

# 3Com® CoreBuilder®



## 3500 MultiLayer Switch

*Enhances performance in switched Ethernet, Fast Ethernet, Gigabit Ethernet, FDDI, and ATM LANs*

The CoreBuilder 3500 MultiLayer Switch allows you to control your network traffic without compromising performance.



### Key Benefits

**Performance.** Advanced programmable distributed ASIC+RISC Flexible Intelligent Routing Engine (FIRE) architecture provides non-blocking, wire-speed routing and switching on all 100 Mbps ports for unicast, broadcast, and multicast packets with an aggregate throughput of more than 4 million packets per second (pps).

**Migration.** The CoreBuilder 3500 module will allow Ethernet, Fast Ethernet, Gigabit Ethernet, FDDI, and ATM to communicate transparently. The subnet structure can be maintained, avoiding readdressing end stations.

**Policy.** Policy-based services prioritize and allocate bandwidth to different types of network traffic.

**Network management.** The CoreBuilder 3500 AutoFocus SmartAgent® software provides powerful self-management tools in conjunction with 3Com Transcend® network management.

The 3Com® CoreBuilder® 3500 MultiLayer Switch redefines price/performance and functionality in high-end switching and routing. Built around sophisticated third-generation ASIC technology, the switch provides wire-speed Layer 2 and Layer 3 traffic forwarding and supports real-time, multimedia network traffic using the most advanced policy-based services found in networking devices today. Combined with flexible virtual LAN (VLAN) support, multicast services, multiprotocol routing, network management with RMON-1 and RMON-2, and Roving Analysis Port (RAP), the CoreBuilder 3500 MultiLayer Switch provides a robust and resilient networking infrastructure.

The CoreBuilder 3500 MultiLayer Switch is designed to act as a backbone LAN router, replacing legacy LAN routers for Layer 3

forwarding functionality. It will also be used as an edge device performing Layer 3 forwarding while connected to a backbone of Gigabit Ethernet or ATM.

Migrating the network backbone from Fiber Distributed Data Interface (FDDI) to ATM is another specialty of this system. The CoreBuilder 3500 switch can mix and match ATM, 10/100 Fast Ethernet, Gigabit Ethernet, and FDDI interfaces in each of its four module slots for the flexibility to move freely between technologies.

With superb performance, flexibility, and network control features, the CoreBuilder 3500 MultiLayer Switch is the ideal networking device to make the transition to a next-generation network.

# Switches

## Scaling Performance and Managing Growth with the CoreBuilder 3500 MultiLayer Switch

As networks become more complex and performance requirements more demanding, organizations need greater ability to manage the evolution of these infrastructures while making them increasingly transparent to users. Network managers require the ability to build flexible, scalable, and easily managed network solutions. Users also want all their applications, however sophisticated, to be instantly available and extremely responsive. With the CoreBuilder 3500 MultiLayer Switch and Transcend® network management software, these goals are not only attainable, but you can build a network that will have the right tools to scale performance and manage growth while providing policy services for the first time.

### Evolution of Switched Networks

The demands of today's networks are changing from a model where 80 percent of traffic remained local with the rest going through a backbone to either centralized servers or to some other part of an enterprise network. Today, 50 percent of traffic remains local with the balance going across workgroups or to the backbone. Also, shared media desktop connections are rapidly changing to switched connections to support increased traffic loads. The immediate impact of this evolution is primarily felt in the traditional backbone routers that have been deployed to segment LANs. With so much more traffic crossing IP subnet and

IPX network boundaries, these routers become bottlenecks in traffic flows. The reason is that traditional routers were optimized to handle a diverse set of media types and speeds, where translation and buffering ability were of paramount importance, not wire-speed throughput or low latencies. While some recent entries in the router space are much improved in performance—some reaching 1 million pps—they have done so at a very high price point.

### The CoreBuilder 3500 MultiLayer Switch—Layer 3 Wire-Speed, Multiprotocol Routing

Today's LAN infrastructures require a new solution to the problem of forwarding traffic across network boundaries. The answer is a new type of networking device. This new device combines the functions of current Layer 2 switches and LAN routers while adding features beyond what legacy LAN routers can support. These new devices have been referred to as Layer 3 switches, but that label does not fully describe the ability of the CoreBuilder 3500 MultiLayer Switch. This product can route packets at wire speeds across 10/100 Mbps Ethernet ports, scaling up to 4 million pps. The CoreBuilder 3500 MultiLayer Switch also has low latencies associated with Layer 2 switches, typically 15 to 30 microseconds. Plus, the CoreBuilder 3500 MultiLayer Switch supports sophisticated Class of Service (CoS) and Quality of Service (QoS) features that allow different types of traffic to have different levels of service—without affecting performance.

