



PC Sales Advisor *Australia/New Zealand*

June 1997



Table of Contents

| | | | |
|---|-----|---|-----|
| Content Notes | 4 | IBM PC Server 325 Industry Comparison | 104 |
| What's New | 5 | IBM PC Server 330 Series | 105 |
| What's Changed | 6 | IBM PC Server 330 Essentials | 106 |
| IBM ThinkPads | | IBM PC Server 330 Industry Comparison | 108 |
| IBM ThinkPad Family Overview | 7 | IBM PC Server 704 Series | 109 |
| IBM ThinkPad At-A-Glance | 8 | IBM PC Server 704 Essentials | 110 |
| IBM ThinkPad 365 Series | 9 | IBM PC Server 704 Industry Comparison | 112 |
| IBM ThinkPad 365 Essentials | 10 | IBM PC Server Rack Enclosure Series | 113 |
| IBM ThinkPad 365 Industry Comparison | 12 | IBM PC Server Racks Enclosures Essentials | 114 |
| IBM ThinkPad 380 Series | 13 | IBM PC Server Expansion Enclosure Series | 117 |
| IBM ThinkPad 380 Essentials | 14 | IBM PC Server Expansion Enclosures Essentials | 118 |
| IBM ThinkPad 380 Industry Comparison | 16 | IBM PC Server Option Compatibility Matrix | 120 |
| IBM ThinkPad 560 Series | 17 | IBM PC Server Memory Configurations | 125 |
| IBM ThinkPad 560 Essentials | 18 | IBM Monitors | |
| IBM ThinkPad 560 Industry Comparison | 20 | IBM Monitor Family Overview | 127 |
| IBM ThinkPad 760 Series | 21 | IBM Monitors At-A-Glance | 128 |
| IBM Think Pad 760 Essentials | 22 | IBM Monitors Essentials | 129 |
| IBM ThinkPad 760 Industry Comparison | 24 | | |
| IBM ThinkPad Options Compatibility Matrix | 25 | | |
| IBM ThinkPad Memory Configurations | 29 | | |
| IBM Aptivas | | | |
| IBM Aptiva Family Overview | 31 | | |
| IBM Aptiva At-A-Glance | 32 | | |
| IBM Aptiva Essentials | 34 | | |
| IBM Aptiva S Series Essentials | 36 | | |
| IBM PCs | | | |
| IBM PC Family Overview | 39 | | |
| IBM PC At-A-Glance | 40 | | |
| IBM PC 300GL Series | 43 | | |
| IBM PC 300GL Essentials | 44 | | |
| IBM PC 300GL Industry Comparison | 46 | | |
| IBM PC 330 and 350 Series | 47 | | |
| IBM PC 330 and 350 Essentials | 48 | | |
| IBM PC 330 and 350 Industry Comparison | 50 | | |
| IBM PC 365 Series | 51 | | |
| IBM PC 365 Essentials | 52 | | |
| IBM PC 365 Industry Comparison | 54 | | |
| IBM PC 300XL Series | 55 | | |
| IBM PC 300XL Essentials | 56 | | |
| IBM PC 300XL Industry Comparison | 58 | | |
| IBM PC Options Compatibility Matrix | 59 | | |
| IBM PC Memory Configurations | 65 | | |
| IBM IntelliStation Family Overview | 67 | | |
| IBM IntelliStation At-A-Glance | 68 | | |
| IBM IntelliStation M Pro Series | 69 | | |
| IBM IntelliStation M Pro Essentials | 70 | | |
| IBM IntelliStation M Pro Industry Comparison | 72 | | |
| IBM IntelliStation Options Compatibility Matrix | 73 | | |
| IBM LAN Adapter At-A-Glance | 76 | | |
| IBM PC Servers | | | |
| IBM PC Server Family Overview | 77 | | |
| IBM PC Server At-A-Glance | 78 | | |
| IBM PC Server Racks & Enclosures At-A-Glance | 79 | | |
| IBM PC Server Solutions | 80 | | |
| IBM ServerGuide Version 3.0 | 82 | | |
| Supported Operating Systems | 85 | | |
| IBM PC Server 310 Series | 93 | | |
| IBM PC Server 310 Essentials | 94 | | |
| IBM PC Server 310 Industry Comparison | 96 | | |
| IBM PC Server 315 Series | 97 | | |
| IBM PC Server 315 Essentials | 98 | | |
| IBM PC Server 315 Industry Comparison | 100 | | |
| IBM PC Server 325 Series | 101 | | |
| IBM PC Server 325 Essentials | 102 | | |



IBM Trademarks and Content Notes

©IBM Personal Computer Company

All the part numbers referenced in this publication are product part numbers and not service part numbers.

This publication could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of this publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time.

IBM reserves the right to alter specifications and other product information without notice. It is your responsibility to obtain the latest information.

It is possible that this publication may contain references to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Other part numbers in addition to those listed in this document may be required to support a specific device or function.

Data on competitive products is obtained from publicly available information and is subject to change without notice. Please contact the manufacturer for the most recent information.

This IBM equipment is subject to applicable rules and regulations of the United States Federal Communication Commission (FCC).

The following terms are trademarks or registered trademarks of IBM Corporation in the United States or other countries or both: EduQuest, HelpWare, IBM, LANStream, MWave, NetFinity, OS/2, PC 300, PC 700, Predictive Failure Analysis, RISC System/6000, SelectaSystem, SurePath, SystemView, TechConnect, ThinkPad, ThinkPad Proven, ThinkPad Ultrabay, Total Image Video, TrackPoint, TrackPoint II, TrackPoint III, WebExplorer.

Microsoft, Windows, and Windows NT are trademarks or registered trademarks of Microsoft Corporation. UNIX is a registered trademark in the United States and other countries or registered trademarks licensed exclusively through X/Open Company Limited. C-bus is a trademark of Corollary, Inc. Trinitron is a trademark of the Sony Corporation. All other registered trademarks and trademarks are the properties of their respective owners.

*Processor speeds shown indicate the processor's internal clock speed. Application speed will be less.

**When referring to hard drive capacity, MB stands for million bytes and GB stands for one thousand million bytes. Total user-accessible capacity may vary depending on operating environments.

***Battery life (and recharge times) will vary based on screen brightness, applications, features, power management, battery conditioning, and other customer preferences. CD-ROM and HDD usage may also have a significant impact on battery life.

****Actual weight may vary due to vendor components, manufacturing process, and options.

*****SAS = SelectaSystem, W95 = Windows 95, WNT = Windows NT

Limited warranty includes Warranty Service in those countries where this product is sold by IBM or IBM Business partners (registration required). For information on IBM's Statement of Limited Warranty, please contact your IBM representative or reseller. Copies are available upon request.

For products with Lotus SmartSuite, depending on the product, SmartSuite may be pre-loaded, included on a CD, or available for order on a CD at no charge. Diskettes and hard copy documentation available at an extra charge.

Energy Star compliance: The EPA, as a matter of policy, does not endorse any particular company or its products.

Unless otherwise stated, IBM makes no representations or warranties with respect to non-IBM products. Support (if any) for the non-IBM products is provided by the third party, not IBM.

What's New



IBM ThinkPad 380/380D

All-in-one convenience, versatility and power. The new integrated design offer a diskette, CD-ROM and hard disk drive in one convenient package. Add a powerful Pentium processor, brilliant 12.1" display and spacious hard drive. With the ThinkPad 380, the power of a desktop meets the personality of a Thinkpad.



IBM PC 300XL

The IBM PC 300XL is designed with the latest technology to handle the most demanding business applications in a networked environment. These are the high-end systems that deliver value and keep you ahead of the curve with the performance that power users demand. The PC 300XL delivers innovative technology that offers the highest level manageability and security, so you can concentrate more on business.



IBM IntelliStations M Pro

Powered by a 266MHz Pentium II processor and pixel-potent 2D or 3D graphics engine, the IntelliStation M Pro is the professional workstation that helps you super-charge your projects to reach new heights of excellence.



IBM PC Servers

New models available for current PC Sever 310 and PC Server 704 series. Also, introducing the new PC Server 315 series. With the new IBM PC Server 315, Pentium Pro 200MHz processor and 32MB of RAM standard, you can take your business and your work as far as you need them to go.



Options By IBM

Various new Options are available for the new products announced this month. These includes selected options for ThinkPad 380, PC 300XL, IntelliStations and PC Server 310, 315 and 704.



What's Changed

IBM ThinkPad Systems

IBM ThinkPad Added

| | |
|--------------|---------|
| ThinkPad 380 | 263510A |
| | 26352AA |
| | 26353AA |

IBM PC Systems

IBM PC Added

| | |
|----------|---------|
| PC 300XL | 6588200 |
| | 6588510 |

IBM IntelliStation Systems

IBM IntelliStation Added

| | |
|-------|---------|
| M Pro | 6888220 |
| | 6888260 |

IBM PC Server Systems

IBM PC Server Added

| | |
|---------------|---------|
| PC Server 310 | 86390E5 |
| PC Server 315 | 8638PS0 |
| PC Server 704 | 86506MM |

IBM Monitors

IBM Monitors Added

| | |
|-----|---------|
| G42 | 654002S |
|-----|---------|

IBM Options Systems

IBM Options Added

| | |
|---|---------|
| ThinkPad 380/385 Port Replicator | 84G1316 |
| ThinkPad 380/385 Li-Ion Battery | 73H9793 |
| ThinkPad 380/385 8X CD-ROM Drive | 73H9795 |
| PC Server SCSI-2 F/W Enhanced Repeater | 94G7585 |
| IBM SCSI Storage Extender Cable | 94G7594 |
| PC Server 704 420W HS Redundant Power Option | 94G7490 |
| PC Server 3519 Rack Storage Expansion Enclosure | 3519R01 |
| 2.5-inch 2.1GB IDE HDD | 73H9797 |
| PC Server 4.51GB Wide Ultra SCSI Hot-Swap HDD | 94G7491 |
| PC Server 9.1GB Wide Ultra SCSI Hot-Swap HDD | 94G7492 |
| PC Server SCSI Terminator Kit | 94G7587 |
| PC Server Shared Disk Convenience Kit | 94G7584 |

IBM Aptiva Systems

IBM Aptiva Removed

| | |
|--------------------|---------|
| Aptiva 3D Graphics | 2176Y63 |
| | 2176Y65 |
| | 2176Y71 |

IBM ThinkPad Systems

IBM ThinkPad Removed

| | |
|----------------|---------|
| ThinkPad 730TE | 2524BNV |
| ThinkPad 760E | 9546A9B |
| ThinkPad 760ED | 9546A9A |

IBM PC Server Systems

IBM PC Server Removed

| | |
|---------------|----------|
| PC Server 520 | 8641-EE0 |
|---------------|----------|

IBM Monitors

IBM Monitors Removed

| | |
|-----------------------------------|---------|
| 2248 (13.2"/336mm Viewable Image) | 2248004 |
|-----------------------------------|---------|

IBM Options Systems

IBM Options

| | |
|---|----------|
| PC Server 704 420W Redundant Power Option | 94G5880* |
| PC Server 704 2.14GB SCSI F/W HDD | 94G5882* |
| PC Server 704 4.51GB SCSI F/W HDD (Withdrawn) | 94G6679 |
| PC Server SCSI-2 F/W Repeater | 94G5565* |

* To be withdrawn when stock runs out.

IBM ThinkPad Family Overview

ThinkPad 380



ThinkPad 560



ThinkPad 365



ThinkPad 760

IBM ThinkPad At-A-Glance



| | Part Number | Processor Type/Speed | Memory: std./max. (MB) | Memory Slots: total/avail. | Hard Drive Size, Speed | Display Type | Display Technology | Viewable Image Size | Battery Type | Battery Life (hours) | Integrated CD-ROM | Dimensions (mm) | Weight (kg) | Operating System | Essentials Page |
|--------------|-------------|----------------------|------------------------|----------------------------|------------------------|--------------|-----------------------|---------------------|--------------|----------------------|-------------------|-----------------|-------------|----------------------------------|-----------------|
| 365XD | 2625-1A9 | 133 | 8/40 | 1 /1 DIMM | 1.35GB, 13 | SVGA | TFT | 11.3" | NiMH | 2.0, 1.2 | 6X | 49.5x297x211 | 2.79 | Microsoft Windows 95 | page 10 |
| | 2625-FA9 | 133 | 8/40 | 1 /1 DIMM | 1.35GB, 13 | SVGA | DSTN - passive matrix | 11.3" | NiMH | 2.0, 1.2 | 6X | 49.5x297x211 | 2.82 | Microsoft Windows 95 | page 10 |
| 380 | 2635-10A | 150 | 16/80 | 1 /1 DIMM | 1.08GB, 13 | SVGA | DSTN - passive matrix | 12.1" | NiMH | 2.0, 2.8 | Optional | 59x300x233 | 3 | Microsoft Windows 95 | page 14 |
| 380D | 2635-2AA | 150 | 16/80 | 1 /1 DIMM | 1.35GB, 13 | SVGA | DSTN - passive matrix | 12.1" | NiMH | 2.0, 2.8 | 8X | 59x300x233 | 3.2 | Microsoft Windows 95 | page 14 |
| | 2635-3AA | Pentium MMX, 150 | 16/80 | 1 /1 DIMM | 2.1GB, 13 | SVGA | TFT | 12.1" | Li-Ion | 2.5, 3.3 | 8X | 59x300x233 | 3.1 | Microsoft Windows 95 | page 14 |
| 560 | 2640-20A | 133 | 8/40 | 1 /1 DIMM | 2.1GB, 14 | SVGA | TFT | 12.1" | Li-Ion | 3.0, 1.5 | -- | 31x297x222 | 1.86 | Microsoft Windows 95 | page 18 |
| | 2640-10A | 133 | 8/40 | 1 /1 DIMM | 2.1GB, 14 | SVGA | DSTN - passive matrix | 11.3" | Li-Ion | 3.0, 1.5 | -- | 31x297x222 | 1.87 | Microsoft Windows 95 | page 18 |
| 760E | 9546-A4A | 133 | 16/104 | 2 /2 DIMM | 1.08GB, 13 | SVGA | TFT | 12.1" | Li-Ion | 3.4/6.8, 1.5 | -- | 48.7x297x210 | 3.07 | Microsoft Windows 95 | page 22 |
| 760EL | 9547-A4G | 133 | 16/104 | 2 /2 DIMM | 2.1GB, 13 | SVGA | TFT | 12.1" | Li-Ion | 3.0/6.0, 1.5 | Optional | 50.7x297x210 | 2.91 | Microsoft Windows 95 | page 22 |
| | 9547-A4K | 133 | 32/104 | 2 /1 DIMM | 2.1GB, 13 | SVGA | TFT | 12.1" | Li-Ion | 2.7/5.4, 1.5 | Optional | 50.7x297x210 | 2.91 | Microsoft Windows NT Version 4.0 | page 22 |
| 760XD | 9546-A9E | Pentium MMX, 166 | 32/104 | 2 /1 DIMM | 3GB, 12 | XGA | TFT | 12.1" | Li-Ion | 2.0/4.0, 1.5 | 8X | 50.7x297x210 | 3.18 | Microsoft Windows 95 | page 22 |
| 760XL | 9547-A9C | Pentium MMX, 166 | 16/104 | 2 /2 DIMM | 2.1GB, 14 | SVGA | TFT | 12.1" | Li-Ion | 2.3/4.6, 1.5 | Optional | 54.3x297x210 | 3.05 | Microsoft Windows 95 | page 22 |



IBM ThinkPad 365 Series



THINKPAD 365



IBM ThinkPad 365 Essentials

ThinkPad 365XD

Machine Type 2625

Exceptional combinations of performance and price. A distinctively designed, yet affordable mobile PC with the ideal combination of

power, usability and potential to do more in a connected environment. Features include a choice of Pentium processors; big, bright displays; lots of storage; and multimedia.

Benefits

CD-ROM Models

Do more with your ThinkPad. Quickly load the latest software. Access reference information, graphics and video clips. Or, if you just need a break, play your favorite music CD or computer game. Best of all, most non-CD models can be upgraded to include a CD-ROM should your requirements change.

Range of Displays

Lets you choose what best fits your needs and budget.

Integrated Infrared

You can share files between ThinkPads, exchange information with popular electronic organisers, synchronise data between your desktop and notebook, print, even connect to your LAN -- all without attaching cables or swapping diskettes. It's the productive way to work.

Lotus SmartSuite

With a Lotus SmartSuite license included at no charge, IBM helps you be more productive with your ThinkPad.

PCI

PCI bus provides a high-speed interface to subsystems.

Range of Processors

Provides fast performance to handle demanding applications, at a range of price points to fit your budget.

SVGA Displays

Excellent for large spreadsheets, CAD drawings or anytime detail is critical. With a resolution of 800x600, you can fit 56% more information on your screen (compared to a VGA display).

TrackPoint Pointing Device

Accuracy and ease are at your fingertips. Features like QuickStop response and the non-slip cap make it easier to maneuver through applications and get your work done.

Standard Features

Processor

133MHz Pentium processors

L2 Cache

None

Memory (std/max)

8/40MB EDO 3.3v 70ns non-parity EDO SO DIMM, one socket for one JEDEC 144 pin EDO SO DIMM of 8, 16 or 32MB

Display & Resolution

11.3" DSTN - 256 colors @ 800x600

11.3" TFT - 64K colors @ 800x600

Video Subsystem

Trident CYBER9320 / 32-bit SVGA accelerator / 1MB fast page DRAM 70ns; PCI 2.1 / 32-bit external SVGA to 1024x768 with 256 colors

Video Memory

1MB

Architecture

ISA (audio, PCMCIA, diskette, serial, parallel, infrared)

PCI 2.1 / 32-bit / 33MHz (EIDE, graphics)

Hard Drive (std/max)

1.35GB/2.1GB

Diskette Drive

1.44MB (external in CD-ROM models)

PC Card Slots

(1) Type III or (2) Type II

Integrated CD-ROM

6X standard

Optional 8X upgrade (via service-authorized dealer)

Audio

16-bit ESS 1688 audio chip with OPL3 includes support for Sound Blaster Pro applications, 18 voice MIDI FM synthesis, internal speaker (.5 Watts), dial volume control, internal microphone, audio in and out jacks

Modem

Optional via PC Card

Pointing Device

TrackPoint III with Quick Stop response, drag lock and non-slip cap

Port Replicator

Optional with integrated second battery charger and palm rest

Docking Station

N/A

Battery Type/Life, Charge Time (power on)

NiMH/2.0 hours, 1.5 hours

Maximum No. of Batteries

One

Integrated Infrared

115Kbps (IrDA IR data link specification Version 1.0 compatibility)

Ports

1 Parallel (EPP/ECP), 1 Serial (19550A), 1 Infrared (IrDA), 1 Keyboard/Mouse, 1 Display

Software Included

Windows 95; Software may include: Lotus SmartSuite CD-ROM, CoSession Remote, IntelliLink Connect, IBM Anti-Virus, IGN and Netscape Navigator, CompuServe for Windows, NetFinity for Windows 95, Puma TranXit, and PC Card Director

Keyboard

Full-size, 85-key keyboard lifts to change battery and/or upgrade memory and disk

Security

Power-on password, hard disk password, supervisor password, locking device keyhole, keyboard lock

Approximate Weight (with battery)

2.79kg

Dimensions (WxDxH)

2.97 x 210 x 49.5mm (may vary slightly depending on model)

Warranty

International 1 Year Parts/Labour (battery 1 year)

12 Months Express Repair Door to Door Pickup (Australia Only) or Customer Carry-in Repair Service

1 Year Accidental Damage Coverage (Australia Only)

Selected Options

Accessory

Carrying Cases

All Models

| | |
|--|---------|
| ThinkPad polyester Carry Bag (Regular) | 79F0982 |
| ThinkPad Deluxe Koskin Carry Bag (large) | 79F0983 |
| ThinkPad Leather Carry Bag (large) | 79F0984 |
| ThinkPad Overnight Carry Bag | 79F0985 |

Communications/Networking

Emulation

All Models

| | |
|----------------------------------|---------|
| 3270 Emulation PCMCIA Card | 0933315 |
| 5250 Emulation PCMCIA Card | 92G5360 |

Ethernet

All Models

| | |
|---|---------|
| EtherJet PC Card Adapter | 72H4533 |
| EtherJet PC Card 10Base-T/2 Adapter | 72H4534 |

Modems

All Models

| | |
|--|---------|
| PCMCIA 33.6 Kbps Internal Data/Fax modem (Aus) | 42H4330 |
| PCMCIA 33.6 Kbps Internal Data/Fax modem (NZ) | 42H4331 |

Token-Ring

All Models

| | |
|--|---------|
| Token-Ring Auto 16/4 Credit Card Adapter | 04H6922 |
| Turbo Token Ring PC Card | 85H3628 |

Desktop Expansion

Other

All Models

| | |
|---|---------|
| PS/2 Mini-Mouse Color Laptop, Notebook & ThinkPad | 07G0033 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II (Black) | 13H6714 |
| TrackPoint III Caps | 39H1354 |
| ThinkPad Keyboard/Mouse Y Connector | 54G0441 |
| 26251A9, 2625FA9 | |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |

Port Replicators

All Models

| | |
|-----------------------------------|---------|
| Port Replicator and Charger | 75H7529 |
|-----------------------------------|---------|

Memory

SO DIMM

All Models

| | |
|---|---------|
| 8MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7340 |
| 16MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7341 |
| 32MB EDO SO DIMM 144-pin 60ns 3.3V 8-byte | 92G7342 |

Power

AC Adapters

All Models

| | |
|------------------------------------|---------|
| 35W AC/DC Adapter Slim 2-Pin | 76H0139 |
|------------------------------------|---------|

Batteries

All Models

| | |
|-----------------------------|---------|
| 365 NiMH Battery Pack | 38H6304 |
|-----------------------------|---------|

Storage

CD-ROM Drives

26252A9

| | |
|---------------------------------------|---------|
| 4X IDE CD-ROM For ThinkPad 365X | 73H7225 |
|---------------------------------------|---------|

All Models

| | |
|------------------------------------|---------|
| 8X Internal IDE CD-ROM Drive | 83H6726 |
|------------------------------------|---------|

Hard Disk Drives

All Models

| | |
|--|---------|
| ThinkPad 365 1.08GB Hard Disk II | 69H7956 |
| ThinkPad 365 1.4GB HDD 3L | 82H8161 |
| ThinkPad 365X/XD 2.1GB HDD Upgrade | 82H8175 |



IBM ThinkPad 365 Industry Comparison

| | IBM 365XD Series | Toshiba Satellite Pro 4x0 Series | Compaq Armada 41xx Series |
|-----------------------------|-------------------------------------|----------------------------------|-------------------------------------|
| Processor | 133MHz Pentium | 75, 90, 100MHz Pentium | 100, 120, 133MHz Pentium |
| Memory (std / max) | 8/40MB | 8/40MB | 8/40MB or 16/48MB |
| L2 Cache | | | 256K |
| Display | | 10.4" SVGA TFT or DSTN | |
| | 11.3" SVGA DSTN | 11.3" SVGA TFT or DSTN | 11.3" SVGA DSTN |
| | 11.3" SVGA TFT | | 11.8" SVGA TFT |
| Video Memory | 1MB | 1MB (410) or 2MB (420) | 1MB |
| PCI Architecture | Yes | No | Yes |
| Pointing Device | TrackPoint III | AccuPoint | Touchpad |
| PC Card Slots | (1) Type III or (2) Type II | (1) Type III or (2) Type II | (1) Type III or (2) Type II, ZV |
| | | 420 is CardBus ready with ZV | |
| Hard Drive - std | 1.35GB | 772MB, 810MB or 1.3GB | 810MB or 1.08GB |
| Hard Drive - max | 2.1GB | 772MB or 810MB or 1.3GB | 1.08GB |
| Upgradeable HDD | Yes | No (410) | Yes |
| | | Yes (420) | |
| Port Replicator | Yes (w/ battery charger, palm rest) | Yes | Yes (Convenience Base) |
| Docking Station | No | No | No |
| Battery (type/life) | NiMH / 2.0 hrs | Li-Ion / 2-4 hrs | Li-Ion / 2.5-3.3 hrs |
| Max # Batteries | | | |
| Battery Charge Time | 1.2 hrs (power off/suspend) | 2-3 hrs | n/a |
| Integrated Audio | Yes | Yes | Yes |
| Integrated Fax/Modem | Optional via PC Card | Optional via PC Card | Optional via PC Card |
| Integrated Infrared | Yes (115Kbps) | Yes (115Kbps) | Yes (115Kbps) |
| Integrated CD-ROM | Standard 6x or Optional (8X) | Standard or Optional (4X) | Optional 4X via Mobile CD Unit |
| Weight w/ Battery | 6.1-6.4lbs. | 6.0 - 7.4 lbs. | 8.1 lbs (w/ MCDU) |
| Dimensions (cu. in.) | 1.9 x 11.7 x 8.3 (184.5) | 2.2 x 11.8 x 8.9 (231.0) | 2.3 x 11.6 x 10.3 - w/ MCDU (274.8) |
| | 2.0 x 11.7 x 8.3 (194.2) | 1.9 x 11.8 x 8.9 (199.5) | 1.49 x 11.6 x 10.3 - w/o MCDU (178) |
| | | 2.2 x 11.8 x 9.25 (240.13) | |
| O/S Included | Win 95 | DOS/WFW or Win 95 | Win 95 |

Competitive Advantages

Upgradeable Hard Drives

With over 1GB of available storage, there's plenty of room for today, and room to grow for tomorrow.

Integrated Infrared

Makes it easy to print, transfer files and synchronize data between systems ... all without using cables or wires.

Audio

Lets you enjoy multimedia applications, and add business audio to your documents.

CD-ROM Models

Let you take advantage of multimedia applications and quickly load today's large programs and operating systems

Battery Charges Quickly

Your ThinkPad is ready to go when you are.

Light Weight

It's easy to carry around when you're on the move.

Lotus SmartSuite

Included at no additional cost!

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM ThinkPad 380 Series



THINKPAD 380



IBM ThinkPad 380 Essentials

ThinkPad 380 ThinkPad 380D

All-in-one convenience, versatility and power. The new integrated design offers a diskette, CD-ROM and hard disk drive in one

Machine Type 2635 Machine Type 2635

convenient package. Add a powerful Pentium processor, brilliant 12.1" display and spacious hard drive. With the ThinkPad 380, the power of a desktop meets the personality of a ThinkPad.

Benefits

All-in-One Convenience

New integrated design offers a diskette, CD-ROM and hard disk drive in one convenient package. (CD-ROM drive is standard on 380D models)

Integrated Infrared

You can share files between ThinkPads, exchange information with popular electronic organisers, synchronise data between your desktop and notebook, print, even connect to your LAN -- all without attaching cables or swapping diskettes. It's the productive way to work.

Lotus SmartSuite

With a Lotus SmartSuite license included at no charge, IBM helps you be more productive with your ThinkPad.

Pentium processors with MMX Technology

Deliver blazing performance for the programs you run today while positioning you for the dynamic multimedia applications of tomorrow.

TrackPoint Pointing Device

Accuracy and ease are at your fingertips. Features like QuickStop response and the non-slip cap make it easier to maneuver through applications and get your work done.

Standard Features

Processor

150MHz Pentium processor with MMX technology
150MHz Pentium processor

L2 Cache

256KB, write-back, direct mapped, 10ns, synchronous pipelined burst

Memory (std./max.)

16/80MB, 3.3v non-parity EDO SO DIMM
One socket for one JEDEC 144 pin EDO SO DIMM of 8, 16, 32 or 64MB

Display & Maximum Resolution

12.1" TFT, 64K colors @ 800x600, 100:1 contrast ratio
12.1" DSTN, 64K colors @ 800x600, 30:1 contrast ratio

Video Subsystem

NeoMagic MagicGraph 128ZV (NM2093), 128 bit SVGA accelerator, Zoomed Video support, DDC1 and DDC2B, color space conversion and interpolation in X and Y axis, support for DCI and DirectDraw PCI 2.1, 32 bit, external SVGA to 1024x768 with 256 colors

Video Memory

1.125MB, iDRAM (embedded)

Architecture

PCI 2.1: 32-bit, 33MHz (EIDE, graphics, PCMCIA)
ISA (audio, diskette, serial, parallel, infrared)

Hard Drive (std./max.)

1.08GB, 1.35GB or 2.1GB/2.1GB

Diskette Drive

1.44MB

PC Card Slots

(1) Type III or (2) Type II
ZV Port enabled (lower slot)
PCMCIA 2.1 compatible, PC Card Standard 95, Cirrus Logic CL-PD6729 (PCI)

Integrated CD-ROM

380D: 8X standard
380: 8X optional (via service authorised dealer)
Multi-session, XA, ATAPI

Audio

16 bit audio chip, 20 voice MIDI FM synthesis, Crystal Semiconductor CS4236
One internal speaker, .5 watt, dial volume control, internal microphone, line-in and -out jacks

Modem

Optional via PC Card

Pointing Device

TrackPoint with Quick Stop finger control and non-slip cap

Port Replicator/Convenience Docking

Optional - includes two Type III PC CardBus slots

Docking Station

N/A

Battery Type/Life, Charge Time (power on)

NiMH/2.2 hours
Li-Ion/2.6 hours
3.5 - 10 hours
Maximum No. of Batteries
One

Integrated Infrared

Up to 4Mbps (IrDA IR data link specification Version 1.1 compatibility)

Ports

1 parallel (EPP/ECP/bidirectional), 1 serial (19550A), 1 infrared (IrDA), 1 keyboard/mouse, 1 display, line-out and line-in

Software Included

Windows 95 - Preloaded software may include: Lotus SmartSuite CD-ROM, CoSession Remote, CompuServe for Windows, NetFinity for Windows 95, Puma TranXit, IntelliLink Connect, IBM Global Network and Netscape Navigator browser, and SystemSoft CardWorks

Keyboard

Full-size, 85-key keyboard lifts to change battery and/or upgrade memory and hard drive

Security

Power-on password, hard disk password, locking device keyhole for cable lock

Approximate Weight (with battery)

380 DSTN -2.69kg.
380D DSTN - 3.2kg.
380D TFT - 3.1kg.

Dimensions (WxDxH)

300 x 232 x 59mm

Warranty

International 1 Year Parts/Labour (battery 1 year)
12 Months Express Repair Door to Door Pickup (Australia Only) or Customer Carry-in Repair Service
1 Year Accidental Damage Coverage (Australia Only)

Selected Options

Accessory

Carrying Cases

| | |
|--|---------|
| All Models | |
| ThinkPad polyester Carry Bag (Regular) | 79F0982 |
| ThinkPad Deluxe Koskin Carry Bag (large) | 79F0983 |
| ThinkPad Leather Carry Bag (large) | 79F0984 |
| ThinkPad Overnight Carry Bag | 79F0985 |

Communications/Networking

Emulation

| | |
|----------------------------------|---------|
| All Models | |
| 3270 Emulation PCMCIA Card | 0933315 |
| 5250 Emulation PCMCIA Card | 92G5360 |

Ethernet

| | |
|---|---------|
| All Models | |
| EtherJet PC Card Adapter | 72H4533 |
| EtherJet PC Card 10Base-T/2 Adapter | 72H4534 |

Modems

| | |
|---|---------|
| All Models | |
| PCMCIA 33.6 Kbps Internal Data/Fax modem(Australia) | 42H4330 |
| PCMCIA 33.6 Kbps Internal Data/Fax modem(NZ) | 42H4331 |

Token-Ring

| | |
|--|---------|
| All Models | |
| Token-Ring Auto 16/4 Credit Card Adapter | 04H6922 |
| Turbo Token Ring PC Card | 85H3628 |

Desktop Expansion

Other

| | |
|---|---------|
| All Models | |
| PS/2 Mini-Mouse Color Laptop, Notebook & ThinkPad | 07G0033 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| TrackPoint III Caps | 39H1354 |
| ThinkPad Keyboard/Mouse Y Connector | 54G0441 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |

Port Replicators

| | |
|--|---------|
| All Models | |
| ThinkPad 380/385 Port Replicator | 84G1316 |

Memory

SO DIMM

| | |
|---|---------|
| All Models | |
| 64MB NP SO DIMM EDO | 76H0268 |
| 8MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7340 |
| 16MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7341 |
| 32MB EDO SO DIMM 144-pin 60ns 3.3V 8-byte | 92G7342 |

Power

Batteries

| | |
|---------------------------------------|---------|
| All Models | |
| ThinkPad 380/385 Li-Ion Battery | 73H9793 |

Storage

CD-ROM Drives

| | |
|--|---------|
| All Models | |
| ThinkPad 380/385 8X CD-ROM Drive | 73H9795 |

Hard Disk Drives

| | |
|------------------------------|---------|
| All Models | |
| 2.5-inch 2.1GB IDE HDD | 73H9797 |



IBM ThinkPad 380 Industry Comparison

| | ThinkPad 380 | Toshiba Satellite Pro 420/430 | Compaq Armada 1500 |
|---|------------------------------------|--------------------------------|--------------------------------|
| Intel Pentium Processor | 150MHz, 150MHz with MMX technology | 120, 133MHz | 120, 133MHz |
| L2 Cache std./max. | 256KB/256KB | 0/0 | 0 or 256KB/256KB |
| Memory std./max. Type (slots) | 16/80MB EDO(2) | 8 or 16/40 or 48MB EDO(1) | 16/80MB EDO (1) |
| Architecture | PCI | VESA | PCI |
| Display | 12.1" SVGA TFT 12.1" SVGA DSTN | 11.3" SVGA TFT 11.3" SVGA DSTN | 12.1" SVGA TFT 11.3" SVGA DSTN |
| Video Width Bus/Memory | 128-bit PCI/1.125MB | 32-bit VL/2MB | 32-bit PCI/1MB |
| Pointing Device | Trackpoint III | Accupoint | touchpad |
| Data Ports Modem/IR Speed | None/4Mbps | None/115Kbps | 33.6Kbps/4Mbps |
| A/V Ports: A-in/out V-in/out | Yes/Yes No/No | Yes/Yes No/No | Yes/Yes No/No |
| Speakers Location | Built-in | Built-in | Built-in |
| PCMCIA Slots Type (CardBus/ZV) | 1-Typelll, 2-Typell (N/Y) | 1-Typelll, 2-Typell (N/Y) | 1-Typelll, 2-Typell (Y/Y) |
| Optical Media Location Speed Type | Int. or Opt. 8X CDRom | Internal 6X or 10X CD-ROM | Internal 10X CD-ROM |
| HDD Sizes (Upgradeable?) | 1.08GB-2.1GB(Yes) | 810MB-1.35GB (Yes) | 1.08GB-1.4GB (Yes) |
| Devices Simultaneously Internal | Batt, HDD, CDRom & FDD | Batt, HDD, CDRom or FDD | Batt, HDD, CDRom & FDD |
| Port Replicator: PC slots (CardBus?) | 2(Yes) | 2(No) | 0(No) |
| Battery Type Life/Charge Time (off) | NiMH or Lilon /2.8Hrs. | NiMH /2-11Hrs. | NiMH or Lilon /3.5 Hrs. |
| Size/Weight w/ Battery | 261 cu. in./6.6-7.1lbs. | 252 cu. in./7.1-7.4lbs. | 261 cu. in./7.1-8lbs. |
| Systems Management | NetFinity; CoSession | | Intelligent Manageability |

Competitive Advantages

All-in-One Convenience

Battery, Hard Disk, CDRom, and Diskette Drive are all in the system - no external parts to carry around or lose.

