The explosive growth of intranet applications is placing a huge demand on enterprise LANs and creating bottlenecks that extend all the way to the desktop. To combat this problem, Extreme Networks offers a revolutionary enterprise desktop switching solution—the Summit48™ Enterprise Desktop Switch.

Summit48 combines the dedicated bandwidth that clients need today with the performance and scalability to support emerging applications for years to come. As the industry’s first Enterprise Desktop Switch, Summit48 integrates seamlessly into the enterprise LAN while delivering the most sought-after enterprise features, high port density, wire-speed performance and low cost of ownership.

With 48 switched 10/100 Mbps autosensing Ethernet ports and two full-duplex Gigabit Ethernet ports, Summit48 has a 17.5 Gbps non-blocking switch fabric and a forwarding rate of 10.1 million packets per second. Summit48 supports wire-speed Layer 2 switching in its base configuration and easily scales up to Wire-Speed IP Routing at Layer 3 with a simple field upgrade key.

Summit48 port density, fault tolerance and performance scale even further with the Summit Virtual Chassis™. It’s a high-speed external backplane that interconnects up to eight stacked or distributed Summit48 switches into one cohesive system with up to 384 10/100 Mbps Ethernet ports. Connected to a Virtual Chassis SummitLink™ port, Summit48 switches combine the flexibility and low entry-cost of a stackable with the fault tolerance and high port-density of a modular system.

Each Summit system is pre-installed with ExtremeWare™, a standards-based software suite that delivers a major breakthrough in the ability to manage and control bandwidth on a network. ExtremeWare combines standards with advanced features to deliver Policy-Based Quality of Service (QoS) that includes bandwidth allocation and VLAN switching. Policy-Based QoS lets network managers prioritize and allocate bandwidth to many different types of network traffic—right down to the TCP session and without performance penalty.

- Unprecedented enterprise backbone capabilities and performance in a desktop switch
- 17.5 Gbps non-blocking switch fabric bandwidth with wire-speed switching performance
- 48 10/100 Mbps Ethernet ports and two GBIC-based 1000BASE-SX Gigabit Ethernet ports
- Optional Wire-Speed IP Routing performance at 10.1 million packets per second
- Fully interoperable with existing routers using standard IP routing protocols
- Policy-Based QoS, including bandwidth management, prioritization and congestion control
- Fault-tolerant features include multiple load-sharing trunks, multiple spanning trees, and optional redundant power supply
- Extensive management through HTML, SNMP, RMON, local and remote (telnet) CLI
- Ideal for direct high-density desktop connections and high-performance applications
Exponential growth in network traffic has driven the emergence of Extreme's Intranet Switching Architecture, the reference standard for today's switched enterprise LANs. It lets network managers build a fully integrated switched LAN infrastructure that handles wire-speed Layer 2 and Layer 3 switching from end to end. The result is the elimination of bottlenecks in key areas of the enterprise LAN—desktops, workgroups, servers and the core.

Summit48's high-density 10/100 Mbps autosensing Ethernet ports greatly simplify deployment and minimize complexity at the desktop. There's no need to change any existing subnet infrastructures. And while Summit48 comes equipped with wire-speed Layer 2 switching, network managers can migrate anytime to full Wire-Speed IP Routing using a system-specific upgrade key.

The ExtremeWare standards-based software suite also simplifies switch management. Preloaded on every Summit switch, ExtremeWare includes a comprehensive Command Line Interface (CLI) as well as the easy-to-use ExtremeWare Vista™ browser-based management interface. ExtremeWare also supports SNMP and four groups of RMON.

With Summit48, Extreme has taken the features and performance of an enterprise switch, the simplicity and low cost of a workgroup hub, and deployed them in a stackable 3½ inch-high form factor. Included with this powerful price/performance mix are port trunking, wire-speed Layer 2 switching and quality of service—everything a business needs for today's switched enterprise LANs.

For future proofing, network managers can easily upgrade their Summit48 switches at any time to perform Wire-Speed IP Routing, IP multicasting and more granular QoS for applications and individual users. Summit48 and Extreme's Intranet Switching Architecture give businesses the ability to handle the most bandwidth-intensive applications in the future.

