

Intel EtherExpress™ PRO/10 Adapters

The powerful LAN connection for Intel486™ and Pentium® processor-based PCs†



Features at a glance

PRO/10 Family

- Supports Plug 'n Play installation
- Choice of management tools
- Supports all popular network operating systems

PRO/10 PCI Adapters

- High-performance 32-bit bus master design
- 32-bit PCI bus interface

PRO/10 ISA Adapters

- Superior performance via concurrent processing, 32KB buffer memory and 32-bit instructions
- Centralized driver/utility updates (with Flash)
- Pre-boot virus protection (with Flash)
- On-board PC configuration history (with Flash)



Intel has applied its silicon expertise and understanding of PC system design to bring you a family of fully optimized 10Mbps Ethernet adapters. These adapters take advantage of Intel technologies, such as PCI bus and Flash, to bring you a high level of Ethernet performance.

Intel EtherExpress™ PRO/10 Adapters for PCI

Intel has combined its proven Ethernet technology with its in-depth understanding of PCI system design to develop the EtherExpress PRO/10 PCI LAN adapter: a high-performance 10Mbps Ethernet adapter designed for today's Intel486™ and Pentium® processor-based PCI systems. Its 32-bit bus master architecture provides the right balance of high network throughput and low CPU utilization, making it the ideal 10Mbps LAN adapter for PCI servers and clients.

The right card for your PCI Ethernet needs

PRO/10 PCI adapters are available in two versions: a cost-effective TP-only version that features an RJ-45 connector for Twisted-pair cabling, and a Combo version that provides AUI and BNC connectors for Thin- or Thick-wire Ethernet cabling, and an RJ-45 connector for Twisted-pair cabling. Both versions feature two on-board LEDs for simple network troubleshooting.

Easy Installation

EtherExpress PRO/10 PCI adapters are extremely easy to install and use. "Hands-off" extras, such as automatic connector, IRQ, and I/O address selection and reversed polarity detection and correction take the hassle out of adapter installation.

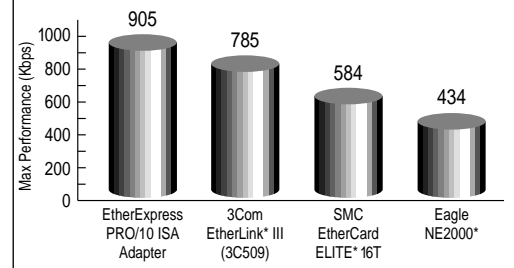
Intel EtherExpress PRO/10 Adapters for ISA

Robust Intel EtherExpress PRO/10 ISA adapters use one-third the electrical power of ordinary Ethernet adapters, yet give your high-powered PCs a three-pronged performance edge.

First, the EtherExpress PRO/10 ISA adapters use concurrent processing, an early interrupt technology which increases throughput. With this approach, PRO/10 ISA adapters can copy packets from the host and transmit them onto the wire concurrently. Similarly, packets are received from the wire and copied to the host simultaneously.

Intel EtherExpress™ PRO/10 ISA Adapters Performance Comparison

LANQuest Labs – July '94
Novell's Perform3 v1.61 Results
NetWare® v4.01, same adapter in server and single client



To determine the performance advantage of the EtherExpress™ PRO/10 ISA adapters, LANQuest Labs performed matched pair benchmark tests. The LANQuest tests yielded the results above.

†EtherExpress PRO/10 Adapters also work with Intel286 and Intel386™ processor-based machines.

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Intel EtherExpress™ PRO/10 Adapters

Second, a large 32KB buffer memory increases performance by reducing overhead on LANs with high network traffic and/or multitasking operating systems.

Third, PRO/10 ISA drivers use 32-bit instructions for higher performance and lower CPU utilization.

Benefits you don't expect from a LAN adapter

EtherExpress™ PRO/10 ISA adapters with Flash provide a number of benefits not typically found on competing adapters.

- **Centralized driver update** – The flash adapters can automatically download new drivers and network utilities from a NetWare* file server to any node on the network.
- **Patented pre-boot anti-virus technology** in flash adapters guards against thousands of computer viruses.
- **On-board PC configuration history** makes it easier to troubleshoot problems by storing a record of the last five hardware inventory and software configuration changes in flash memory.
- **Remote boot software** for Novell NetWare and Microsoft LAN Manager* eliminates the need for a separate boot ROM, saving you both time and money.