Leading Core Technologies

Some models include Pentium MMX, 256K L2 Cache, PCI Bus, 2.1GB Hard Disk, 128-bit Video & 4Mbps Infrared - a combination that leads the industry.

Port Replication with CardBus

Two CardBus slots provide for 32-bit higher speed attachments like LAN cards for long term investment protection.

High-Speed Infrared

Lets you print, transfer files and synchronize data at LAN speeds ... all without attaching cables or wires.

Lotus SmartSuite

License included at no additional cost!

Built-in Systems Management

NetFinity and CoSession to reduce total cost of operations.

IBM SystemCare

Comprehensive hardware, leasing, and services to minimize customers' required resources.

Data on competitive products obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM ThinkPad 560 Series



THINKPAD 560



IBM ThinkPad 560 Essentials

ThinkPad 560

Machine Type 2640

Ultraportability without compromise. The award-winning ThinkPad 560 notebooks are super-slim, lightweight and packed with the performance features our customers demand in a ThinkPad. Features

include Pentium processors, large displays, roomy hard drives, PCI architecture, and integrated infrared. It's the lightweight that acts like a heavyweight.

Benefits

Integrated Infrared

You can share files between ThinkPads, exchange information with popular electronic organisers, synchronise data between your desktop and notebook, print, even connect to your LAN -- all without attaching cables or swapping diskettes. It's the productive way to work.

Lotus SmartSuite

With a Lotus SmartSuite license included at no charge, IBM helps you be more productive with your ThinkPad.

Range of Processors

Provides fast performance to handle demanding applications, at a range of price points to fit your budget.

SVGA Displays

Excellent for large spreadsheets, CAD drawings or anytime detail is critical. With a resolution of 800x600, you can fit 56% more information on your screen (compared to a VGA display).

Light and Thin

ThinkPad 560 notebooks are super-slim and lightweight, yet packed with the performance features our customers demand in a ThinkPad. When you see one you'll agree: our engineers have performed magic, fitting 7 pounds of features into a notebook that weighs just over four pounds.

TrackPoint Pointing Device

Accuracy and ease are at your fingertips. Features like QuickStop response and the non-slip cap make it easier to maneuver through applications and get your work done.

Standard Features

Processor

133MHz Pentium processors

L2 Cache

None

Memory (std./max.)

8/40MB EDO 3.3v 70ns non-parity SO-DIMM, one socket

Display & Resolution

12.1" SVGA TFT - 64K colors @ 800x600

11.3" SVGA DSTN - 256 colors @ 800x600

Video Subsystem

Trident CYBER9382: 64-bit SVGA accelerator, 1MB fast page DRAM. Hardware acceleration of 'Video for Windows' is integrated into the 9382 graphics controller; interpolation in X and Y axis; color space conversion when DCI enabled.

PCI 2.1: 32-bit, 32-bit path to memory, DCI, directDraw, EnDIVE support, external SVGA to 1024x768 with 256 colors

Video Memory

1MB

Architecture

ISA (audio, diskette, serial, parallel, infrared)

PCI 2.1: 32-bit, 33MHz (EIDE, graphics, PCMCIA), Mobile Triton 82430MX

Hard Drive (standard)

2.1GB

Diskette Drive

1.44MB (detachable)

PC Card Slots

(1) Type III or (2) Type II/I

CD-ROM

Optional via PC Card

Audio

16-bit ESS 1688 audio chip with OPL3 includes support for Sound Blaster Pro applications, 18 voice MIDI FM synthesis, internal speaker (.5 Watts), dial volume control, internal microphone, audio in/out jacks

Modem

Optional via PC Card

Pointing Device

TrackPoint III with Quick Stop response, drag lock and non-slip cap

Port Replicator

Optional

Docking Station

N/A

Battery Type/Life, Charge Time (power on)

Li-Ion/3.0 hours, 2.5-3.5 hours

Maximum No. of Batteries

One

Integrated Infrared

115Kbps (IrDA IR data link specification Version 1.0 compatible)

Ports

1 parallel (ECC/ECP), 1 serial (16550A), 1 infrared (IrDA), 1 keyboard/mouse, 1 display

Software Included

Windows 95. Software may include Lotus SmartSuite, CoSession Host, IntelliLink Connect, IGN with Netscape Navigator, NetFinity for Windows, Puma TranXit, IBM Anti-Virus, PC Card Director

Keyboard

Full-size 85-key, 8 Fn Key

Security

Power-on password, supervisor password, locking device keyhole

Approximate Weight (with battery)

12.1" TFT - 1.86kg.

11.3" DSTN - 1.87kg.

Dimensions (WxDxH)

297 x 222 x 31mm

Warranty

International 1 Year Parts/Labour (battery 1 year)

12 Months Express Repair Door to Door Pickup (Australia Only)

Customer Carry-in Repair Service

1 Year Accidental Damage Coverage (Australia Only)

Selected Options

Accessory

Carrying Cases

| | |
|--|---------|
| All Models | |
| ThinkPad polyester Carry Bag (Regular) | 79F0982 |
| ThinkPad Deluxe Koskin Carry Bag (large) | 79F0983 |
| ThinkPad Leather Carry Bag (large) | 79F0984 |
| ThinkPad Overnight Carry Bag | 79F0985 |

Communications/Networking

Emulation

| | |
|----------------------------------|---------|
| All Models | |
| 3270 Emulation PCMCIA Card | 0933315 |
| 5250 Emulation PCMCIA Card | 92G5360 |

Ethernet

| | |
|---|---------|
| All Models | |
| EtherJet PC Card Adapter | 72H4533 |
| EtherJet PC Card 10Base-T/2 Adapter | 72H4534 |

Modems

| | |
|--|---------|
| All Models | |
| PCMCIA 33.6 Kbps Internal Data/Fax modem | 42H4330 |

Token-Ring

| | |
|--|---------|
| All Models | |
| Token-Ring Auto 16/4 Credit Card Adapter | 04H6922 |
| Turbo Token Ring PC Card | 85H3628 |

Desktop Expansion

Other

| | |
|---|---------|
| All Models | |
| Numeric Keypad Color Laptop & ThinkPad | 07G0032 |
| PS/2 Mini-Mouse Color Laptop, Notebook & ThinkPad | 07G0033 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II (Black) | 13H6714 |
| TrackPoint III Caps | 39H1354 |
| ThinkPad Keyboard/Mouse Y Connector | 54G0441 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |

Port Replicators

| | |
|------------------------------------|---------|
| All Models | |
| ThinkPad 560 Port Replicator | 46H4209 |

Memory

SO DIMM

| | |
|---|---------|
| All Models | |
| 64MB NP SO DIMM EDO | 76H0268 |
| 8MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7340 |
| 16MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte | 92G7341 |
| 32MB EDO SO DIMM 144-pin 60ns 3.3V 8-byte | 92G7342 |

Power

AC Adapters

| | |
|------------------------------------|---------|
| All Models | |
| 35W AC/DC Adapter Slim 2-Pin | 76H0139 |

Batteries

| | |
|-----------------------------|---------|
| All Models | |
| TP 560 Li-Ion Battery | 46H4206 |

Storage

Hard Disk Drives

| | |
|----------------------------------|---------|
| All Models | |
| 2.5-Inch 2.1GB HDD IDE | 45H8783 |
| ThinkPad 560 1.08GB HDD II | 46H4208 |



IBM ThinkPad 560 Industry Comparison

| | IBM ThinkPad 560 Series | DEC HiNote Ultra II 5100 Series | Toshiba Portege 650CT | Toshiba Portege 660CDT |
|----------------------------------|--------------------------------|--|---|---|
| Processor | 133MHz Pentium | 100, 120, 133 or 150MHz Pentium | 133MHz Pentium | 150MHz Pentium |
| Memory (std./max.) | 8/40MB EDO | 8 or 16/56MB | 16/80MB EDO | 16/80MB EDO |
| L2 Cache | 0 | 256KB | 256KB | 256KB |
| Display | 12.1" SVGA TFT | -- | -- | -- |
| | 11.3" SVGA DSTN | 11.3" SVGA TFT | 11.3" SVGA TFT | 11.3" SVGA TFT |
| | -- | 10.4" SVGA TFT | -- | -- |
| Video Memory | 1MB | 1MB | 2MB EDO | 2MB EDO |
| PCI Architecture | Yes | No | Yes | Yes |
| Pointing Device | TrackPoint III | trackball | AccuPoint | AccuPoint |
| PC Card Slots | (1) Type III or (2) Type II | (1) Type III or (2) Type II | (1) Type III or (2) Type II - CardBus, ZV | (1) Type III or (2) Type II - CardBus, ZV |
| Hard Drive (std./max.) | 2.1GB | 1.08GB, 1.35GB or 1.44GB/1.44GB | 1.26GB/1.26GB | 1.35GB |
| Upgradeable HDD | Yes | Yes | No | Yes |
| Max # HDD | 1 | 1 | 1 | 1 |
| Port Replicator | Optional | Optional | Optional | Optional |
| Docking Station | No | Optional | No | Optional |
| Battery (type/life) | Li-Ion/3hrs. | Li-Ion/3-5hrs. | Li-Ion/2.5-5hrs. | Li-Ion/2-4hrs. |
| Max # Batteries | 1 | 1 | 1 | 2 |
| Battery Charge Time | 1.5hrs. (power off) | 2-3hrs. (power off) | 4hrs. (power off) | 3hrs. (power off) |
| Integrated Fax/Modem | Optional via PC Card | Optional via PC Card | 28.8 data/fax/voice | 28.8 data/fax/voice |
| Integrated Audio | Yes | Yes | Yes | Yes |
| Integrated Infrared | Yes | Yes | Yes | Yes |
| Integrated CD-ROM | Optional via PC Card | Optional Mobile Media Module | Optional via PC Card | Yes |
| Approx. Weight w/ Battery | 4.1lbs. | 4.0lbs. | 4.8lbs. | 5.6lbs. |
| Dimension (cu. in.) | 1.2x11.7x8.7 (122.15) | 1.2x11x8.5 (112.2) | 1.81x10.3x8.2 (152.87) | 1.9x10.35x8.27 (162.63) |

Competitive Advantages

Large Displays

Largest displays in this form factor makes it easier to see your work.

PCI Bus

Supports 32-bit transfers for faster performance.

Quick Battery Charge

Your ThinkPad is ready to go when you are.

Lotus SmartSuite

License included at no additional cost!

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM ThinkPad 760 Series



THINKPAD 760



IBM Think Pad 760 Essentials

ThinkPad 760E
ThinkPad 760ED
ThinkPad 760EL
ThinkPad 760XD
ThinkPad 760XL

Machine Type 9546
Machine Type 9546
Machine Type 9547
Machine Type 9546
Machine Type 9547

The latest power, connectivity and configuration flexibility to optimise effectiveness and maximise investment return. High performance features may include: the latest Pentium processors with MMX technology, large high-resolution displays with superb graphics, large hard drives, integrated infrared, and advanced multimedia.

Benefits

Integrated Infrared

You can share files between ThinkPads, exchange information with popular electronic organisers, synchronise data between your desktop and notebook, print, even connect to your LAN -- all without attaching cables or swapping diskettes. It's the productive way to work.

Removable Hard Drive

With a removable hard drive, your ThinkPad is ready to grow when you are. If your applications and data keep growing, another hard drive may be all you need to meet your new storage requirements.

UltraBay

With UltraBay, your ThinkPad is equipped with the industry's most comprehensive modular design. Just lift up the keyboard to add a second battery (double your battery life) or a second hard drive (double your storage). Swap the diskette drive with a CD-ROM (CD-ROM capable models). Add a PCMCIA Adapter for an additional PC Card slot. Or install a wireless modem for communicating when you're on the road. UltraBay gives you ultra flexibility.

TheatreSound

ThinkPad notebooks with TheatreSound provide advanced audio capabilities:

Total Image Video

Your ThinkPad 760ED can play virtually broadcast quality video clips full screen, including support for AVI, MPEG 1 and MPEG 2 HHR video formats. This capability is excellent for customer presentations, as well as multimedia and education applications.

Media Processor

ThinkPad notebooks with the integrated media processor provide extensive audio and communications capabilities. This software-upgradeable DSP provides dynamic sound allowing you to enhance your presentations with audio, play WAV files or voice annotate your documents. It also functions as a data/fax modem, allowing you to send and receive documents right from your ThinkPad. Lastly, it provides comprehensive telephony functions, including speakerphone, answering machine, and speed dialer. It's like having your office with you wherever you go.

Standard Features

Processor

Up to 166MHz Pentium processors with MMX Technology

L2 Cache

Up to 256KB

Memory (std./max.)

16 or 32MB/104MB

All: EDO 3.3v 70ns non-parity; two sockets for two JEDEC 144 pin EDO SO DIMMs

Display & Maximum Resolution

12.1" TFT - 64K colors @ 1024x768

12.1" TFT - 64K colors @ 800x600

Video Subsystem

EL (TFT): Trident CYBER9385/64-bit SVGA accelerator/1MB EDO DRAM/70ns

PCI 2.1/32-bit/external SVGA to 1280x1024 with 256 colors

E/ED: Trident CYBER9385/64-bit SVGA accelerator/2MB EDO DRAM/70ns

PCI 2.1/32-bit/DCI, Direct Draw, EnDIVE support/external SVGA to 1280 x 1024 with 256 colors or 1024 x 768 with 65,536 colors

E:Trident CYBER9320/32-bit SVGA accelerator/1MB EDO DRAM/70ns

PCI 2.1/32-bit/external SVGA to 1280x1024 with 256 colors (Models A3B, A3L, A4B, A4A)

Video Memory

1MB or 2MB EDO (Model dependant)

PC Card Slots

(1) Type III or (2) Type I/II - CardBus 32 bit PCI

PCMCIA 2.1 compatible

Pointing Device

TrackPoint III with Quick Stop response, drag lock and non-slip cap

Integrated Infrared

Yes - 1.15Mbps (IrDA data link specification v1.0 compatible)

Ports

1 parallel (EPP/ECP), 1 serial (19550A), 2 infrared (IrDA), 1 keyboard/mouse, 1 display

Architecture

ISA (audio, diskette, serial, parallel, infrared, external expansion) PCI 2.1 / 32-bit / 33MHz (EIDE, graphics, CardBus, MPEG (ED), external expansion)

Hard Drive (standard)

Removable hard disk drives up to 3.0GB

Maximum No. of Hard Drives/Max. Storage

Two / 6GB (12GB with two drives in ThinkPad and two drives in SelectaDock II)

Integrated CD-ROM

Up to 8X in select models

Optional in other models

Multi-session / XA / EIDE / PIO Mode 3 (ATAPI)

Modem

E/ED/XD: 28.8Kbps data/14.4Kbps fax modem standard via Mwave DSP

EL/ELD/XL: Optional via PC Card

Docking Station (optional)

E/ED/EL/XD/XL (PCI models): SelectaDock I or SelectaDock II

All: Dock I & II

Maximum No. of Batteries

Two

Battery Type/Life; Charge Time (power on/power off)

Li-Ion / 2.2-3.3 hr. (one battery); 2.0-3.0 hr./1.5-2.5hr.

Keyboard

Full-size, 85-key, 8 Fn key; keyboard lifts to change battery, upgrade memory and disk; keyboard automatically tilts to 5.5 degrees for added comfort; integrated palm rest; LCD status panel.

Audio

E/ED/XD: Mwave DSP (MDSP2780) provides 44.1KHz MPC-2 16-bit audio with real-time compression; support for Sound Blaster Pro applications; general MIDI compatible; 32-voice wavetable synthesizer; simultaneous audio play and record; digital audio mixing with up to eight open .WAV sources; full-features telephone (answering machine, full-duplex speakerphone).

EL/XL: 16-bit ESS 1688 audio chip with OPL3 includes support for Sound Blaster Pro applications, 20 voice MIDI FM synthesis.

All: internal speakers (.5w), slide volume control, internal microphone, audio in/out jacks

Security

Power-on password, hard disk password, supervisor password, locking device keyhole, keyboard lock

Software Included

Choice of Microsoft Windows 95 or Microsoft Windows NT Preloaded software may include: Lotus SmartSuite, INSYNC CoSession Remote, Prodigy, CompuServe for Windows, NetFinity for Windows 95, SofNet FaxWorks Voice for Windows, Puma TranXit, PC Card Director and Asymetrix Digital Video Producer (760ED with MPEG).

Approximate Weight (with battery)

3.30kg max

Dimensions (WxDxH)

Approx: 297 x 210 x 54.3mm

Warranty

International 3 Year Parts/Labour (battery 1 year)

12 Months Express Repair Door to Door Pickup (Australia Only) or

Customer Carry-in Repair Service

1 Year Accidental Damage Coverage (Australia Only)

Selected Options

Accessory

Carrying Cases

All Models

ThinkPad polyester Carry Bag (Regular) 79F0982

ThinkPad Deluxe Koskin Carry Bag (large) 79F0983

ThinkPad Leather Carry Bag (large) 79F0984

ThinkPad Overnight Carry Bag 79F0985

Communications/Networking

Emulation

All Models

3270 Emulation PCMCIA Card 0933315

5250 Emulation PCMCIA Card 92G5360

Ethernet

All Models

PCM331 10Base-T ENET C/C Adapter 0934331

EtherJet PC Card (10Base-T) 72H4533

EtherJet PC Card (Combo) 72H4534

Modems

All Models

33.6 Kbps International Data/Fax Modem (Aus) 42H4330

33.6 Kbps International Data/Fax Modem (NZ) 42H4331

Token-Ring

All Models

Token-Ring Auto 16/4 Credit Card Adapter 04H6922

Desktop Expansion

Docks

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

SelectaDock I 3547001

SelectaDock II 3547002

All Models

SelectaDock Base Model I 39H7405

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

ThinkPad IDE Conversion Card (for Dock I/II) 46H5994

Port Replicators

All Models

Thinkpad 360/750/755 Port Replicator Model I 66G3510

Processor Up-Grades

ThinkPad

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

ThinkPad Pentium 133MHz Upgrade Kit 46H5991

Memory

SO DIMM

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

8MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte 92G7340

16MB EDO SO DIMM 144-pin 70ns 3.3V 8-byte 92G7341

32MB EDO SO DIMM 144-pin 60ns 3.3V 8-byte 92G7342

64MB EDO SO DIMM 76H0268

Power

AC Adapters

All Models

35W AC/DC Adapter Slim 4-Pin 76H0119

Batteries

All Models

Li-Ion Battery Pack II 29H9329

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

ThinkPad 760L NiMH Battery Pack 41H9720

Chargers

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

ThinkPad Travel Quick Charger 85G1522

Storage

Adapters

All Models

2nd Hard-Disk Drive Adapter 29H9333

CD-ROM Drives

All Models

TP 760 8X CD-ROM Drive 45H8786

Diskette Drives

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9546A4A,
9547A3F, 9547A4F

FDD External Attachment Kit 66G3618

Hard Disk Drives

All Models

ThinkPad 760/755 1.4GB HDD 69H8412

9547A4K, 9546A9A, 9546A9B, 9547A4G, 9546A3A, 9547A3F,
9547A4F

ThinkPad 760/755 2.1GB HDD 69H8414

ThinkPad 760 3.0GB HDD 45H8789



IBM ThinkPad 760 Industry Comparison

| | IBM ThinkPad 760 Series | Toshiba Tecra 7x0CDT Series | Compaq LTE 5xxx Series |
|-----------------------------------|---------------------------------------|-----------------------------|------------------------------------|
| Processor | 133, 150 or 166MHz Pentium | 133 or 150MHz Pentium | 100, 120, 133MHz Pentium |
| Memory (std / max) | 16 or 32MB/104MB | 16/144MB | 8/72MB or 16/80MB |
| L2 Cache | 256KB | 256KB | 256 |
| Display | 12.1" XGA TFT | 12.1" XGA TFT | 12.1" SVGA TFT |
| | 12.1" SVGA TFT | | 11.3" SVGA TFT or DSTN |
| | | | 10.4" SVGA TFT |
| Video Memory | 1MB or 2MB | 2MB | 1MB |
| PCI Architecture | Yes | Yes | Yes |
| Pointing Device | TrackPoint III | AccuPoint | EasyPoint II |
| PC Card Slots | (1) Type III or (2) Type II - CardBus | (1) Type III or (2) Type II | (1) Type III or (2) Type II |
| Hard Drive - std / max | 1.08GB, 2.1GB or 3.0GB / 4.2GB | 1.13GB or 2.5GB / 2.5GB | 810MB, 1.35GB or 2.16GB / 4.32GB |
| Removable HDD | Yes | Yes | Yes |
| Port Replicator | Yes | Yes | No |
| Docking Station | Yes | Yes | Yes |
| Battery (type/life w/ one) | Li-Ion / 2.8-3.4 hrs | Li-Ion / 2.75-5 hrs | NiMH (Li-Ion optional) / 2.5-4 hrs |
| Max # Batteries | Two | | |
| Battery Charge Time | 1.5-2.5 hrs (power off) | 4 hrs | 1.5 hrs (power off) |
| Integrated Audio | Yes | Yes | Yes |
| Integrated Fax/Modem | Up to 28.8 via DSP | Up to 28.8 | Optional via PC Card |
| Integrated Infrared | Yes (2 transceivers - 1.15Mbps) | Yes (115Kbps) | Yes (115Kbps) |
| Integrated CD-ROM | Optional/Standard 6X or 8x | 6X | Optional or Standard (4X) |
| Weight w/ Battery | 6.4 - 7.4 lbs | 7.5 - 8.2 lbs | 7.2 - 7.5 lbs |
| Dimensions (cu. in.) | 1.92 x 11.7 x 8.3 - thin (186.9) | 2.3 x 11.8 x 9.1 (246.9) | 2.0 x 12.2 x 9.0 (219.6) |
| | 2.14 x 11.7 x 8.3 - thick (207.8) | | |
| | 1.98 x 11.7 x 8.3 - 11.3" D (192.3) | | |

Competitive Advantages

UltraBay Modularity

Provides the most extensive list of options, including wireless modems and PCMCIA Adapter

Docking Solutions

Extensive solutions, including modular SelectaDock with building-block approach and full PCI support, makes your ThinkPad a true desktop replacement

MPEG Support

Provides professional quality video and advanced multimedia support (ED)

Media Processor

Provides advanced audio and telephony (E/ED). It's like taking your office on the road

Full PCI

Full PCI implementation, including CardBus and SelectaDock, so you can take advantage of higher performing peripherals

CD-ROM Upgradeability

All new models can be upgraded to include CD-ROM, giving you future flexibility and investment protection

High-Speed Infrared

Lets you print, transfer files and synchronize data ... all without attaching cables or wires

Lotus SmartSuite

Productivity software included at no additional cost!

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM ThinkPad Options Compatibility Matrix

| | | Current | | | | | | Out of Production | | | | | |
|--|---------|---|----|---|---|---|---|-------------------|---|---|--|---|--|
| | | IBM ThinkPad 765D/L IBM ThinkPad 760E/ED/EL/ELD/XL/XD IBM ThinkPad 560/560E IBM ThinkPad 380/385 IBM ThinkPad 365E/ED/X/XD IBM ThinkPad 310/310 ⁸¹⁴ IBM ThinkPad 760C/CD/L/LD IBM ThinkPad 730T/TE IBM ThinkPad 365C/CS/CD/CSD | | | | | | | | | | | |
| | | Part Number | | | | | | | | | | | |
| Memory | | | | | | | | | | | | | |
| EDO SO DIMM (Non-Parity) | | | | | | | | | | | | | |
| 8MB EDO | 92G7340 | • | • | • | • | 8 | | | | | | | |
| 16MB EDO | 92G7341 | • | • | • | • | 8 | | | | | | | |
| 32MB EDO | 92G7342 | • | • | • | • | 8 | | | | | | | |
| 64MB EDO | 76H0268 | • | 13 | | • | | | | | | | | |
| 16MB EDO ¹⁴ | 11J8636 | | | | | | • | | | | | | |
| 32MB EDO ¹⁴ | 11J8637 | | | | | | • | | | | | | |
| Storage | | | | | | | | | | | | | |
| 810MB ¹ Hard-Disk Drive II ⁵ | 29H9313 | • | • | | | | | | • | | | | |
| 1.08GB Hard-Disk Drive | 69H7956 | | | | | • | | | | | | • | |
| 1.08GB Hard-Disk Drive ¹¹ | 46H4208 | | | • | | | | | | | | | |
| 1.2GB Hard-Disk Drive II ⁵ | 29H9325 | • | 5 | | | | | | 5 | | | | |
| 1.4GB Hard-Disk Drive | 82H8161 | | | | | • | | | | | | • | |
| 1.4GB Hard-Disk Drive ⁶ | 69H8412 | • | • | | | | | | • | | | | |
| 2.1GB Hard-Disk Drive ⁶ | 69H8414 | • | 5 | | | | | | 5 | | | | |
| 2.1GB Hard-Disk Drive ¹¹ | 45H8783 | | | • | | | | | | | | | |
| 2.1GB Hard-Disk Drive | 82H8175 | | | | | 8 | | | | | | | |
| 2.1GB Hard-Disk Drive ¹¹ | 73H9797 | | | | • | | | | | | | | |
| 2.1GB Hard-Disk Drive ¹⁴ | 11J8643 | | | | | | • | | | | | | |
| 3.0GB Hard-Disk Drive ⁶ | 45H8789 | • | 5 | | | | | | 5 | | | | |
| 2nd Hard-Disk Drive Adapter | 29H9333 | • | • | | | | | | • | | | | |
| 4X CD-ROM Drive ¹¹ | 73H7225 | | | | | 2 | | | | | | | |
| 8X CD-ROM Drive | 83H6726 | | | | | 8 | | | | | | | |
| 8X CD-ROM Drive ⁶ | 45H8786 | • | 5 | | | | | | • | | | | |
| 6X CD-ROM Drive ⁶ | 85G1957 | • | 10 | | | | | | | | | | |
| 8X CD-ROM Drive ¹¹ | 73H9795 | | | | • | | | | | | | | |
| 10X CD-ROM Drive ¹⁴ | 11J8676 | | | | | | • | | | | | | |
| FDD External Attachment Kit | 66G3618 | | • | | | | | | • | | | | |
| Power | | | | | | | | | | | | | |
| Li-Ion Battery Pack II | 29H9329 | • | • | | | | | | • | | | | |
| 760 NiMH Battery Pack ⁹ | 41H9720 | • | • | | | | | | • | | | | |
| 730 NiMH Battery Pack | 66G9550 | | | | | | | | | • | | | |
| 560 Li-Ion Battery Pack | 46H4206 | | | • | | | | | | | | | |
| 365 NiMH Battery Pack | 38H6304 | | | | | • | | | | | | • | |
| 380 Li-Ion Battery | 73H9793 | | | | • | | | | | | | • | |



Current

Out of
Production

IBM ThinkPad 765D/L
IBM ThinkPad 760E/ED/EL/ELD/XL/XD
IBM ThinkPad 560/560E
IBM ThinkPad 380/385
IBM ThinkPad 365E/ED/X/XD
IBM ThinkPad 310/310^{8/14}
IBM ThinkPad 760C/CD/L/LD
IBM ThinkPad 730T/TE
IBM ThinkPad 365C/CS/CD/CS/D

| | Part Number | | | | | | | | | | |
|--|-------------|---|---|---|---|---|--|--|---|---|---|
| NiMH Battery ¹⁴ | 11J8639 | | | | | | | | • | | |
| Car Battery Adapter | 49G2167 | • | • | | | | | | | • | |
| 730 Car Battery Adapter | 66G9545 | | | | | | | | | | • |
| Travel Quick Charger | 85G1522 | • | • | | | | | | | • | |
| 730 Quick Charger | 66G9540 | | | | | | | | | | • |
| 45W AC Adapter ¹⁴ | 11J8702 | | | | | | | | • | | |
| 56W AC Adapter | 12J2456 | • | | | | | | | | | |
| 35 Watts Slim AC Adapter (4-pin) | 76H0119 | | • | | | | | | | • | |
| 35 Watts Slim AC Adapter (2-pin) | 76H0139 | | | • | • | 8 | | | | | |
| Worldwide 50 Watts AC Adapter ² | 66G3541 | | • | | | | | | | • | |
| 730 AC Adapter | 84G0480 | | | | | | | | | | • |

Desktop Expansion

| | | | | | | | | | | | |
|---|---------|---|---|---|---|---|---|--|--|---|---|
| IDE Conversion Card ¹⁵ | 46H5994 | • | • | | | | | | | | |
| SelectaDock Base Model I | 39H7405 | • | • | | | | | | | • | |
| SelectaDock I ⁷ | 3547001 | • | • | | | | | | | | |
| SelectaDock II ⁷ | 3547002 | • | • | | | | | | | | |
| Port Replicator | 46H4209 | | | • | | | | | | | |
| Port Replicator (with Card Bus slots) | 84G1316 | | | | • | | | | | | |
| Port Replicator and Charger | 75H7529 | | | | | • | | | | | • |
| Port Replicator for 730T | 84G0485 | | | | | | | | | • | |
| Standard 104-Key Keyboard in Black | 76H0109 | • | • | • | • | • | • | | | • | • |
| Enhanced Keyboard with TrackPoint II in Black | 13H6705 | • | • | • | • | • | • | | | • | • |
| TrackPoint III caps | 39H1354 | • | • | • | • | • | • | | | • | |
| PS/2 Numeric Keypad | 07G0032 | • | • | • | | 8 | • | | | • | |
| IBM Enhanced Mouse II in Black | 13H6714 | • | • | • | • | • | • | | | • | • |
| PS/2 Miniature Mouse in Black | 07G0033 | • | • | • | • | • | • | | | • | • |
| PS/2 Keyboard/Mouse Connector | 54G0441 | • | • | • | • | • | • | | | • | • |

Networking and Communications

| | | | | | | | | | | | | |
|--|---------|---|---|---|---|---|---|--|--|---|---|---|
| Turbo 16/4 Token-Ring PC Card (9 Pin D Shell) | 85H3628 | • | • | • | • | • | • | | | • | • | • |
| Turbo 16/4 Token-Ring PC Card (RJ-45) | 85H3629 | • | • | • | • | • | • | | | • | • | • |
| Token-Ring Auto 16/4 | 04H6922 | | • | • | • | • | • | | | • | • | • |
| EtherJet PC Card 10Base-T | 72H4533 | | • | • | • | • | • | | | • | • | • |
| EtherJet PC Card Combo 10Base-T/10Base-2 | 72H4534 | | • | • | • | • | • | | | • | • | • |
| 56K PC Card Modem Kit ¹² | 04K0052 | • | • | • | • | • | • | | | • | • | • |
| PCMCIA 33.6Kbps Data/Fax Modem with XJack ¹² | 55H6759 | • | • | • | • | • | • | | | • | | • |
| PCMCIA 33.6Kbps Host Processor Controlled Data/Fax Modem ¹² | 42H4335 | • | • | • | • | • | • | | | • | | • |
| PCMCIA 28.8Kbps International Data/Fax Modem ¹² | 42H4319 | • | • | • | • | • | • | | | • | • | • |



Current

Out of
Production

| | Part Number | IBM ThinkPad 765D/L IBM ThinkPad 760E/ED/EL/ELD/XL/XD IBM ThinkPad 560/560E IBM ThinkPad 380/385 IBM ThinkPad 365E/ED/X/XD IBM ThinkPad 310/310 ⁸¹⁴ | | | | | | IBM ThinkPad 760C/CD/L/LD IBM ThinkPad 730T/TE IBM ThinkPad 365C/CS/CD/CSO | | |
|--|----------------|---|---|---|---|---|---|--|---|---|
| | | | | | | | | | | |
| V.34 Data/Fax Modem (33.6Kbps) ¹² | 25H6420 | • | • | • | • | • | • | • | • | • |
| WaveRunner ISDN/Analog Modem | 04H7686 | • | • | • | • | • | • | • | • | • |
| WaveRunner/ISDN Kit | 85H8058 | • | • | • | • | • | • | • | • | • |
| 3270 Emulation | 0933315 | | • | • | • | • | • | • | • | • |
| 3270 Emulation Credit Card Cable | 0933247 | | • | • | • | • | • | • | • | • |
| 5250 Emulation | 92G5360 | • | • | • | • | | • | • | • | • |
| 5250 Express PC Card | 88H0256 | • | • | • | • | • | • | • | • | • |



:

SelectaDock Base Model I and SelectaDock II
SelectaDock Base Model I and SelectaDock II

| | Part Number | | |
|---|-------------|---|---|
| ThinkPad Docking Options | | | |
| Storage | | | |
| 8X CD-ROM Drive | 45H8786 | • | • |
| 810MB Hard-Disk Drive II (12.5mm) | 29H9313 | • | • |
| 1.2GB Hard-Disk Drive II (17mm) | 29H9325 | • | • |
| 1.4GB Hard-Disk Drive | 69H8412 | • | • |
| 2.1GB Hard-Disk Drive | 69H8414 | • | • |
| 3.0GB Hard-Disk Drive | 45H8789 | • | • |
| FDD External Attachment Kit | 66G3618 | • | • |
| Accessories | | | |
| Enhanced Keyboard with TrackPoint II in Black | 13H6705 | • | • |
| PS/2 Numeric Keypad | 07G0032 | • | • |
| PS/2 Miniature Mouse in Black | 07G0033 | • | • |
| IBM Enhanced Mouse II in Black | 13H6714 | • | • |
| Enhanced Keyboard with PS/2 Style Cable | 92G7453 | • | • |
| Other | | | |
| Display Stand II | 39H7436 | • | • |

Key to Chart Footnotes

¹ MB equals one million bytes and GB equals one billion bytes when referring to hard drive capacity. Accessible capacity varies, depending on operating environment.