The Summit48 maximizes performance and scalability for a wide range of desktop connections. It can provide dedicated 10/100 Mbps links to every desktop or multiple 10/100 Mbps links can be trunked to load-share power-user traffic. Summit48 also supports dual load-shared Gigabit Ethernet down links to the rest of the network.

Like other Summit switches, Summit48 is non-blocking so its backplane capacity is always greater than the aggregation of all its ports. This guarantees full wire-speed performance on all ports, all the time—even under the most severe traffic conditions. In addition, a low over-subscription ratio of 2.4:1 enables the Summit48 to handle the traffic demands of individual users and high-performance workgroups.
Low cost is an important factor when considering switching to the desktop. And the combination of low cost, high port density and wire-speed performance make Summit48 the ultimate choice for Enterprise Desktop Switching.

Summit48 protects current and future investments in Ethernet equipment and infrastructures, thereby reducing the total cost of network ownership. To eliminate LAN congestion problems, network managers can easily migrate from Layer 2 to Layer 3 without a costly forklift upgrade.
General
48 10/100BASE-TX ports
Two GBIC-based 1000BASE-SX ports (hot swappable via SX or LX GBIC modules) each with a redundant GBIC port (unpopulated)
True QoS via ExtremeWare and Policy-Based Quality of Service
Full or half duplex operation
Multiple spanning tree support
Multiple load-sharing trunks
Up to 128,000 Layer 2 addresses
Up to 64,000 Layer 3 addresses*
4 MB buffering

Protocols and Standards
IEEE 802.3z 1000BASE-X
IEEE 802.3x Flow control
IEEE 802.1D STP
IEEE 802.1p Packet priority
IEEE 802.1Q VLAN tagging
RFC 1058 RIP*
RFC 1723 RIP v2*
RFC 1112 IGMP*
RFC 1256 Router discovery protocol*
RFC 1812 IP route requirement*
RFC 783 TFTP
RFC 1542 BootP
RFC 951 BootP
RFC 854 telnet
RFC 2068 HTTP
OSPF*
DVMRP v3*

Performance
17.5 Gbps non-blocking bandwidth
Route/filter/forward 10.1 million pps*

Management and Security
RFC 1157 SNMP v1/v2c
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1573 Evolution of Interface
RFC 1643 Ethernet MIB
RFC 1757 RMON Groups 1-4
HTML and telnet management

Physical and Environmental
Dimensions: (H) 3.5 in x (W) 17.32 in x (D) 17.42 in
(H) 8.90 cm x (W) 44.0 cm x (D) 44.25 cm
Weight: 18 lb (8.17 kg)
Operating Temperature: 0º C to 40º C
Storage Temperature: -20º C to 80º C
Humidity: 10% to 95% non-condensing
Power: 90-250 VAC, 47-63 Hz, 2.5 A max
Includes hardware for mounting in a standard 19-inch rack

Regulatory Compliance
EN55022 Class A
FCC part 15 Class A
CSA C108.8-M1983 (A)
VCCI Class 2
EN50082-1
EN60068
UL 1950 3rd Edition,
cUL listed to CSA 22.2#950
EN60950: 1992/A3: 1995
TUV GS Mark
CE Mark

* Optional Layer 3 capabilities

Ordering Information

<table>
<thead>
<tr>
<th>Product</th>
<th>Order Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summit48</td>
<td>15001</td>
<td>Layer 2 switching with 2 GBIC-based 1000BASE-SX ports, 2 redundant GBIC ports (unpopulated), 48 10/100BASE-TX ports</td>
</tr>
<tr>
<td>Summit48</td>
<td>15002</td>
<td>Basic Layer 3 switching with 2 GBIC-based 1000BASE-SX ports, 2 redundant GBIC ports (unpopulated), 48 10/100BASE-TX ports</td>
</tr>
<tr>
<td>ExtremeWare</td>
<td>10021A</td>
<td>Optional upgrade key to Layer 3 switching</td>
</tr>
</tbody>
</table>

Extreme Networks™ leads the third wave of LAN switching. Recognizing the need to migrate existing LANs to the extreme requirements of today's intranets, Extreme builds on Gigabit Ethernet with its system of Summit switches and ExtremeWare software to scale speed, bandwidth, network size and quality of service (QoS) from the desktop to the backbone.

For more product information from Extreme Networks, please call 1-888-257-3000.