Networks are not all based on Ethernet. FDDI and ATM are popular LAN backbone technologies. ATM was once considered the only backbone technology that could be deployed if multimedia applications were to be used. Newer technologies such as Gigabit Ethernet have the potential to become the choice of tomorrow's LAN backbone infrastructures. Some Gigabit Ethernet switches becoming available support CoS and QoS and, combined with massive bandwidth, have the potential to provide service levels adequate for video, voice, and multimedia over Ethernet LANs. While not as robust as ATM QoS, it will be available at lower cost and complexity. Given this reality, any networking device in consideration for use in backbones must provide a way to interconnect these technologies and provide a migration path for those networks that will be changing backbone technologies. This is an area where the CoreBuilder 3500 MultiLayer Switch plays very strongly.

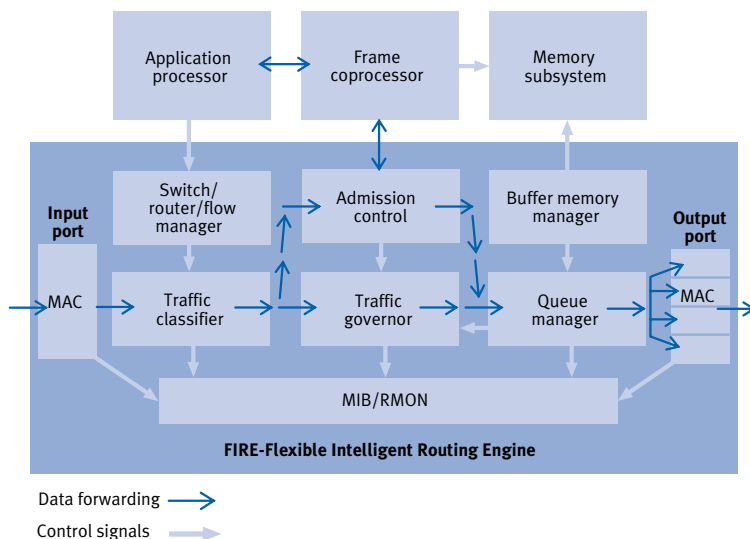
### CoreBuilder 3500 Switching Architecture

What makes the CoreBuilder 3500 product the industry-leading multilayer switch is its unique architecture. The switch is built around a third-generation architecture whose key element is the FIRE ASIC. This generation not only builds upon advancements in Layer 2, but provides extensive capabilities and wire-speed performance levels for Layer 3 routing, multicast forwarding, and user-selectable policy services as well. There is no longer a disparity between Layer 2 and Layer 3 performance. True Layer 3 switched topologies can now be built with the control of Layer 3 and the performance of Layer 2 with absolutely no compromises.

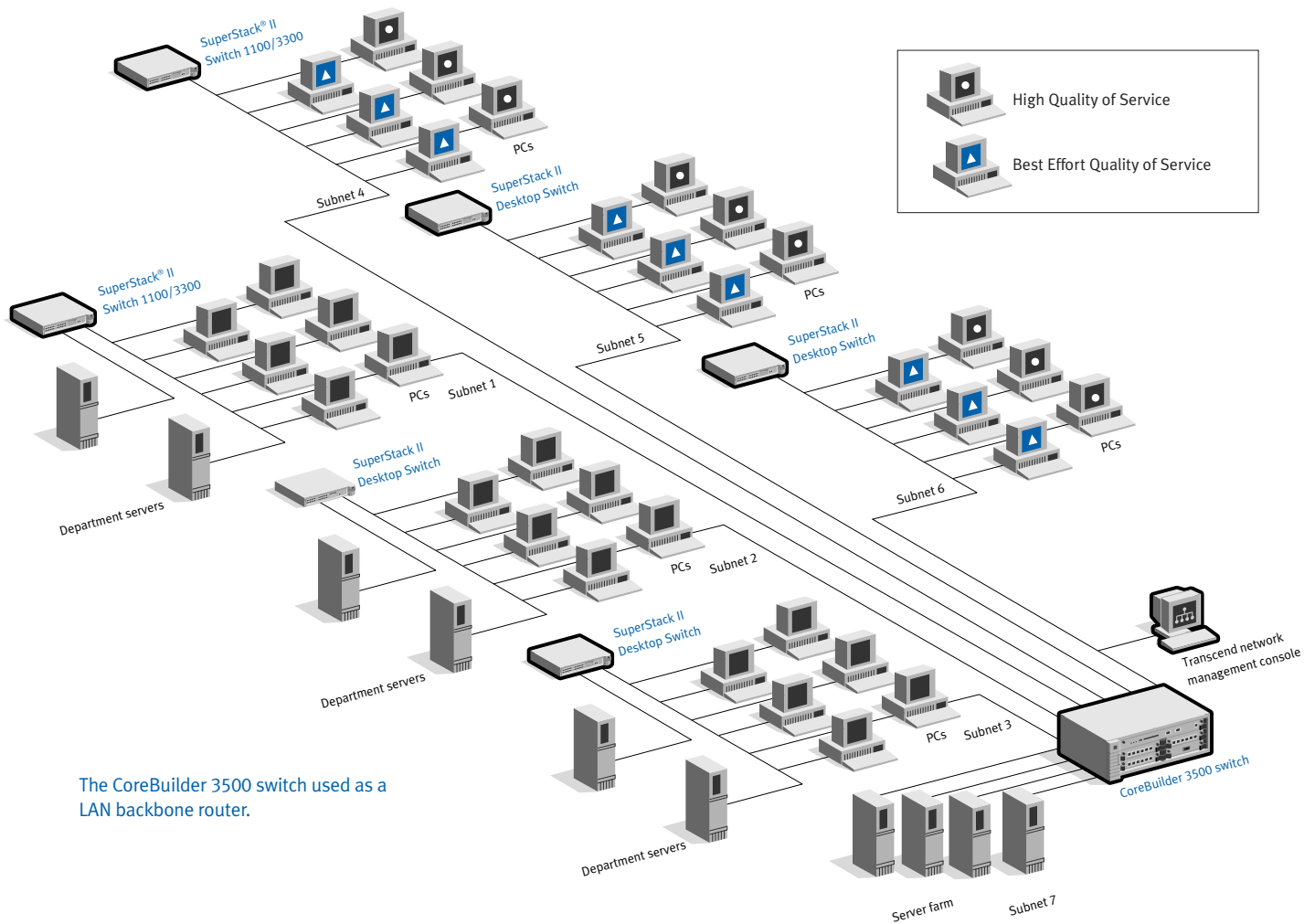
### Flexible Intelligent Routing Engine (FIRE)