² Available through 6/97 only.

³ Supports 365X only.

⁴ NiCad battery 41H7919 and WW AC Adapter 41H9722 are available as spares for this product.

⁵ Supports 760CD/LD/ED/EL/ELD/XL/XD and "thick" models of the E only.

⁶ Can also be used in UltraBay of 760 models and SelectaDocks. Requires 29H9333 to enable 2nd hard disk drive in 760 systems and 39H3987 for CD-ROM use in Dock I and Dock II.

⁷ Requires 39H7405 (SelectaDock Base).

⁸ Supports 365X/XD only.

⁹ Can also be used in UltraBay of 760 models.

¹⁰ Supports 365E/ED only.

¹¹ Dealer/Service installation only.

¹² Maximum speed. Actual speed may vary

¹³ .Supports 760 XL/XD only.

¹⁴ Not available in all countries.

¹⁵ Required to access IDE devices in the Dock I/ Dock II when used with 760E/EL/ED/ELD and is not needed in any other case.

IBM ThinkPad Memory Configurations

IBM ThinkPad 310 (2600 EDO)

| | | | | | |
|--------------------|---------|---------|---------------------|---------------------|---------------------|
| Base MB | 16 | 16 | R ¹⁶ -16 | R ¹⁶ -32 | R ¹⁶ -32 |
| Desired MB | 32 | 48 | 64 | 48 | 64 |
| Quantity MB | 16 (1) | 32 (1) | 32 (2) | 32 (1) | 32 (2) |
| Part Number | 11J8636 | 11J8637 | 11J8637 | 11J8637 | 11J8637 |

IBM ThinkPad 365E/ED (2625 Non-Parity)

| | | |
|--------------------|---------|---------|
| Base MB | 8 | 8 |
| Desired MB | 12 | 24 |
| Quantity MB | 4 (1) | 16 (1) |
| Part Number | 92G7287 | 92G7293 |

IBM ThinkPad 365X/XD (2625 Non-Parity)

| | | |
|---------|---------|---------|
| 8 | 8 | 8 |
| 16 | 24 | 40 |
| 8 (1) | 16 (1) | 32 (1) |
| 92G7340 | 92G7341 | 92G7342 |

IBM ThinkPad 560 (2640 Non-Parity)

| | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|---------|
| Base MB | 8 | 8 | 8 | 16 | 16 | 16 | 16 |
| Desired MB | 16 | 24 | 40 | 24 | 32 | 48 | 80 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 8 (1) | 16 (1) | 32 (1) | 64 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 92G7340 | 92G7341 | 92G7342 | 76H0268 |

IBM ThinkPad 760C/CD (9546 Non-Parity)

| | | | |
|--------------------|---------|---------|---------|
| Base MB | 8 | 8 | 8 |
| Desired MB | 16 | 24 | 40 |
| Quantity MB | 8 (1) | 16 (1) | 16 (2) |
| Part Number | 92G7315 | 92G7316 | 92G7316 |

IBM ThinkPad 760L/LD (9547 Non-Parity)

| | | | |
|---------|---------|---------|------------------|
| 8 | 8 | 8 | 8 |
| 16 | 24 | 40 | 72 ¹⁸ |
| 8 (1) | 16 (1) | 16 (2) | 32 (2) |
| 92G7315 | 92G7316 | 92G7316 | 4390-32 |

IBM ThinkPad 760EL/ELD (9547 EDO)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| Base MB | 8 | 8 | 8 | 8 | 16 | 16 | 16 | 16 | 16 | 8 |
| Desired MB | 16 | 24 | 40 | 72 | 24 | 32 | 48 | 80 | 104 ¹⁸ | 104 ¹⁸ |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 32 (2) | 8 (1) | 16 (1) | 32 (1) | 32 (2) | 96 (1) | 96 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 92G7342 | 92G7340 | 92G7341 | 92G7342 | 92G7342 | 439196C | 439196C |

IBM ThinkPad 760E/ED (9546 EDO)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| Base MB | 8 | 8 | 8 | 8 | 16 | 16 | 16 | 16 | 8 | 16 |
| Desired MB | 16 | 24 | 40 | 72 | 24 | 32 | 48 | 80 | 104 ¹⁸ | 104 ¹⁸ |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 32 (2) | 8 (1) | 16 (1) | 32 (1) | 32 (2) | 96 (1) | 96 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 92G7342 | 92G7340 | 92G7341 | 92G7342 | 92G7342 | 439196C | 439196C |

IBM ThinkPad 760XD (9546 EDO)

| | | | | |
|--------------------|---------|---------|---------|---------------------|
| Base MB | 32 | 32 | 32 | R ¹⁶ -32 |
| Desired MB | 40 | 48 | 64 | 104 ¹⁷ |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 96(1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 439196C |

**IBM ThinkPad 760XL** (9547 EDO)

| | | | | | | | | | |
|--------------------|---------|---------|---------|---------|-------------------|---------|---------|---------|---------------------|
| Base MB | 16 | 16 | 16 | 16 | 16 | 32 | 32 | 32 | R ¹⁶ -32 |
| Desired MB | 24 | 32 | 48 | 80 | 104 ¹⁸ | 40 | 48 | 64 | 104 ¹⁸ |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 32 (2) | 96 (1) | 8 (1) | 16 (1) | 32 (1) | 96 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 92G7342 | 439196C | 92G7340 | 92G7341 | 92G7342 | 439196C |

IBM ThinkPad 765D (9546 EDO)

| | | | | | |
|--------------------|---------|---------|---------|---------------------|---------|
| Base MB | 32 | 32 | 32 | R ¹⁶ -32 | 32 |
| Desired MB | 40 | 48 | 64 | 96 | 96 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) 32 (1) | 64 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 76H0268 92G7342 | 76H0268 |

IBM ThinkPad 765L (9547 EDO)

| | | | | | |
|--------------------|---------|---------|---------|---------------------|---------|
| Base MB | 32 | 32 | 32 | R ¹⁶ -32 | 32 |
| Desired MB | 40 | 48 | 64 | 96 | 96 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) 32 (1) | 64 (1) |
| Part Number | 92G7340 | 92G7341 | 92G7342 | 76H0268 92G7342 | 76H0268 |

¹⁶ R=Removal of base memory.¹⁷ Additional ThinkPad Information may be found at <http://www.pc.i.com/thnkpadd>.¹⁸ Using ThinkPad Proven option.

IBM Aptiva Family Overview



Note: Aptiva C series is shipped with either G42, G50 or G72 monitors. Please refer to the Monitor section of this document for actual image of the monitors.



Note: Image of the S series shown is model 91. Model 81 does not include the subwoofer as standard.

IBM Aptiva At-A-Glance

| | Part Number*** | Order Number*** | Desktop/Mini Tower | Processor Type/ | Hard Drive: std. | Memory: std./max. | Video Memory: std./ | 3D Graphics | L2 Cache: std./max. | CD ROM | Stereo Speakers | Microphone | Modem: data/fax | Bays: total, avail. | Slots: total, avail. | Operating System** | Monitor | Essentials Page |
|------------------------|----------------|-----------------|--------------------|--------------------|------------------|-------------------|---------------------|-------------|---------------------|---------|-----------------------|-----------------------|--------------------|---------------------|----------------------|--------------------|---------|-----------------|
| Aptiva C Series | 2161-E64 | 61E6414 | Mini Tower | Pentium 166MHz | 2GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 14" CRT | page 34 |
| | 2161-E64 | 61E6415 | Mini Tower | Pentium 166MHz | 2GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 15" CRT | page 34 |
| | 2161-E64 | 61E6417 | Mini Tower | Pentium 166MHz | 2GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 17" CRT | page 34 |
| | 2161-E84 | 61E8414 | Mini Tower | Pentium MMX 166MHz | 3.1GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 14" CRT | page 34 |
| | 2161-E84 | 61E8415 | Mini Tower | Pentium MMX 166MHz | 3.1GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 15" CRT | page 34 |
| | 2161-E84 | 61E8417 | Mini Tower | Pentium MMX 166MHz | 3.1GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Yes | Yes | 33.6 data/14.4 fax | 6,3 | 7,5 | MS-Win '95 | 17" CRT | page 34 |
| Aptiva S Series | 2162-Q81 | 62Q8115 | Mini Tower | Pentium MMX 166MHz | 3.1GB | 16/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Integrated on Monitor | Integrated on Monitor | 33.6 data/14.4 fax | 8,5 | 7,4 | MS-Win '95 | MM50 | page 36 |
| | 2162-Q91 | 62Q9117 | Mini Tower | Pentium MMX 200MHz | 3.1GB | 32/64 | 2MB/4MB | Yes | 256KBKb/512KBKb | 16X max | Integrated on Monitor | Integrated on Monitor | 33.6 data/14.4 fax | 8,5 | 7,4 | MS-Win '95 | MM70 | page 36 |

* When referring to hard drive capacity, MB stands for one million bytes and GB stands for one thousand million bytes. Total user-accessible capacity may vary depending on operating environments.

** SAS = SelectaSystem, W95 = Windows 95, WNT = Windows NT, OS/2 = Warp Connect with Win OS/2

*** Substitute Y for Z or E for F or Q for U if in New Zealand (Not all models are available in New Zealand)







IBM Aptiva C3 Essentials

Aptiva 3D Graphics 2161

These high performance Aptivas bring serious fun and learning to your family.

Make learning fun with Aptiva's superior selection of top rated education software titles including Kid's Room, an Aptiva exclusive, that gives kids a fun place to learn. You can learn from the Internet via the fast 33.6Kbps (data) modem.

RingCentral handles your communication needs in one convenient

package, including fax, answering systems, and automated paging when a message is received. It will even read your email to you over the phone. Together with an extensive range of productivity software titles, Aptiva gives you a better way to work at home.

Aptiva's IBM innovations like Rapid Resume, Wake Up On Ring and Scheduler makes sure that Aptiva is ready when you are. All this and award winning IBM service and support.

Benefits

Learning Software

An extensive range of top-rated educational software comes with your Aptiva. Titles like World Book (TM) 1997 Multimedia Encyclopedia makes learning fun. (Applications may differ from retail versions and may not include all documentation or functions.)

33.6Kbps data modem

This fast data transfer modem helps you explore the world from your Aptiva. Whether you're using RingCentral or accessing the Internet your data communications can be transferred at rates up to 33.6Kbps.

MMX (TM) Technology

The Pentium(R) processor with MMX(TM) technology enhances multimedia and communications by giving you smoother, more realistic video, higher quality graphics, and enhanced CD audio quality.

16X Max. CD-ROM Drive

Variable speed CD-ROM drive using Constant Angular Velocity (CAV) technology for faster disk access time allowing quicker access to all your CD-ROM applications.

SDRAM/SGRAM

The latest in memory technology for faster system and graphics performance helping you speed through your PC applications.

RingCentral

Your communications center for phone, fax and email. Have Aptiva read your email to you over the phone or page you when an important call comes in. You can have your faxes, voicemail or email forwarded to another location and have the ability to download files from another computer.

Total Image 3D

Aptiva's Total Image 3D provides high resolution, smooth action and razor-sharp detail needed for the ultimate multimedia experience. With texture mapping, smooth shading and other effects, Aptiva Total Image 3D allow you the complete control important for multimedia creations and sophisticated games. Aptiva's 2D and 3D graphics chip delivers Total Image 3D and improved Total Image Video (for non-3D graphics).

Standard Features

Pentium Processors with MMX technology

166 MHz MMX or 166MHz standard Pentium processor

Hard Drives

2.0GB and 3.1GB

Memory

16MB (expandable to 64MB)

3-D Graphics

Standard

Video Memory

2MB SGRAM (Expandable to 4MB)

L2 Cache

256KB (expandable to 512KB)

Serial/Parallel/USB Ports

1 serial, 1 parallel and 2 USB

Fax Modem

33.6Kbps data/14.4Kbps fax modem

Ring Central

Standard

Rapid Resume

Standard

CD-ROM

16X Max CD-ROM Drive

Stereo Speakers

Model 20 on all models

Microphone

Standard

Slots

7 total, 5 available

Bays

6 total, 3 available

Operating System

Microsoft Windows 95

Software

Preloaded applications:

AmericaOnline, Aptiva Desktop Customization, Aptiva Guide, Aptiva Helper, Aptiva Installer, Aptiva Scheduler, Audio Station 2, Compuserve for Windows, IBM Antivirus, IBM Internet Connection Phone, Internet Explorer 3.0, Kid's Room, Microsoft Plus!, Microsoft Works 4.0, Netscape Navigator, Rapid Resume Manager, Ring Central, Wall Street Money.

Bundled applications:

Battle Beast, Lotus Smartsuite 96*, Mech Warrior 2, Power Goo, Quicken V5, Strategy Games of the World, Triple Play Plus, Video Screensaver/Cityscapes, The World's Greatest Monuments, World Book 1997 Multimedia Encyclopedia, Body Works, Caesar II, Actua Soccer 3D, POD MMX**.

*Free upgrade to Lotus Smartsuite '97 through the Lotus Service Desk

** Only works on machine with MMX processors.

Applications may vary from retail versions and may not include all documentation or function. All may not be available separately.

Selected Options

**Memory
DIMM**

| | |
|---------------------------------------|---------|
| All Models | |
| 16MB Non-Parity SDRAM DIMM 60NS | 76H0283 |
| 32MB Non-Parity SDRAM DIMM 60NS | 76H0284 |
| 64MB NP EDO DIMM | 76H0326 |

L2 Cache

| | |
|----------------------------------|---------|
| All Models | |
| 512KB Synchronous L2 Cache | 92G7336 |

**Accessory
Other**

| | |
|----------------------------------|---------|
| All Models | |
| Flight Controller Joystick | 76H0130 |
| Sleek Mouse | 76H0104 |
| 1200DPI ADF Colour Scanner | 25H6629 |



IBM Aptiva S Series Essentials

Aptiva S Series

2162

The Aptiva S Series, with its revolutionary award-winning design, utilises the latest technologies for an awesome multimedia experience.

Aptiva frees your working area by incorporating a split system design; separating for convenient access the CD-ROM and floppy drive in the media console, from the main processor unit. The wave chamber speakers and microphone are integrated within the multimedia

monitor unit.

With the excellent performance of Pentium processors with MMX technology and a range of communications features, including a modem capable of 33.6Kbps (data) / 14.4 Kbps (fax), the Aptiva S Series keeps you connected to the world and ahead of the pack. The charcoal gray color and distinctive style makes Aptiva S Series the 'talk of the town'.

Benefits

Purposeful Design

The Aptiva S Series frees your working area and reduces desktop clutter by incorporating an award-winning split system design. A charcoal gray minitower houses the main system and can be located away from the desktop. The media console brings all the frequently used areas within fingertip reach, access for the CD-ROM, power and indicator lights are in its slimline design that conveniently stands underneath the monitor. You can stow the keyboard on top of the media console when its not in use. Integrated into the multimedia monitor unit are the speakers and the microphone. This split system design frees the working area while maintaining power and expansion capabilities.

Main System Unit

A charcoal gray minitower contains the slots and bays and houses the processor, power and the latest in memory technology. SDRAM and SGRAM system and graphics memory give faster performance to help you speed through your PC applications. It also has the next generation of 3D with ATI Rage 2 for crisper, smoother, faster 3D effects. Communications include a modem capable of 33.6Kbps (data)/ 14.4Kbps (fax). The unit can be placed up to 6 feet from the front of the monitor, media console and keyboard.

MMX (TM) Technology

The Pentium(R) processor with MMX(TM) technology enhances multimedia and communications by giving you smoother, more realistic video , higher quality graphics, and enhanced CD audio quality.

16X Max. CD-ROM Drive

Variable speed CD-ROM drive using Constant Angular Velocity (CAV) technology for faster disk access time allowing quicker access to all your CD-ROM applications.

Multimedia Monitor

The multimedia monitor takes advantage of the latest technologies for displaying enhanced 3D images and effects. The monitor unit design integrates superior stereo and high quality sound emanating from speakers featuring SuperSound with WaveChamber audio and Multidome speaker design. There is an integral microphone and built-in external connectors for subwoofer, headphones and external microphone. The monitor sits comfortably on the space efficient stand (supplied with the Aptiva S Series PC).

RingCentral

Your communications center for phone, fax and email. Have Aptiva read your email to you over the phone or page you when an important call comes in. You can have your faxes, voicemail or email forwarded to another location and have the ability to download files from another computer.

Standard Features

Pentium Processors with MMX technology

166 and 200 MHz

Hard Drives

3.1GB

Memory

16MB and 32MB (expandable to 64MB)

3-D Graphics

Available on all models

Video Memory

2MB SGRAM (Expandable to 4MB)

L2 Cache

256KB as standard on all models (expandable to 512KB)

Serial/Parallel/USB Ports

Base unit: 1 serial, 1 parallel and 2 USB

Media Console: 1 parallel

Fax Modem

Available on all models: 33.6Kbps data/14.4 Kbps fax modem

Ring Central

Available on all models

CD-ROM

16X (maximum) on all models

Stereo Speakers

Integrated into the monitor

P200MMX also has a subwoofer

Microphone

Integrated into the monitor

Mouse

Standard mouse available on all models

Joystick

Available on all models

Slots

7 total, 4 available

Bays

Main System Unit: 6 total, 5 available

Media Console: 2 total, 0 available

Operating System

Microsoft Windows 95



Software

Preloaded applications:

America Online, Aptiva Desktop Customization, Aptiva Guide, Aptiva Helper, Aptiva Installer, Aptiva Scheduler, Audio Station 2, Compuserve for Windows, IBM Antivirus, IBM Internet Connection Phone, Internet Explorer 3.0, Kid's Room, Microsoft Plus!, Microsoft Works 4.0, Netscape Navigator, Rapid Resume Manager, Ring Central, Wall Street Money.

Bundled applications:

Battle Beast, Lotus Smartsuite, Mech Warrior 2, Power Goo, Quicken, Strategy Games of the World, Triple Play Plus, Video Screensaver/Cityscapes, The World's Greatest Monuments, World Book 1997 Multimedia Encyclopedia, Body Works, Caesar II, Actua Soccer 3D, POD MMX

Applications may vary from retail versions and may not include all documentation or function. All may not be available separately.

Selected Options

Memory

DIMM

All Models

| | |
|---------------------------------------|---------|
| 16MB Non-Parity SDRAM DIMM 60NS | 76H0283 |
| 32MB Non-Parity SDRAM DIMM 60NS | 76H0284 |
| 64MB NP EDO DIMM | 76H0326 |

L2 Cache

All Models

| | |
|----------------------------------|---------|
| 512KB Synchronous L2 Cache | 92G7336 |
|----------------------------------|---------|

Accessory

Other

All Models

| | |
|----------------------------------|---------|
| Flight Controller Joystick | 76H0130 |
| Sleek Mouse | 76H0104 |
| 1200DPI ADF Colour Scanner | 25H6629 |
| Black Subwoofer | 12J6147 |

IBM PC Family Overview



IBM PC 300GL



IBM PC 300XL



IBM PC 330/350



IBM PC 365

IBM PC At-A-Glance



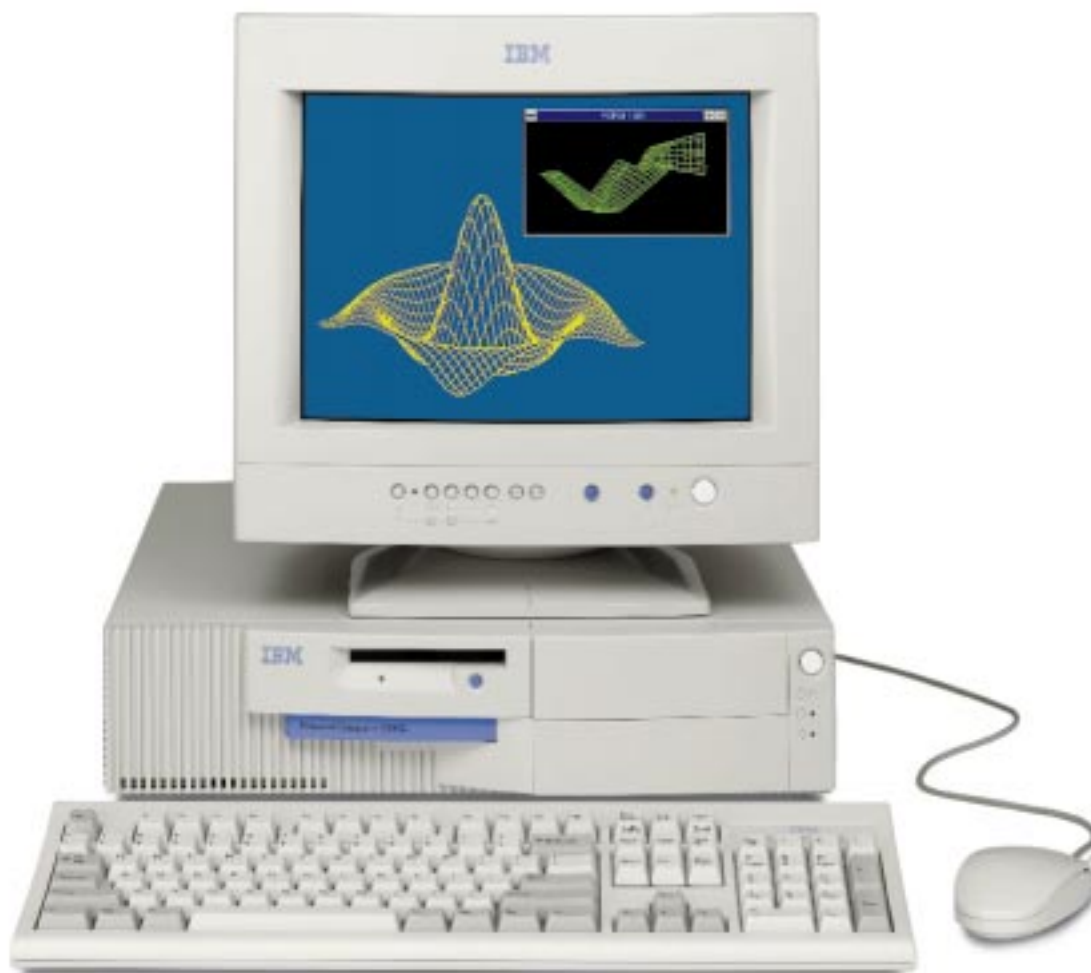
| | Part Number | Processor | Speed (MHz) | L2 Cache: std./max. (KB) | Memory: std./max. (MB) | Standard Memory | Hard Drive Type | Hard Drive Size, Speed | Graphic Chip Set | CD-ROM | Slots:total/avail. | Bays:total/avail. | Network Interface/Speed | Audio | Operating System | Essentials Page |
|----------|-------------|-------------------|-------------|--------------------------|------------------------|-----------------|-----------------|------------------------|------------------|--------|--------------------|----------------------------|-------------------------|------------------------------------|------------------|-----------------|
| PC 300GL | 6282-24A | Pentium/133 | 256KB/256KB | 16/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 1.2GB, 12 | Cirrus Logic GD5446 | Optional | 4, 4 | 4, 2 | Ethernet-Integrated/10Mbps | no | Microsoft Windows 95 | page 44 | |
| | 6282-28A | Pentium/133 | 256KB/256KB | 16/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 2.5GB, 12 | Cirrus Logic GD5446 | Optional | 4, 4 | 4, 2 | Ethernet-Integrated/10Mbps | no | Microsoft Windows 95 | page 44 | |
| | 6282-48A | Pentium/166 | 256KB/256KB | 16/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 1.2GB, 12 | Cirrus Logic GD5446 | Optional | 4, 4 | 4, 2 | Ethernet-Integrated/10Mbps | no | Microsoft Windows 95 | page 44 | |
| | 6282-36A | Pentium/166 | 256KB/256KB | 16/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 2.5GB, 12 | Cirrus Logic GD5446 | Optional | 4, 4 | 4, 2 | Ethernet-Integrated/10Mbps | no | Microsoft Windows 95 | page 44 | |
| | 6282-34A | Pentium MMX/166 | 256KB/256KB | 32/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 2.5GB, 12 | Cirrus Logic GD5446 | Optional | 4, 4 | 4, 2 | --/-- | no | Microsoft Windows NT Version 4.0 | page 44 | |
| | 6282-52A | Pentium MMX /166 | 256KB/256KB | 32/128 | SDRAM 66MHz | S.M.A.R.T. EIDE | 2.5GB, 12 | Cirrus Logic GD5446 | 16X max | 4, 3 | 4, 1 | Ethernet-Integrated/10Mbps | yes | Microsoft Windows 95 | page 44 | |
| PC 330 | 6577-9BT* | Pentium/166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ | Optional | 3, 3 | 3, 1 | --/-- | no | IBM PC DOS 70/ Win 3.11 or Win '95 | page 48 | |
| | 6577-9GU | Pentium/166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ | Optional | 3, 3 | 3, 1 | / | no | Microsoft Windows 95 | page 48 | |
| PC 350 | 6587-9BT* | Pentium/166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | --/-- | no | IBM PC DOS 70/ Win 3.11 or Win '95 | page 48 | |
| | 6587-9GU | Pentium/166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Microsoft Windows 95 | page 48 | |
| | 6587-KGU | Pentium MMX/166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Microsoft Windows 95 | page 48 | |
| | 6587-KTX | Pentium MMX/166 | 256KB/512KB | 32/192 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 9 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Windows NT Version 4.0 | page 48 | |
| | 6587-KHU | Pentium MMX /166 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 9 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Microsoft Windows 95 | page 48 | |
| | 6587-LTX | Pentium MMX/200 | 256KB/512KB | 32/192 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 9 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Windows NT Version 4.0 | page 48 | |
| | 6587-LHU | Pentium MMX / 200 | 256KB/512KB | 16/192 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 9 | S3 Trio64 V+ | Optional | 5, 5 | 5, 3 | / | no | Microsoft Windows 95 | page 48 | |

Part Number
Processor Speed (MHz)
L2 Cache: std./max. (KB)
Memory: std./max. (MB)
Hard Drive Type
Hard Drive Size, Speed
Graphic Chip Set
CD-ROM
Slots: total/avail.
Bays: total/avail.
Network Interface/Speed
Audio
Operating System
Essentials Page

| | | | | | | | | | | | | | | | |
|-------------------------------|----------|---------------------|-----------------|--------|-------------------|-----------------------------------|------------|---|-----------------------------|------|------|---|-----|--|---------|
| PC 365 | 6589-14A | Pentium Pro/ 200 | 256KB | 32/512 | EDO ECC | S.M.A.R.T. SCSI-2 Fast/Wide | 2.1GB, 8 | Matrox MGA Millennium (PCI adapter) | 6X PD/ CD read/ write | 5, 3 | 5, 2 | --/-- | yes | Microsoft Windows NT Version 4.0 | page 52 |
| | 6589-13A | Pentium Pro/ 200 | 256KB | 32/512 | Non-parity EDO | S.M.A.R.T. EIDE | 2.5GB, 12 | S3 Trio64 V+ (PCI adapter) | 16X max | 5, 4 | 5, 2 | --/-- | yes | Microsoft Windows NT Version 4.0 | page 52 |
| | 6589-15A | Pentium Pro/ 200 | 256KB | 32/512 | EDO ECC | S.M.A.R.T. EIDE | 4.2GB, 8.5 | Matrox MGA Millennium (PCI adapter) | 16X max | 5, 4 | 5, 2 | --/-- | yes | Microsoft Windows NT Version 4.0 | page 52 |
| PC 300XL New Model | 6588-200 | Pentium II/ 233 | 512KB/ 512KB | 32/384 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 11 | S3 Trio64V2 | 16X max | 5, 5 | 5, 2 | Ethernet-Inte- grated/10Mbps, 100Mbps | yes | Microsoft Windows NT Version 4.0 | page 56 |
| | 6588-510 | Pentium II/ 266 | 512KB/ 512KB | 32/384 | Non-parity EDO | S.M.A.R.T. EIDE | 4.2GB, 11 | S3 Trio64V2 | 16X max | 5, 5 | 5, 2 | Ethernet-Inte- grated/10Mbps, 100Mbps | yes | Microsoft Windows NT Version 4.0 | page 56 |

*To be withdrawn when stock runs out.

IBM PC 300GL Series



IBM PC 300GL



IBM PC 300GL Essentials

PC 300GL

Machine Type 6282

With all the performance, manageability, and security not often found in other PCs--the IBM PC 300GL offers an outstanding value for your core computing needs. These systems deliver on the IBM PC

Promise of Value, so you can concentrate on your business, not your computers. The IBM PC 300GL is the affordable option for today's business environment.

Benefits

Power and Performance

Choose the power of Intel's Pentium processor with 256KB L2 cache standard, or you can opt for the enhanced multimedia and communications performance of the Pentium processor with MMX technology. High performance SDRAM satisfies the memory requirements of your most demanding business applications, and you can easily upgrade to the 128MB maximum. The integrated graphics accelerator provides high performance graphics and TV quality, full-motion, full-screen video playback. The systems S.M.A.R.T. bus master EIDE hard drives offer generous storage and advanced data protection.

IBM AssetCare

Owners of the IBM PC 300GL will be able to register their systems and components with a third party registration company that maintains a database of serialized components and their owners. Additionally, laser etching (to be phased in during the life of the product) of memory DIMMS and microprocessors take serialization and registration of components to a new level by ensuring that the component serial numbers cannot be tampered or altered. Registration and laser etching can act as an aid in the prosecution of offenders.

Enhanced Productivity

Lotus SmartSuite license comes with every system to help increase productivity and ease of use.

Protecting Business Data

To help protect your critical business information, IBM Anti-Virus Software is provided to help protect against the intrusion of computer viruses. Additionally, ConfigSafe software is provided so users can revert to a saved system configuration when file and driver changes threaten system integrity.

Desktop Management Interface (DMI)

The IBM PC 300GL includes the DMI Service Layer and is designed in compliance with DMI. DMI is an industry-standard that defines the components of a PC and provides tools that permit management applications to access to this information. DMI allows network administrators to inventory and allocate hardware and software resources accurately and monitor nearly every aspect of a PC's functionality.

Plug-in and Go

Setup your new IBM PC 300GL's over the LAN with IBM's Advanced Manageability features. Simply plug new systems into the power outlet and LAN jacks, then walk away. Some time later, each system can be programmed to be started automatically by the server, given the latest BIOS/CMOS, loaded with the users' specific software images, given an ID profile for the user, and shut down--all without a technician on-site. Plug-in and Go is accomplished using Wake on LAN technology, a new boot sequence, and Flash over LAN, a feature of IBM's LANClient Control Manager software.

Standard Features

Processors

Pentium(R) processors - 133 or 166MHz

Pentium(R) processors with MMX(TM) technology - 166MHz

L2 Cache

256K pipeline burst synchronous write back

Memory

16/32MB, expandable to 128MB (2 DIMMs), SDRAM/66MHz

Hard Drives

1.2GB or 2.5GB bus master EIDE with S.M.A.R.T.

