## IBM

## **IBM IntelliStation E Pro**

#### Highlights

#### Slimline design, towering power

The low-profile, 5-slot/4-bay design including an optional floor stand makes the IntelliStation<sup>®</sup> E Pro fit easily into virtually any workspace.

### Application-focused performance

The IntelliStation E Pro is vendor-certified for superior Windows® NT application compatibility and performance. The advanced Intel® Pentium® II processor propels data up to 450MHz<sup>1</sup>. The E Pro is ramcharged with Intel's 440BX AGPset and 100MHz system bus, with support for up to 768MB of fast 100MHz SDRAM.

### Ultra responsive 2D and 3D graphics

Choose from leading 2D and 2D/3D graphics engines tailored to your tasks including technical, creative and business-critical enterprise computing. The 128-bit Matrox Millennium G200 is the industry choice for demanding 2D computing such as architectural design and drafting. For mainstream 3D modeling and visualization, 3DLabs' GLINTbased PERMEDIA 2A, available through IBM Business Partners, delivers excellent performance and real value.

#### IBM Universal Manageability

Innovative IBM manageability tools help protect your systems and valuable data while reducing the cost of maintenance. Spend more time creating profits and less time re-creating users' systems.

#### Navigating the maze of migration

The path toward a new and powerful standards-based workstation has never been clearer—or easier. Now that your business-critical applications have been optimized for Windows NT, you'll find that IBM holds a leadership position in cross-platform migration and integration. Whether you're moving to the awardwinning IntelliStation family from a PC- or UNIX-based environment, IBM's experience in professional technical computing brings the best of Windows NT to your enterprise.

The IBM IntelliStation E Pro—the powerful, versatile, value-rich professional NT workstation. For all the right reasons.







#### **Pushing the NT envelope**

IBM's IntelliStation E Pro series is propelled by the advanced Intel Pentium II processor at an inspiring 450MHz. The high-bandwidth 440BX AGPset supports this muscular processor with speed and agility. Enhanced subsystems include a 100MHz system bus; the dedicated Accelerated Graphics Port (AGP 2X) interface that relieves the PCI bus of graphics traffic, improving overall bandwidth; a choice of 7,200rpm ATA-33 EIDE or Wide Ultra SCSI drives; and up to 768MB of 100MHz SDRAM with ECC to safeguard the integrity of your data.

For customers moving up from Windows 95 to NT, the competitive pricing and winning performance of the E Pro are a rare combination deserving serious consideration. The same holds true for UNIX® or Macintosh® environments. Make the transition with confidencethe E Pro has garnered an extensive portfolio of NT application certifications, awarded by leading software vendors. And the 5-slot/4-bay slimline design of the E Pro is right at home where space or budgets are tight, be it the global trading room or the office cubicle. The price? The IntelliStation E Pro opens new doors of affordability.

#### **Application-focused graphics**

IBM partners with graphics industry leaders to offer an impressive palette of advanced graphics technologies for the IntelliStation E Pro. The E Pro delivers superior 2D performance powered by the next-generation graphics adapter from Matrox, providing a robust platform for MCAD, EDA, Finance and digital media creation. The AGP-based Matrox Millennium G200 utilizes a new 128-bit DualBus architecture, effectively doubling 2D performance with two independent 64-bit buses. Available from IBM Business Partners, the GLINT-based PERMEDIA 2A creates its own price/performance standard for fast 2D and mainstream 3D tasks from CAD/ CAM to digital media creation, including Web design and game development. With video drivers highly optimized for Windows NT, the PERMEDIA 2A supports leading 3D applications written to the OpenGL, Direct3D and Heidi APIs.

Using multiple Matrox or PERMEDIA adapters, the E Pro's dedicated AGP and 4 expansion slots accommodate multimonitor environments from graphics studios to global trading rooms. Teamed with IBM CRT or Flat Panel monitors, the IntelliStation E Pro has the graphics solution to improve your view and remove the wait.

#### **Certified for success**

In tandem with leading software developers, IBM provides technical expertise and long-lead prototypes to prepare the IntelliStation E Pro for superior 2D and entry 3D application performance. These premier vendors rigorously test the E Pro to verify compatibility with their diverse applications. As a result, you can be confident your IBM IntelliStation E Pro is accredited by the same companies that provide the software you rely on every day. Visit our Web site at www.ibm.com/pc/us/ intellistation for a current list of supported applications.

