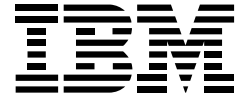*New Extreme Performance Champion*

IBM

IntelliStation Z Pro

Intel® Pentium® II Xeon™ Slot 2 processors pumping at 450MHz¹
Compress time with Intel's fastest processors and 440GX AGPset with full-speed L2 cache, support for up to 2GB of 100MHz ECC SDRAM, 100MHz system bus and Ultra 2 SCSI hard drives.

Application-focused performance
Superior application compatibility and performance is ensured by IntelliStation®'s extensive portfolio of certifications from leading software vendors.

Ultra-responsive 2D and 3D graphics
Complement the dazzling power of the Z Pro with first-choice graphics engines: the Matrox Millennium G200 for 2D or Intergraph's Intense 3D Pro 3400 and optional geometry and lighting accelerator for precision OpenGL 3D environments.

Windows NT® 4.0-steady/5.0-ready
At IBM's Kirkland Programming Center in Redmond, WA, more than 200 IBM and Microsoft programmers collaborate to bring next-generation speed, security and manageability to the IntelliStation.

IBM Universal Manageability
Precedent-setting manageability tools help protect your systems, safeguard data and reduce the cost of doing business.

Dominate your work with Z Pro
Vault to the forefront of the NT workstation revolution with the new IBM IntelliStation Z Pro. Astonishing performance erupts from the fastest Intel Pentium II Xeon processors with full-speed L2 cache. For the one-two punch of symmetric multiprocessing, specify dual 450MHz processors. Retrieve data at up to 80MBps with 10,000rpm Ultra 2 SCSI disk drives. A choice of RAM-charged 2D and 3D graphics adapters from Matrox and Intergraph completes this power tour. The 7 slot/7 bay tower anticipates future expansion needs with tool-free access, abundant power and efficient cooling. The IntelliStation Z Pro's compact design makes the most of your workspace—the refined power makes the most of your work day.

IntelliStation trims the costs of ownership with IBM Universal Management Agent (UMA). The UMA integrates natively with the industry's premiere DMI-compliant management suites, including Tivoli® Management Software, Microsoft® SMS and more. Deploy, manage and protect your IT assets with the first unified management console to deliver coherent control over the industry's leading life cycle tools.

The new IntelliStation Z Pro: designed to dominate your work with extreme performance.

IntelliStation

e **e-business tools**

The pinnacle of power

The IntelliStation family crowns a new performance champion with the Z Pro series. The Z Pro marks another major evolutionary leap in real-world performance with the introduction of Pentium II Xeon processors and the supporting 440GX AGPset. Building on a 100MHz system bus, the new IntelliStation flagship turns in significant benchmark gains over the fastest Pentium II Slot 1 designs with the implementation of a full-speed L2 cache running at up to 450MHz. Applications thrive on 2GB memory, with 256MB of ECC SDRAM standard (3 open DIMM slots) on most models. Ideal for compute-intensive MCAD, EDA, and digital media applications, the IntelliStation Z Pro is the clear choice when impossible deadlines loom and Return on Investment is defined as "getting to market first."

Application-focused graphics

IBM has evaluated the most advanced display technologies available to complement the IntelliStation Z Pro with brilliant graphics. Each solution is tailored to your priority 2D and 3D applications. The AGP-based Matrox Millennium G200 utilizes a new 128-bit architecture, effectively doubling 2D performance with two independent 64-bit buses. This design allows simultaneous read/write display commands to be processed noticeably faster, especially frequent copying of small bitmaps and fonts.

For precision OpenGL 3D design, the Intergraph Intense 3D Pro 3400 adapter displays fluid real-time response. With 16MB of video SDRAM and 16MB of texture SGRAM, this 3D dynamo delivers a fill rate of 2.1 million 25-pixel triangles per second—lit and shaded. The available Geometry and Lighting Accelerator—with 14 dedicated digital signal processors—renders the IntelliStation Z Pro the ultimate 3D environment on Windows NT.

Certified for success

In tandem with leading software developers, IBM provides technical expertise and long-lead prototypes to prepare the IntelliStation Z Pro for superior application performance. These premier vendors rigorously test the Z Pro to verify compatibility with their business-critical applications. You can be confident that your IBM IntelliStation Z Pro is accredited by the same companies that provide the software tools 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 transparently integrates advanced management capabilities into your current heterogeneous environment. UMA natively plugs into your enterprise management console of choice to augment basic feature sets with enhanced DMI 2.0-compliant capabilities.

IBM's Universal Management Agent brings a new level of control and convenience to the industry's leading IT management suites, in addition to life cycle tools included with the IntelliStation Z Pro:

- SMART Reaction™ for proactive data protection including automatic back ups

- Alert on LAN™ 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™ (LCCM) for remote system maintenance and centralized software distribution

- Asset ID™,[2] to streamline deployment and security of IntelliStations tagged with radio-frequency (RF) beacons

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

*ViewPerf v5.1 OpenGL graphics performance**

CDRS-03	138.04
DX-03	21.16
DRV-04**	14.41
AWadvs-01	31.68
Light-01	2.23

Business Graphics WinMark 98

Graphics Accelerator WinBench score	298

*Weighted frames/second. IntelliStation model 6865, 450MHz Xeon, 256MB. Measured by IBM July 10, 1998.