Graphics and Video Resolution

Cirrus Logic GD5446; 64-bit; 1 or 2MB std./2MB max. EDO DRAM 50ns; 256 colors @ 1024x768 (1MB) or 256 colors @ 1280x1024 (2MB)

Network Features

LANClient Control Manager supported, Wake on LAN, Plug-and-Play, DMI v1.1 compliant, CID

Network Interface

Models available with integrated 10BaseT Ethernet with Wake on LAN

CD-ROM/Audio

Models available with 16X max (variable speed) CD-ROM and Sound Blaster Pro compatible audio

Diskette Drive

3.5" 1.44MB standard

Slots

6282 models - 4 (2 shared PCI/ISA, 1 PCI, 1 ISA)

Bays

6282 models - 4 (two 3.5", two 5.25")

BIOS

IBM BIOS - 256KB Flash ROM

Architecture

PCI local bus, ISA data bus

Ports

Two serial (16550), enhanced parallel (ECP/EPP), two USB ports, SVGA video, EIDE controller, keyboard, mouse

Keyboard/Mouse

IBM Cameo 104-key (rubber dome) and Enhanced Mouse

Power Supply

6282 models - 145 Watts

Security Features

IBM AssetCare: serialization, laser etching (to be phased in during life of product), and third party registration of memory and processors
IBM AntiVirus and ConfigSafe

Vital Product Data (VPD) support, U-bolt anchor support, diskette write protect, power-on password, configuration/administrator password, boot sequence control, diskette boot inhibit, boot without keyboard/mouse, I/O control

Software and Tools

Windows 95 (OSR2.1) or Windows NT 4.0 preload available
Lotus SmartSuite license, MicroSoft NetMeeting (Windows 95 preload models only), LANClient Control Manager, Intel LANDesk Client Manager, TME 10 NetFinity, Artisoft CoSession, QAPLUS System Support CD (Ready to Configure) with additional software/drivers

Limited Warranty

Three-year parts and one-year labour

Selected Options

Accessory

Other

All Models

| | |
|--|---------|
| Personal Computer Floor Stand | 76H3302 |
| PC 350/750 Base Cover..... | 82G4985 |
| 5.25" to 3.5" DASD Bay Conversion Kit..... | 70G8165 |

Communications/Networking

All Models

| | |
|--|---------|
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6757 |
| 33.6 Kbps Data/Fax Modem | 42H4334 |

ARTIC

All Models

| | |
|----------------------------------|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC Multiport..... | 61G3862 |
| X.25 Interface Co-Processor..... | 71G6460 |
| ARTIC Co-Processor 512KB | 85X2706 |

Emulation

All Models

| | |
|--------------------------|---------|
| 3270 Emulation ISA | 53F6425 |
| 5250 Emulation ISA | 30F5383 |

Token-Ring

All Models

| | |
|--|---------|
| PCI Token-Ring Adapter (Diskette)..... | 41H8900 |
| Wake on LAN Token Ring PCI Adapter | 86H1880 |
| Wake Token-Ring ISA Adapter | 55H6760 |
| Turbo 16/4 Token-Ring ISA Adptr | 72H3482 |

Ethernet

All Models

| | |
|---|---------|
| Wake on LAN EtherJet 100/10 PCI Adapter | 85H9921 |
| EtherJet 100/10 PCI Adapter | 86H2432 |

Desktop Expansion

Other

All Models

| | |
|---|---------|
| Enhanced Mouse II (Pearl White) | 13H6690 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II(Black) | 13H6714 |
| 104-key Rubber-Dome Keyboard | 41H9724 |
| 104-key, Rubber-Dome Keyboard(Chinese) | 76H0101 |
| 104-key, Rubber-Dome Keyboard(Thailand)..... | 76H0103 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |
| Enhanced Keyboard PS Style..... | 92G7453 |
| Enhanced Keyboard PS/AT Style | 92G7454 |
| Enhanced Keyboard w/TrackPoint II Pearl White | 92G7461 |

Memory

DIMM

All Models

| | |
|--------------------------|---------|
| 16MB NP SDRAM DIMM | 76H0250 |
| 32MB NP SDRAM DIMM | 76H0251 |

Video/Graphics

All Models

| | |
|--|---------|
| 1MB EDO Video DRAM 50ns | 76H0286 |
| 1MB Video/Graphics DRAM Memory Upgrade | 92G7443 |

Storage

CD-ROM Drives

All Models

| | |
|-------------------------------------|---------|
| External SCSI 8X CD-ROM Drive | 3509709 |
| 16XMAX CD-ROM Drive | 76H6110 |

Diskette Drives

All Models

| | |
|---------------------------------|---------|
| 3.5" 1.44MB Diskette Drive..... | 70G8499 |
|---------------------------------|---------|

Hard Disk Drives

All Models

| | |
|---|---------|
| 3.2GB AT HDD | 75H9918 |
| DeskStar 4.2GB AT HDD..... | 76H7246 |
| Ultrastar 2ES 2.16GB Ultra SCSI HDD | 76H5809 |
| Ultrastar 2ES 4.33GB Ultra SCSI HDD | 76H5811 |



IBM PC 300GL Industry Comparison

| | IBM PC 300GL | Compaq Deskpro 2000 | HP Vectra VL5 | DELL OptiPlex Gs |
|---------------------------------|--|-----------------------------------|----------------------------------|---------------------------------|
| Intel Pentium Processor | 133MHz, 166MHz | 133MHz, 166MHz, 200MHz | 133MHz, 166MHz, 200MHz | 133MHz, 166MHz, 200MHz |
| with MMX Technology | 166MHz | N/A | 166MHz, 200MHz | 166MHz, 200MHz |
| L2 Cache | 256KB Pipeline Burst | 256KB Write Thru | 256KB std. DT / 512KB std. MT | 256KB Pipeline Burst |
| RAM | 16, 32 /128MB SDRAM | 16, 32/128MB EDO | 8, 16, 32/192MB EDO | 16/128MB EDO |
| Hard Disk Drives | 1.2GB, 2.5GB EIDE S.M.A.R.T. | 1.2GB, 2.5GB EIDE S.M.A.R.T. | 1.6GB, 2.5GB EIDE S.M.A.R.T. | 1.0GB, 2.0GB, 3.0GB |
| CD-ROM Drive | 16X max (variable speed) models available | Optional 8X models | Optional 8X-IDE models | 8X-EIDE standard |
| Audio | Models available via Crystal ISA adapter | Optional via ISA adapter | Integrated models available | Optional via ISA adapter |
| Graphics | Cirrus Logic 5446 1MB/2MB DRAM | Cirrus Logic 5436 1MB/2MB DRAM | S3 Trio 64V2 1MB / 2MB DRAM | S3 Trio 64V+ 1/2MB DRAM |
| No./Type Slots * | 1 PCI | 2 PCI | DT - 2 PCI MT - 2 PCI | LP - 1 PCI MS - 2 PCI |
| | 1 shared PCI/ISA | 1 shared PCI/ISA | DT - 1 PCI/ISA MT - 2 PCI/ISA | LP - 1PCI/ISA MS - 1 PCI/ISA |
| | 2 ISA | 2 ISA | DT - 1 ISA MT - 2 ISA | LP - 1 ISA MS - 2 ISA |
| No. USB Ports | 2 | None | 2 | None |
| No. Serial Ports | 2 | 1 | 2 | 2 |
| Network Interface | Integrated 10BaseT with Wake on LAN Available | Optional via NIC adapter | PCI 10BaseT models available | 3COM 10BaseT Adapter available |
| Network Management | Advanced Manageability with WOL, LCCM, IBM AssetCare | Intelligent Manageability | HP TopTOOLS | None |
| Wake on LAN Enabled | Yes | No | Yes | No |
| Operating Systems | Windows 95 or Windows NT | Windows 95 or Windows 3.1 | Windows 95, WindowsNT Dual | Windows 95, NT, 3.11 choice |
| Lotus SmartSuite License | Yes | No | No | No |
| Microsoft NetMeeting | Yes | No | No | No |
| Warranty | 3 Years Parts/1 Year Labour | 3 Years Parts/1 Year Labor | 3 Years Parts & Labor | 3 Years Parts/1 Year Labor |

Competitive Advantages

Advanced Manageability

Delivers industry-leading manageability features and tools including: Wake on LAN, Lan Client Control Manager (LCCM), DMI compliance, TME 10 NetFinity and Intel LANDesk client manager.

IBM Advanced Manageability enables remote setup and management which virtually eliminates the need for technicians to visit the PC 300GL.

This helps keep both end users and technical support groups more productive, with less down-time.

IBM AssetCare

IBM AssetCare represents the latest in system security and data protection capabilities. Laser etching, serialization, and third-party registration of components

aid in tracking and recovering assets. Additionally, IBM Anti-Virus software and ConfigSafe help prevent end-users from losing data.

Lotus SmartSuite License

Lotus SmartSuite helps you to be instantly productive.

IBM Service & Support

IBM leading limited warranty and International Warranty Service coverage.

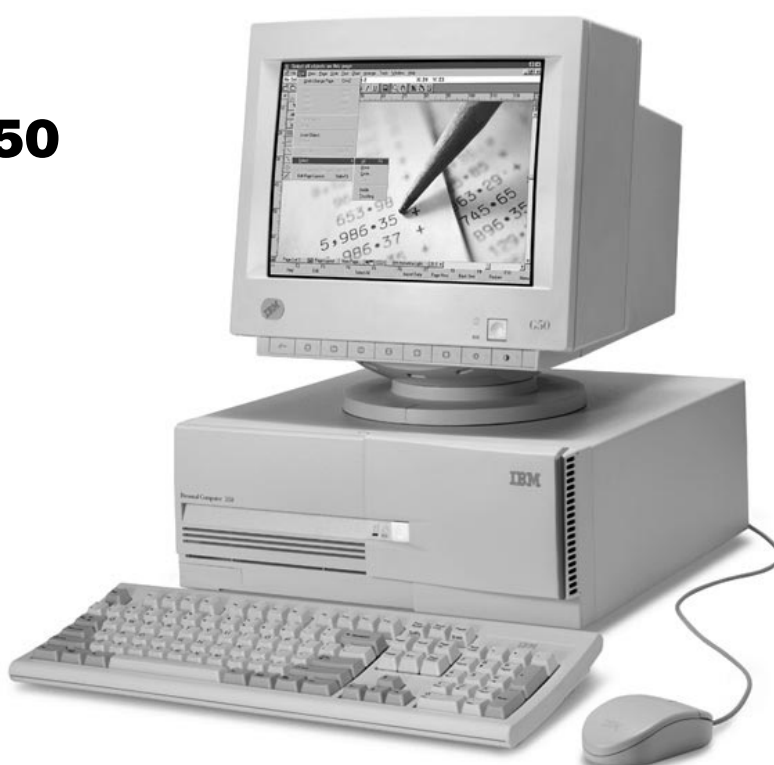
Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC 330 and 350 Series



IBM PC 330

IBM PC 350





IBM PC 330 and 350 Essentials

PC 330 PC 350

Machine Type 6577 Machine Type 6587

Designed to fit right into your demanding business environment - the IBM PC 330s and PC 350s deliver you top performance with the latest technology at a competitive price. Featuring your choice of powerful Pentium(R) processors or Pentium processors with MMX(TM) technology, these PCs are right in step with your needs. A PCI bus master controller and S.M.A.R.T. capabilities complement the

range of available EIDE hard drives. These PC models are equipped with Universal Serial Bus ports, the latest advance for the quick and simple connection of peripherals to your computer. Combine all this with IBM's Advanced Manageability tools, including Wake on LAN capability, for comprehensive network management functions, and you'll agree the IBM PC 330s and PC 350s meet the manageability demands of a networked environment to the serious productivity demands of its users.

Benefits

Standard Software

IBM PCs come with a set of business applications that can save you additional expense. Lotus SmartSuite license, NetFinity, Intel ProShare, and Easy Tools are all standard software applications - how's that for value.

Simplified Network Manageability

IBM's Advanced Manageability tools, including Wake on LAN capabilities, help simplify the integration and management of IBM PCs in a networked environment. With Advanced Manageability, systems administrators can remotely conduct an audit, update key files, perform routine maintenance and analyze performance and capacity. Additionally, with Wake on LAN, network maintenance can be performed after users have powered-off their systems to avoid costly network downtimes.

IBM's Warranty Service and Support

Built-in Peace of Mind: All IBM PCs are backed by IBM's service and support, including a three-year parts and labor limited warranty with International Warranty Service.

Price & Performance

With features including S.M.A.R.T. PCI Enhanced IDE hard drives, Universal Serial Bus ports, infrared, and 64-bit PCI graphics, IBM PC 330s & PC 350s are designed to give users a productivity edge at a great price.

Pentium(R) processors that fit the bill

Demanding business users can tap up to 200MHz of power. Choose a Pentium processor for your business productivity applications or for peak performance of compute-intensive multimedia and communications applications, choose the Pentium processor with MMX(TM) technology. We've designed the IBM PC 330s & PC 350s to fit your application environments as well as your budgets.

Universal Serial Bus

USB paves the way to greatly increased peripheral connectivity. "Hot-plug" future peripherals in seconds as devices can be added or removed without reconfiguring or rebooting your system. Each easy-to-use port allows you to connect up to 127 USB-capable devices.

Standard Features

Processors

Pentium(R) processors (P54C) - 133, 166MHz
ZIF socket for future upgrade
Pentium(R) processors with MMX(TM) technology (P55C) - 166, 200MHz
NOTE that MMX and 200MHz models are on the PC 350 only

L2 Cache

256K pipeline burst synchronous write back (expandable to 512K)

Memory

16/32MB, expandable to 192MB (1 DIMM, 4 SIMMs), 60ns, EDO

Architecture

PCI local bus, ISA data bus

Graphics and Video Resolution

S3 Trio64V+, 64-bit PCI bus with 1MB EDO DRAM (expandable to 2MB); 16 colors @ 1280x1024 (1MB) or 256 colors @ 1280x1024 (2MB)

Hard Drives

1.2GB, 2.5GB, or 4.2GB S.M.A.R.T. with busmaster EIDE

Diskette Drive

3.5" 1.44MB standard

Keyboard

IBM Cameo 104-key (rubber dome)

BIOS

256KB Sure Path

Bays

330: 3 (one 5.25", two 3.5")
350: 5 (two 5.25", three 3.5")

Slots

330: 3 (3 shared PCI/ISA)
350: 5 (3 shared PCI/ISA, 2 ISA)

Ports

One SVGA video, one serial (16550), one enhanced parallel (ECP/EPP), two USB ports, EIDE controller, IrDA-compliant infrared port

Power Supply

330: 145 Watts
350: 200 Watts

Security

Cover key lock, U-bolt anchor support, diskette write protect, secure removable media, secure fixed DASD, power-on password, configuration/administrator password, boot sequence control, diskette boot inhibit, boot without keyboard/mouse, I/O control

Included Software

Windows 95; or Windows 95 or PC DOS 7.0/Windows 3.1 is a one time choose/lose selection; or Windows NT 4.0

Lotus SmartSuite license, NetFinity, Intel ProShare, System Support CD (Ready to Configure) and additional software

Limited Warranty

Three-year Parts/Labour Onsite

Selected Options

Accessory

Other

All Models

| | |
|------------------------------|---------|
| PC 300/700 Floor Stand | 82G4984 |
| PC 350/750 Base Cover | 82G4985 |

Communications/Networking

ARTIC

All Models

| | |
|---------------------------------------|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC Multiport | 61G3862 |
| ARTIC Co-Processor 512KB | 85X2706 |
| X.25 Interface Co-Processor ISA | 71G6460 |
| X.25 Interface Co-Processor PCI | 55H4501 |

ATM

All Models

| | |
|--|---------|
| IBM TURBOWAYS 25 ATM ISA Adapter | 42H0525 |
| IBM TURBOWAYS 25 ATM PCI Adapter | 85H9035 |

Ethernet

All Models

| | |
|--|---------|
| IBM EtherJet ISA Adapter | 04H6550 |
| PCI Ethernet Adapter | 13H9237 |
| 100/10 PCI EtherJet Adapter | 86H2432 |
| Wake on LAN 100/10 EtherJet Adapter | 85H9921 |
| EtherJet ISA Adapter with Wake Up On LAN | 72H2613 |
| IBM EtherJet 10Base-T ISA Adapter | 73G9379 |

Other

All Models

| | |
|---|---------|
| ISA SDLC/ASYNCR Adapter | 42H4332 |
| 65877NX, 65877ZT, 6587GAV, 658779T, 65877BJ, 65877BT, 65879BT, 65879GU, 6587KGU, 6587KHU, 6587KTX, 6587LHU, 6587LTX | |
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6756 |
| All Models | |
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6757 |
| 33.6 Kbps Data/Fax Modem | 42H4334 |

Token-Ring

All Models

| | |
|--|---------|
| PCI Token Ring Wake on LAN Adapter | 86H1880 |
| PCI Token-Ring Adapter (Diskette) | 41H8900 |
| IBM Auto Wake Token-Ring ISA Adapter | 55H6760 |
| Turbo 16/4 Token-Ring ISA Adptr | 72H3482 |

Desktop Expansion

Other

All Models

| | |
|---|---------|
| Enhanced Mouse II (Pearl White) | 13H6690 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II(Black) | 13H6714 |
| 104-key Rubber-Dome Keyboard | 41H9724 |
| 104-key, Rubber-Dome Keyboard(Chinese) | 76H0101 |
| 104-key, Rubber-Dome Keyboard(Thailand) | 76H0103 |
| 2-Button Mouse | 76H0104 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |
| Enhanced Keyboard PS Style | 92G7453 |
| Enhanced Keyboard PS/AT Style | 92G7454 |
| Enhanced Keyboard w/TrackPoint II Pearl White | 92G7461 |

Memory

DIMM

All Models

| | |
|--|---------|
| 16MB EDO ECC Au 60ns 3.3V | 76H0278 |
| 16MB EDO DIMM Gold 5V 168-Pin 60NS | 92G7334 |
| 32MB EDO DIMM Gold 5V 168-Pin 60NS | 92G7335 |

SIMM

All Models

| | |
|--|---------|
| 8MB EDO SIMM Kit Tin-Lead 72-Pin 60ns | 92G7318 |
| 16MB EDO SIMM Kit Tin-Lead 72-Pin 60ns | 92G7320 |
| 32MB EDO SIMM Kit Tin-Lead 72-Pin 60ns | 92G7322 |
| 64MB EDO SIMM Kit Tin-Lead 72-Pin 60ns | 92G7324 |

Video/Graphics

All Models

| | |
|-------------------------------|---------|
| 1MB EDO Video DRAM 60ns | 76H0238 |
|-------------------------------|---------|

Multimedia

Other

All Models

| | |
|-------------------------------------|---------|
| MPEG Interactive Video Player | 55H8615 |
| 16-bit Sound Card | 76H1852 |

Storage

Adapters

All Models

| | |
|---|---------|
| 16-bit AT Fast SCSI Adapter (Plug and Play) | 06H9649 |
| PCI Fast/Wide SCSI Adapter | 76H3579 |

CD-ROM Drives

All Models

| | |
|-------------------------------------|---------|
| External SCSI 4X CD-ROM Drive | 3509707 |
| 8X SCSI External CD-ROM | 3509709 |
| 8X SCSI Internal CD-ROM | 76H3215 |
| 16XMAX CD-ROM Drive | 76H6110 |

Diskette Drives

All Models

| | |
|----------------------------------|---------|
| 3.5" 1.44MB Diskette Drive | 70G8499 |
|----------------------------------|---------|

Enclosures

All Models

| | |
|------------------------|--|
| SCSI Storage Enclosure | |
| 35100V0 | |

Hard Disk Drives

All Models

| | |
|---|---------|
| 3.24GB AT HDD | 75H9918 |
| DeskStar 4.2GB AT HDD | 76H7246 |
| Ultrastar 2ES 2.16GB Ultra SCSI HDD | 76H5809 |
| Ultrastar 2ES 4.33GB Ultra SCSI HDD | 76H5811 |
| 2.25GB Ultrastar XP Fast SCSI-2 Hard Disk Drive | 94G3054 |

Other

All Models

| | |
|---|---------|
| 5.25" to 3.5" DASD Bay Conversion Kit | 70G8165 |
|---|---------|



IBM PC 330 and 350 Industry Comparison

| | IBM PC 330 & 350 | Compaq Deskpro 4000 | HP Vectra VL4 | DELL OptiPlex GXL |
|---|---|-------------------------------------|---|--|
| Processor | Pentium 133, 166, 200MHz (200MHz PC 350 only) | Pentium 120, 133, 166MHz | Pentium 100, 120, 133, 166, 200MHz | Pentium 100 - 200MHz |
| | Pentium processor w/ MMX 166, 200MHz (350 only) | Pentium Pro 200 MHz | Pentium processor w/ MMX 166, 200 MHz | Pentium processor w/ MMX 166, 200 MHz |
| L2 Cache | 256/512KB | 256/256KB | 256/512KB | 256/512KB |
| | Pipeline burst | Pipeline burst | Pipeline burst | Pipeline burst |
| RAM | 16/32-192MB EDO | 16/32-256MB EDO | 8/16-128MB EDO | 8-128MB EDO |
| Hard Disk Drive | 1.2GB / 1.6GB / 2.5GB / 4.2GB EIDE | 1.08GB / 1.62GB / 2.5GB EIDE | 1.28GB / 1.62GB / 2.5GB EIDE | 850MB / 1.0GB / 1.6GB / 2.0GB EIDE |
| HDD Interface | PCI Busmaster EIDE | PCI Busmaster EIDE | PCI Busmaster EIDE | PCI EIDE |
| Graphics | S3 Trio 64V+ | Cirrus Logic 5446 | S3 Trio 64V+ or Matrox Millennium | S3 Trio 64V+ |
| | 1MB/2MB EDO DRAM | 2MB/2MB EDO DRAM | 1MB/2MB DRAM or 2MB/8MB WRAM | 2/2MB VRAM |
| Slots | 3 PCI | 3 PCI | 2 PCI | 2 PCI |
| Universal Serial Bus Ports | 2 | Not supported | Not supported | Not supported |
| Operating Systems | Win/DOS, or Win 95, Win NT (IBM PC 350 only) | Dual install Windows 95, Win/DOS | Windows 95 or Win/DOS, OS/2 Warp | Windows 95 |
| Network Integration and Installation Tools | IBM PC Networking Tools | Enhanced Intelligent, Manageability | HP TopTOOLS, Open-View for Windows (opt.), DMI, Plug and Play | 3rd party software, DMI, Plug and Play |
| Wake on LAN | Yes | No | No | No |
| Infrared | Yes | Yes | No | No |
| S.M.A.R.T. Hard Drives | Yes | Yes | No | No |
| PC Card Support | Yes | No | No | No |
| Lotus SmartSuite license | Yes | No | No | No |
| Intel ProShare | Yes | No | No | No |
| Warranty | 3 Years | 3 Years | 3 Years | 3 Years |

Competitive Advantages

Wake on LAN

With an optional Wake on LAN adapter, system administrators can remotely power-on a PC 330/350 to perform system updates and maintenance during off peak hours.

IBM PC Networking Tools

Remotely conduct an audit, update key files and receive technical support with your IBM PC's suite of networking tools including: NetFinity, CoSession and QA Plus.

Universal Serial Bus

"Hot Plug" future peripherals without having to configure device drivers or reboot your system.

S.M.A.R.T. Hard Drives

Protect vital data with S.M.A.R.T. Hard Drives.

Infrared

Efficiently exchange information and resources with the addition of an infrared transceiver.

Lotus SmartSuite

Lotus SmartSuite helps you to be instantly productive.

IBM Service & Support

IBM leading three-year warranty and International Warranty Service coverage.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC 365 Series





IBM PC 365 Essentials

PC 365

Machine Type 6589

The IBM PC 365 teams the supersonic speed of Pentium Pro processors with the robustness of 32-bit operating systems for a serious improvement in efficiency and productivity. The scalable design provides dual Pentium Pro processing capabilities, flexible memory and hard drive options, and a Universal Serial Bus port. Best

of all, the IBM PC 365s offer leading network management capabilities with Wake on LAN, IBM PC Networking Tools and S.M.A.R.T. hard drives. With the latest in Pentium Pro and industry-leading technologies, the IBM PC 365 will help users efficiently manage their systems, so they can reallocate to managing their business.

Benefits

CD-ROM Technology

Choice of CD-ROM models to meet specific user demands. 16X max. (variable-speed) CD-ROM player provides fast access and smooth digital video playback. PD/CD-ROM technology enables users to read standard CDs at 6X speed and create read/write media for easy, low-cost data storage and backup all in one bay.

Comprehensive Network Management

Advanced manageability features, including Wake on LAN capabilities, simplify integration and management of IBM PCs in a networked environment. With advanced manageability, systems administrators can remotely conduct an audit, update key files, perform routine maintenance and analyze performance and capacity. Additionally, S.M.A.R.T. hard drives allow you to protect your vital data by sending alerts through TME 10 NetFinity.

32-bit Performance

The IBM PC 365 offers one of the industry's best platforms for 32-bit environments. Models are Windows NT certified (preload available), Windows 95 logo'd, and OS/2 Warp tested. Also, IBM performs extensive hardware and software compatibility testing to make network integration as seamless as possible.

Performance Graphics

If you're looking for superb graphics performance, look no further than the IBM PC 365. With a Pentium Pro processor and the Matrox MGA Millennium graphics card, IBM PC 365 is an ideal system for all your graphic-intensive applications.

Scalable Pentium Pro Design Processors

As the price delta between Pentium and Pentium Pro solutions narrow and users migrate to 32-bit environments, the IBM PC 365 stands out of the crowd as an attractively priced Pentium Pro solution. Dual Pentium Pro upgradeability, integrated 256KB L2 cache, memory upgradeability to 512MB, advanced graphics, and a Universal Serial Bus port result in maximization of your Pentium Pro investment for years to come.

IBM's Warranty Service and Support

Built-in Peace of Mind: All IBM PCs are backed by IBM's service and support, including a three-year parts and labor limited warranty with International Warranty Service.

Standard Features

Pentium Pro Processor

200MHz Pentium Pro
Dual processing capable

L2 Cache

Integrated 256K write-back; runs at processor speed

Memory

32MB, expandable to 512MB (4 DIMMs); 60ns, EDO Non-Parity or EDO ECC-Parity

Architecture

PCI local bus, ISA data bus

Graphics and Video Resolution

S3 Trio64V+ 64-bit PCI adapter with 2MB EDO DRAM, 256 colors @ 1280x1024

Matrox MGA Millennium PCI 64-bit adapter with 4MB WRAM (expandable to 8MB), 64K colors @ 1600x1200 (4MB) or 16M colors @ 1600x1200 (8MB)

Hard Drives

2.5GB, 4.2GB S.M.A.R.T. with bus master EIDE controller or 2.1GB S.M.A.R.T. Fast/Wide SCSI with Ultra SCSI controller

Diskette Drive

3.5" 1.44MB standard

CD-ROM

16X max. (variable-speed) CD-ROM or PD/CD-ROM 6X

Keyboard

IBM Cameo 104-key (rubber dome)

BIOS

256KB SurePath

Bays

5 (two 5.25, three 3.5)

Slots

5 (3 shared PCI/ISA and 2 ISA or 3 shared PCI/ISA and 2 PCI)

Ports

One SVGA video, one serial (16550), one enhanced parallel (ECP/EPP), one USB, EIDE controller

Power Supply

200 Watts; EIDE hard drive models are Energy Star Compliant

Security

Cover key lock, sliding front door lock, secure access openings, U-bolt anchor support, diskette write protect, secure removable media, secure fixed DASD, power-on password, configuration/administrator password, Wake on LAN password, keyboard/mouse password, boot sequence control, diskette boot inhibit, boot without keyboard/mouse, mouse disable, I/O control

Included Software and Tools

Windows NT preload
Lotus SmartSuite license, IBM PC Networking Tools, IBM Anti-Virus and additional software.

Warranty

Three-year Parts/Labour Onsite

Selected Options

Accessory

Other

| | |
|------------------------------|---------|
| All Models | |
| PC 300/700 Floor Stand | 82G4984 |
| PC 350/750 Base Cover | 82G4985 |

Communications/Networking

ARTIC

| | |
|-----------------------------------|---------|
| All Models | |
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC Multiport | 61G3862 |
| X.25 Interface Co-Processor | 71G6460 |
| ARTIC Co-Processor 512KB | 85X2706 |

ATM

| | |
|--|---------|
| All Models | |
| IBM TURBOWAYS 25 ATM ISA Adapter | 42H0525 |
| IBM TURBOWAYS 25 ATM PCI Adapter | 85H9035 |

Ethernet

| | |
|--|---------|
| All Models | |
| 100/10 PCI Ethernet Adapter | 86H2432 |
| EtherJet ISA Adapter with Wake Up On LAN | 72H2613 |
| IBM EtherJet 10Base-T ISA Adapter | 73G9379 |

Other

| | |
|--|---------|
| All Models | |
| ISA SDLC/ASYNCR Adapter | 42H4332 |
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6757 |
| 33.6 Kbps Data/Fax Modem | 42H4334 |

Token-Ring

| | |
|--|---------|
| All Models | |
| PCI Token-Ring Adapter (Diskette) | 41H8900 |
| IBM Auto Wake Token-Ring ISA Adapter | 55H6760 |
| Turbo 16/4 Token-Ring ISA Adptr | 72H3482 |

Desktop Expansion

Other

| | |
|---|---------|
| All Models | |
| Enhanced Mouse II (Pearl White) | 13H6690 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II(Black) | 13H6714 |
| 104-key Rubber-Dome Keyboard | 41H9724 |
| 104-key, Rubber-Dome Keyboard(Chinese) | 76H0101 |
| 104-key, Rubber-Dome Keyboard(Thailand) | 76H0103 |
| 2-Button Mouse | 76H0104 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |
| Enhanced Keyboard PS Style | 92G7453 |
| Enhanced Keyboard PS/AT Style | 92G7454 |
| Enhanced Keyboard w/TrackPoint II Pearl White | 92G7461 |

Memory

DIMM

| | |
|----------------------------------|---------|
| 658912A, 658913A | |
| 16MB NP Au 60ns 3.3V 1K | 76H0274 |
| 32MB NP Au 60ns 3.3V | 76H0275 |
| 64MB NP Au 60ns 3.3V | 76H0276 |
| 128MB NP Au 60ns 3.3V | 76H0277 |
| 658914A, 658915A | |
| 16MB EDO ECC Au 60ns 3.3V | 76H0278 |
| 32MB EDO ECC Au 60ns 3.3V | 76H0279 |
| 64MB EDO ECC Au 60ns 3.3V | 76H0280 |
| 128MB EDO ECC Au 60ns 3.3V | 76H0281 |

Multimedia

Other

| | |
|-------------------------------------|---------|
| All Models | |
| MPEG Interactive Video Player | 55H8615 |
| 16-bit Sound Card | 76H1852 |

Processor Up-Grades

PC Server

| | |
|--|---------|
| All Models | |
| Pentium Pro SMP 200MHz 256KB Processor Upgrade | 94G6175 |

Storage

Adapters

| | |
|---|---------|
| All Models | |
| 16-bit AT Fast SCSI Adapter (Plug and Play) | 06H9649 |
| PCI Fast/Wide SCSI Adapter | 76H3579 |

CD-ROM Drives

| | |
|-------------------------------------|---------|
| All Models | |
| External SCSI 4X CD-ROM Drive | 3509707 |
| 8X SCSI External CD-ROM | 3509709 |
| 8X IDE CD-ROM | 76H0491 |
| 8X SCSI Internal CD-ROM | 76H3215 |
| 16XMAX CD-ROM Drive | 76H6110 |

Diskette Drives

| | |
|----------------------------------|---------|
| All Models | |
| 3.5" 1.44MB Diskette Drive | 70G8499 |

Enclosures

| | |
|------------------------------|---------|
| All Models | |
| SCSI Storage Enclosure | 35100V0 |

Hard Disk Drives

| | |
|---|---------|
| 658914A, 658915A | |
| 3.24GB AT HDD | 75H9918 |
| DeskStar 4.2GB AT HDD | 76H7246 |
| Ultrastar 2ES 2.16GB Ultra SCSI HDD | 76H5809 |
| Ultrastar 2ES 4.33GB Ultra SCSI HDD | 76H5811 |
| 658914A, 658915A | |
| Ultrastar 2ES 2.16GB Wide Ultra SCSI | 76H5813 |
| Ultrastar 2ES 4.33GB Wide Ultra SCSI | 76H5815 |
| All Models | |
| 2.25GB Ultrastar XP Fast SCSI-2 Hard Disk Drive | 94G3054 |

Other

| | |
|---|---------|
| All Models | |
| 5.25" to 3.5" DASD Bay Conversion Kit | 70G8165 |



IBM PC 365 Industry Comparison

| | IBM PC 365 | Compaq Deskpro 4000 | HP Vectra VA | DELL GXpro |
|---|-----------------------------------|-------------------------------------|---|--|
| Processor | Pentium Pro 200MHz | Pentium Pro 180MHz | Pentium Pro 180, 200MHz | Pentium Pro 180, 200MHz |
| | Dual Processor | Single Processor | Single Processor | Dual Processor |
| L2 Cache | 256KB integrated | 256KB integrated | 256KB integrated | 256KB or 512KB integrated |
| RAM | 32MB-512MB | 32MB-256MB | 16/32MB-192MB | 16MB-512MB |
| | EDO Non-parity or EDO ECC Parity | EDO Non-parity | EDO Non-parity | EDO ECC Parity |
| Hard Disk Drive | 2.5GB, 4.2GB Busmaster IDE | 1.62GB Busmaster IDE | 1.28GB Busmaster IDE | 1.0/2.0GB Busmaster IDE |
| | 2.1GB F/W SCSI | 2.5GB Busmaster IDE | 2.5GB Busmaster IDE | 1.0/2.0/4.0GB F/W SCSI |
| HDD Interface | PCI Busmaster IDE or Ultra SCSI | PCI Busmaster IDE | PCI Busmaster IDE | PCI Busmaster IDE or SCSI-2 |
| Graphics | S3 Trio 64V+ or Matrox Millennium | Cirrus Logic 5446 | Cirrus Logic 5446 or Matrox Millennium | S3 Trio 64V+ or #9 Image II |
| | 2MB/2MB DRAM or 4MB/8MB WRAM | 2MB/2MB EDO DRAM | 1MB/2MB DRAM or 2MB/8MB WRAM | 2MB/2MB DRAM or 4MB/8MB |
| Slots | 2 PCI or 2 ISA | 3 PCI | 2 PCI | 3 PCI |
| | 3 shared PCI/ISA | 1 shared PCI/ISA | 1 shared PCI/ISA | 2 shared PCI/ISA |
| | -- | 1 ISA | 1 ISA | -- |
| Universal Serial Bus Ports | 1 | Not supported | Not supported | Not supported |
| Operating Systems | Windows NT | Windows NT | Windows NT, Win 95, and OS/2 | Windows NT, Win 95, Win/DOS |
| Network Integration and Installation Tools | IBM PC Networking Tools | Enhanced Intelligent, Manageability | HP TopTOOLS, Open-View for Windows (opt.), DMI, Plug and Play | 3rd party software, DMI, Plug and Play |
| Wake on LAN | Yes | No | No | No |
| Infrared | Yes (4Mbps) | Yes | No | No |
| S.M.A.R.T. Hard Drives | Yes | Yes | No | No |
| CD-ROM | 16x max | 8X | 8X | 4X/6X/8X models |
| PD/CD-ROM | Yes - 14A model | No | No | No |
| Lotus SmartSuite License | Yes | No | No | No |
| Warranty | 3 Years Parts & Labour | 3 Years Parts/1 Year Labour | 3 Years Parts & Labour | 3 Years Parts/1 Year Labour |

Competitive Advantages

Scalable Pentium Pro Design

Maximize your Pentium Pro investment with the IBM PC 365's robust design. Superior memory and graphics upgradeability, combined with dual processing capabilities, will help optimize performance of your 32-bit application environments.

