis available | 802.3ae IO-Gigabit Ethernet standard capable, hardware multicast routing, network login, access control lists, Layer 3 protocol authentication, rule-based packet ID, input/output queues for bandwidth management, switching fabric redundancy, BGP4 MSTP, SNMP Version 3 protocols |