3Com has extended the FIRE programmable ASIC capabilities even further by embedding a processor into the silicon. This gives FIRE the performance of an ASIC and makes it extensible as well. Future enhancements, such as IP version 6, can be incorporated without a product upgrade or a sacrifice in performance. This future proofing is a key consideration when evaluating next-generation switching solutions. See the figures on this page and on page 4 for examples of FIRE architecture.

FIRE introduces Distributed Packet Processing (DPP). With DPP, multiple



FIRE Architecture



The CoreBuilder 3500 switch used as a LAN backbone router.

distributed forwarding engines rapidly and independently transfer packets through the system. As a packet travels through the pipeline, the system:

- Verifies frame integrity
- Captures statistics for relevant MIBs, including RMON
- Determines VLANs
- Distinguishes bridged and routed frames
- Classifies specific data flows
- Polices data rates on flows and reservations
- Applies filters
- Modifies packet headers if routing or tagging
- Applies priorities
- Transmits the packet

Within an individual pipeline, several ASICs simultaneously handle multiple frames. This parallelism and pipelining bring forwarding performance at Layer 2 and Layer 3 to new levels: wire speed on all ports for unicast, multicast, and broadcast traffic.

All buffering is done on the output because all the necessary checking and updates are complete by the time a packet arrives at the output stage. This avoids accessing a packet in memory, one of the most costly operations in terms of performance.

### Dynamically Scalable Memory

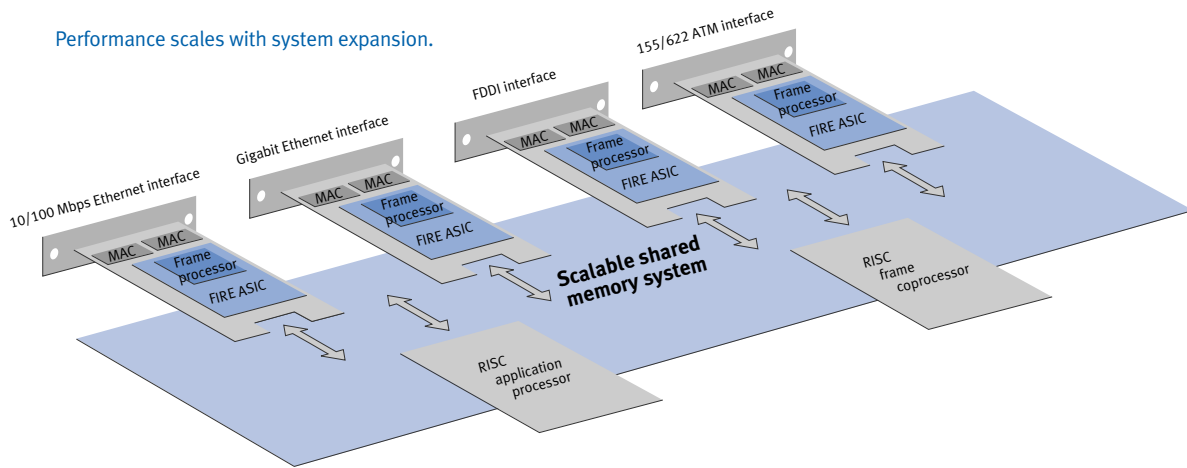
The performance potential of advanced LAN switches is built on an intelligently designed memory subsystem. With FIRE, a portion of the buffer memory is associated directly with the forwarding engines. As interface modules are added with their respective forwarding engines, memory scales accordingly. Memory is not statically coupled with the forwarding engines, but is made available to all forwarding engines in the system. This physically distributed, yet globally shared memory provides a dramatic increase in performance, especially for multicast forwarding. FIRE allocates buffers to the size of received frames and does so dynamically, so large packets get large buffers and small