Wake on LAN

System administrators can remotely power-on a Wake on LAN enabled PC 365 to perform system updates and maintenance during off peak hours.

Ultra SCSI

Blazing hard disk access speeds and SCAM plug and play support for compliant SCSI devices.

PD/CD-ROM

Dual functionality in one bay - users can read standard CDs at 6X speed and also create read/write media for easy, low-cost data storage and backup.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC 300XL Series



IBM PC 300XL



IBM PC 300XL Essentials

PC 300XL

Machine Type 6588

The IBM PC 300XL is designed with the latest technology to handle the most demanding business applications in a networked environment. These are the high-end systems that deliver value and

keep you ahead of the curve with the performance that power users demand. The PC 300XL delivers innovative technology that offers the highest level manageability and security, so you can concentrate more on business.

Benefits

Performance for Power Users

The IBM PC 300XL integrates peak performance with command and control features to satisfy the most demanding user. Keep your work schedule in fast-forward with a Pentium II processor, a speedy EIDE or Wide Ultra SCSI hard drive with S.M.A.R.T. and integrated 10/100 Ethernet with Wake on LAN. Dynamic media is enhanced by the 16X max. (variable speed) CD-ROM, integrated Sound Blaster Pro-compatible audio, and a leading 2D graphics accelerator. With all these power-user features working for you, not only will you get more done, you'll get done sooner.

Pentium II Processor

Racing at 233MHz or 266MHz with on-board 512KB L2 cache, Intel Pentium II processors will propel you to higher levels of productivity. Pentium II processors combine the power of the Pentium Pro processor with the capabilities of MMX technology, delivering performance headroom for business media, communication and Internet capabilities.

Advanced Manageability

Designed for manageability, IBM PC 300XLs help your company reclaim excessive resources applied to PC management, so they may be redirected to essential business activities. With innovative industry standard tools, including Wake on LAN, LANClient Control Manager, TME 10 NetFinity, LANDesk Client Manager, integrated 10/100 Ethernet with Wake on LAN, and DMI instrumentation, your IS department can remotely setup and manage your IBM PC 300XLs while virtually eliminating the need for a technician to visit individual PCs to perform management tasks. IBM PCs are your clear choice, because the best PCs for your business are the PCs that let you concentrate on doing business.

IBM AssetCare

The IBM PC 300XL is the first IBM PC to feature a DMI-compliant manageability chip that monitors temperature, voltage, and chassis intrusion. Monitoring the system's vital signs help insure the integrity of vital business data. Additionally, owners of the IBM PC 300XL can register their systems and high-value components with a third party registration company. Registration, serialization and laser etching can act as an aid in the prosecution of offenders.

Standard Features

Processors

Pentium(R) II processors - 233MHz with unified 512KB L2 Cache or 266MHz with unified 512KB L2 Cache

Memory

32MB, expandable to 384MB (3 DIMMs), EDO/60ns

Hard Drives

4.2GB EIDE with S.M.A.R.T. or 4.3GB Wide Ultra SCSI with S.M.A.R.T. or open bay
PCI bus master EIDE controller on planar, SCSI models include a SCSI-2 Fast and Wide PCI bus master adapter

Graphics and Video Resolution

S3 Trio64V2; 64-bit; 2MB std./max. video DRAM; 256 colors @ 1280x1024

Network Features

LANClient Control Manager supported, Wake on LAN, Plug-In and Go, Flash over LAN (BIOS/CMOS), Plug-and-Play, CID

Network Interface

Integrated Intel EtherExpress 10/100Mbps Ethernet with Wake on LAN

CD-ROM

Models available with 16X max (variable speed) CD-ROM

Audio

Crystal 4236B audio chip, 16-bit, supports Sound Blaster Pro applications

Diskette Drive

3.5" 1.44MB standard

Slots

3 shared PCI/ISA, 2 ISA

Bays

Three 3.5", two 5.25"

BIOS

Flash ROM, DMI v2.0

Architecture

PCI local bus, ISA data bus

Ports

Serial (16550), enhanced parallel (ECP/EPP), two USB ports, SVGA video, EIDE controller, 10/100 Ethernet RJ-45, IrDA-2 compliant infrared, audio mic-in and line-out mini-jacks, keyboard, mouse

Keyboard/Mouse

IBM Cameo 104-key (rubber dome) and Enhanced Mouse

Power Supply

200 Watts

Security Features

IBM AssetCare: serialization and laser etching of memory and processors, third party registration (to be phased in during life of product)

IBM AntiVirus and ConfigSafe

Vital Product Data (VPD) support, cover key lock, sliding front door lock, U-bolt anchor support, secure access openings, secure removable media, secure fixed DASD, diskette write protect, power-on password, configuration/administrator password, keyboard/mouse password, Wake on LAN password prompt, boot sequence control, diskette boot inhibit, boot without keyboard/mouse, mouse-disable, I/O controls

Software and Tools

Windows NT 4.0 preload available on models with a hard drive
Lotus SmartSuite license, LANClient Control Manager (downloadable via internet), TME 10 NetFinity, Intel LANDesk Client Manager, Artisoft CoSession, QAPIus
System Support CD (Ready to Configure) with additional software/drivers

Limited Warranty

Three-year parts and one-year labour

Selected Options

Accessory

Other

All Models

| | |
|-------------------------------------|---------|
| Personal Computer Floor Stand | 76H3302 |
| PC 300/700 Floor Stand | 82G4984 |
| PC 350/750 Base Cover | 82G4985 |

Communications/Networking

Other

All Models

| | |
|--|---------|
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6756 |
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6757 |

Storage

Hard Disk Drives

All Models

| | |
|-----------------------------|---------|
| 3.2GB AT HDD | 75H9918 |
| DeskStar 4.2GB AT HDD | 76H7246 |

Desktop Expansion

All Models

| | |
|---|---------|
| Enhanced Mouse II (Pearl White) | 13H6690 |
| TrackPoint II Keyboard, PS Style, 101 Keys | 13H6705 |
| IBM Enhanced Mouse II(Black) | 13H6714 |
| 104-key Rubber-Dome Keyboard | 41H9724 |
| 104-key, Rubber-Dome Keyboard(Chinese) | 76H0101 |
| 104-key, Rubber-Dome Keyboard(Thailand) | 76H0103 |
| 104-Key Rubber Dome Keyboard (Black) | 76H0109 |
| Enhanced Keyboard PS Style | 92G7453 |
| Enhanced Keyboard PS/AT Style | 92G7454 |
| Enhanced Keyboard w/TrackPoint II Pearl White | 92G7461 |

Memory

DIMM

All Models

| | |
|-------------------------------|---------|
| 16MB NP Au 60ns 3.3V 1K | 76H0274 |
| 32MB NP Au 60ns 3.3V | 76H0275 |
| 64MB NP Au 60ns 3.3V | 76H0276 |
| 128MB NP Au 60ns 3.3V | 76H0277 |



IBM PC 300XL Industry Comparison

| | IBM PC 300XL | Compaq Deskpro 4000/6000 | HP Vectra VL |
|---------------------------------------|---|--|------------------------------------|
| Intel Pentium II Processor | 233, 266MHz | 233, 266MHz | 233,266MHz |
| L2 Cache | 512KB | 512KB | 512KB |
| RAM (std./max.) | 32MB/384MB | 32MB/256MB | 16, 32MB/192MB |
| | Non-parity EDO | Non-parity EDO | Non-parity EDO |
| Hard Disk Drive | 4.2GB S.M.A.R.T. EIDE | 2.5GB EIDE (4000) OR 2.1, 4.2GB Ultra SCSI (6000) | 1.6GB, 2.5GB EIDE |
| HDD Interface | PCI bus master EIDE or UltraSCSI | PCI bus master EIDE (4000) or UltraSCSI (6000) | PCI bus master EIDE |
| Graphics | S3 Trio 64V2 | Cirrus 5446 (4000) OR Matrox Millennium (6000) | Matrox Millennium II |
| Graphics Memory | 2MB/2MB EDO DRAM | 2MB/2MB (4000) OR 2MB/ 4MB/8MB WRAM (6000) | 4MB WRAM |
| Expansion Slots | 3 PCI/ISA , 2 ISA | 3 PCI, 1 PCI/ISA, 1 ISA | DT - 2 PCI, 1 PCI/ISA, 1 ISA |
| Expansion Bays | 5 Total | 4 Total | MT - 2 PCI, 2 PCI/ISA, 2 ISA |
| USB Ports | Yes - 2 | Not supported | Yes - 2 |
| Operating Systems Provided | Windows NT 4.0 | Windows NT 4.0 | Windows NT, Windows 95 |
| Systems Management | NetFinity, CoSession, QA Plus/ Pro, Intel LANDesk, Config- Safe | Enhanced Intelligent Manage- ability | HP TopTOOLS, DMI, Plug and Play |
| Network Interface | Integrated 10Base-T/100Base- TX | Integrated NetFlex-3 10Base-T | 10 BaseT optional via adapter |
| Wake on LAN | Yes | No | No |
| Other Network Features | Plug In and Go, CID, Plug and Play | Upgradeable to 100Base-TX | Upgradeable to 100Base-TX |
| Infrared | Yes | Yes | No |
| Audio | Crystal Audio 4236B 16-bit | Business Pro Audio 16-bit | Integrated Sound Blaster 16 |
| CD-ROM | 16X max. (variable speed) | 8X EIDE or 6X PD-CD | 8X EIDE OR 24X EIDE |
| Lotus SmartSuite License | Yes | No | No |
| Warranty | 3 Years Parts/1 Year Labor | 3 Years Parts/1 Year Labor | 3 Years Parts and Labor |

Competitive Advantages

Advanced Manageability

With innovative industry-standard tools, including Wake on LAN, LANClient Control Manager, TME 10 NetFinity, LANDesk Client Manager, integrated 10/100 Ethernet with Wake on LAN, and DMI instrumentation, you can remotely setup and manage your PC 300XL while virtually eliminating the need for a technician to visit individual PCs to perform management tasks.

AssetCare

Combination of laser-etched ID numbers and registration of these systems and components aid the owners in tracking, monitoring and recovery of these assets.

Higher Maximum Memory

A robust 384MB of main memory gives you tremendous upward flexibility to better protect your investment.

Lotus SmartSuite

Lotus SmartSuite helps you to be instantly productive.

IBM Service & Support

IBM leading three-year Parts and 1 Year Labour limited warranty, and International Warranty Service coverage.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Options Compatibility Matrix

In Production

Out of Production

Part
Number

PC 300 GL Series 6272/6282
365 Pentium Pro 6589
350 PCI/ISA 6587B
340 PCI/ISA 6560
330 PCI/ISA 6577B
PC 300XL 6588
140 ISA 6260

750 PCI/ISA 6887
730 PCI/ISA 6887
360 Pentium Pro 6598
350 ISA w/ 486 6581/PCI/ISA 6583
350 PCI/ISA 6586
330 ISA w/486 6571/PCI/ISA 6573
330 PCI/ISA 6576

Memory

IS SIMM 72-Pin Parity

| | | | | | | | | | | | | | | | | |
|---------------|---------|--|--|--|--|--|--|--|--|---|---|----|--|--|--|--|
| 8MB kit 60ns | 92G7308 | | | | | | | | | 2 | 2 | | | | | |
| 16MB kit 60ns | 92G7310 | | | | | | | | | 2 | 2 | | | | | |
| 32MB kit 60ns | 92G7312 | | | | | | | | | 2 | 2 | 14 | | | | |
| 64MB kit 60ns | 92G7317 | | | | | | | | | 2 | 2 | 14 | | | | |

72-Pin Non-Parity

| | | | | | | | | | | | | | | | | |
|------------------------|---------|--|--|--|--|--|--|--|----|---|---|--|--|--|--|--|
| 16MB 70ns | 92G7543 | | | | | | | | | | | | | | | |
| 8MB 70ns ¹ | 92G7246 | | | | | | | | | | | | | | | |
| 16MB 70ns ¹ | 92G7248 | | | | | | | | | | | | | | | |
| 8MB EDO kit 60ns | 92G7318 | | | | | | | | 31 | 3 | 3 | | | | | |
| 16MB EDO kit 60ns | 92G7320 | | | | | | | | 31 | 3 | 3 | | | | | |
| 32MB EDO kit 60ns | 92G7322 | | | | | | | | 31 | 3 | 3 | | | | | |
| 64MB EDO kit 60ns | 92G7324 | | | | | | | | 31 | 3 | 3 | | | | | |

8-Byte DIMM

Parity

| | | | | | | | | | | | | | | | | |
|-----------|---------|--|--|--|--|--|--|--|--|---|---|--|--|--|--|--|
| 16MB 60ns | 92G7338 | | | | | | | | | 2 | 2 | | | | | |
| 32MB 60ns | 92G7339 | | | | | | | | | 2 | 2 | | | | | |

Non-Parity

| | | | | | | | | | | | | | | | | |
|----------------|---------|--|----|--|--|--|--|--|--|---|---|--|--|--|--|--|
| 16MB EDO 60ns | 92G7334 | | | | | | | | | 3 | 3 | | | | | |
| 32MB EDO 60ns | 92G7335 | | | | | | | | | 3 | 3 | | | | | |
| 16MB EDO 60ns | 76H0274 | | 21 | | | | | | | | | | | | | |
| 32MB EDO 60ns | 76H0275 | | 21 | | | | | | | | | | | | | |
| 64MB EDO 60ns | 76H0276 | | 21 | | | | | | | | | | | | | |
| 64MB EDO 60ns | 76H0326 | | | | | | | | | | | | | | | |
| 128MB EDO 60ns | 76H0277 | | 21 | | | | | | | | | | | | | |

ECC DIMM

| | | | | | | | | | | | | | | | | |
|----------------|---------|--|----|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 16MB EDO 60ns | 76H0278 | | 22 | | | | | | | | | | | | | |
| 32MB EDO 60ns | 76H0279 | | 22 | | | | | | | | | | | | | |
| 64MB EDO 60ns | 76H0280 | | 22 | | | | | | | | | | | | | |
| 128MB EDO 60ns | 76H0281 | | 22 | | | | | | | | | | | | | |

SDRAM DIMM

Non-Parity

| | | | | | | | | | | | | | | | | |
|------|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 8MB | 76H0249 | | | | | | | | | | | | | | | |
| 16MB | 76H0250 | | | | | | | | | | | | | | | |
| 32MB | 76H0251 | | | | | | | | | | | | | | | |

L2 Cache

| | | | | | | | | | | | | | | | | |
|--------------------|---------|--|--|--|----|--|--|----|--|---|--|--|--|--|--|--|
| 256KB Asynchronous | 76H0236 | | | | 11 | | | 11 | | | | | | | | |
| 512KB Synchronous | 92G7336 | | | | | | | | | 5 | | | | | | |

PC OPTIONS COMPATIBILITY
MATRIX



In Production

Out of Production

Part Number

PC 300 GL Series 6272/6282
365 Pentium Pro 6589
350 PCI/ISA 6587B
340 PCI/ISA 6560
330 PCI/ISA 6577B
PC 300XL 6588
140 ISA 6260

750 PCI/ISA 6887
730 PCI/ISA 6887
360 Pentium Pro 6598
350 ISA w/ 486 6586
330 ISA w/486 6571/PCI/ ISA 6573
330 PCI/ISA 6576

Video/Graphics

| | | | | | | | | | | | | | | | |
|-----------------------|---------|---|--|---|---|---|--|---|--|--|--|--|---|--|---|
| 1MB DRAM 60ns | 92G7443 | | | | • | | | • | | | | | • | | • |
| 1MB EDO 60ns | 76H0238 | | | • | | • | | | | | | | | | |
| 1MB EDO DRAM 60ns Kit | 76H0286 | • | | | | | | | | | | | | | |

Processor Upgrade

| | | | | | | | | | | | | | | | |
|---|---------|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| 200/66MHz ²⁹ Pentium Pro with 256KB L2 Cache | 94G6175 | | • | | | | | | | | | | | | |
|---|---------|--|---|--|--|--|--|--|--|--|--|--|--|--|--|

Storage

Hard Disk Drives

| | | | | | | | | | | | | | | | |
|------------------------------------|---------|---|---|---|---|---|---|---|--|---|---|---|---|---|---|
| Deskstar AT 1.70GB ^A AT | 06H8724 | • | • | • | • | • | • | | | • | • | • | • | • | • |
| Deskstar 3 AT 2.1GB | 76H0949 | • | • | • | • | • | • | • | | • | • | • | • | • | • |
| Deskstar 3 AT 3.24GB | 75H9918 | • | • | • | • | • | • | • | | • | • | • | • | • | • |
| Deskstar 4 4.2GB EIDE | 76H7246 | • | • | • | • | • | • | • | | • | • | • | • | • | • |

Ultrastar ES 2.16GB SCSI-2

| | | | | | | | | | | | | | | | |
|--------------------------|---------|----|----|----|----|----|----|--|--|----|----|----|----|----|----|
| Fast Ultra ¹⁶ | 07H1126 | 6 | 8 | 6 | 6 | 6 | 8 | | | 6 | 6 | 8 | 6 | 6 | 6 |
| Wide Ultra | 07H1128 | 19 | 19 | 19 | 19 | 19 | 19 | | | 19 | 19 | 19 | 19 | 19 | 19 |

Ultrastar 2ES 2.16GB SCSI

| | | | | | | | | | | | | | | | |
|---------------------|---------|----|----|----|----|----|----|--|--|----|----|----|----|----|----|
| Ultra ¹⁶ | 76H5809 | 6 | 8 | 6 | 6 | 6 | 8 | | | 6 | 6 | 8 | 6 | 6 | 6 |
| Wide Ultra | 76H5813 | 19 | 19 | 19 | 19 | 19 | 19 | | | 19 | 19 | 19 | 19 | 19 | 19 |

Ultrastar 2ES 4.33GB SCSI

| | | | | | | | | | | | | | | | |
|---------------------|---------|----|----|----|----|----|----|--|--|----|----|----|----|----|----|
| Ultra ¹⁶ | 76H5811 | 6 | 8 | 6 | 6 | 6 | 8 | | | 6 | 6 | 8 | 6 | 6 | 6 |
| Wide Ultra | 76H5815 | 19 | 19 | 19 | 19 | 19 | 19 | | | 19 | 19 | 19 | 19 | 19 | 19 |

Ultrastar XP 2.25GB SCSI-2

| | | | | | | | | | | | | | | | |
|-----------|---------|----|----|----|----|----|----|--|--|----|----|----|----|----|----|
| Fast | 94G3054 | 6 | 8 | 6 | 6 | 6 | 8 | | | 6 | 6 | 8 | 6 | 6 | 6 |
| Fast/Wide | 94G3055 | 19 | 19 | 19 | 19 | 19 | 19 | | | 19 | 19 | 19 | 19 | 19 | 19 |

| | | | | | | | | | | | | | | | |
|--|---------|---|---|---|---|---|---|---|--|---|---|---|---|---|---|
| 5.25-inch to 3.5-inch DASD Bay Conversion Kit | 70G8165 | • | • | • | • | • | • | • | | • | • | • | • | • | • |
|--|---------|---|---|---|---|---|---|---|--|---|---|---|---|---|---|

CD-ROM Drives

| | | | | | | | | | | | | | | | |
|---|---------|----|----|----|----|----|----|----|--|----|----|----|----|----|----|
| External 4X SCSI CD-ROM Drive | 3509707 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | | 10 | 10 | 10 | 10 | 10 | 10 |
| Internal 8X IDE CD-ROM Drive | 76H0491 | • | • | • | • | • | • | • | | • | • | • | • | • | • |
| Internal 8X SCSI CD-ROM Drive | 76H3215 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | 7 |
| External 8X SCSI CD-ROM Drive | 3509709 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | | 10 | 10 | 10 | 10 | 10 | 10 |
| 16MAX Internal IDE CD-ROM Drive ²⁶ | 76H6110 | • | • | • | • | • | • | • | | • | • | • | • | • | • |

Tape Backup Products

| | | | | | | | | | | | | | | | |
|--|---------|----|----|----|----|----|----|---|--|----|----|----|----|----|----|
| TR3 (1.6/3.2GB) Internal Tape Drive | 06H9712 | • | • | • | • | • | • | | | • | • | • | • | • | • |
| TR3 (1.6/3.2GB) External Tape Drive | 3502800 | • | • | • | • | • | • | | | • | • | • | • | • | • |
| TR4 (4.0/8.0GB) Internal SCSI Tape Drive ¹⁸ | 06H9716 | 7 | 7 | 7 | 7 | 7 | 7 | | | 7 | 7 | 7 | 7 | 7 | 7 |
| TR4 (4.0/8.0GB) External SCSI Tape Drive | 3502900 | 10 | 10 | 10 | 10 | 10 | 10 | | | 10 | 10 | 10 | 10 | 10 | 10 |
| TR4 (4.0/8.0GB) Internal EIDE Tape Drive ¹⁸ | 06H9720 | • | • | • | • | • | • | • | | | • | • | • | • | • |
| Internal 3.5" 4mm 4/10GB SCSI Tape Drive | 74G8632 | 7 | 7 | 7 | 7 | 7 | 7 | | | 7 | 7 | 7 | 7 | 7 | 7 |
| Internal 5.25" 4mm 4/10GB SCSI Tape Drive | 74G8631 | 7 | 7 | 7 | 7 | 7 | 7 | | | 7 | 7 | 7 | 7 | 7 | 7 |



35598
36 6581/PCI/ISA 6583
ISA 6586
5A w/486 6571/PCI/ISA 6573
330 PCI/ISA 6576



In Production

Out of Production

Part Number

PC 300 GL Series 6272/6282
365 Pentium Pro 6589
350 PCI/ISA 6587^B
340 PCI/ISA 65
330 PCI/IS
PC 30
1

78
588
A 6260

750 PCI/ISA 6887
730 PCI/ISA 6887
360 Pentium Pro 6598
350 ISA w/ 486 6581/PCI/ISA 6583
350 PCI/ISA 6586
330 ISA w/486 6571/PCI/ISA 6573
330 PCI/ISA 6576

ATM Products

| | | | | | | | | | | | | | | | |
|------------------------------|---------|---|---|---|---|---|---|---|---|---|---|----|---|----|---|
| TURBOWAYS 25 ATM Adapter-PCI | 25H3562 | • | • | • | • | • | • | • | • | • | • | 17 | • | 17 | • |
| TURBOWAYS 25 ATM Adapter-ISA | 42H0525 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

Wide Area Connectors

| | | | | | | | | | | | | | | | | |
|-----------------------|---------|---|---|---|---|---|---|---|--|---|---|---|----|---|----|---|
| PCI RS232 Single Port | 85H7204 | • | • | • | • | • | • | • | | • | • | • | 17 | • | 17 | • |
| PCI V.35 Single Port | 85H7205 | • | • | • | • | • | • | • | | • | • | • | 17 | • | 17 | • |
| PCI RS422 Single Port | 85H7206 | • | • | • | • | • | • | • | | • | • | • | 17 | • | 17 | • |
| PCI X.21 Single Port | 85H7882 | • | • | • | • | • | • | • | | • | • | • | 17 | • | 17 | • |

ARTIC Products

| ARTIC Products | | | | | | | | | | | | | | | | |
|--|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ARTIC X.25 Interface Co-Processor PCI Adapter | 55H4501 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | |
| ARTIC X.25 Interface Co-Processor ISA Adapter | 71G6460 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |
| ARTIC 960 PCI Adapter | 39H8058 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |
| ARTIC Multiport Eight Port 232 Adapter | 06H3890 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |
| ARTIC Multiport Model 2 (1MB) | 33F8791 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |
| ARTIC Multiport(512KB)-3.5" Media | 61G3862 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |
| ARTIC (512KB)-3.5" Media/5.25" Media | 85X2706 | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | | | | | |

Multimedia

| | | | | | | | | | | | | | | | | |
|---------------------------------|---------|----|---|---|---|---|--|----|--|---|---|---|---|---|---|---|
| 16-Bit Sound Card ¹⁵ | 76H1852 | 28 | • | • | • | • | | 25 | | • | • | • | • | • | • | • |
|---------------------------------|---------|----|---|---|---|---|--|----|--|---|---|---|---|---|---|---|

Monitors

| | | | | | | | | | | | | | | | | |
|---|---------|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|
| IBM G72 Color Monitor(17" FST/15.7" Viewable Image Size) in Pearl White | 654701S | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |
| IBM G52 Color Monitor (15" FST/13.6" Viewable Image Size) in Pearl White | 654601S | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |
| IBM G50 Color Monitor (15" FST/13.4" Viewable Image Size) in Pearl White | 6543304 | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |
| IBM G42 Color Monitor (14" Conven./13.2" Viewable Image Size) in Pearl White | 654002S | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |
| IBM P200 Color Monitor (20" Trinitron CRT/19.1" Viewable Image Size) in Pearl White | 6555774 | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |
| IBM P70 Color Monitor (17" Trinitron CRT/15.9" Viewable Image Size) in Pearl White | 6554674 | • | • | • | • | • | • | • | | • | • | • | • | • | • | • |

Accessories

Keyboards

| Keyboards | | Standard 104-Key Keyboard (Pearl White) | | | | | | | | Standard 104-Key Keyboard (Black) | | | | | | | |
|---|---------|---|---|---|---|---|---|---|---|-----------------------------------|---|---|---|---|---|---|---|
| Standard 104-Key Keyboard (Pearl White) | 41H9724 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Standard 104-Key Keyboard (Black) | 76H0109 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Enhanced Keyboard (PS Style) | 92G7453 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Enhanced Keyboard (AT Style) | 92G7454 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Enhanced Keyboard w/TrackPoint II (Pearl White) | 92G7461 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Enhanced Keyboard w/TrackPoint II (Black) | 13H6705 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

In Production

Out of Production

Part Number

PC 300 GL Series 6272/6282
365 Pentium Pro 6589
350 PCI/ISA 6587B
340 PCI/ISA 6560
330 PCI/ISA 6577B
PC 300XL 6588
140 ISA 6260

750 PCI/ISA 6887
730 PCI/ISA 6887
360 Pentium Pro 6598
350 ISA w/ 486 6581/PCI/ISA 6583
350 PCI/ISA 6586
330 ISA w/486 6571/PCI/ISA 6573
330 PCI/ISA 6576

Mice

| | | | | | | | | | | | | | | | | |
|---------------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enhanced Mouse II (Pearl White) | 13H6690 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Enhanced Mouse II (Black) | 13H6714 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

Other

| | | | | | | | | | | | | | | | | |
|--|---------|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|
| Two-Slot Front Access PCMCIA ISA Bus Adapter - 3.5/5.25" Bay | 55H6757 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Two-Slot Front Access PCMCIA ISA Bus Adapter - 5"x 5" Bay | 55H6756 | | | • | | | • | | | | | • | • | | | |
| ADF Color Scanner | 25H6629 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Flight Controller II | 76H0130 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Floor Stand | 82G4984 | | • | • | | • | • | • | | 24 | • | | • | • | • | • |
| Floor Stand | 76H3302 | • | | | • | | | • | | | | | | | | |
| Base Cover | 82G4985 | | • | • | | • | • | • | | • | • | | | | | |



Key Footnotes

^AMB equals million bytes and GB equals a thousand million bytes when referring to hard drive capacity. Accessible capacity varies.

^BNot all models available in all countries.

¹Pairs of SIMMs required.

²Works on 730/750 ISA parity models only: 6877. **C, **G, **R; 6887. **C, **D, **G, **H, **R, **S.

³Works on 730/750 ISA EDO models only: 6877. **A, **E, **N; 6887. **A, **B, **E, **F, **N, **P.

⁴Supports 20E/20F models only.

⁵Supports 750 ISA EAA, Kxx, Mxx, FAA, Vxx, Yxx, Xxx models only. Standard on 166MHz models.

⁶Some systems may require a SCSI-2 Fast Adapter such as PN 06H9649.

⁷When equipped with the appropriate SCSI Adapter.

⁸Fast SCSI-2 devices can be used with Fast/Wide SCSI-2 systems with 16-bit converter 32G3925.

⁹Requires system equipped with Wake on LAN ability to realize Wake on LAN function.

¹⁰When equipped with appropriate SCSI Adapter and cable.

¹¹Does not support models with cache.

¹²Requires 2X CD-ROM or faster.

¹³PC360 models except FFK. All SIMMs must be of the same capacity.

¹⁴PC360 FFK model only. All SIMMs must be of the same capacity.

¹⁵Not available in all countries.

¹⁶An Ultra SCSI Adapter such as 76H3579 must be used to realize burst transfer rates double the standard SCSI-2.

¹⁷Supports 6583/6573 models only.

¹⁸Physical limitations currently prevent the security door from closing when a tape is inserted in the drive.

¹⁹Use PCI Ultra Wide SCSI Adapter (76H3579) on all models except where equivalent adapter is standard or on non-PCI units.

²⁰Does not support Windows 95.

²¹Supports 365 EDO (6589 10x, 11x, 12x, 13x, 17x, 18x) models only.

²²Supports 365 ECC (6589 14x, 15x) models only.

²³Does not support 75MHz.

²⁴Standard on 6887 models.

²⁵Only supported in Latin America and Asia Pacific South.

²⁶Maximum Speed. Actual speed may vary.

²⁷Requires Windows 3.1 or Windows 95.

²⁸Except on Audio Model 628232U.

²⁹MHz only measures microprocessor internal clock speed, not application performance. Other factors also affect application performance.

³⁰System has standard 10/100 Ethernet Adapter with Wake-On-Lan.

³¹Supports 30x, 32x and 34x models only.

IBM PC Memory Configurations

IBM PC 140 (6260 EDO)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|-------------------|---------|---------|---------|---------|--------------------|
| Base MB | 8 | 8 | 8 | 8 | R ¹ -8 | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 16 | 24 | 40 | 72 | 128 | 24 | 32 | 48 | 80 | 128 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 |

IBM PC 300GL (6272/6282 EDO)

| | | | | |
|--------------------|---------|--------------------|---------|--------------------|
| Base MB | 16 | R ¹ -16 | 32 | R ¹ -32 |
| Desired MB | 80 | 128 | 96 | 128 |
| Quantity MB | 64 (1) | 64 (2) | 64 (1) | 64 (2) |
| Part Number | 76H0326 | 76H0326 | 76H0326 | 76H0326 |

IBM PC 300GL (6272/6282 Synchronous DRAM)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|
| Base MB | 16 | 16 | 16 | 32 | 32 | 32 |
| Desired MB | 24 | 32 | 48 | 40 | 48 | 64 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 8 (1) | 16 (1) | 32 (1) |
| Part Number | 76H0249 | 76H0250 | 76H0251 | 76H0249 | 76H0250 | 76H0251 |

IBM PC 300XL (6588 EDO Non-Parity)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 48 | 64 | 96 | 160 | 288 | 384 |
| Quantity MB | 16 (1) | 32 (1) | 64 (1) | 128 (1) | 128 (2) | 128 (3) |
| Part Number | 76H0274 | 76H0275 | 76H0276 | 76H0277 | 76H0277 | 76H0277 |

IBM PC 330/350 (6576/6586 Non-Parity)

| | | | | | | | | | |
|--------------------|---------|---------|---------|-------------------|---------|---------|---------|---------|--------------------|
| Base MB | 8 | 8 | 8 | R ¹ -8 | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 16 | 24 | 40 | 128 | 24 | 32 | 48 | 80 | 128 |
| Quantity MB | 4 (2) | 8 (2) | 16 (2) | 32 (4) | 4 (2) | 8 (2) | 16 (2) | 32 (2) | 32 (4) |
| Part Number | 92G7244 | 92G7246 | 92G7248 | 92G7250 | 92G7244 | 92G7246 | 92G7248 | 92G7250 | 92G7250 |

IBM PC 330/350 (6577/6587 EDO)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|--------------------|
| Base MB | 8 | 8 | 8 | 8 | R ¹ -8 | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 16 | 24 | 40 | 72 | 160 ² | 24 | 32 | 48 | 80 | 160 ² |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 32 (1) 64 (2) | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 32 (1) 64 (2) |
| Part Number | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7335 92G7324 | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7335 92G7324 |

IBM PC 330/350 (6577/6587 EDO) Continued

| | | | | | |
|--------------------|---------|---------|---------|---------|------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 |
| Desired MB | 40 | 48 | 64 | 96 | 160 ² |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 |

**IBM PC 340** (6560 EDO)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|-------------------|---------|---------|---------|---------|--------------------|
| Base MB | 8 | 8 | 8 | 8 | R ¹ -8 | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 16 | 24 | 40 | 72 | 128 | 24 | 32 | 48 | 80 | 128 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 |

IBM PC 360 (6598 Non-Parity)

| | | |
|--------------------|---------|---------|
| Base MB | 16 | 32 |
| Desired MB | 32 | 64 |
| Quantity MB | 16 (1) | 32 (1) |
| Part Number | 92G7331 | 92G7332 |

IBM PC 360 (6598 Parity)

| | | | |
|--------------------|---------|---------|--------------------|
| Base MB | 32 | 32 | R ¹ -32 |
| Desired MB | 64 | 96 | 128 |
| Quantity MB | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7312 | 92G7317 | 92G7317 |

IBM PC 365 (6589 EDO ECC)

| | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 48 | 64 | 96 | 160 | 512 |
| Quantity MB | 16 (1) | 32 (1) | 64 (1) | 128 (1) | 128 (4) |
| Part Number | 76H0278 | 76H0279 | 76H0280 | 76H0281 | 76H0281 |

IBM PC 365 (6589 EDO Non-Parity)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|--------------------|
| Base MB | 16 | 16 | 16 | 16 | R ¹ -16 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 32 | 48 | 80 | 144 | 512 | 48 | 64 | 96 | 160 | 512 |
| Quantity MB | 16 (1) | 32 (1) | 64 (1) | 128 (1) | 128 (4) | 16 (1) | 32 (1) | 64 (1) | 128 (1) | 128 (4) |
| Part Number | 76H0274 | 76H0275 | 76H0276 | 76H0277 | 76H0277 | 76H0274 | 76H0275 | 76H0276 | 76H0277 | 76H0277 |

IBM PC 700 (6875/6 6885/6 Parity)

| | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|
| Base MB | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 24 | 32 | 48 | 80 | 192 |
| Quantity MB | 4 (2) | 8 (2) | 16 (2) | 32 (2) | 32 (6) |
| Part Number | 92G7201 | 92G7520 | 92G7204 | 92G7206 | 92G7206 |

IBM PC 700 (6877/6887 EDO)

| | | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 16 | 16 | 16 | 16 | R ¹ -16 | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 24 | 32 | 48 | 80 | 128 | 40 | 48 | 64 | 64 | 96 | 128 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) | 8 (1) | 16 (1) | 32 (1) | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7318 | 92G7320 | 92G7322 | 92G7324 | 92G7324 | 92G7318 | 92G7320 | 92G7335 | 92G7322 | 92G7324 | 92G7324 |

IBM PC 700 (6877/6887 Parity)

| | | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 16 | 16 | 16 | 16 | R ¹ -16 | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 24 | 32 | 48 | 80 | 128 | 40 | 48 | 64 | 64 | 96 | 128 |
| Quantity MB | 8 (1) | 16 (1) | 32 (1) | 64 (1) | 64 (2) | 8 (1) | 16 (1) | 32 (1) | 32 (1) | 64 (1) | 64 (2) |
| Part Number | 92G7308 | 92G7310 | 92G7312 | 92G7317 | 92G7317 | 92G7308 | 92G7310 | 92G7339 | 92G7312 | 92G7317 | 92G7317 |

¹ R=Removal of base memory.