#### IBM Universal Manageability: the IntelliStation advantage

IBM is committed to helping you deploy, manage and protect your workstation investment. To this end, the IBM Universal Management Agent (UMA) provides a unifying framework that natively plugs into your enterprise management console of choice—including Tivoli® Management Software, Microsoft SMS, CA Unicenter and more—in addition to these life cycle tools included with the IntelliStation E Pro:

- SMART Reaction<sup>™</sup> for proactive data protection including automatic backups
- Alert on LAN<sup>™</sup> to monitor system status, including temperature, voltage, chassis intrusion, component removal and disconnection from power or the LAN even when the computer is powered off
- LANClient Control Manager<sup>™</sup> (LCCM) for remote system maintenance and centralized software distribution
- Asset ID<sup>TM.2</sup> to streamline deployment and security of IntelliStations tagged with radio-frequency (RF) beacons

IBM takes manageability to the max with the IntelliStation E Pro: comprehensive, customizable control of your networked world today and tomorrow.

#### Value 3D: ViewPerf v5.1 OpenGL graphics performance\* with PERMEDIA 2A

CDRS-03 v1.1	29.96
DX-03	8.11
DRV-04	4.55
Awadvs	10.44
Light-01	1.08

High Performance 2D: Business Graphics WinMark 98 with Matrox Millennium G200

WinBench score 268

\*Weighted frames/second. IntelliStation model 6893, 450MHz, 128MB, 1280X 1024 at 16-bit, 75Hz. Measured by IBM July 27, 1998.

# Inside the IBM IntelliStation E Pro

#### **IBM IntelliStation E Pro Technical Specifications**

	•		
Processor	Up to 450MHz Pentium II processor		
L2 cache	512KB ECC onboard		
Core logic	Intel 440BX AGPset Accelerated Graphics Port		
Memory std/max	64, 128 or 256/768MB		
Type/speed/total sockets	SDRAM ECC/100MHz/3 DIMMs		
Hard disk drives	6.4GB <sup>3</sup> and 10.1GB /7,200rpm/ATA-33 with S.M.A.R.T.		
	4.5GB and 9.1GB/7,200 rpm/Wide Ultra SCSI with S.M.A.R.T.		
Controllers	ATA-33 EIDE integrated		
	Ultra Wide SCSI adapter (PCI) on SCSI models		
Bays	4 bays: (1) 3.5" internal, (2) 3.5" external, (1) 5.25" external		
Slots—number/type	5 slots: 1 AGP, 1 ISA, 1 shared PCI/ISA, 2 PCI		
Network interface	Integrated 10/100 Ethernet with Wake on LAN		
CD-ROM⁴	32X max, variable speed		
Audio	16-bit, SoundBlaster <sup>™</sup> -compliant-Crystal 4235, high-quality speaker, Mic input, line-in, line-out		
Operating system	Windows NT Workstation 4.0 installed <sup>5</sup>		
Productivity software/tools	Lotus SmartSuite <sup>®</sup> License <sup>6</sup>	Client Services for Netfinity Manager	
	<ul> <li>Hummingbird "Try and Buy" Software Suite CD</li> </ul>	<ul> <li>IBM Via Voice 98<sup>™</sup></li> </ul>	
	<ul> <li>Intel LANDesk<sup>®</sup> Client Manager</li> </ul>	Microsoft NetMeeting	
	<ul> <li>IBM LANClient Control Manager™</li> </ul>	Microsoft Internet Explorer	
	ConfigSafe <sup>®</sup>	<ul> <li>Norton AntiVirus<sup>™</sup> (OEM version)<sup>7</sup></li> </ul>	
	Partition Magic <sup>®</sup>	· ·	

#### **IBM Color Monitors**

	G74	P72	P202	9514 LCD	9516 LCD
Tube type/ stripe pitch	FST/.27mm	Trinitron CRT/.25mm	Trinitron CRT/.25mm	TFT/.28 Pixel pitch	TFT/.25 Pixel pitch
CRT size/ viewable image	17"/15.9"	17"/16"	21"/19.8"	14.1"/14.1"	16.1"/16.1"
Max NI addressability®	1280×1024	1600×1200	1800x1440	1024x768	1280×1024
IBM Part#	6547-4AN	6556-43N	6558-43N	9514-B23	9516-B23