packets get small buffers. This uses memory efficiently and increases the system's ability to handle large traffic bursts without losing a packet. These dynamically constructed buffers are then allocated in a two-level hierarchy, on a per-port basis and a common pool. This arrangement allows FIRE to guarantee a fixed amount of buffering for each interface yet handle large bursts of data without depleting resources. The result is efficient utilization with outstanding performance.

### Advanced Queuing Mechanisms

Traditional LAN switches buffer output traffic on a single queue. Traffic was served on a first-in, first-out manner, with excess traffic discarded when the queue became full. The larger queue allowance added to latency. These characteristics made deploying real-time and multimedia applications very difficult. In response to this, 3Com introduced PACE™ technology, which allows for different classes of service over the same Ethernet LAN with controls for latency

Performance scales with system expansion.



and jitter. The FIRE architecture builds on PACE technology and introduces four levels of output queuing for even greater levels of traffic discrimination. Packets associated with real-time flows and multimedia are placed on higher-priority queues. Weighted Fair Queuing (WFQ) services the higher-priority queues more frequently, while not starving the lower-priority queues.

### Automatic Flow Classification

FIRE can instruct its packet pipeline to discriminate among user-specified traffic flows. These network manager-defined priority settings are implemented in silicon. This results in decreased latencies, high-priority transmissions, and congestion avoidance. AutoClass instructs the pipeline to classify data flows and assign them a queue-based priority. The process is media independent, working over all Ethernet, FDDI, and ATM media. AutoClass can recognize Data Link Encapsulation such as SNAP types and LLC, as well as protocol types. Unicast, multicast, and broadcast traffic can be distinguished, as well as IP UDP, TCP source, destination addresses, and well-known ports. Mappings of 802.1p and 802.1Q services are provided as well as default classifiers. To simplify the task of traffic classification setup, Transcend network management applications offer simplified configuration of classifiers and queuing.

One example of using AutoClass is prioritizing FTP traffic during large file backups to ensure timely completion. Another is wire-speed firewalls, where certain flows are allocated zero bandwidth.

### CoreBuilder 3500 Features

- VLANs provide enhanced network performance by isolating broadcast domains. Three basic types of VLANs are supported:

*Port-based VLANs* are an arbitrary group of ports within a bridge group.

*Protocol-based VLANs* are a collection of ports designated as a VLAN interface for packets belonging to a specific Layer 3 protocol family.

*Network-based VLANs* are a collection of ports designated as a VLAN interface for packets belonging to a specified Layer 3 network address.

IEEE 802.1Q tagging is also supported for interoperability with switches in a multivendor environment. 3Com proprietary tagging and Layer 3 address tagging are also supported.

- Trunking is a method of aggregating traffic over a group of ports either to form a big pipe between switches or a fault-tolerant pipe to another switch. The trunking group is treated as a single Layer 2 pipe with respect to spanning tree, filtering, VLAN membership, and so on.
- Traffic control mechanisms are supported to prevent the propagation of certain traffic. Packet filtering allows the user to define filters that cause blocking of traffic to or from the designated source or destination address or many other criterion. Protocol filtering prevents certain protocols from being processed on particular ports. Route filtering defines the prevention of routes from being advertised on selected interfaces. This type of filtering is mainly a security feature.

- Multicast packet firewalls limit the rate at which multicast packets are forwarded.

### Internetworking

As large, flat Layer 2 networks are built for performance and simplicity reasons, it is becoming obvious that Layer 3 control is necessary. Users are coming full circle again as they realize the issues of Layer 2-only designs: broadcast storms, spanning tree topologies making inefficient use of data paths, limited dissimilar network connectivity, security, and so on, which forced the use of routers years ago. The reason users tried to reduce the amount of routing in networks was their greater latency and slower performance. Today, the CoreBuilder 3500 MultiLayer Switch is the solution, providing Layer 3 forwarding at the performance levels of Layer 2 switches. Networks can still benefit from Layer 2 switches, but a proper network design must balance Layer 2 with the control of Layer 3 devices. The CoreBuilder 3500 MultiLayer Switch supports the most common Layer 3 protocols in use today:

- IP is the protocol most networks are using. Full IP support is incorporated in the CoreBuilder 3500 Layer 3 switch, including TCP, UDP, RIP, OSPF, DVMRP, and all RFCs defined for routing of IP. Both unicast and multicast traffic types are supported. IP version 6 will be supported as well.
- IPX, which is used in NetWare environments, is an important protocol as most networks today have some amount of NetWare usage. Although Novell's future direction is toward IP, support of IPX is critical in migrating today's networks

toward an IP-only model. The CoreBuilder 3500 MultiLayer Switch supports IPX RIP, SAP, and all IPX Ethernet encapsulation types.