EtherExpress™ PRO/10 ISA Adapter



Easy installation

All PRO/10 ISA adapters feature switchless and jumperless configuration with innovative software that enables fast and easy installation. And, PRO/10 ISA adapters support the industry Plug 'n Play specification for effortless configuration in Plug 'n Play systems. In a Novell environment, the PRO/10 software automatically configures the board and downloads and installs drivers from the server. PRO/10 ISA adapters with Flash can download and install your choice of IPX or ODI drivers with NETX or VLM shells.

EtherExpress PRO/10 Adapters offer a choice of management tools

- Intel LANDesk® Express remote node management software for NetWare networks (included in ISA 20 packs, available free on the Intel BBS for ISA and PCI)
- Desktop Management Interface (DMI) support for management by DMI-compliant applications (available for ISA)
- SNMP management with Intel's LANDesk SNMP Gateway (available for ISA and PCI)

Awards

- Network Computing, *Runner-up, Well-Connected Award, Ethernet NICs* (April 1, 1995)
- LAN Times, *Runner-up, Readers' Choice Award, Ethernet NICs* (April 10, 1995)



- Network Computing, *Editor's Choice Award, Ethernet NICs* (May 1995)



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Intel EtherExpress™ PRO/10 Adapters

Intel Backing

Intel backs all EtherExpress™ PRO adapters with a satisfaction guaranteed, 90-day money-back refund policy, and a limited lifetime warranty. Intel's PRO/10 PCI adapters come with a PCI compatibility guarantee, as well.

PC Week Labs Top 10 NIC Index

Rank	Manufacturer/Model	Performance Index
1	Intel EtherExpress™ PRO/10 ISA Adapter	2.18
2 (tie)	3Com EtherLinkIII* ISA TP (3C509-TP)	2.08
2 (tie)	Farallon Computing EtherWave* ISA Card (PN880-TP)	2.08
3	Standard Microsystems EtherCard Elite* 16T Ultra	2.04

Performance rated #1, PC Week Labs Top 10 NIC Index, 8/94

Product	Connector Type	Order Number
EtherExpress™ PRO/10 ISA Adapter with Flash	RJ-45	PCLA8225A
EtherExpress PRO/10 ISA Adapter with Flash	RJ-45, BNC	PCLA8215A
EtherExpress PRO/10 ISA Adapter with Flash	RJ-45, BNC, AUI	PCLA8205A
EtherExpress PRO/10 ISA Adapter	RJ-45	PCLA8220A
EtherExpress PRO/10 ISA Adapter	RJ-45, BNC	PCLA8210A
EtherExpress PRO/10 ISA Adapter	RJ-45, BNC, AUI	PCLA8200A
EtherExpress PRO/10 PCI Combo Adapter	RJ-45, BNC, AUI	PILA8400
EtherExpress PRO/10 PCI TP Adapter	RJ-45	PILA8420

5 pack and 20 pack available for all versions, 80 pack available for ISA versions. To order, simply add "PAK5" or "PAK20" to the end of the order number (e.g., PCLA8225APAK5).

FaxBack* Document	Document Number
EtherExpress™ PRO/10 ISA Adapter: Reducing Bottlenecks for Maximum Performance	6298
Differences between EtherExpress 16 and EtherExpress PRO/10 ISA Adapters	6299
LANQuest Labs Performance Report	6353
EtherExpress PRO/10 ISA Adapter Compatibility Testing Report	6368
Intel Branded Products Price List	9000

Call 800-525-3019 or 503-264-6835 to order FaxBack documents.

