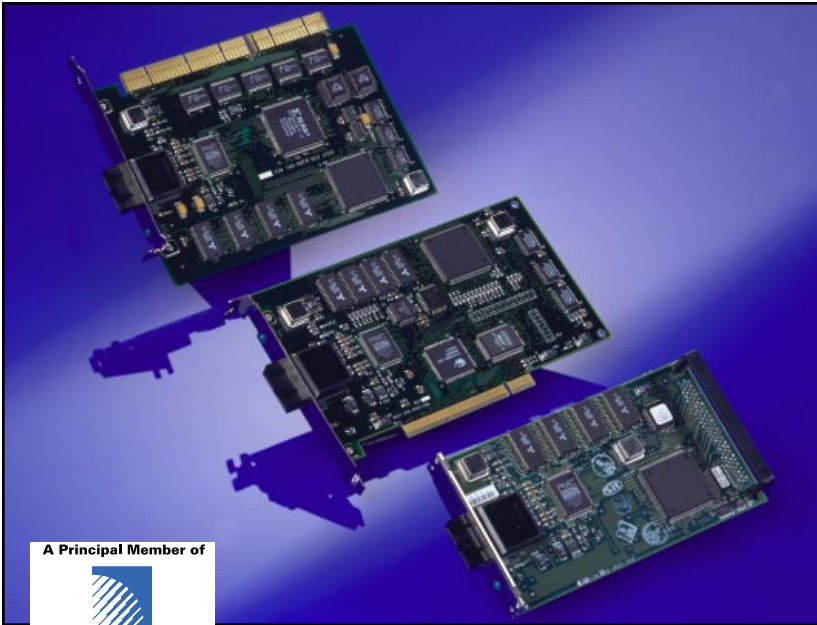# ATM Power155
PCI and EISA ATM Network Cards
Fiber and UTP-5 Models

ATM Power to Your Desktop

SMC, a networking company with a well-established presence in Ethernet, Fast Ethernet and Token Ring, has leveraged off its experience to develop a family of ATM adapters for PCI and EISA computers.* These ATM Power155™ adapters provide the bandwidth and features necessary for today's demanding applications—applications requiring guaranteed data rates and/or integrated voice, video and data. They employ a custom ASIC that provides a high-speed hardware implementation of the more complex functions of the ATM protocol: segmentation and reassembly (SAR), peak cell rate (PCR) based traffic shaping, and Direct Memory Access (DMA). As a result, the ATM Power155 adapters have the industry's best ATM price/performance ratio.

The adapters are standards-based. They have been extensively tested and have proven to be interoperable with all products based on ATM Forum specifications, and they currently support a wide range of network operating systems. What's more, SMC is committed to providing ongoing software support as ATM Forum specifications and developments by PC NOS leaders continue to evolve. And, the cards include a free SNMP agent plus SMC's EZ Configuration Management utility for quick and easy installation.

The adapters are offered with either 512 KB or 2 MB of on-board RAM for greater flexibility. Both configurations support as many as 1,024 Virtual Circuit Identifiers (VCIs) and are available with either Multimode Fiber (MMF) or Category 5 Unshielded Twisted-Pair (UTP) connectors, so you can preserve your current cabling infrastructure as you migrate to ATM.

SMC UNITY

*   Also available for SBus computers.

Features/Benefits

Outstanding Performance
◆ Support for VBR, CBR and UBR traffic with flexible traffic shaping and peak cell rate parameters to minimize congestion
◆ Full-speed support for AAL-5 traffic
◆ Up to 1,024 Virtual Connection Identifiers (VCIs)

High Bandwidth
◆ 155.52 Mbps SONET/SDH STS-3c/STM-1 transport

Easy to Install and Use
◆ SMC's EZ Configuration Management Software simplifies installation
◆ Extensive self-test and network diagnostics

Compatible
◆ Tested interoperable with switches from 3Com, AT&T, ATM Ltd., Bay Networks, Chipcom, CrossComm, Digital Equipment, Fore Systems, General DataComm, Hughes LAN Systems, IBM, NetEdge, Newbridge, UB Networks, XYLAN
◆ UNI 3.0 and UNI 3.1 signaling

Desktop Management
◆ SNMP (AToM MIB)
◆ Interim Local Management Interface (ILMI)