- AppleTalk version 2 remains ubiquitous in large networks and is critical in supporting migration to the IP-only direction Apple Computer is taking. The CoreBuilder 3500 MultiLayer Switch supports AppleTalk SNAP, AARP, DDP, RTMP, ZIP, AEP, and NBP.
- Autocast VLANs filter IP multicasts based on IGMP and IP multicast routing packets that are received. Multicast traffic will be flooded to ports where IGMP packets have been observed. Multicast packets will also be flooded to DVMRP ports to other multicast routers. This is a benefit in applications that stream video to multiple locations or need to send many copies of large databases to many hosts, such as in financial trading floors.
- Policy-based services define the characteristics and criteria for offering different grades of network services for certain types of traffic such as file backups, video, and multimedia. The CoreBuilder 3500 MultiLayer Switch offers a rich set of features for supporting QoS, including multiple output queues, AutoClass of traffic types, and WFQ of priority-queued traffic.

## CoreBuilder 3500 Interfaces

### Ethernet

There are three Ethernet modules for the CoreBuilder 3500 MultiLayer Switch: the 6-port 10/100BASE-TX module supports autonegotiation for speed and for half and full duplex; and the 6-port 100BASE-FX (MMF) and the 6-port 100BASE-FX (SMF) modules support half and full duplex.

### Gigabit Ethernet

The single-port Gigabit Ethernet module supports a Gigabit Interface Converters (GBICs) interface, allowing a variety of media type support: 1000BASE-SX (62.5 and 50 micron MMF), 1000BASE-LX (62.5 and 50 micron MMF), 1000BASE-LX SMF, and a future 1000BASE-TX transceiver.

### FDDI

The 6-port FDDI modules support SAS and DAS configurations, plus A, B, S, M port functionality, available with either multimode or single-mode fiber ports. FDDI interfaces offer a tremendous advantage in networks that have FDDI backbones. They can also be used as a migration tool if the backbone technology is changing to Gigabit Ethernet or ATM. (See diagram below.)

### ATM

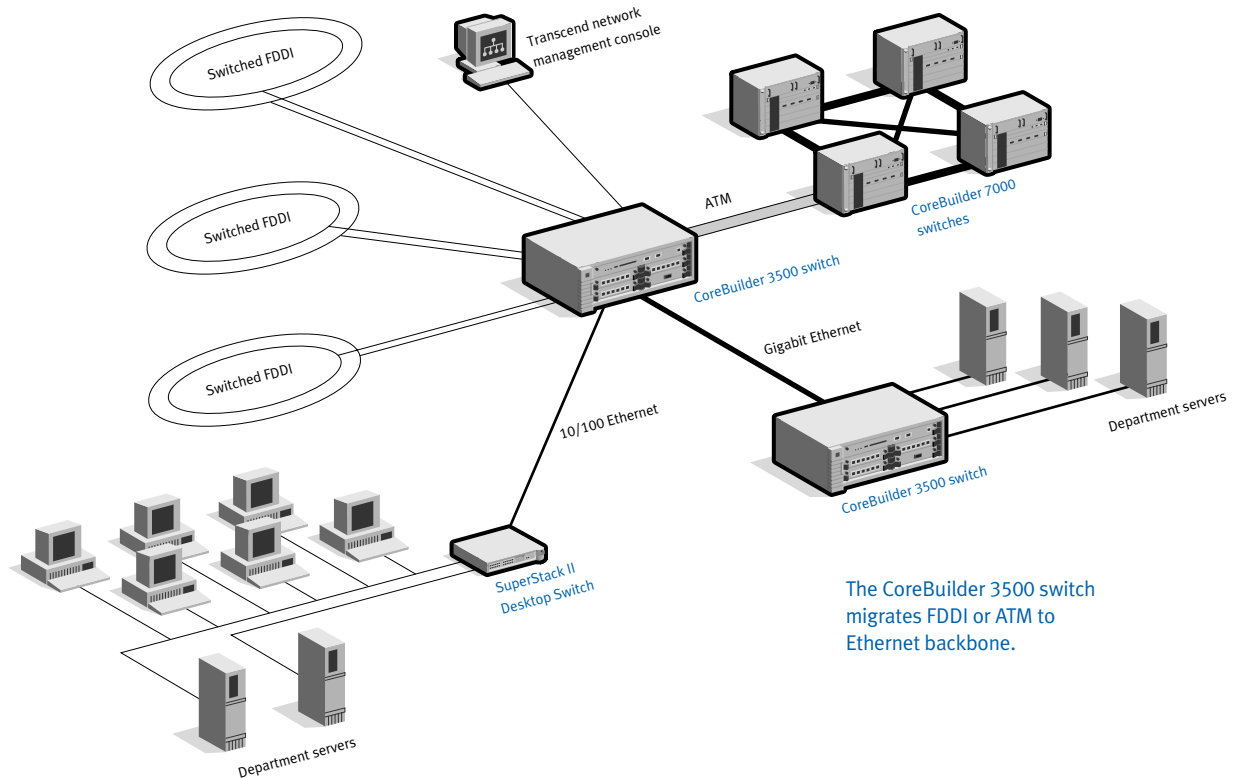
The ATM interface modules for the CoreBuilder 3500 MultiLayer Switch enable wire-speed communication between virtual segments known as