Related Products

- LANdesk® Manager
- LANdesk SNMP Gateway
- LANdesk Virus Protect

Intel EtherExpress™ PRO/10 Adapters

Intel Ethernet Adapter Feature Guide

	Bus architecture	ISA	ISA	PCI	EISA
	Product name	EtherExpress™ PRO/10 Flash	EtherExpress PRO/10	EtherExpress PRO/10 PCI	EtherExpress Flash 32
	Product code: Connectors	PCLA8225A: RJ-45 only PCLA8215A: RJ-45/BNC PCLA8205A: RJ-45/BNC/AUI	PCLA8220A: RJ-45 only PCLA8210A: RJ-45/BNC PCLA8200A: RJ-45/BNC/AUI	PILA8420: RJ-45 only PILA8400: RJ-45/BNC/AUI	EILA8225: RJ-45/BNC/AUI
	Multi-packs available	5, 20 & 80 packs	5, 20 & 80 packs	5 & 20 packs	5 packs
ADAPTER PRODUCT FEATURES	Switchless board configuration	■	■	■	■
	Plug 'n Play support	■	■	■	N/A
	Price/Performance leadership	■	■	■	■
	Automatic driver installation	■	■	■	■
	Boot ROM support	■	upgrade option		■
	Pre-boot virus protection	■	upgrade option		
	Centralized driver update	■	upgrade option		
	On-board storage of PC config history	■	upgrade option		
NETWORK MANAGEMENT	DMI-ready	■	■		
	Board and network diagnostics	■	■	■	■
	SNMP-manageable with SNMP Gateway	■	■	■	■
	Remote node management software	LANDesk® Express free in 20 packs & on BBS	LANDesk Express free in 20 packs & on BBS	LANDesk Express free on BBS	LANDesk Express free on BBS
NOS SOFTWARE SUPPORT	Artisoft LANtastic* (NDIS 2.01)	■	■	■	■
	Banyan Vines* Client (NDIS 2.01)	■	■	■	■
	DEC PathWorks* (NDIS 2.01)	■	■	■	■
	FTP PC/TCP for DOS (NOS 2.01)	■	■	■	■
	IBM LAN Server* (NDIS 2.01)	■	■	■	■
	Microsoft LAN Manager* (NDIS 2.01)	■	■	■	■
	Microsoft DOS* & OS/2* v2.01 (NDIS 2.01)	■	■	■	■
	Microsoft FWW* (NDIS 3.1)	■	■	■	■
	Microsoft Windows NT* 3.5 (NDIS 3.1)	■	■	■	■
	Microsoft Windows NT 3.1 (NDIS 3.1)	■	■		■
	NextStep*	■	■		■
	Novell NetWare* 3.11, 3.12 & 4.01 Server	■	■	■	■
	Novell NetWare DOS ODI Client	■	■	■	■
	Novell NetWare OS/2 ODI Requestor	■	■	■	■
	Novell UnixWare*	■	■		
	SunSoft PC/NFS (NDIS 2.01)	■	■	■	■
	SunSoft Solaris*	■	■		■
	SCO UNIX*	■	■		■
	Wollogong Pathway Access* (ODI)	■	■	■	■
TECHNICAL FEATURES	Data rate(s) supported	10Mbps	10Mbps	10Mbps	10Mbps
	On-board memory	32KB	32KB	0KB	0KB
	Interrupt levels	Software selectable	Software selectable	INTA	Software selectable
	I/O base addresses	Software selectable	Software selectable	N/A	Slot specific
	Full IEEE compliance	802.2 & 802.3	802.2 & 802.3	802.2 & 802.3	802.2 & 802.3
	Data path width	8- & 16-bit	8- & 16-bit	32-bit	32-bit
	Hardware certifications	FCC B, VDE B	FCC B, VDE B	FCC B, VDE B	FCC B, VDE B
	Data transfer mode	Programmed I/O	Programmed I/O	Bus-Master DMAB	Bus-Master DMA
	Controller or processor	Intel 82595TX	Intel 82595TX	Intel 82596	Intel 82596
	Power requirement	0.5Watts @+5VDC	0.5Watts @+5VDC	0.9Watts @+5VDC	0.9Watts @+5VDC
	Operating temperature	+10-55°C	+10-55°C	+10-55°C	+10-55°C
	Operating Humidity	85% at +55°C	85% at +55°C	85% at +55°C	85% at +55°C
INTEL BACKING	Limited lifetime warranty	■	■	■	■
	90-day money-back guarantee	■	■	■	
	Guaranteed PCI compatibility			■	

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