**Dual 450's installed

IBM IntelliStation Z Pro Technical Specifications

Processor	450MHz Pentium II Xeon processors, dual-capable
L2 cache	Full-speed 512KB ECC onboard
Core logic	Intel 440GX AGPset (Accelerated Graphics Port)
Memory std/max	128, 256MB/2GB
Type/speed/total sockets	SDRAM ECC/100MHz/4 DIMMS
Hard disk drives/max capacity	4.5GB/7,200rpm Ultra 2 SCSI with S.M.A.R.T 9.1GB[3] and 18.2GB/10,000rpm Ultra 2 SCSI with S.M.A.R.T./81.9GB
Controllers	Dual-ported Ultra 2 SCSI (80MBps)
Bays	7 bays: (3) 3.5" internal, (2) 3.5" external, (2) 5.25" external
Slots—number/type	7 slots: 5 PCI, 1 shared PCI/ISA, 1 AGP (up to 5 open slots)
Network interface	Integrated 10/100 Ethernet with Wake on LAN
CD-ROM[4]	32X-14X, variable speed
Audio	16-bit, SoundBlaster™-compliant, Crystal 4235, high quality speaker, mic input, line-in, line-out
Operating system	Windows NT Workstation 4.0 installed[5]

Productivity software/tools

- Lotus SmartSuite® License[6]
- Hummingbird "Try and Buy" Software Suite CD
- Intel LANDesk Client Manager®
- IBM LANClient Control Manager
- ConfigSafe®
- Client Services for Netfinity Manager
- IBM Via Voice 98™ with microphone
- Microsoft NetMeeting
- Microsoft Internet Explorer
- Norton AntiVirus™ (OEM version)[7]

IBM Color Monitors

	G94	P92	P202	9516 LCD	9519 LCD
Tube type/stripe pitch	FST CRT/.22mm	Trinitron® CRT/.26mm	Trinitron CRT/.25mm	TFT/.25 Pixel pitch	TFT/.28 Pixel pitch
CRT size (viewable image)	19" (17.8")	19" (17.9")	21" (19.8")	16.1" (16.1")	18.1" (18.1")
Max NI addressability	1600x1200	1600x1200	1800x1440	1280x1024	1280x1024
IBM Part #	6549-40N	6557-43N	6558-43N	9516-B23	9519-AG1

Graphics Engines

Matrox G200
High-performance 2D/entry 3D

- AGP 2X mode
- 8MB/frame buffer, upgradable to 16MB
- 120MHz max vertical refresh rate
- Resolution: 1920x1200
- DirectDraw, Direct 3D and OpenGL-compliant
- Multiple monitor support

Intergraph Intense Pro 3D 3400
Extreme-performance 3D

- 16MB/frame buffer (SDRAM)
- 16MB/texture memory (SGRAM)
- 85MHz max. vertical refresh rate
- Resolution: 1280x1024
- Colors: 16.7M
- OpenGL, RenderGL, Direct Draw, Heidi
- Full triangle set up
- Gouraud shading
- Trilinear MIP mapping
- Anti-aliasing
- Alpha blending
- 32-bit Z-buffer
- 32-bit double buffered
- Available Geometry and Lighting Accelerator with 14 DSPs
- 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 Option[8]—a flexible and affordable way to upgrade your leased computers after only two years—for 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
- Ultra 2 SCSI 2x68 pin
- Audio line in, line out and microphone input

Input devices
- 104-key keyboard with palm rest
- IBM three-button mouse
- Headset with microphone

Advanced manageability
- Wake on LAN-enabled 10/100 Ethernet
- SMART Reaction
- Alert on LAN
- IBM Netfinity Manager
- 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
- Watergate PC-Doctor Diagnostics
- ConfigSafe

Options by IBM

Memory (100MHz ECC SDRAM):

128MB	20L0256
256MB	01K1132
512MB	20L0257

Hard disk drives:

9.1GB/10,000rpm Ultra 2 SCSI	20L0539
18.2GB/10,000rpm Ultra 2 SCSI	20L0540
4/16/100 High Speed Token Ring Adapter w/Wake-on LAN	25L5571
DDS3 12/24GB tape drive	01K1282

Second Processor:

Intel 450MHz Xeon processor	20L0240

Geometry Accelerator:

Intense 3D Pro 3400GA	02K3461

Standards supported
- FCC Part 15, Class A; UL 1950 First Edition; CSA C22.2 No. 950; ANSI 12.10; GOP TUV-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.

1 800 IBM-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

Y2K

Get Year 2000 Ready

Worldwide	www.ibm.com/pc/year2000

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[1] MHz only measures microprocessor internal clock speed, not application performance. Many factors affect application performance.

[2] 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 C95.1 1992 RF Radiation Limits.

[3] GB means billions of bytes when referring to hard drive capacity. Accessible capacity may vary.

[4] Variable read rate. Actual playback speed will vary and is often less than the maximum possible.

[5] Windows NT not included with custom-configured models.

[6] Diskettes and hard copy documentation available at extra charge.

[7] Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.

[8] Eligibility for Technology Exchange Option is based on total IBM PC hardware acquisition commitment for a 12-month period; minimum qualifying levels apply.

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