ATM emulated LANs (ELANs). The CoreBuilder 3500 switch can be configured with up to two ATM interface modules, each supporting one OC-12c or two OC-3c ports. Multiple ELANs can share each physical interface. This layer independence offers unparalleled flexibility since the hardware-based router can be plugged directly into any ATM switch in the network without concern for Layer 3 address changes.

## Network Management

The CoreBuilder 3500 MultiLayer Switch will be supported by a combination of embedded SmartAgent® software agents and external network management applications. The CoreBuilder software leverages the advanced capabilities engineered into the device to provide traditional console-based, Web-based, application-based management, and a PCMCIA modem.

- Console-based management. The CoreBuilder 3500 MultiLayer Switch supports a state-of-the-art console interface that allows users to utilize a traditional out-of-band or in-band Command Line Interface (CLI) to configure the wide array of software options available.
- Web-based management. The CoreBuilder 3500 MultiLayer Switch also features an embedded Web server that provides an advanced GUI to configure



The CoreBuilder 3500 switch migrates FDDI or ATM to Ethernet backbone.

consistently the software options commonly found using the console interface.

- Applications-based management. Transcend Enterprise Manager for Windows NT and Transcend Network Control Services for UNIX supply configuration management, performance monitoring, topological mapping, VLAN management, and front-panel status viewing, enhanced by an advanced GUI for ease of use.

The CoreBuilder 3500 MultiLayer Switch also supports a variety of unique embedded management mechanisms to allow users to utilize various methods for nontraditional management.

- AutoFocus. This tool combines the advanced feature of RAP with the Transcend network management application's ability to accomplish action on event. AutoFocus allows a user to predefine the outcome of a trapped threshold and allows Transcend to set an event into motion automatically. These events, for example, can include shutting down a port or assigning an externally attached probe to a specific port.

- Embedded RMON. Groups of RMON-1/RMON-2 within the hardware ASIC architecture allow users the freedom of using this technology without regard to performance.
- Roving Analysis Port (RAP). This port allows external RMON/RMON-2 probes, such as the 3Com SuperStack® II Enterprise Monitor to monitor traffic on any switched segment. The CoreBuilder 3500 MultiLayer Switch RAP works across multiple CoreBuilder 3500 MultiLayer Switch systems with any type of backbone connection (Fast Ethernet, FDDI, Gigabit Ethernet, or ATM), making it the industry's most powerful roving port capability. RAP is accessible from 3Com's advanced monitoring applications, Transcend Enterprise Manager, Transcend Network Control Services, and Transcend Traffic™ Manager software. The combination of RAP, Transcend applications, and a RMON-1/RMON-2 probe is an important element in managing and troubleshooting a network. The roving port allows data collection from all segments of the network without having to relocate a probe manually.

### 3Com Software

3Com Transcend network management and control solutions consist of Transcend applications as well as embedded network-control software. Embedded software built into the CoreBuilder 3500

MultiLayer Switch includes:

- Service-level policy for bandwidth reservation and prioritizing traffic with CoS and QoS
- Security policy for setting firewalls and filters
- Network operations to provide the tools to set up VLANs, trunking, and multicast policies

Policy management functions allow for device management, traffic reporting, troubleshooting through RMON-1, and analysis through a RAP. Global policy allows for the setting of service-level policy, security policy, and network-operations policy across the network, giving you unprecedented control over the network and allowing you to manage it as a single, cohesive system. Therefore, with Transcend network management and control solutions, you can set global policies via centralized applications that are automatically executed by embedded software throughout the network.