² Maximum memory assuming IBM options is 160, however system will support 192 total configuration.

³ To reach the system maximum of 192, a non-IBM memory option of a 64 DIMM must be used.

IBM IntelliStation Family Overview

IBM M Pro



IBM IntelliStation



| | Part Number | Processor Type/Speed | L2 Cache: std./max. (KB) | Memory: std./max. (MB) | Standard Memory | Graphics Chip Type | Hard Drive Type | Hard Drive Size, Speed | CD-ROM | Slots: total, avail. | Bays: total, avail. | Network Interface/Speed | Audio | Operating System | Essentials Page |
|-----------------|-------------|----------------------|--------------------------|------------------------|-----------------|---|----------------------------------|------------------------|--------|----------------------|---------------------|---|-------|---|-----------------|
| M Pro 2D | 6888-220 | /1/266 | 512KB/ 512KB | 64/512 | EDO ECC | Matrox MGA Millen- nium (PCI Adapter) | S.M.A.R.T. Wide Ultra SCSI | 4.3GB, 10 | 16X | 5, 3 | 5, 2 | Ethernet-Integrated/ 10Mbps, 100Mbps | yes | Microsoft Windows NT Ver- sion 4.0 | page 70 |
| M Pro 3D | 6888-260 | /1/266 | 512KB/ 512KB | 128/512 | EDO ECC | Intergraph Intense3D Pro1000/ T (PCI Adapter) | S.M.A.R.T. Wide Ultra SCSI | 4.3GB, 10 | 16X | 5, 3 | 5, 2 | Ethernet-Integrated/ 10Mbps, 100Mbps | yes | Microsoft Windows NT Ver- sion 4.0 | page 70 |

IBM IntelliStation M Pro Series



INTELLISTATION M PRO SERIES



IBM IntelliStation M Pro

M Pro 2D **M Pro 3D**

Machine Type 6888 **Machine Type 6888**

Ideas soar and project backlogs vanish aboard the IntelliStation M Pro, combining the fastest single-processor design with Windows NT

running your compatible 32-bit applications. Powered by a 266MHz Pentium II processor and pixel-potent 2D or 3D graphics engine, the IntelliStation M Pro is the professional workstation that helps you super-charge your projects to reach new heights of excellence.

Benefits

Pentium II Processor

Pushing the envelope at 266MHz with on-board 512KB L2 cache, the IntelliStation M Pro's Pentium II processor can propel you to higher levels of productivity. Pentium II processors combine the power of the Pentium Pro processor with the capabilities of MMX technology, allowing your creativity and ideas to reach new heights.

2D or 3D Graphics

You've got the best seat in the house as the IntelliStation M Pro offers graphics accelerated for 2D by Matrox or 3D by Intergraph. Either dimension offers responsive performance to eliminate the wait and let you create.

Application Compatibility

Applications and operating environments that define your industry's standards are more complex than traditional business applications. Therefore, IBM provides hardware and technical support with key ISVs for your business-critical applications. Establishing the highest level of compatibility, quality and application performance, the IntelliStation M Pro has and continues to undergo rigorous testing within the IBM IntelliStation, Microsoft, and ISV labs.

Advanced Manageability

Based on revolutionary Wake on LAN technology, IBM is committed to providing standards-based advances in system manageability to help you manage and protect your professional workstation investment. The IntelliStation features integrated Intel EtherExpress 10/100 Ethernet with Wake on LAN. Wake on LAN enables remote workstation setup, updates, and asset tracking to occur after hours and on weekends so daily LAN traffic is kept to a minimum and users are not interrupted. Coupled with IBM's award-winning TME 10 NetFinity or Intel's popular LANDesk(R) Client Manager, the IntelliStation brings new levels of control and savings to your LAN-based networks.

IBM AssetCare

IBM AssetCare offers comprehensive data protection and system security. The IntelliStation M Pro features a DMI-compliant manageability chip that monitors temperature, voltage, and chassis intrusion. Monitoring the systems vital signs help insure the integrity of vital business data. Additionally, serialization, laser etching, and third party registration can help deter theft.

Standard Features

Pentium II Processor

266MHz with 512KB on-board L2 cache

Memory

64/128MB, expandable to 512MB
3 DIMMs; EDO ECC; 60ns

Graphics and Video Resolution

2D: Matrox MGA Millennium PCI 64-bit adapter, 4MB WRAM (expandable to 8MB)
64K colors @ 1600x1200 (4MB) or 16M colors @ 1600x1200 (8MB)
3D: Intergraph Intense3D Pro1000/T PCI bus master adapter, 16MB std./max. frame buffer (SDRAM) and 4MB (SGRAM) of texture memory
16M colors @ 1280x1024

Hard Drives

4.3GB Wide Ultra SCSI with S.M.A.R.T.
Adaptec 2940 Wide Ultra SCSI PCI bus master adapter

Diskette Drive

3.5" 1.44MB standard

Bays

5 (two 5.25", three 3.5")

Slots

5 (3 shared PCI/ISA, 2 ISA)

CD-ROM

16X max (variable-speed) CD-ROM

Network Interface

Integrated Intel EtherExpress 10/100 Ethernet controller with Wake on LAN

Audio

Supports Sound Blaster Pro audio (Crystal); 16-bit

Keyboard and Mouse

IBM 104-key keyboard and 3 button mouse

BIOS

IBM/Intel BIOS - DMI v2.0 compliant

Architecture

PCI local bus, ISA data bus

Ports

One serial (16550), one enhanced parallel (ECP/EPP), two universal serial bus, one 10/100 Ethernet RJ-45, one SVGA video, one keyboard, one mouse, one infrared, audio line in/out mini-jack

Power Supply

200 Watts

Security

IBM AssetCare: serialisation and laser etching of memory and processors, third party registration (to be phased in during product life)

IBM AntiVirus and ConfigSafe

Vital Product Data (VPD), ConfigSafe, cover key lock, secure access openings, U-bolt anchor support, secure fixed DASD, diskette write protect, boot sequence control, diskette boot inhibit, boot without keyboard/mouse, mouse disable, I/O control, power-on password, configuration/administrator password, Wake on LAN password, keyboard/mouse password

Included Software and Tools

Windows NT 4.0 preload

Lotus SmartSuite license, Hummingbird "Try and Buy" Software Suite, TME 10 NetFinity, Intel LANDesk Client Manager, IBM AntiVirus, ConfigSafe, CPU Thermal Monitor, CoSession, QAPLus/PRO, DMI, device driver support and additional software

Limited Warranty

Three-year parts and one-year labour

Selected Options

Communications/Networking

All Models

| | |
|--|---------|
| ISA Bus 2-Slot Front Access PCMCIA Adptr | 55H6757 |
| 33.6 Kbps Data/Fax Modem | 42H4334 |

ARTIC

All Models

| | |
|-----------------------------------|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC Multiport | 61G3862 |
| X.25 Interface Co-Processor | 71G6460 |
| ARTIC Co-Processor 512KB | 85X2706 |

Emulation

All Models

| | |
|--------------------------|---------|
| 3270 Emulation ISA | 53F6425 |
| 5250 Emulation ISA | 30F5383 |

Token-Ring

All Models

| | |
|--|---------|
| PCI Token-Ring Adapter (Diskette) | 41H8900 |
| Wake on LAN Token Ring PCI Adapter | 86H1880 |
| Wake Token-Ring ISA Adapter | 55H6760 |
| Turbo 16/4 Token-Ring ISA Adptr | 72H3482 |

Ethernet

All Models

| | |
|---|---------|
| Wake on LAN EtherJet 100/10 PCI Adapter | 85H9921 |
| EtherJet 100/10 PCI Adapter | 86H2432 |

Memory

DIMM

All Models

| | |
|----------------------------------|---------|
| 16MB EDO ECC Au 60ns 3.3V | 76H0278 |
| 32MB EDO ECC Au 60ns 3.3V | 76H0279 |
| 64MB EDO ECC Au 60ns 3.3V | 76H0280 |
| 128MB EDO ECC Au 60ns 3.3V | 76H0281 |

Storage

Adapters

All Models

| | |
|-----------------------------------|---------|
| PCI Wide Ultra SCSI Adapter | 76H3579 |
|-----------------------------------|---------|

Diskette Drives

All Models

| | |
|----------------------------------|---------|
| 3.5" 1.44MB Diskette Drive | 70G8499 |
|----------------------------------|---------|

Hard Disk Drives

All Models

| | |
|--|---------|
| Ultrastar 2ES 2.16GB Wide Ultra SCSI | 76H5813 |
| Ultrastar 2ES 4.33GB Wide Ultra SCSI | 76H5815 |



IBM IntelliStation M Pro

| | IBM IntelliStation M Pro | Compaq Deskpro 4000/6000 | HP Vectra VL |
|-------------------------------------|--|---|---------------------------------|
| Pentium II Processor | 266MHz | 233, 266MHz | 233, 266MHz |
| L2 Cache | 512KB | 512KB | 512KB |
| RAM (std./max.) | 64MB/128MB, upgrade to 512MB | 32MB/192MB | 32MB/192MB |
| Hard Disk Drive | 4.5GB S.M.A.R.T. Ultra Wide SCSI | 2.5GB EIDE (4000) OR 2.1, 4.2GB Ultra SCSI (6000) | 1.6GB, 2.5GB EIDE |
| HDD Interface | Adaptec 2940 Ultra Wide SCSI | PCI bus master EIDE (4000) or UltraSCSI (6000) | PCI bus master EIDE |
| Graphics | 2D | 2D - Matrox MGA Millenium (688200) | Matrox Millennium II |
| | 3D | 3D - Cirrus 5446 (4000) OR Matrox Millennium (6000) | N/A |
| 2D Memory (std./max.) | 4MB/ 8MB WRAM | 2MB/2MB (4000) OR 2MB/ 4MB/8MB WRAM (6000) | 4MB WRAM |
| 3D Frame Memory (std./max.) | 16MB/16MB SDRAM | N/A | N/A |
| 3D Texture Memory | 4MB (SGRAM) | N/A | N/A |
| 3D Maximum Resolution/Colors | 1600 x 1200/16.7M colors | N/A | N/A |
| 3D Triangles Per Second | 810K 24-bit, 25-pixel triangles/second | N/A | N/A |
| 3D APIs Supported | OpenGL, Heidi | N/A | N/A |
| Slots | 4 PCI, 1 PCI/ISA, 2 ISA | 3 PCI, 1 PCI/ISA, 1 ISA | DT - 2 PCI, 1 PCI/ISA, 1 ISA |
| | | | MT - 2 PCI, 2 PCI/ISA, 2 ISA |
| Audio | Crystal Audio - 16-bit | Business Pro Audio 16-bit | Integrated Sound Blaster 16 |
| Universal Serial Bus Ports | Yes - 2 | Not supported | Yes - 2 |
| Operating Systems Provided | Windows NT 4.0 | Windows NT 4.0 | Windows NT, Windows 95 |
| Network Interface | Intel EtherExpressPro/100 (10/100 PCI) | Integrated NetFlex-3 10BaseT | 10 BaseT optional via adapter |
| Wake on LAN | Yes | No | No |
| CD-ROM | 16X Variable Speed | 8X EIDE or 6X PD-CD | 8X EIDE OR 24X EIDE |
| Advanced Manageability | Wake on LAN, TME 10 NetFinity, Intel LANDesk, Flash BIOS over LAN, Setup over LAN | Enhanced Intelligent Manageability | HP TopTOOLS, DMI, Plug and Play |
| Asset Protection | IBM Anti-Virus, HDD PFA, Serialization, PC System Monitor, Thermal Sensing, QAPLus, ConfigSafe | Intrusion detection | |
| Warranty | 3 Years Parts/1 Year Labor | 3 Years Parts/1 Year Labor | 3 Years Parts and Labor |

Competitive Advantages

Graphics Performance

Superior Viewperf (CDRS-03) performance versus competition.

Advanced Manageability

With innovative industry-standard tools, including Wake on LAN, LANClient Control Manager, TME 10 NetFinity, LANDesk Client Manager, integrated 10/100 Ethernet with Wake on LAN, and DMI instrumentation, you can remotely setup and manage your PC 300XL while virtually eliminating the need for a technician to visit individual PCs to perform management tasks.

AssetCare

Combination of laser-etched ID numbers and registration of these systems and components aid the owners in tracking, monitoring and recovery of these assets.

Higher Maximum Memory

A robust 512MB of main memory gives you tremendous upward flexibility to better protect your investment and handle larger datasets.

Wide Ultra SCSI Hard Drives

Faster hard disk access speeds and SCSI channel throughput translate into better disk subsystem performance.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM IntelliStation Options Compatibility Matrix

IBM IntelliStation M Pro 6888

| | Part Number | |
|--|-------------|---|
| Memory | | |
| ECC DIMM | | |
| 16MB EDO 60ns | 76H0278 | • |
| 32MB EDO 60ns | 76H0279 | • |
| 64MB EDO 60ns | 76H0280 | • |
| 128MB EDO 60ns | 76H0281 | • |
| 256MB EDO 60ns | 76H0269 | • |
| Processor Upgrades | | |
| Dual Pentium Pro Processor Upgrade Kit 200MHz/256KB Cache ² | 94G6175 | |
| Dual Pentium Pro Processor Upgrade Kit 200MHz/512KB Cache ² | 94G6463 | |
| Storage | | |
| Hard Disk Drives | | |
| Ultrastar 2ES 2.16GB ¹ Wide Ultra SCSI | 76H5813 | • |
| Ultrastar 2ES 4.33GB Wide Ultra SCSI | 76H5815 | • |
| Ultrastar 2XP 4.51GB Wide Ultra SCSI | 76H2687 | |
| Tape Backup Products | | |
| TR4 (4.0/8.0GB) Internal SCSI Tape Drive ³ | 06H9716 | • |
| TR4 (4.0/8.0GB) Internal EIDE Tape Drive ³ | 06H9720 | • |
| TR4 (4.0/8.0GB) External SCSI Tape Drive | 3502900 | • |
| Internal 3.5" 4mm 4/10GB SCSI Tape Drive | 74G8632 | • |
| Internal 5.25" 4mm 4/10GB SCSI Tape Drive | 74G8631 | • |
| Diskette Drives | | |
| 3.5" 1.44MB ¹ Diskette Drive | 70G8499 | • |
| 3.5" 2.88MB Diskette Drive | 32G4338 | • |
| Adapter | | |
| PCI Fast Wide Ultra SCSI Adapter | 76H3579 | • |
| Communications/Networking | | |
| Token-Ring Products | | |
| PCI Token-Ring Adapter | 41H8900 | • |
| Turbo 16/4 Token-Ring ISA Adapter | 72H3482 | • |
| Auto Wake Token-Ring ISA Adapter ⁶ | 55H6760 | • |
| Ethernet Products | | |
| PCI Ethernet Adapter | 13H9237 | • |
| 100/10 PCI Ethernet Adapter | 25H4374 | • |
| EtherJet ISA w/ Wake-Up on LAN ⁶ | 72H2613 | • |
| EtherJet 10Base-T ISA Adapter | 73G9379 | • |
| 100/10 ISA Ethernet Adapter | 25H3501 | • |
| PCI Ultra SCSI Wide Adapter | 76H3579 | • |
| Modems | | |
| ISA V34 Plug and Play Data/Fax Modem ⁴ | 42H4322 | • |



Key to Chart Footnotes

- ¹ MB equals one million bytes and GB equals one billion bytes when referring to hard drive capacity. Accessible capacity varies.
- ² MHz only measures microprocessor internal clock speed, not application performance. Other factors also affect application performance.
- ³ Black bezels are available. Contact your IBM representative for details.
- ⁴ Does not support Wake Up on Ring function.
- ⁵ Available 2Q1997.
- ⁶ Requires Wake on LAN capability to realize Wake on LAN function.

IBM LAN Adapter Family At-A-Glance



| | Part Number | Bus Type | LEDs | Full Duplex Enabled | Media/ Connectors | Remote Program load | UTP / STP | Wake on LAN | LANClient | SMP |
|--|---------------------|----------|------|---------------------|------------------------------|---------------------|-----------|-------------|-----------|-----|
| Ethernet PCI | 13H9237 | PCI | Yes | Yes | 10Base-T, AUI | Yes | Yes | No | Yes | Yes |
| Ethernet 100/10 PCI | 86H2432 | PCI | Yes | Yes | 10Base-T, 100Base-TX | No | Yes | No | No | Yes |
| Ethernet 100/10 PCI Wake-on-Lan | 85H9921 | PCI | Yes | Yes | 10 Base-T, 100 Base-TX | Yes | Yes | Yes | No | Yes |
| EtherJet Wake-on-LAN | 72H2613 | ISA | Yes | Yes | 10Base-T | Yes | Yes | Yes | Yes | Yes |
| EtherJet 10Base-T ISA | 73G9379 | ISA | Yes | Yes | 10Base-T | Yes | Yes | No | Yes | Yes |
| EtherJet ISA | 04H6550 | ISA | Yes | Yes | 10Base-T, 10Base-2 | Yes | Yes | No | Yes | Yes |
| EtherJet PC Card (PCMCIA) | 72H4533 | PCMCIA | Yes | Yes | 10Base-T | No | Yes | No | Yes | No |
| EtherJet PC Card Combo (PCMCIA) | 72H4534 | PCMCIA | Yes | Yes | 10Base-T, 10Base-2 | No | Yes | No | Yes | No |
| Token-Ring PCI | 41H8900 | PCI | Yes | Yes | Single RJ-45 | Yes | Yes | No | Yes | Yes |
| Token-Ring PCI Wake-on-LAN | 86H1880 | PCI | Yes | Yes | Single RJ-45 /9-pin Shell | Yes | Yes | Yes | Yes | Yes |
| Triple LANStreamer PCI | 25H6304 | PCI | Yes | Yes | Three RJ-45 | Yes | Yes | No | Yes | Yes |
| Turbo 16/4 ISA | 72H3482 | ISA | Yes | Yes | Three RJ-45 | Yes | Yes | No | Yes | No |
| AutoWake ISA | 55H6760 | ISA | Yes | Yes | Single RJ-45 | Yes | Yes | Yes | Yes | No |
| AutoLANStreamer MC32 | 60G1592 | MCA | Yes | Yes | Single RJ-45 | Yes | Yes | Yes | No | Yes |
| Turbo 16/4 Token-Ring | 85H3629/ 85H3628 | PCMCIA | Yes | Yes | Single RJ-45 /9-pin Shell | Yes | Yes | No | Yes | Yes |
| Auto 16/4 Token-Ring | 04H6922 | PCMCIA | No | No | Single RJ-45 | Yes | Yes | No | Yes | No |

IBM PC Server Family Overview

PC Server 310



PC Server 315



PC Server 325



PC Server 330



PC Server 704



IBM PC Server At-A-Glance



| | Part Number | Processor Speed (MHz) | SMP Processor Std./Max. L2 Cache Std./Max. | Memory Type Standard | Memory: Std./Max.(MB) | Hard Drive Type | Hard Drive Std: Size, Speed(r | Hard Drive Controller | Raid Lvs Supported | Bus | Slots: Total, Avail. | Bays: Total, Avail. | Hot-swappable Bays: | Essentials Page | |
|-----|-------------|-----------------------|---|----------------------|-----------------------|-----------------|-------------------------------|-----------------------|--|------|----------------------|---------------------|---------------------|-----------------|----------|
| 310 | 8639-0E0 | 166 | 1/1 | 256/256 | ECC | 16/160, 60 | Open bay | -- | Wide Ultra SCSI (PCI 32-bit adapter) | -- | PCI/ISA | 5,4 | 5,3 | 0,0 | page 94 |
| | 8639-0E5 | 200 | 1/1 | 512/512 | ECC | 32/160, 60 | Open bay | -- | Wide Ultra SCSI (PCI 32-bit adapter) | -- | PCI/ISA | 5,4 | 5,3 | 0,0 | page 94 |
| 315 | 8638-PS0 | Pro,200 | 1/1 | 256/256 | ECC | 32/512, 60 | Open bay | -- | Wide Ultra SCSI (PCI 32-bit adapter) | -- | PCI/EISA | 7,5 | 6,4 | 0,0 | page 98 |
| 325 | 8639-ES0 | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | Open bay | -- | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 6,6 | 7,5 | 0,0 | page 102 |
| | 8639-RS0 | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | Open bay | -- | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 6,6 | 7,5 | 0,0 | page 102 |
| | 8639-ESV | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | SCSI-2 F/W | 2.25GB, 8 | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 6,6 | 7,4 | 0,0 | page 102 |
| 330 | 8640-ES2 | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | Open bay | -- | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 9,9 | 10,8 | 6,6 | page 106 |
| | 8640-EM2 | Pro,200 | 1/2 | 512/512 | ECC | 32/1024, 60 | Open bay | -- | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 9,9 | 10,8 | 6,6 | page 106 |
| | 8640-ES0 | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | Open bay | -- | Adaptec 7880 Ultra SCSI | -- | PCI/EISA | 9,9 | 9,7 | 0,6 | page 106 |
| | 8640-ESS | Pro,200 | 1/2 | 256/512 | ECC | 32/1024, 60 | SCSI-2 F/W | 2x2.25GB, 8 | PC Server ServeRAID SCSI PCI Adapter | None | PCI/EISA | 9,8 | 10,6 | 6,6 | page 106 |
| 704 | 8650-4BW | Pro,166 | 1/4 | 512/512 | ECC | 64/2000, 60 | SCSI-2 F/W | 2x2.14GB, 9 | 2xSCSI-2 F/W | 1 | PCI/EISA | 10,9 | 17,13 | 12,12 | page 110 |
| | 8650-7AX | Pro,166 | 2/4 | 512/512 | ECC | 128/2000, 60 | SCSI-2 F/W | 4x2.14GB, 9 | SCSI-2 F/W RAID | None | PCI/EISA | 10,8 | 17,11 | 12,12 | page 110 |
| | 8650-4M0 | Pro,200 | 1/4 | 512/512 | ECC | 128/2000, 60 | Open bay | -- | 2xSCSI-2 F/W | 1 | PCI/EISA | 10,10 | 17,15 | 12,12 | page 110 |
| | 8650-6MM | Pro,200 | 1/4 | 512/512 | ECC | 256/2000, 60 | Open bay | -- | PC Server ServeRAID (SCSI PCI adapter) | None | PCI/EISA | 10,9 | 17,15 | 12,12 | page 110 |

IBM PC Server Racks & Enclosures At-A-Glance

| | Model Number | Mounting Size | Space ¹ | Server Capacity: Total | | | Server Capacity: 85s/95s | | Server Capacity: 300s ² | | Server Capacity: 500s/700s ³ | | Cabinet Width | Cabinet Depth | Cabinet Height | Selector Switch | Type of Cabinet |
|------------------------|--------------|---------------|--------------------|------------------------|---|---|--------------------------|---|------------------------------------|---|---|--------|---------------|---------------|----------------|-----------------|-----------------|
| Rack Enclosures | 94G5000 | 24 in. | 40u | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 30 in. | 37 in. | 76 in. | Yes | Primary | | |
| | 94G5002 | 24 in. | 40u | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 30 in. | 37 in. | 76 in. | No | Expansion | | |

| | Model Number | Total Bays | Hot-Swap Bays: total, avail. | | Maximum Storage | Dimensions (in.) | Power Supply: std. |
|---|--------------|------------|---------------------------------|----|-----------------|------------------|--------------------|
| SCSI Multi-Storage Enclosure | 3517001 | 7 | 5 | 5 | 22.5 | 7.75x19x16 | 480 Watts |
| PC Server Enterprise Expansion Enclosure | 3518001 | 22 | 18 | 18 | 40.5 | 24.5X13.9X29.7 | 470 Watts |
| SSA Entry Storage Subsystem⁴ | 3527001 | 7 | 5 | 5 | 22.5 | 7.75x19x16 | 480 Watts |

† Estimated Reseller Price. Actual reseller price may vary.

¹ u=1.75

² PC Server 310 not supported.

³ PC Server 704 not supported.

⁴ Supports SSA Hard Disk Drives when used in conjunction with IBM SSA RAID Adapter for PC Servers (Part Number 32H3811)





IBM PC Server Solutions

ServerGuide 3.0

The fastest way to install and configure your IBM PC Server. ServerGuide is a library of CD-ROMS containing AutoPilot, installation aids for popular network operating systems, on-line documentation, Diskette Factory, and CoPilot. AutoPilot guides you through the steps required to configure the hardware in a PC Server reading it for software installation. It makes sure that no important steps are forgotten, and at every stage the relevant section in the on-line documentation is only a mouse click away. CoPilot includes applications at no additional charge, including Lotus Domino 4.5 Server (single processor edition), IBM NetFinity, the award winning, industry leading asset and systems management application, and IBM AntiVirus. Diskette Factory provides an easy way of creating diskettes for device drivers and configurations for IBM PC Servers and options. The software installation features of ServerGuide can be used with both an existing license of your network operating system, or if you prefer in conjunction with an activation key that can be purchased from IBM.

IBM NetFinity

IBM NetFinity encompasses industry leading systems management features with comprehensive hardware inventory management for IBM and IBM compatible systems with crucial features such as software inventory, remote console capability, system monitoring, alert management, file and process management and more! NetFinity supports all major operating systems, supporting networks across multiple protocols and across even over phone line connections.

IBM NetFinity Manager V5.0 (PN: 30F6983)

IBM NetFinity Services V5.0 (PN: 4306972)

Upgrade to Tivoli NetFinity Manager V5.0 (PN: 84H4321)

Upgrade to Tivoli NetFinity Services V5.0 (PN: 84H4338)

Lotus Domino Server R 4.5, single processor edition¹

Network computing has never been easier with IBM PC Servers and Lotus Domino! Now you can realize the full potential of your network and your people – plus tap the power of the Internet – right out of the box. That's because a copy of Lotus Domino is available with every IBM PC Server – at no additional charge. Lotus Domino makes it easy for people throughout your organization to communicate with colleagues, collaborate in teams, and coordinate strategic business processes. It is the central access point to find and share information you need whether it is located in e-mail, relational databases, host based systems, in your favorite desktop application, or on the World Wide Web. Domino DB provides a secure reliable and scalable means to store manage and distribute business information.

APC Uninterruptible Power Supplies and APC PowerChute Plus Software

IBM is pleased to offer the APC Smart-UPS line of uninterruptible power supplies. IBM offers the Smart-UPS 700 (94G4073), Smart-UPS 1000 (94G4074), Smart-UPS 1400 (94G4075) and the Smart-UPS 2200 (94G4076). The APC Smart-UPS is one of the most advanced UPS available. Features include:

- Lightning and Surge Protection shields hardware
- Network-grade Line Conditioning prevents glitches
- SmartBoost & SmartTrim corrects brownouts and over-voltages without unnecessary battery drain
- SmartSlot provides customizable performance and management
- QuickSwap hot-swappable battery replacement system extends UPS Life & Uptime

When purchased through IBM, using an IBM part #, the APC Smart-UPS comes with an IBM PC Server exclusive 3-year limited part warranty and IBM also provides a copy of APC PowerChute Plus software at no additional charge. PowerChute Plus works with IBM NetFinity to provide detailed UPS diagnostics as well as unattended orderly shutdown of the operating system. Together, IBM and APC provide the industry's most comprehensive power management and protection solution.

IBM PC Server Compatibility Program²

IBM is working with leading industry vendors to test a broad range of adapters and network operating systems for compatibility with IBM PC Servers, companies like; Adaptec Madge, 3Com, Mylex/BusLogic, Olicom, SMC and Intel. This program should reduce the configuration, installation and setup costs for IBM PC Servers by providing easy, worldwide World Wide Web access to detailed compatibility information (<http://www.pc.ibm.com/compat/compat.html>) as well as making device drivers available via ServerGuide and various electronic vehicles.

IBM PC Server High Availability Solution

The IBM PC Server High Availability Solution for Microsoft Windows NT Server (PN: 94G6621), OS/2 Warp Server (PN: 94G6620) and Novell NetWare (PN: 94G6622) implements a "hot standby" server for your mission-critical applications. This Phase 1 clustering solution combines software and a dedicated server-to-server link to mirror your data in real time. If your primary server should fail, the standby server usually takes over in a matter of seconds.

¹A license upgrade must be purchased from a Lotus reseller for use on systems with multiple processors.

²IBM makes no guarantee regarding the compatibility of specific products.

TechConnect

IBM's commitment to connect technical professionals to IBM's technical experts and resources. One can participate as an associate or select a certification path.

PC Server SCSI-2 Fast/Wide Repeater

The IBM PC Server SCSI-2 Fast/Wide Repeater is more than another internal card to plug into your system. It's the answer to your external storage dilemma. While the IBM PC Server SCSI-2 Fast/Wide repeater works using the same principle as other repeater devices, it offers considerably more with data farming, a massive library, cluster-like scalability and close to 500GB of storage. And by positioning the repeater card internally, the hassles involved with setting up an external repeater device, such as cabling, transceiver connections and configurations are virtually eliminated. Part Number 94G5565* and 94G7585.

* To be withdrawn when stock runs out.

PC ServeRAID SCSI Adapter

New ServeRAID technology offers logical drive migration to let you add or remove disks or redefine arrays—without shutting down your system. With three Ultra SCSI channels capable of supporting 15 devices each, a single PC ServeRAID SCSI Adapter can support up to 45 devices. Additionally, the adapter's 4MB of cache and advanced 32-bit PCI interface provides improved system performance.

Part Number 70G8489

PC Server Advanced Systems Management Adapter

Whether you are in the office, at home, or almost anywhere else you may want to be, you can now be confident that if a problem occurs with a PC Server, you can be made aware of it and take remedial action to minimize disruption. Working in conjunction with IBM NetFinity, you can manage your PC Server remotely and:

- Reset the system
- Browse a system log to detect errors and take corrective action
- Set alerts for the system
- Check voltages and temperature
- Send an alert via a pager or NetFinity Manager to the system administrator
- Turn the PC Server off or on remotely

These are just a few of the functions of the PC Server Advanced Systems Management adapter (PN: 94G5570).

Serial Storage Architecture

The new IBM SSA RAID Adapter for PC Servers is a high-performance, high-connectivity, enhanced-availability adapter that conforms to the industry-standard Serial Storage Architecture (SSA). Along with the SSA RAID Adapter for PC Servers two SSA hard disk drives are available in 2.25GB (PN: 05J6413) and 4.51GB (PN: 05J6414) capacities and a SSA Entry Storage subsystem with up to 22.5GB of SSA storage capacity.

This multi-type RAID adapter can attach up to 96 SSA disk drives to PC Servers that have a PCI bus. Four serial ports forming two SSA loops can be configured in up to 32 arrays; each array can be RAID 0, 1, 5, or non-RAID.