Versatile
◆ Choice of two memory configurations: 512 KB or 2 MB of on-board RAM
◆ Choice of two media types: Multimode Fiber (MMF) or Category 5 UTP cabling
◆ Support for a wide range of platforms, including PC and PowerPC systems
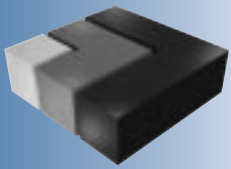◆ PVC and SVC connections

Reliable
◆ High MTBF
◆ Five-year warranty
◆ Free technical support

Support for Popular Network Operating Systems

◆ Support for Windows NT, NetWare MPR, NetWare 3.12/4.x and Windows 95
◆ LAN Emulation Client (LEC) included for transparent operation with traditional LANs
◆ Support for RFC 1577 and RFC 1483

SMC®

ATM Power155
PCI and EISA ATM Network Cards
Fiber and UTP-5 Models

Specifications

Adapter Type
9741F (PCI, 512 KB RAM, MMF cable)
9741D (PCI, 512 KB RAM, UTP-5 cable)
9746F (PCI, 2 MB RAM, MMF cable)
9746D (PCI, 2 MB RAM, UTP-5 cable)
9742F (EISA, 512 KB RAM, MMF cable)
9742D (EISA, 512 KB RAM, UTP-5 cable)
9747F (EISA, 2 MB RAM, MMF cable)
9747D (EISA, 2 MB RAM, UTP-5 cable)

Network Interface
SONET/SDH STS-3c/STM-1 (155.52 Mbps)
SC-type optical connector
  Multimode Fiber (MMF)—2 km maximum
Shielded RJ-45 connector
  UTP Category 5—100 m maximum

Weight
4 oz. (113.4 gm)

LED Indicator
SONET/SDH format signal

Diagnostic Tests
Loopback
DMA
Interrupt
Complete end-to-end

PC Bus Interface
32-bit burst-mode bus master

PVC and SVC Support
512 KByte RAM models
2 MByte RAM models

Traffic Scheduling
VBR, CBR and UBR service
User-selectable parameters for rate and
  congestion control

SVC Signaling
Selectable ATM Forum
  UNI 3.0 (Q.93B) compliance
  UNI 3.1 (Q.2931) (in development)

Software Driver and OS Support
Windows NT 3.51
Windows 95
NetWare 3.1/4.x
NetWare MPR 3.x
IBM AIX 4.1.4 (in development)

PVC Encapsulation
Classical IP and ARP support (RFC 1577)
Multiprotocol Encapsulation over ATM (RFC 1483)

SVC Encapsulation
ATM Forum LAN Emulation Client (LEC) for 802.3 Ethernet
ATM Forum LAN Emulation Client (LEC) for 802.5 Token Ring (in development)
Classical IP and ARP support (RFC 1577) (in development)
Multiprotocol Encapsulation over ATM (RFC 1483) (in development)

Configuration Management
ILMI support in all drivers
Separate configuration management utilities
  GUI based
  Command line

Operating Environment
Temperature 32° to 158° F (0° to 70° C)
Humidity, non-condensing 5% to 95%

Power Requirements
+5 V @ 1.5 A (maximum)
+12 V @ 0.02 A (maximum)

Compliances
CE marking
Safety
  UL 1950
  CSA 22.2 Number 950
  EN60950
Emissions
  All models: EN 50082-1, VCCI-2 (pending)
  PCI models
    UTP-5 only: FCC Class A, CDOC A, EN55022-B
    MMF only: FCC Class B, CDOC B, EN55022-B
  EISA models
    UTP-5 only: FCC Class A, CDOC A, EN55022-A
    MMF only: FCC Class B, CDOC B, EN55022-B

Warranty and Support
Hardware: 5-year warranty
Software: ongoing support and upgrades

Product	Order Number	Description
ATM Power155	SMC9741F	PCI Adapter with 512 KB RAM, uses MMF Cable
	SMC9741D	PC I Adapter with 512 KB RAM, uses UTP-5 Cable
	SMC9746F	PCI Adapter with 2 MB RAM, uses MMF Cable
	SMC9746D	PCI Adapter with 2 MB RAM, uses UTP-5 Cable
	SMC9742F	EISA Adapter with 512 KB RAM, uses MMF Cable
	SMC9742D	EISA Adapter with 512 KB RAM, uses UTP-5 Cable
	SMC9747F	EISA Adapter with 2 MB RAM, uses MMF Cable
	SMC9747D	EISA Adapter with 2 MB RAM, uses UTP-5 cable