## Specifications

### CoreBuilder 3500 MultiLayer Switch

#### Layer 2 Features

##### Layer 2 Switching Support

Store-and-forward switching  
IEEE 802.1d bridging mode  
Address table size: 32 K (64 K)  
Configure address table per VLAN  
IPX SNAP encapsulation (FDDI)  
IP fragmentation (RFC 1042)  
AppleTalk II translation (IEEE 802.1H)  
Broadcast/multicast firewalls

##### Switching Performance

Max forwarding rate:  
4 million pps  
Max multicast/broadcast forwarding rate: 4 million pps  
Average latency: 10-30 µsec

##### Spanning Tree Protocol

IEEE 802.1d compliant  
Programmable multicast address  
Enable/disable per port

##### Multicast Management

IGMP snooping  
Multicast limits

##### Traffic Prioritization

IEEE 802.1p service classes  
PACE technology

##### VLAN Support

Port grouping  
Number of port groups supported: 32  
Protocol-based grouping  
IEEE 802.1Q tagging  
IEEE 802.1Q GVRP  
Open VLANs  
Closed VLANs  
Port trunking (up to 8 ports/trunk)

#### Layer 3 Features

##### Layer 3 Routing Performance

Max forwarding rate:  
4 million pps  
Max multicast/broadcast forwarding rate: 4 million pps  
Average latency: 10-30 µsec

##### Layer 3 IP

IP routing table entries: 50 K  
RIP/RIP v2  
OSPF  
Number of static routes: 64

Number of static ARP cache entries: 64  
Enhanced PING  
Traceroute support  
IP debug  
BootP/DHCP relay agent  
IP multicast  
IP multicast routing table entries: 6 K  
DVMRP  
Multicast tunnels  
Proxy ARP  
Overlapped subnets (one-armed routing)  
Routing over bridged ports

##### Layer 3 IPX

802.2 interface  
802.3 (RAW) interface  
SNAP interface  
IPX ethertype interface  
Multiple interface types/port  
RIP  
RIP entries: 2 K  
SAP  
SAP entries: 2 K

#### ATM Features

8K virtual circuits (VCs)  
ATM LAN Emulation Client v1.0  
32 ATM LAN Emulation Clients  
1-to-1 mapping of 802.1Q VLANs to ATM ELANs

#### AppleTalk

Version 2.0  
Interface seeding

#### Transcend Policy

##### Traffic Classification

Destination IP address  
Source IP address  
IP protocol  
Destination TCP port  
Source TCP port  
Destination UDP port  
Source UDP port  
IEEE 802.1p CoS

##### Bandwidth Reservation

RSVP  
Static bandwidth reservation  
Traffic policing

#### Quality of Service (QoS)

4 output queues/port  
Weighted Fair Queuing (WFQ)

#### User-Defined Packet Filtering

Source address  
Destination address  
Protocol type field  
128 B programmable field

#### AutoFocus SmartAgent Support

Roving Analysis Port (RAP)  
RAP sessions: 4  
Port mirroring  
Mirroring session: 4

#### MIBs

MIB II  
Ethernet MIB  
FDDI SMT MIB  
Bridge MIB  
SNMP/FDDI Proxy  
SNMP  
CoreBuilder 3500 Enterprise Extensions

#### RMON-1

Statistics  
History  
Events  
Alarms  
Hosts  
HostTopN

#### Matrix

#### RMON-2

Protocol directory  
Protocol distribution  
Address mapping  
Network-layer host  
Network-layer matrix

#### Management Access

Telnet  
Configurable time-out  
Number of sessions: 4  
Levels of password protection: 3  
SNMP  
Console (RS 232)  
TFTP download to Flash  
FTP  
External PCMCIA load  
Embedded Web server

#### Serviceability

Event logs  
Upline dump  
Out-of-band management  
Modem and serial ports  
Web browser  
Power-on diagnostics

#### Redundancy

Dual hot-swap power supplies  
Hot-swap fan tray with redundant features

#### Modules

##### Fast Ethernet Modules

100BASE-TX: 6 ports, RJ-45 connector, and UTP media  
100BASE-FX: 6 ports, SC connector, and MM fiber media  
100BASE-FX: 6 ports, SC connector, and SM fiber media  
All modules support autonegotiation

##### Gigabit Ethernet Modules

1000BASE: 1 port, GBICS connector, supports SX, LX, SMF media

##### FDDI Modules

6-port multimode fiber SC connector  
6-port single-mode fiber SC connector

##### ATM Modules

2 155 Mbps OC-3c ports with SC connector  
1 622 Mbps OC-12c port with SC connector

#### CoreBuilder 3500 Chassis

Slots: 5 (4 interface module slots)

#### Physical Dimensions

Depth: 39.4 cm (15.5 in)  
Width: 44.5 cm (17.5 in)  
Height: 13.3 cm (5.25 in)  
Weight (fully loaded): 13.2 kg (29 lb)



### Environmental Ranges

#### Operating

Temperature: 0° to 40°C  
(32° to 104°F)

Humidity: 10% to 95%  
noncondensing

#### Storage

Temperature: -30° to 65°C  
(-22° to 149°F)