Any combination of supported IBM SSA subsystems can be attached, provided no more than 48 disk drives are configured in one loop. Each SSA loop has a bandwidth of 80 MB/sec full-duplex using point-to-point copper cables up to 25 meters long. Device drivers provided with the adapter kit allow installation on supported PC Servers running Microsoft Windows NT, OS/2, or Novell NetWare operating systems.



IBM ServerGuide Version 3.0

Product Information Sheet

Use the following instructions to order software activation keys.

1. Photocopy the forms and keep the originals for future use.
2. Write the Licensed Diskette serial number in the space provided on these forms. The Licensed Diskette serial number is on the diskette label and also on the bottom of the ServerGuide package.
3. Fill out the forms as follows:

Aggregator: Fill out Section I, III, IV and V on this sheet. On the Product Order form, select the items to be purchased. Fax or send the forms to your IBM order-processing center.

Dealer: Fill out sections I, II, III, IV and V on this sheet. On the Product Order form, select the items to be purchased. Fax or send the forms, along with your aggregator's invoice, to your IBM order-

processing center.

End-User: Fill out Sections III, IV, and V on this sheet. On the Product Order form select the items to be purchased. Fax or send the forms to your IBM authorised reseller or IBM marketing representative.

Important: When ordering NetWare license upgrades:

- Provide a copy of your original NetWare license diskette label (or the original ServerGuide Product Order Form, showing the serial number) and proof of purchase.
- Complete Section III and have the end-user sign the Agreement to Destroy Previous Version on the Product Order Form.

Software activation keys for upgrades will not be sent without this information.

Section I Master Distributor/Aggregator Information

Distributor/Aggregator: _____

Contact Name: _____

Contact Title: _____

Authorized HQ Location ID: _____

Street Address: _____

City/State/Country/Postcode: _____

Telephone Number: _____

Section II Dealer Information

Dealer Name: _____

Contact Name: _____

Contact Title: _____

Authorised Location ID: _____

Street Address: _____

City/State/Country/Postcode: _____

Telephone Number: _____

Section III End-User Information (mandatory for upgrades)

Name: _____

Company Name: _____

Title: _____

Street Address: _____

City/State/Country/Postcode: _____

Telephone Number: _____

Section IV Payment Method and Billing Information

Type: Open Terms/CC/Credit Card/Check: _____

Number: Purchase Order/Reference No.: _____

Section V

Fax number where key is to be sent: _____

Authorised Signature: _____

Date: _____

Write License Diskette Serial Number Here:

IBM ServerGuide Version 3.0

Product Order Form

Ordering Product Software Activation Keys

Write your license diskette serial number on this form. To order a software activation key, place an X in the box next to the item. If you already own a product license, you can order an upgrade to receive an activation key at a reduced cost.

LAN Requester 4.0 - License

- | | | | |
|----------------------------------|-----------------|----------------------------------|------------------|
| <input type="checkbox"/> 12H9774 | 1 user license | <input type="checkbox"/> 07H9698 | 10 user licenses |
| <input type="checkbox"/> 07H9697 | 5 user licenses | <input type="checkbox"/> 07H9700 | 50 user licenses |

LAN Requester 4.0 - License Upgrade

- | | | | |
|----------------------------------|-----------------|----------------------------------|------------------|
| <input type="checkbox"/> 12H9888 | 1 user license | <input type="checkbox"/> 07H9705 | 10 user licenses |
| <input type="checkbox"/> 07H9704 | 5 user licenses | <input type="checkbox"/> 07H9707 | 50 user licenses |

LAN Server 4.0 - License and License Upgrade

- ☐ 06H9015 Upgrade LAN Server 3.0 Entry to 4.0 Entry
- ☐ 06H9016 Upgrade LAN Server 3.0 Advanced to 4.0 Advanced
- ☐ 06H9017 Upgrade LAN Server Entry 4.0 to 4.0 Advanced

Microsoft Windows NT Server 3.51 - Processor License

- ☐ 07H1691 Windows NT Server 3.51 (1-4 processors)
- ☐ 07H1692 Windows NT Server 3.51 (1-5 processors)
- ☐ 07H1693 Windows NT Server 3.51 (1-6 processors)

SCO OpenServer 5.02 Enterprise System - License

- ☐ 76H3928 SCO OpenServer 5.02 5 user license
(requires for purchase of additional user licenses below)

License

- | | |
|----------------------------------|--------------------|
| <input type="checkbox"/> 76H3929 | 10 user licenses |
| <input type="checkbox"/> 76H3930 | 25 user licenses |
| <input type="checkbox"/> 76H3931 | 100 user licenses |
| <input type="checkbox"/> 76H3932 | 500 user licenses |
| <input type="checkbox"/> 76H3933 | Unlimited licenses |

SCO OpenServer 5.02 - License

- ☐ 76H3934 SCO OpenServer SMP license for 2 processors
(requires for purchase of additional user licenses below)

| SCO SMP 5.02 | Your Current Processor License | Desired Number of Processors |
|----------------------------------|--------------------------------------|---------------------------------|
| <input type="checkbox"/> 76H3935 | 2 | 3 |
| <input type="checkbox"/> 76H3936 | 3 | 4 |
| <input type="checkbox"/> 76H3937 | 4 | 5 |
| <input type="checkbox"/> 76H3938 | 5 | 6 |

IBM NetFinity

Version V4.0 - Additional Services License

- | | | | |
|----------------------------------|------------|----------------------------------|-------------|
| <input type="checkbox"/> 78H4913 | 1 licenses | <input type="checkbox"/> 78H4915 | 10 licenses |
| <input type="checkbox"/> 78H4914 | 5 licenses | <input type="checkbox"/> 78H4916 | 50 licenses |

IBM NetFinity

Version V4.0 - Services License Upgrade

- | | | | |
|----------------------------------|------------|----------------------------------|-------------|
| <input type="checkbox"/> 78H4919 | 1 licenses | <input type="checkbox"/> 78H4921 | 10 licenses |
| <input type="checkbox"/> 78H4920 | 5 licenses | <input type="checkbox"/> 78H4922 | 50 licenses |

IBM NetFinity

Version V4.0 - Services License Upgrade

- ☐ 78H4902 NetFinity Manager additional license
- ☐ 78H4908 NetFinity 3.x Mgr license upgrade to NetFinity 4.0

The following IBM NetFinity order numbers are for use in Europe, Middle East, Africa, and Latin America

IBM NetFinity

Additional Services Licenses

- | | | | |
|----------------------------------|------------|----------------------------------|-------------|
| <input type="checkbox"/> 72H9356 | 1 license | <input type="checkbox"/> 72H9358 | 10 licenses |
| <input type="checkbox"/> 72H9357 | 5 licenses | <input type="checkbox"/> 72H9359 | 50 licenses |

IBM NetFinity

Service License Upgrades

- ☐ 83H1354 1 license

IBM NetFinity

Manager License Upgrade

- | | | | |
|----------------------------------|------------|----------------------------------|-------------|
| <input type="checkbox"/> 72H9352 | 1 license | <input type="checkbox"/> 72H9354 | 10 licenses |
| <input type="checkbox"/> 72H9353 | 5 licenses | <input type="checkbox"/> 72H9355 | 50 licenses |

IBM NetFinity

Manager License Upgrade

- ☐ 83H1353 1 license

NetWare from IBM - License

| Netware 3.12 | NetWare 4.1 | Number of Users |
|----------------------------------|----------------------------------|-----------------|
| <input type="checkbox"/> 06H9850 | <input type="checkbox"/> 94G4516 | 5 |
| <input type="checkbox"/> 06H9851 | <input type="checkbox"/> 94G4517 | 10 |
| <input type="checkbox"/> 06H9852 | <input type="checkbox"/> 94G4518 | 25 |
| <input type="checkbox"/> 06H9853 | <input type="checkbox"/> 94G4519 | 50 |
| <input type="checkbox"/> 06H9854 | <input type="checkbox"/> 94G4520 | 100 |
| <input type="checkbox"/> 06H9855 | <input type="checkbox"/> 94G4521 | 250 |
| | <input type="checkbox"/> 94G4522 | 500 |
| | <input type="checkbox"/> 94G4523 | 1000 |

Write License Diskette Serial Number Here:



IBM ServerGuide Version 3.0

Product Order Form

NetWare form IBM - Version 4.1 SMP - License

- ☐ 06H9724 Netware V4.1 SMP 1-4 processors (NetWare 4.1 license required)
 - ☐ 06H9725 NetWare V4.1 SMP upgrade to 8 processors (NetWare V4.1 SMP 1-4 processor license required)
- Note:** To purchase NetWare 4.1 License packs, you must buy or own NetWare 4.1 Server.

NetWare from IBM - License Upgrade

| From any version to: NetWare 3.2 NetWare 4.1 | | | From NetWare 4.x to 4.1 | Your Current User License | Desired Number of Users |
|---|----------------------------------|----------------------------------|----------------------------|------------------------------------|-------------------------------|
| <input type="checkbox"/> 06H9856 | <input type="checkbox"/> 94G4524 | <input type="checkbox"/> 94G4573 | | 5 | 5 |
| <input type="checkbox"/> 06H9857 | <input type="checkbox"/> 94G4525 | | | 5 | 10 |
| <input type="checkbox"/> 06H9858 | <input type="checkbox"/> 94G4526 | | | 5 | 25 |
| <input type="checkbox"/> 06H9859 | <input type="checkbox"/> 94G4527 | <input type="checkbox"/> 94G4545 | | 10 | 10 |
| <input type="checkbox"/> 06H9860 | <input type="checkbox"/> 94G4528 | | | 10 | 25 |
| <input type="checkbox"/> 06H9861 | <input type="checkbox"/> 94G4529 | | | 10 | 50 |
| <input type="checkbox"/> 06H9862 | <input type="checkbox"/> 94G4530 | <input type="checkbox"/> 94G4546 | | 25 | 25 |
| <input type="checkbox"/> 06H9863 | <input type="checkbox"/> 94G4531 | | | 25 | 50 |
| <input type="checkbox"/> 06H9864 | <input type="checkbox"/> 94G4532 | | | 25 | 100 |
| <input type="checkbox"/> 06H9865 | <input type="checkbox"/> 94G4533 | <input type="checkbox"/> 94G4547 | | 50 | 50 |
| <input type="checkbox"/> 06H9866 | <input type="checkbox"/> 94G4534 | | | 50 | 100 |
| <input type="checkbox"/> 06H9867 | <input type="checkbox"/> 94G4535 | | | 50 | 250 |
| <input type="checkbox"/> 06H9868 | <input type="checkbox"/> 94G4536 | <input type="checkbox"/> 94G4548 | | 100 | 100 |
| <input type="checkbox"/> 06H9869 | <input type="checkbox"/> 94G4537 | | | 100 | 250 |
| | <input type="checkbox"/> 94G4538 | | | 100 | 500 |
| <input type="checkbox"/> 06H9870 | <input type="checkbox"/> 94G4539 | <input type="checkbox"/> 94G4549 | | 250 | 250 |
| | <input type="checkbox"/> 94G4540 | | | 250 | 500 |
| | <input type="checkbox"/> 94G4541 | | | 250 | 1000 |
| | <input type="checkbox"/> 94G4542 | <input type="checkbox"/> 94G4550 | | 500 | 500 |
| | <input type="checkbox"/> 94G4543 | | | 500 | 1000 |
| | <input type="checkbox"/> 94G4544 | <input type="checkbox"/> 94G5181 | | 1000 | 1000 |

NetWare Upgrades

Provide existing NetWare serial number

**Agreement to Destroy Previous Version
(Mandatory for Upgrades)**

Upon installing the new software version from ServerGuide, you agree to destroy the earlier version you already own. Receipt of the activation key voids the license granted for the earlier version. The earlier version cannot be used, sold, or transferred.

Signature/Date

Note: Some products listed might not be available in your country. Contact your authorised IBM reseller for availability.

Supported Operating Systems

| | IBM OS/2 Warp 3.0 | IBM OS/2 Warp Connect 3.0 | IBM OS/2 2.1.1 SMP | IBM OS/2 Warp Server 4.0 | Microsoft Windows Server 3.51 | Microsoft Windows NT 4.0 | Novell Netware 4.11 | Novell Netware 4.1 SMP | Novell Netware 4.1 | SCO Unixware 3.12 | SCO OpenServer 2.X | SCO OpenServer 5.0.2 Enterprise 3.0 | SunSoft Solaris 2.5 ¹ |
|--|-------------------|---------------------------|--------------------|--------------------------|-------------------------------|--------------------------|---------------------|------------------------|--------------------|-------------------|--------------------|-------------------------------------|----------------------------------|
| Key Selectable on Server-Guide | • | | • | • | • | | | • | • | • | • | • | |
| PC Server 704 | | | | | | | | | | | | | |
| 8650-xMx | • | • | • | • | • | • | • | • | • | • | • | • | 3 |
| PC Server 330 | | | | | | | | | | | | | |
| 8640-xMx | • | • | • | • | • | • | • | • | • | • | • | • | • |
| 8640-xSx | • | • | • | • | • | • | • | • | • | • | • | • | • |
| PC Server 325 and 325 Rack Drawer | | | | | | | | | | | | | |
| 8639-xSx | • | • | • | • | • | • | • | • | • | • | • | • | • |
| PC Server 315 | | | | | | | | | | | | | |
| 8638-Pxx | • | • | | • | • | • | • | • | • | • | • | | |
| PC Server 310 | | | | | | | | | | | | | |
| 8639-xEx | • | • | | • | • | • | • | | • | • | 2 | • | 2 |

¹ Additional software drivers required and/or model restrictions possible. Contact IBM PC Server Start up Support.

² Contact your local IBM representative or call the IBM HelpCenter for special NetWare SMP requirements.

³ Certified by NOS vendor.

■ Support planned for the future.



RAID Definitions

| RAID 0 | Data striping |
|---------------------|--|
| Performance | Best—significant performance advantage over a single disk (because the array can do N requests simultaneously if it has N disks rather than N request to disk) |
| Protection | Poor—if one disk fails, all data is lost and all disk must be reformatted |
| Capacity | N x disk capacity, where N=number of disk |
| Via software | Most network operation systems provide data mirroring capabilities |
| Via hardware | IBM SCSI-2 RAID Controllers |
| Description | Data striped (spread) across each disk in array in sector(s) for improved performance |
| RAID 1 | Data mirroring or duplexing |
| Performance | Good—since there are at least two disks, a read request can be met by either disk. Duplexing has each disk attached to separate controller, so performance may be further improved |
| Protection | Good—either disk can fail and data is still accessible from the other disk. With duplexing, a disk controller could fail as well and still have complete protection of data |
| Capacity | (N x disk capacity) /2 |
| Via software | Most network operating systems provide data mirroring capabilities |
| Via hardware | IBM SCSI-2 RAID Controllers |
| Description | Disk mirroring duplicates data (complete file) from one disk onto a second disk using a single disk controller. Disk duplexing is the same as mirroring except disk are attached to a second disk controller (like two SCSI adapters) |
| Hybrid RAID 1 array | The first stripe is the data stripe and the second stripe is the mirror (copy) of the first data strip but shifted one drive with an odd number of disks. IBM RAID Controllers offer Hybrid RAID 1 |
| RAID 3 | Data striping (bytes) with parity disk |
| Performance | Good for large transfers only RAID 3 is generally considered better for transfer of large data blocks such as graphics or imaging files |
| Protection | Good—if any disk fails, the data can still be accessed by using the information from the other disks and parity disk to reconstruct it |
| Capacity | N-1 |
| Via software | None Available |
| Via hardware | Third-party vendors |
| Description | RAID 3 stripes data, one byte at a time, across all the data drives. Parity information, used to reconstruct missing data, is stored on a dedicated drive. RAID 3 requires at least two data disks, but works best with four disks (and one parity disk) |
| RAID 4 | Similar to RAID 3 with interleaved sectors (not bytes) and unsynchronised rotation (not synchronised rotation) |
| RAID 5 | Data/parity striping (sectors) |
| Performance | Good for networks—RAID 5 is preferred for smaller block transfers the size of typical network files. RAID 5 degrades the throughput of any server, IBM or non-IBM, about 35% compared to RAID 0 |
| Protection | Good—if any disk fails, the data can still be accessed by using the data from the other disks along with the striped parity info |
| Capacity | (N-1) x disk capacity |
| Via software | Not generally recommended for high-performance applications |
| Via hardware | IBM SCSI-2 RAID Controllers |
| Description | RAID 5 stripes data, sector(s) at a time, across all disks. Parity is interleaved with data information rather than stored on a dedicated drive, RAID 5 works with a minimum of three disks |

RAID stands for "Redundant Array of Independent Disk" and provides a method of classifying the different ways of using multiple disks to increase availability and performance.

A failed disk (except RAID 0) still allows users to access data on the array, and a replacement disk or online spare can be re-created while the array is in use.

Arrays are multiple physical disks treated as one logical disk.

Striping is spreading data over multiple disk drives. Data is interleaved by

bytes or sectors (sector=512 bytes) across the disks. So one file is not stored on one disk, but one file is split up and stored on multiple disks.

Hardware-based arrays use a dedicated array processor to offload RAID functions from the CPU, which usually provides better performance than software-based arrays.

IBM RAID controllers use RISC processors to perform these RAID functions.

IBM SCSI Hard Disk Drives

| Capacity Model | 4.51 GB PC Server 704 | 9.1GB PC Server 704 | 4.51GB HS III | 9.1GB HS III |
|--|-----------------------------|---------------------------|------------------|-----------------|
| Interface | Wide Ultra SCSI | Wide Ultra SCSI | Wide Ultra SCSI | Wide Ultra SCSI |
| SCSI Data Path | 16-bit | 16-bit | 16-bit | 16-bit |
| SCSI Burst Rate | 40MB/sec | 40MB/sec | 40MB/sec | 40MB/sec |
| Buffer (read/write caching) | 512KB | 512KB | 512KB | 512KB |
| Average Seek Time | 9.0ms | 9.5ms | 9.0ms | 9.0ms |
| Average Latency | 4.17ms | 4.17ms | 4.17ms | 4.17ms |
| Rotation Speed | 7200 rpm | 7200 rpm | 7200 rpm | 7200 rpm |
| Form Factor (with x height) | 3.5" x 1" SL | 3.5" x 1.6" HH | 3.5" x 1" SL | 3.5" x 1.6" HH |
| Predictive Failure Analysis | Yes | Yes | Yes | Yes |
| Part Number | 94G7098 | 94G7099 | 94G7491 | 94G7492 |

HS=Hot-Swap Disk Drive; HS III=Hot-Swap Disk Drive III; NHS= Non Hot-Swap; HH=half-high; SL=slim line



SCSI Hard Disk Drives

| | 4.51GB Ultrastar 2XP | 4.51GB HS, NHS | 2.16GB 2ES Ultrastar | 4.33GB 2ES Ultrastar |
|--------------------------|---------------------------------|---|---------------------------------|---------------------------------|
| Interface | Wide Ultra SCSI | SCSI-2 F/W | Ultra SCSI | Ultra SCSI |
| SCSI Data Path | 16-bit | 16-bit | 8-bit | 8-bit |
| SCSI Burst Rate | 40-20MB/sec | 20MB/sec | 20MB/sec | 20MB/sec |
| Buffer | 512KB | 512KB | 512KB | 512KB |
| Avarage Seek Time | 7.5ms | 8.0ms | 8.5ms | 8.5ms |
| Avarage Latency | 4.17ms | 4.17ms | 5.6ms | 5.6ms |
| Rotation Speed | 7200rpm | 7200rpm | 5400rpm | 5400rpm |
| Form Factor | 3.5"x1"SL | 3.5"x1"SL | 3.5"x1"SL | 3.5"x1"SL |
| PFA | Yes | Yes | Yes | Yes |
| Part Number | NHS: 76H0945 ¹ | HS: 94G6489 ¹ HS III: 94G6494 | NHS: 76H5809 | NHS:76H5811 |

| | 2.16GB 2ES Ultrastar | 4.33GB 2ES Ultrastar | 4.51GB Ultrastar 2XP | 9.10GB Ultrastar 2XP |
|--------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Interface | Wide Ultra SCSI | Wide Ultra SCSI | Wide Ultra SCSI | Wide Ultra SCSI |
| SCSI Data Path | 16-bit | 16-bit | 16-bit | 16-bit |
| SCSI Burst Rate | 40MB/sec | 40MB/sec | 40MB/sec | 40MB/sec |
| Buffer | 512KB | 512KB | 512KB | 512KB |
| Avarage Seek Time | 8.5ms | 8.5ms | 7.5ms | 8.5ms |
| Avarage Latency | 5.6ms | 5.6ms | 4.17ms | 4.17ms |
| Rotation Speed | 5400rpm | 5400rpm | 7200rpm | 7200rpm |
| Form Factor | 3.5"x1"SL | 3.5"x1"SL | 3.5"x1"SL | 3.5"x1.6"HH |
| PFA | Yes | Yes | Yes | Yes |
| Part Number | NHS: 76H5813 | NHS:76H5815 | NHS:76H2687 | NHS:76H2689 |

¹ When installing two or more in PC Server 320 system the PC Server Air baffle option (Part Number 94G7001) is required.

SSA Hard Disk Drive

| | 2.25GB SSA | 4.51GB SSA |
|--------------------------|-------------|-------------|
| Interface | SSA | SSA |
| SSA Data Path | 16-bit | 16-bit |
| SSA Burst Rate | 80MB/sec | 80MB/sec |
| Buffer | 512KB | 512KB |
| Avarage Seek Time | 7.5ms | 7.5ms |
| Avarage Latency | 4.17ms | 4.17ms |
| Rotation Speed | 7200rpm | 7200rpm |
| Form Factor | 3.5"x1"SL | 3.5"x1"SL |
| PFA | Yes | Yes |
| Part Number | HS: 05J6413 | HS: 05J6414 |

¹ Requires external SSA Enclosure (PN: 3527001), only if less than 5 on 3517001, cables, SSA Hard Disk Drives and SSA Dummy Disk module(s) (PN: 05J6411).



IBM Controllers

| Model | PC ServerRAID SCSI Adapter | Wide Ultra SCSI PCI-Adapter |
|------------------------------------|--|--|
| SCSI Type | Wide Ultra SCSI or SCSI-2 F/W | Wide Ultra SCSI |
| SCSI Bus Path, speed | 16-bit, 40MB/sec/channel | 16-bit, 40MB/sec/channel |
| I/O Architecture, Speed | 32-bit PCI, 132MB/sec | 32-bit PCI, 132MB/sec |
| RAID Levels | 0, 1, Hybrid 1, 5 | None (use software) |
| Processors | RISC-based | Intelligent SCSI |
| Channels | Three | One |
| Connectors | Four (three internal 16-bit, one external 16-bit—three active) | Three (two internal, one 68 pin, one 50 pin; one external 68 pin—two active) |
| Devices Supported (maximum) | 45 devices (15 per channel) | 15 devices |
| Cache Size | 4MB | N/A |
| Cache Write Policy | Write through or write back | N/A |
| Part Number | 70G8489 | 76H5407 |

| Model | SCSI-2 Fast/Wide PCI Integrated | PC Server 325 and 330 Integrated PCI UltraSCSI |
|------------------------------------|--|--|
| SCSI Type | SCSI-2 Fast/Wide | Wide Ultra SCSI |
| SCSI Bus Path speed | 16-bit, 20MB/sec/channel | 16-bit, 40MB/sec/channel |
| I/O Architecture, speed | 32-bit PCI; 132MB/sec | 32-bit PCI; 132MB/sec |
| RAID Levels | None (use software) | None (use software) |
| Processors | Intelligent SCSI | Intelligent SCSI |
| Channels | One | One |
| Connectors | Three (one internal 8-bit, one internal 16-bit; one external 16-bit—only one internal active) PC Server 704: One (internal, 16-bit) | Two (one internal 68 pin, one external 68 pin—both active) |
| Devices Supported (maximum) | 15 devices | 15 devices |
| Part Number | N/A | N/A |

¹ Available only as standard equipment on the PC Server 310 not as an option

SSA RAID Adapter for PC Server

SSA RAID Adapter for PC Servers*

| | |
|--------------------------------|---|
| Type | SSA |
| SSA Bus path, speed | 16-bit, 80MB/sec/drive interface |
| BUS Architecture, speed | 32-bit PCI, 132MB/sec |
| RAID Levels | 0, 1, 5 |
| S & A Loops | 2 |
| Device Support | Up to 48 SSA Hard Disk per loop (96 Tota) |
| Part Number | 32H3811 |

* Require external cable for SSA RAID adapter: 1m (59H7220), 2.5m (59H7221), 5m (59H7222), 10m (59H7223), 25m (59H7224)

SCSI Controller Implementation

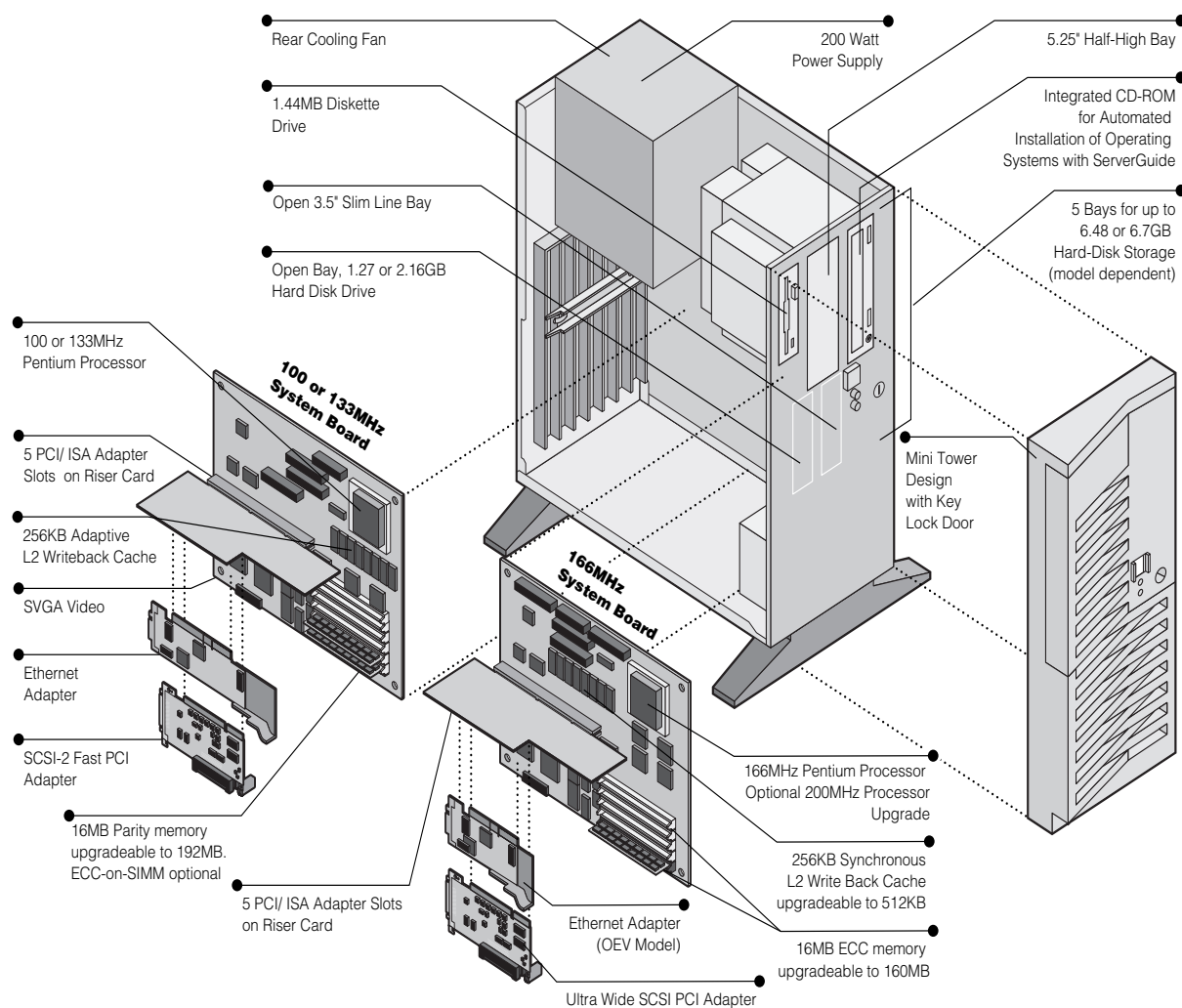
| Part No. | Model | 310 Non 166MHz | 310 166MHz | 320, 520 NonRAID PCI/EISA | 320, 520 NonRAID PCI/IMC | 320, 520 RAID PCI/EISA | 320, 520 RAID PCI/IMC | 325 | 330 NonRAID PCI/EISA | 330 RAID PCI/EISA | 704 NonRAID | 704 RAID | 720 NonRAID | 720 RAID |
|----------|--|----------------|------------|---------------------------|--------------------------|------------------------|-----------------------|------|----------------------|-------------------|-------------|----------|-------------|----------|
| N/A | SCSI-2 Fast PCI Adapter | Std. | | | | | | | | | | | | |
| 70G8489 | PC ServeRAID SCSI Adapter ² | | | | | | Std. | | | Std. | | Std. | | |
| 94G2764 | Fast/Wide PCI RAID Adapter | | | | Std. | Std. | | | | | | | | |
| 94G4673 | SCSI-2 Fast/Wide PCI Adapter II | | | Std. | | | | | | | | | Std. | |
| N/A | SCSI-2 Fast/Wide PCI (Integrated-wide ultra) | | | | Std. | Std. | | | | | 2xStd. | 2x Std. | | |
| 76H5407 | Wide Ultra SCSI PCI Adapter | | Std. | | | | | | | | | | | |
| N/A | Ultra SCSI PCI (Integrated-wide ultra) | | | | | | | Std. | Std. | Std. | | | | |

² Supports Microsoft Windows NT, IBM OS/2, Novell NetWare, SCO OpenServer





IBM PC Server 310 Series



IBM PC SERVER 310

Note: Descriptions of image may vary depending on model.



IBM PC Server 310 Essentials

PC Server 310

Machine Type 8639

For an affordable server that practically installs itself, look no further than the IBM PC Server 310. It offers everything you need to support multiple users with the same level of service and support found on

IBM's larger systems. With flexibility built-in, the PC Server 310 can accommodate business growth. The IBM PC Server 310 makes workgroup computing easy and affordable.

Benefits

Service and Support

The PC Server 310 carries the same level of service and support provided with larger systems: technical information via fax, bulletin board, the internet and commercial online services; and more.

Affordable Power

The PC Server 310 provides outstanding price/performance with Intel's 200MHz Pentium Processor. A real server at desktop prices.

Ease of Ownership

Server setup has never been simpler with ServerGuide, a library of CD-ROM disks designed to make system setup and network operating system (NOS) installation faster, easier and more economical.

Industry leading service and support

With IBM NetFinity, TechConnect and three-year on-site limited warranty, IBM PC Servers lead the industry with service and support that are designed to help reduce the total cost of ownership through the life of the systems while keeping your business running.

Lotus Domino Server 4.5, single processor edition

Network computing has never been easier with PC Servers and Lotus Notes at no additional charge.

Standard Features

Processor

200MHz (8639-0E5) or 166MHz (8639-0E0) Pentium processor in a 320-pin ZIF socket

166MHz models can be upgraded with optional 200MHz Pentium Processor upgrade

Weight & Dimensions

Weight: 12.7kg - 14.1kg (max)

With pedestal: H: 462mm, W: 259mm, D: 444.5mm

L2 Cache

200MHz models: 512KB pipeline burst synchronous write-back

166MHz models: 256KB upgradeable to 512KB

Memory

200MHz models come with 1 x 32MB DIMM std.

166MHz models come with 1 x 16MB DIMM.

Maximum expandable memory capacity of 160MB (60ns). Four SIMM sockets (four available), one 168-Pin DIMM (Gold plated connectors) socket.

Memory Controller

ECC

Architecture

PCI/ISA

Graphics and Video Resolution

Integrated S3 Trio64 V+ with 1MB DRAM expandable to 2MB.

1280x1024, 16 colors with 1MB, 1280x1024, 256 colors with 2MB.

Hard Drives

200MHz (8639-0E5) and 166MHz (8639-0E0) models are open bay.

Maximum internal capacity of 18.2GB can be achieved via 2 x

4.51GB and 1 x 9.1GB Wide Ultra SCSI hard drives. 4.33 Ultra SCSI hard drives are also supported.

SCSI Controller

Wide Ultra SCSI PCI adapter with RISC processor, advanced SCSI features and 40MBps data transfer rates. One 8-bit internal connector and one 16-bit internal, and one 16-bit external connector on a single channel. A four drop cable with two or three (depending on model) 8-bit connectors available.