#### **Graphics Engines**

Matrox Millennium G200 High-performance 2D

- AGP 2X mode
- 8MB standard/16MB max
- 120MHz max vertical refresh rate
- Max resolution: 1920x1200

#### Permedia 2A

- Fast 2D/Value 3D
- 8MB flexible allocation
- Texture memory part of frame buffer
- Max refresh: 100Hz
- Max resolution: 1920x1440
- Max colors: 16.7M
- OpenGL, Direct3D
- Triangle hardware setup
- Shading
- Anti-aliasing
- Multiple monitor support

#### Your competitive edge— IBM SystemXtra™

IBM SystemXtra is designed to make the most of your IT investment by combining a host of technologies, services, and flexible financing to make your job easier. These services include training, on-site recovery assistance and network maintenance. Combined with IBM's Technology Exchange<sup>9</sup>—a flexible and affordable way to upgrade your leased computers after only two years— IBM SystemXtra simplifies IT with a single monthly invoice.

#### **Standard I/O interfaces**

- Two USB ports
- Two serial ports (16550)
- One enhanced parallel port (ECP/EPP)
- One 10/100 Ethernet RJ-45
- Enhanced IDE controller (ATA-33)
- Ultra Wide SCSI 2x68 pin on SCSI models
- Audio line-in, line-out and microphone input

#### **Input devices**

- 104-key keyboard with palm rest
- IBM three-button mouse

#### **Advanced manageability**

- Wake on LAN-enabled 10/100 Ethernet
- SMART Reaction
- Alert on LAN
- IBM Netfinity Manager
- <sup>1</sup> MHz only measures microprocessor internal clock speed, not application performance. Many factors affect application performance.
- <sup>2</sup> Asset ID allows your IntelliStation to be "scanned" by various radio frequency devices supplied by independent companies. Asset ID is intended for use only with radio frequency equipment that meets ANSI/ IEEE C95.11992 RF Radiation Limits.
- <sup>3</sup> GB means billions of bytes when referring to hard drive capacity. Accessible capacity may vary.
- <sup>4</sup> Variable read rate. Actual playback speed will vary and is often less than the maximum possible.
- <sup>5</sup> Windows NT not included with custom-configured models.
- <sup>6</sup> Diskettes and hard copy documentation available at extra charge.
- <sup>7</sup> Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.
- <sup>8</sup> Resolution of display independent of graphics
- subsystem which may operate at a lower resolution.
   <sup>9</sup> Eligibility for Technology Exchange Option is based on total IBM PC hardware acquisition commitment for a 12-month period; minimum qualifying levels apply.
- <sup>10</sup> Can be purchased from Air Speed, Inc. (919 304-5000) or airspeed@interpath.com

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- IBM LANClient Control Manager
- Intel LANDesk Client Manager
- Flash over LAN
- Setup over LAN
- CoSession Remote®
- DMI BIOS and Service Layer for Windows NT

#### AssetCare

- Asset ID
- Manageability chip (temperature/ voltage/tamper/fan speed sensing)
- Enhanced Asset Information Area (EEPROM)
- Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.)
- Norton AntiVirus
- PC-Doctor Diagnostics
- ConfigSafe

#### **Options by IBM**

Memory (100MHz ECC SDRAM)

a	
64MB	01K1130
128MB	01K1131
256MB	01K 1132
Hard disk drive	
6.4GB/7,200rpm ATA-33	01K1329
9.1GB/7,200rpm ATA-33	01K1330
10.1GB/7,200rpm ATA-33	20L0543
4.5GB/7,200rpmWUSCSI	01K1327
9.1GB/7,200rpmWUSCSI	01K1328
PCI UW SCSI adapter	02K3454
PCI Token-Ring WOL2	34L0701
Air Speed Floor Stand <sup>10</sup>	02K2734

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#### Standards supported

• FCC Part 15, Class A; UL 1950 First Edition; CSA C22.2 No. 950; ANSI 12.10; GOPTUV-GS

#### **Need more information?**

#### Reseller and general information

U.S.	1 800 IBM-7255, ext. 4750
Canada	1 800 IBM-2255

#### IBM Fax Information Service - U.S.

800 IBM-3395	Doc #11019
800 IBIVI-3395	DOC # 11019

#### World Wide Web

U.S.	www.ibm.com/pc/us/intellistation		
	www.ibm.com/pc/us/accessories		
Canada	www.ibm.com/pc/ca/intellistation		

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