Humidity: Up to 90%  
noncondensing

### Power Consumption

3.5 A @ 110 VAC

1.4 A @ 240 VAC

### Safety

Agency certifications: UL 1950  
CSA 22.2 No. 950, TUV  
EN 60950, IEC 60950

AC protection: 4 A fuse

Over temperature protection:  
automatic warning at 140°F  
(60°C)

### Regulatory Markings

CE mark

C-TICK mark

TUV/GS mark

### Electromagnetic Emissions

FCC part 15 Class A

ICES 003 Class A

CISPR 22 Class A

EN 55022 Class A

AS 3548 Class A

VCCI level A

### Immunity

EN 50082-1

### Power Supply

AC line frequency: 47 to 63 Hz

Input voltage:

90 to 264 VAC

Current rating:

120 VAC at 3.0 A (max.)

220 VAC at 1.75 A (max.)

Redundancy (optional):

dual power supplies

## Ordering Information

### Starter Kits

CoreBuilder 3500 Starter Kit;  
includes chassis, one power  
supply, fan tray, processor  
module, software, and documenta-  
tion (CD-ROM) 3C35100

### Interface Modules

CoreBuilder 3500 Autosensing  
Ethernet 10BASE-T/Fast Ethernet  
100BASE-TX Module  
(6 ports, RJ-45) 3C35210

CoreBuilder 3500 Fast Ethernet  
100BASE-FX Module [6 ports,  
multimode fiber (MMF),  
SC connector] 3C35220

CoreBuilder 3500 Fast Ethernet  
100BASE-FX Module [6 ports,  
single-mode fiber (SMF),  
SC connector] 3C35230

CoreBuilder 3500 Gigabit Ethernet  
GBIC (Gigabit Interface Converter)  
Module (1 port) 3C35330

CoreBuilder 3500 Gigabit SX GBIC  
Transceiver 3CGBIC91

CoreBuilder 3500 Gigabit LX GBIC  
Transceiver 3CGBIC92

CoreBuilder 3500 FDDI module  
(6 ports, SAS and DAS capable,  
multimode fiber, SC connectors)  
3C35410

CoreBuilder 3500 FDDI module  
(6 ports, SAS and DAS capable,  
single-mode fiber, SC connectors)  
3C35420

CoreBuilder 3500 ATM interface  
module, two OC-3c multimode  
ports, SC connectors 3C35510

CoreBuilder 3500 ATM interface  
module, two OC-3c single-mode  
ports, SC connectors 3C35520

CoreBuilder 3500 ATM interface  
module, one OC-12c multimode  
port, SC connector 3C35530

CoreBuilder 3500 ATM interface  
module, one OC-12c single-mode  
port, SC connector 3C35540

### Field Replaceable Units

CoreBuilder 3500 Chassis includes  
one power supply and fan tray  
3C35001

CoreBuilder 3500 AC Power Supply  
(4.5 in x 8 in x 6 in) 3C35002

CoreBuilder 3500 Fan Tray  
(1.25 in x 4 in x 9 in) 3C35003

CoreBuilder 3500 Processor  
Module (1.5 in x 15 in x 9 in)  
3C35004

### Software and Documentation

CoreBuilder 3500 Switching  
Software Printed Documentation  
Kit 3C35984

CoreBuilder 3500 Switching  
Software Version 3.0 3C35935B

### Accessories

CoreBuilder 3500 Blank Front  
Panel (one slot) 3C35005

PCMCIA Flash Card (20 M)  
3C35007

### Transcend Network Management

Transcend Network Control  
Services for UNIX 3C27850G

Transcend Network Control  
Services Version 1.1  
for Windows NT 3C81400A

Transcend Enterprise Manager  
Version 6.2 for Windows NT  
3C15010H

Transcend WorkGroup Manager  
Version 6.2 for Windows 3C15000I

### 3Com Corporation

5400 Bayfront Plaza  
P.O. Box 58145  
Santa Clara, CA 95052-8145  
Phone: 1 800 NET 3Com or  
1 408 326 5000  
Fax: 1 408 326 5001  
World Wide Web:  
<http://www.3com.com>

To learn more about 3Com products and services, visit our World Wide Web site at [www.3com.com](http://www.3com.com). 3Com Corporation is publicly traded on Nasdaq under the symbol COMS.

Copyright © 1999 3Com Corporation. All rights reserved. 3Com, the 3Com logo, CoreBuilder, SmartAgent, SuperStack, and Transcend are registered trademarks of 3Com Corporation. More connected., PACE, and Traffix are trademarks of 3Com Corporation. AppleTalk is a trademark of Apple Computer. Windows is a trademark of Microsoft. IPX and NetWare are trademarks of Novell. UNIX is a trademark of UNIX Laboratories. All other company and product names may be trademarks of their respective companies. All specifications are subject to change without notice.