Diskette Drive

3.5", 1.44MB

CD-ROM

86390E0: 4X CD-ROM drive

86390E5: 8 x CD-ROM drive

Keyboard

Basic 101-key

Mouse

IBM Two-button Mouse, 400 dpi

BIOS

IBM 256KB Flash ROM supporting CBIOS and POST

Slots and Bays

5 Bays:

| | | | | |
|-------|-------|----|-----------|-------------------------|
| Bay 1 | 3.5" | SL | access | std. diskette |
| Bay 2 | 5.25" | HH | access | open |
| Bay 3 | 5.25" | HH | access | std. SCSI CD-ROM |
| Bay 4 | 3.5" | SL | no access | std. disk (disk models) |
| Bay 5 | 3.5" | SL | no access | open |

5 Slots:

Slot 1:

Slot 2: halfsize 16-bit ISA

fullsize 16-bit ISA

- occupied by IBM EtherJet

Slot 3: ISA adapter on OEV model

fullsize 16-bit ISA or 32-bit PCI

Slot 4: - occupied by Wide Ultra SCSI adapter

Slot 5: fullsize 16-bit ISA or 32-bit PCI

fullsize 16-bit ISA or 32-bit PCI

Power Supply

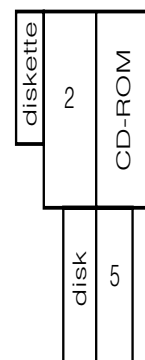
200 Watts, 110/220 Universal Manual Switch

Security

Cover key lock, keyboardless and displayless operation, power-on password, power switch behind door, selectable boot, supervisory password, VPD support

Supported Operating Systems

IBM OS/2 Warp Server Version 4.0, Microsoft Windows NT 3.51/4.0 Workstation, Microsoft Windows NT 3.51/4.0 Server, Novell NetWare 3.12/4.1, SCO OpenServer 5.0, SCO UNIX Ware 2.1, Sunsoft Solaris 2.5



Support

TechConnect

Standard Software

ServerGuide, IBM NetFinity, QAPLUS/PRO, IBM AntiVirus, APC PowerChute Plus, Lotus Domino R 4.5 Server, single processor edition

Ports

166/200MHz models: One ECP/EPP: IEEE 1284 Parallel Port, one 9 pin UART 16550A Serial Port, one SVGA Video Port, one Ultra Wide SCSI external Port, one Keyboard Port, one PS/2 Style Mouse Port, one infrared port, two Universal Serial Bus ports, 10Mbps EtherJet ports.

Warranty

Three year on-site limited warranty

Selected Options

Communications/Networking

ARTIC

86390D0, 86390DT, 86390Z0, 86390ZT

Multiport Adapter Model 233F8791
86390E0

X.25 Interface Co-Processor PCI Adapter 55H4501

X.25 Interface Co-Processor 71G6460

ARTIC Multiport.....61G3862

ARTIC Co-Processor 512KB85X2706

Emulation

86390E0

Enhanced 5250 Display Station Emulation Adapter30F5383

Ethernet

86390E0, 86390E5

IBM EtherJet ISA Adapter 04H6550

100/10 PCI EtherJet Adapter 86H2432

IBM EtherJet 10Base-T ISA Adapter.....73G9379

PC Server Advanced Systems Management Adapter.....94G5570

PCI Ethernet Adapter 13H9237

Token-Ring

86390E0, 86390E5

PCI Token-Ring Adapter (CD-ROM 75H9800

Memory

Video/Graphics

All Models

1MB EDO Video DRAM 60ns..... 76H0238

40-Pin SOJ 1MB Video/Graphics DRAM Memory Upgrades92G7443

Memory

ECC/ECC-ON-SIMM

86390D0, 86390DT, 86390Z0, 86390ZT,

72-Pin ECC-on-SIMM KIT..... 11H0657

L2 Cache

86390E0, 86390EV

512KB Synchronous L2 Cache.....92G7336

SIMM

86390D0, 86390DT, 86390Z0, 86390ZT

2-PK 16MB Memory Upgrade 70ns-PAR IS92G7302

2-PK 32MB Memory Upgrade 70ns-PAR IS92G7304

2-PK 64MB Mem Upg 70ns-Par IS92G7306

86390E0, 86390EV, 86390E5

16MB Parity SIMM Kit92G7310

32MB Parity SIMM Kit92G7312

64MB Parity SIMM Kit92G7317

DIMM

86390E0, 86390EV, 86390E5

16MB Parity DIMM Gold92G7338

32MB Parity DIMM Gold92G7339

Power

Accessories

All Models

American Power Conversion Smart-UPS 70094G4073

American Power Conversion Smart-UPS 100094G4074

Processor Up-Grades

PC Server

86390E0

PC Server 310 Pentium 200MHz Upgrade.....94G6496

Storage

Adapters

All Models

PCI Wide Ultra SCSI Adapter 76H3579

PC Server Wide Ultra SCSI PCI Adapter 76H5407

PC Server SCSI-2 F/W PCI-Bus RAID Adapter94G2764

Cables

All Models

PC Server Four-Drop SCSI Internal Cable 60H7826

CD-ROM Drives

All Models

8X SCSI External CD-ROM.....3509709

8X SCSI Internal CD-ROM..... 76H3215

Diskette Drives

All Models

3.5" 1.44MB Diskette Drive.....70G8499

Enclosures

86390E0

SCSI Storage Enclosure 35100V0

PC Server Enterprise Expansion Enclosure3518001

All Models

SCSI Multi-Storage Enclosure 44H7634

Hard Disk Drives

All Models

Ultrastar 2XP 9.10GB Wide Ultra SCSI HDD.....76H2689*

Ultrastar 2ES 2.16GB Ultra SCSI HDD(50pin)..... 76H5809

Ultrastar 2ES 4.33GB Ultra SCSI HDD 76H5811

Ultrastar 2ES 2.16GB Wide Ultra SCSI (68pin)76H5813*

Ultrastar 2ES 4.33GB Wide Ultra SCSI.....76H5815*

* Require Wide cable PN: 60H7826

Tape Drives

All Models

TR4 Internal SCSI Tape Drive..... 06H9716



IBM PC Server 310 Industry Comparison

| | IBM PC Server 310 | Copmaq ProSignia 200 | HP NetServer E30 |
|--|---|---|-------------------------------------|
| Processor | Pentium 200 MHz | Pentium 166MHz | Pentium 133 & 166MHz |
| SMP Enabled | No | No | No |
| I/O Bus | PCI/ISA | PCI/ISA | PCI/ISA |
| Total I/O Slots | 5 tot/3 or 4 avail/3 PCI shared | 5 tot/3 or 4 avail/2 PCI + 1 shared | 5 tot/3 or 4 avail/2 PCI + 1 shared |
| Standard RAM (std./max.), Speed | 32MB/160MB, 60ns ECC | 16MB/128MB, 70ns | 16MB/192MB, 70ns, ECC |
| L2 Cache (std./max.) | 512KB/512KB | 256KB/512KB | 256KB/256KB |
| Standard Disk | open bay | 2.1GB | Open or 2GB |
| Maximum Internal Storage | 18.1GB | 22.5GB (Int) | 21GB |
| Disk Interface | SCSI-2 PCI Ultra SCSI | EIDE | SCSI-2 Fast |
| Hot-Swap Disk | No | No | No |
| LAN Adapter | Optional | Ethernet | Ethernet |
| Total Bays | 5 | 5 | 5 |
| Power Supply | 200 Watts | 325 Watts | TBD |
| Rack Mountable | No | Yes | Yes |
| CD-ROM | 8X SCSI | 4X SCSI | SCSI |
| Standard Software | ServerGuide, IBM NetFinity, QA Plus/Pro, APC PowerChute Plus, Lotus Domino Server R 4.5 single processor edition, IBM AntiVirus | Insight Manager OS/2, NetWare, NT, UnixWare (limited DeskPro), Smart-Start CD OS/2. | Assistant, AutoPilot |

Competitive Advantages

Big Server Features In A Small Economic Package

With up to 18.1GB of storage capacity and up to 160MB of memory the PC Server 310 is ready to grow.

Ethernet Adapter Standard

Select the Network card most suitable for your needs.

IBM NetFinity

IBM NetFinity provides complete systems and asset management functions through multiple protocol networks.

Lotus Domino R 4.5, single processor edition

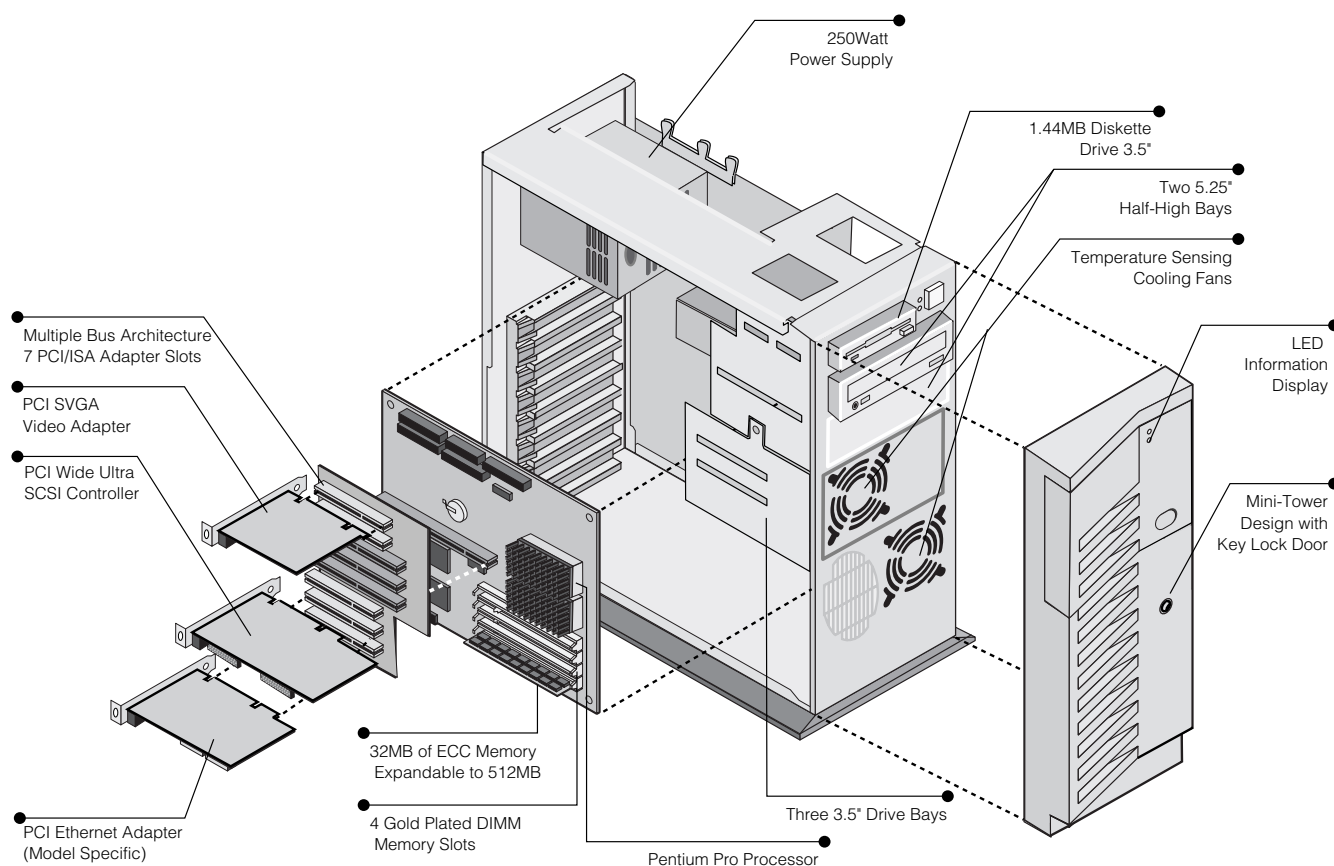
The acclaimed groupware and messaging standard.

Industry Leading Service and Support

With three-year on-site next day business service, the best service and support stands behind every IBM PC Server.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Server 315 Series



IBM PC SERVER 315

Note: Descriptions of image may vary depending on model.



IBM PC Server 315 Essentials

PC Server 315

Machine Type 8638

IBM PC Servers are helping businesses of all sizes manage the chaos of rapid technological change and take the concept of power and value to new levels, with Intel-base platforms...added security

and reliability...more control and more flexibility. Plus second-to-none IBM service and support. With the new IBM PC Server 315, you can take your business and your work as far as you need them to go. And then some.

Benefits

Support

Ensure your networked business systems stay up and running with the same level of service and support you have come to expect from IBM.

Power

Affordable speed and power at an outstanding price/performance for your business, department or branch office.

Manageability

Proactively maintain control of your network assets from anywhere, at any time, with IBM Netfinity.

Scalability

Add more capacity easily to keep up with the growth of your business.

Standard Features

Processor and L2 Cache

200MHz (8638-PS0) Pentium Pro processor with 256KB L2 cache integrated in a 387-pin ZIF socket.

Weight and Dimensions

Weight: 12.2kg

Dimensions (WxDxH): 190 x 445 x 380mm

Memory

32MB ECC EDO DIMM installed in one of four DIMM sockets. System memory can be expanded to a maximum of 512MB via four 128MB 60ns ECC EDO DIMMs. Memory may be installed in any combination of 32MB, 64MB and 128MB ECC EDO DIMM modules.

Memory Controller

ECC

Architecture

PCI/ISA

Graphics and Video Resolution

PCI SVGA adapter with 1MB of video memory supporting 1024 x 768 x 256 colors. Compatible with VGA color, analog monochrome monitors and multiple frequency monitors.

Hard Drives

Available as open bay model.

Maximum hard drive capacity of 22.63GB can be achieved via 3 x 4.51GB and 1 x 9.1GB Wide Ultra SCSI hard drives. Also supported is the 4.33GB Ultra SCSI hard drive.

SCSI Controller

Wide Ultra SCSI PCI controller with one (internal/external) channel with two 68-pin SCSI connectors supporting up to 15 devices. One internal 68-pin, 16-bit connector, one external 68-pin, 16-bit connector, can use both connectors at the same time.

Diskette Drive

3.5", 1.44MB

CD-ROM

Front tray loading 8X, SCSI interface (1200KBps transfer rate and 150ms average access time)

Keyboard

Basic 101-key

Mouse

IBM Two-button Mouse, 400 dpi

BIOS

IBM 256KB Flash ROM supporting CBIOS and POST

Slots and Bays

All Models:

5 Bays:

| | | | | |
|-------|-------|----|-----------|-------------------------|
| Bay 1 | 3.5" | SL | access | std. diskette |
| Bay 2 | 5.25" | HH | access | std. SCSI CD-ROM |
| Bay 3 | 5.25" | HH | access | std. disk (disk models) |
| Bay 4 | 3.5" | HH | no access | open |
| Bay 5 | 3.5" | SL | no access | open |

7 Slots:

| | |
|---------|--|
| Slot 1: | fullsize, 32-bit PCI 2.1 (3.3v/5v) |
| | -occupied by PCI Ethernet 100/10 MBit Adapter (on selected model-8639-PSV) |
| Slot 2: | fullsize, 32-bit PCI 2.1 (3.3v/5v) or 16-bit ISA |
| | -occupied by PCI Wide Ultra SCSI Controller |
| Slot 3: | fullsize, 16-bit ISA |
| Slot 4: | fullsize, 16-bit ISA |
| Slot 5: | halfsize, 32-bit PCI 2.1 (3.3v/5v) |
| Slot 6: | halfsize, 32-bit PCI 2.1 (3.3v/5v) |
| Slot 7: | halfsize, 32-bit PCI 2.1 (3.3v/5v) |
| | -occupied by PCI SVGA Adapter |

Ports

Two NS16550 compatible serial ports and one parallel port supporting ECP/EPP/SPP protocols and adhering to the IEEE 1284 standard are provided

Power Supply

250 Watts, 110/220 Universal Manual Switch

Supported Operating Systems

IBM OS/2 Warp Server Version 4.0, Microsoft Windows NT 3.51/4.0 Workstation, Microsoft Windows NT 3.51/4.0 Server, Novell NetWare 3.12/4.1, SCO OpenServer 5.0, SCO UNIX Ware 2.1, Sunsoft Solaris 2.5

Standard Software

ServerGuide, Netfinity 5.0, QAPLUS/PRO, IBM AntiVirus, APC PowerChute Plus and Lotus Domino R 4.5, single processor edition

Support

TechConnect

Warranty

Three-year on-site limited warranty

Selected Options

Communications/Networking

ARTIC

All Models

| | |
|---|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC960 PCI Adapter | 39H8058 |
| X.25 Interface Co-Processor PCI Adapter | 55H4501 |
| X.25 Interface Co-Processor | 71G6460 |
| ARTIC Multiport..... | 61G3862 |
| ARTIC Co-Processor 512KB | 85X2706 |

Ethernet

All Models

| | |
|--------------------------------|---------|
| IBM EtherJet ISA Adapter | 04H6550 |
|--------------------------------|---------|

Token-Ring

All Models

| | |
|--------------------------------------|---------|
| PCI Token-Ring Adapter (CD-ROM | 75H9800 |
|--------------------------------------|---------|

Memory

DIMM

All Models

| | |
|---------------------------|---------|
| 32MB DIMM ECC 60ns | 76H0279 |
| 64MB DIMM ECC 60ns | 76H0280 |
| 128MB DIMM ECC 60ns | 76H0281 |

Power

Accessories

All Models

| | |
|--|---------|
| American Power Conversion Smart-UPS 700 | 94G4073 |
| American Power Conversion Smart-UPS 1000 | 94G4074 |

Storage

Adapters

All Models

| | |
|--|---------|
| PC ServeRAID Adapter | 70G8489 |
| PC Server Wide Ultra SCSI PCI Adapter | 76H5407 |
| PC Server SCSI-2 F/W Enhanced Repeater | 94G7585 |

CD-ROM Drives

All Models

| | |
|-------------------------------|---------|
| 8X SCSI Internal CD-ROM | 76H3215 |
|-------------------------------|---------|

Enclosures

All Models

| | |
|--|---------|
| PC Server Enterprise Expansion Enclosure | 3518001 |
| SCSI Multi-Storage Enclosure | 44H7634 |

Hard Disk Drives

All Models

| | |
|--|----------|
| Ultrastar 2XP 4.51GB Wide Ultra SCSI HDD | 76H2687* |
| Ultrastar 2XP 9.10GB Wide Ultra SCSI HDD | 76H2689* |
| Ultrastar 2ES 2.16GB Ultra SCSI HDD(50pin)..... | 76H5809 |
| Ultrastar 2ES 4.33GB Ultra SCSI HDD | 76H5811 |
| Ultrastar 2ES 2.16GB Wide Ultra SCSI (68pin) | 76H5813* |
| Ultrastar 2ES 4.33GB Wide Ultra SCSI | 76H5815* |

* Require Wide cable PN: 60H7826

Tape

All Models

| | |
|-----------------------------------|---------|
| TR4 Internal SCSI Tape Drive..... | 06H9716 |
|-----------------------------------|---------|



IBM PC Server 315 Industry Comparison

| | IBM PC Server 315 | Compaq ProSignia 800 | HP NetServer E40 |
|--|---|--------------------------------------|---|
| Processor | PentiumPro 200 MHz | PentiumPro 180, 200 MHz | PentiumPro 180, 200 MHz |
| SMP Support | No | 2-Way | No |
| Processor Upgrade | ZIF Socket | ZIF Socket | ZIF |
| I/O Bus | PCI / ISA | PCI / ISA | PCI/ISA |
| Memory: Min/Max, Type | 32MB / 512MB ECC | 32MB / 512MB ECC | 16MB / 384MB ECC |
| L2 Cache: Min/Max | 256KB / 256KB | 256KB / 256KB | 256KB / 256 KB |
| Disk Controller : Type/ Location. | WideUltra SCSI / PCI Card | WideUltra SCSI / Planar | SCSI-2 Fast / PCI Card |
| Total Internal Storage | 22.63 GB | 22.5 GB SCSI | 16.8 GB |
| Slots: Total/Available | 4/2 PCI, 2/2 ISA, 1/1 Shared | 5/4 PCI, 2/2 ISA, 0/0 Shared | 2/1 PCI, 2/2 ISA, 2/1 Shared |
| Bays: Total/Available | (4)3.5", (2)5.25/(3)3.5", (1)5.25" | (2)3.5", (3)5.25"/ (1)3.5", (2)5.25" | (2)3.5, (4)5.25/ (2)3.5, (2)5.25 |
| Bays: Hot-Swap Available | None | None | None |
| Network Ports / Location | Optional | 10BaseT Ethernet / Planar | 10/100 Ethernet / PCI Card |
| Case / Rack Options | MiniTower / None | MiniTower / None | Mini-Tower / None |
| Installation CD | ServerGuide | SmartStart | Navigator |
| Server Mgmt. Software | NetFinity | InSight Manager | AutoPilot |
| Added Value Software | QA Plus/Pro, APC PowerChute Plus, Lotus Domino 4.5, single processor edition, IBM AntiVirus | None | Not Available |
| Standard Warranty | 3-Year Onsite, Next Business Day Response | 3 Years, Next Business Day Response | 1-Year Onsite, Next Business Day Response |

Competitive Advantages

Big Server Features In A True Mini-Tower Package

With Pentium Pro power, 22.63 GB of storage capacity and up to 512MB of ECC memory the PC Server 315 offers performance and growth.

Reliable Server Features

SCSI hard disk drives with Predictive Failure Analysis (PFA or SMART) standard for true server expandability and performance. Standard ECC memory for enhanced reliability.

IBM NetFinity

IBM NetFinity provides complete systems and asset management functions through multiple protocol networks.

Lotus Domino 4.5, single processor edition

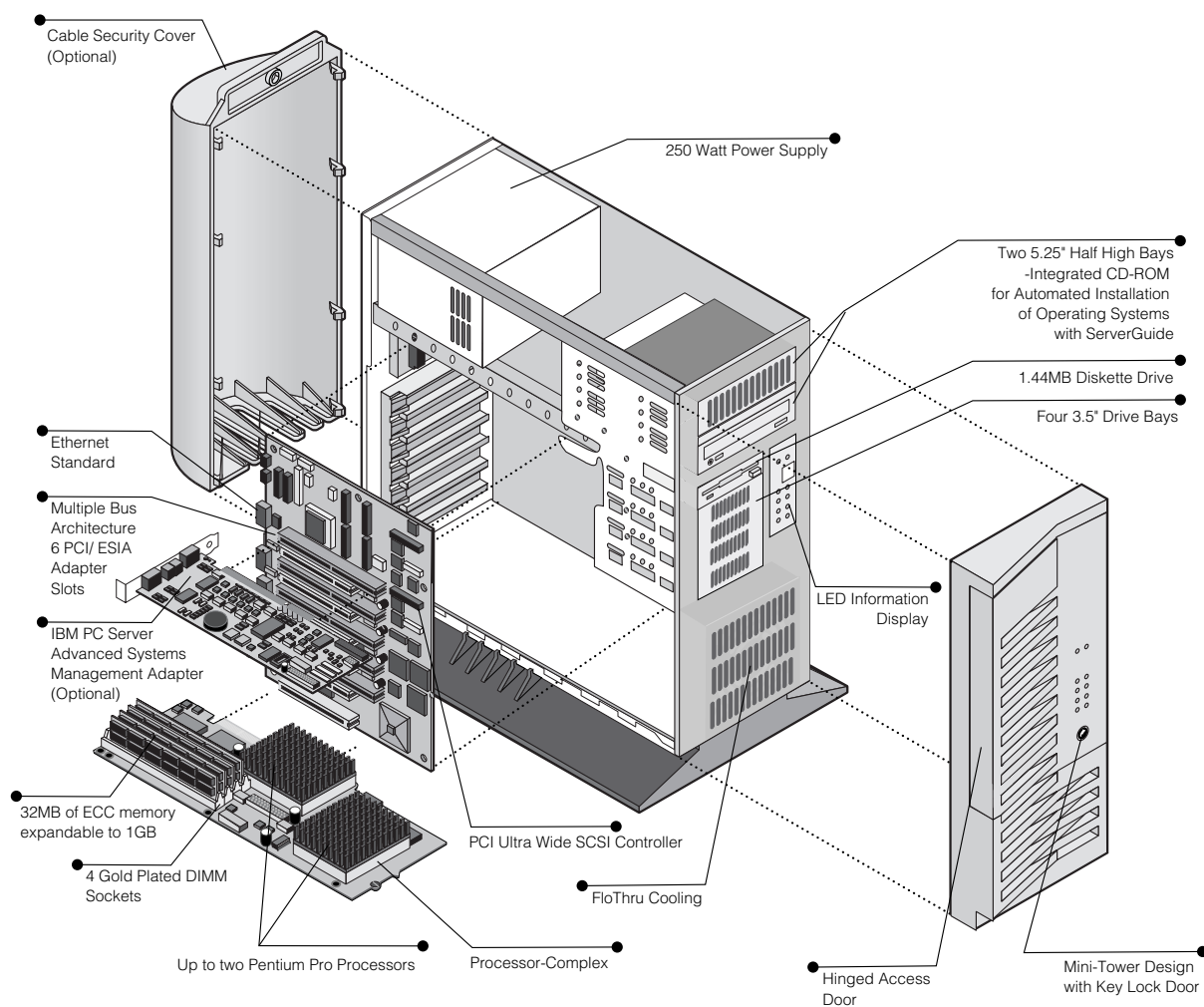
The acclaimed groupware and messaging standard.

Industry Leading Service and Support

With three-year on-site next day business service, the best service and support stands behind every IBM PC Server.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Server 325 Series



IBM PC SERVER 325

Note: Descriptions of image may vary depending on model.



IBM PC Server 325 Essentials

PC Server 325

Machine Type 8639

The IBM PC Server 325 and 325 Rack Drawer gives you the power and configuration flexibility to build the enterprise network that you need now and want for tomorrow. The IBM PC Server 325 Rack Drawer fits into an industry standard 19" EIA compatible cabinet and,

like the PC Server 325, is packed with features and function - and still leaves room to grow. Take a look at the IBM PC Server 325 and 325 Rack Drawer, they have all that you are looking for and more at a very attractive price.

Benefits

Maximum performance capability

Power your network to new heights with up to two way 200MHz Pentium Pro processors, each with 256KB of L2 cache integrated on the processor.

UltraSCSI disk controller

Quick access to network information.

Lotus Domino Server R 4.5, single processor edition

Network computing has never been easier with PC Servers and Lotus Notes at no additional charge.

Industry leading service and support

With ServerGuide, IBM NetFinity, TechConnect and Three-Year On-Site limited warranty, IBM PC Servers lead the industry with service and support that are designed to help reduce the total cost of ownership through the list of the PC Server while keeping your business up and running.

Standard Features

Processor & L2 Cache

200MHz (8639-xSx) Pentium Pro processor with 256KB of L2 cache integrated in a 387-pin ZIF socket on a two-way SMP capable processor card. The 200MHz with 256KB of L2 cache models may be upgraded to a 200MHz with 512KB of L2 cache.

When upgrading systems to two way SMP processors must be identical. Mixing microprocessors of different speeds or caches is not supported.

Weight & Dimensions

Tower Models (8639-Exx)

Weight: 19.5kg max.

With pedestal (WxDxH): 315 x 473 x 455mm

Memory

32MB ECC EDO DIMM installed in one of four DIMM sockets (three DIMM sockets available). System memory maximum is 1GB via four 256MB ECC EDO DIMM modules. Memory may be installed in any combination of 32MB, 64MB, 128MB or 256MB ECC EDO DIMM modules.

Memory Controller

ECC

Architecture

PCI/EISA

Usability

LED information panel containing status lights for the following: power-on, unattended power-on, POST activity, hard drive activity, processor 1 activity, processor 2 activity, Ethernet transmit activity, Ethernet receive activity, ethernet link status, security. FloThru cooling.

Graphics and Video Resolution

Integrated Cirrus Logic 5436 with 1MB of DRAM supporting up to 1024 x 768 with 256 colors.

Hard Drives

Open bay (8639-xx0), 2.25GB (8639-xxV). SCSI-2 F/W expandable to 22.5GB via 4 x 4.51GB slim line hard disk drives and 1 x 4.51GB half-high hard disk drive.

CD-ROM

Front tray loading 8X, multisession, SCSI-2 interface bootable, 150ms average access time, 1200KBps average data transfer rate, 5.0MBps data burst (sync. or async. mode), 256KB buffer.

SCSI Controller

Wide Ultra SCSI PCI controller with one (internal/external) channel with two 68-pin SCSI connectors supporting up to 15 devices. One internal 68-pin, 16-bit connector, one external 68-pin, 16-bit connector, can use both connectors at the same time. A seven drop cable with 16-bit wide SCSI cable available.

Diskette Drive

3.5", 1.44MB

Keyboard

Basic 101-key (not included with the Rack Model 8639-Rxx)

Mouse

IBM Two-Button Mouse, 400dpi (not included with the Rack Model 8639-Rxx)

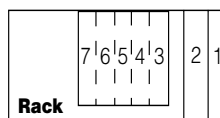
BIOS

256KB in Flash EEPROM (SurePath)

Slots and Bays



Slot 1: fullsize, 32-bit PCI 2.1 (5.0v), primary PCI bus
Slot 2: fullsize, 32-bit PCI 2.1 (5.0v) or 32-bit EISA/16-bit ISA, primary PCI bus
Slot 3: fullsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus
Slot 4: halfsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus
Slot 5: halfsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus
Slot 6: halfsize, 32-bit EISA/16-bit ISA



Bay 1: 5.25" HH 1.6", access, open
Bay 2: 5.25" HH 1.6", access, CD-ROM
Bay 3: 3.5", SL 1", access, diskette
Bay 4: 3.5", SL 1", access, open
Bay 5: 3.5", SL 1", access, open
Bay 6: 3.5", SL 1", access, open
Bay 7: 3.5", SL 1", access, disk (ESV)

Ports

Two 9-pin serial (UART 16550A, 115.2Kbps maximum supported speed, non-DMA), parallel (supporting SSP, ECP, EPP, adhering to IEEE 1284 standard, 2Mbps maximum speed), Infrared (requires optional 4Mbit Infrared Dongle, Part Number 75H7987), Ethernet 10BaseT (RJ45), keyboard, mouse, SVGA.

Rack Configuration

Rack Model (8639-RS0)

Requires EIA-310-D standard 19 inch cabinet with 28 inch depth
All Other Models

Requires Optional Mounting Plate (Part Number 94G4996) to be
installed in 24 inch IBM PC Server Rack Enclosure

Power Supply

250 Watts, 110/220 Universal, Manual Switch

Security

Power-on and privileged access password, keyboard password,
mechanical lock, selectable boot, tie-down via U-Bolt, keyboardless
and displayless operation, optional security cover, optional tamper
evident cable kit.

Supported Operating Systems

Microsoft Windows NT 3.51 Workstation, Windows NT 3.51 Server
and Windows NT 4.0 Server, Solaris 2.5, OS/2 V2.11 for SMP, OS/2
Warp 3.0, OS/2 Warp Connect 3.0, OS/2 Warp 3.0 with WINOS/2, OS/
2 Warp V4, OS/2 Warp Server V4, OS/2 Warp Server Advanced V4,
OS/2 Warp Server for SMP V4, OS/2 LAN Server 4.0 Entry, OS/2 LAN
Server 4.0 Advanced, PC Disk Operating System (PC DOS) 6.3 and
7, Novell NetWare 3.12, 4.1, 4.1 SMP and 4.11 SMP, Open Server 5.0,
UnixWare 2.1

Standard Software

ServerGuide, IBMIBM NetFinity, APC PowerChute Plus, Lotus
Domino, single processor edition, IBM AntiVirus

Support

TechConnect

Warranty

Three-year on-site limited warranty

Selected Options

Accessory

Other

8639ES0, 8639ESV

PC Server 325 Security Cable Kit 94G6398

PC Server 325 Security Cover 94G6471

Communications/Networking

ARTIC

All Models

Multiport Adapter Model 2 33F8791

ARTIC960 PCI Adapter 39H8058

ARTIC Co-Processor 512KB 85X2706

ARTIC Multiport 61G3862

X.25 Interface Co-Processor PCI Adapter 55H4501

X.25 Interface Co-Processor 71G6460

Ethernet

All Models

100/10 PCI EtherJet Adapter 86H2432

IBM EtherJet 10Base-T ISA Adapter 73G9379

Other

All Models

PC Server Advanced Systems Management Adapter 94G5570

Token-Ring

All Models

Triple LANStreamer PCI Adapter 25H6304

PCI Token-Ring Adapter (CD-ROM) 75H9800

Memory

DIMM

8639ES0, 8639ESV

32MB EDO 60ns 3.3V 94G6473

64MB EDO 60ns 3.3V 94G6474

128MB EDO 60ns 3.3V 94G6475

256MB EDO 60ns 3.3V 94G7079

Power

Accessories

8639ES0, 8639ESV

American Power Conversion Smart-UPS 700 94G4073

American Power Conversion Smart-UPS 1000 94G4074

American Power Conversion Smart-UPS 1400 94G4075

American Power Conversion Smart-UPS 2200 94G4076

Processor Up-Grades

PC Server

8639ES0, 8639ESV

PC Server SMP 200MHz/256KB Proc Upg 94G6175

All Models

PC Server SMP P6-200MHz/512KB Upgrade 94G6463

Storage

Adapters

All Models

IBM SSA RAID Adapter for PC Servers 32H3811

PC ServeRAID Adapter 70G8489

8639ES0, 8639ESV

PC Server UltraSCSI F/W PCI Adapter 76H5407

CD-ROM Drives

8639ES0, 8639ESV

8X SCSI Internal CD-ROM 76H3215

Diskette Drives

All Models

3.5" 1.44MB Diskette Drive 70G8499

Enclosures

All Models

PC Server Enterprise Expansion Enclosure 3518001

SSA Entry Storage Subsystem for PC Servers 44H7645

8639ES0, 8639ESV

SCSI Multi-Storage Enclosure 3517001

3519 Rack Storage 3519R01

SCSI Storage Extender 94G7594

Wide SCSI Terminator 94G7587

Hard Disk Drives

All Models

8639ES0, 8639ESV

Ultrastar 2ES 2.16GB Ultra SCSI(Wide) 76H5813

UltraStar 2ES 4.33GB Wide Ultra SCSI HDD 76H5815

Ultrastar 2XP 4.51GB Wide Ultra SCSI HDD 76H2687

Ultrastar 2XP 9.10GB Wide Ultra SCSI HDD 76H2689

Tape Drives

All Models

4/8GB TR4 Internal SCSI Tape Drive 06H9716

20/40 8mm Tape Drive 76H0485



IBM PC Server 325 Industry Comparison

| | IBM PC Server 325 & 325 Rack Drawer | Compaq ProLiant 800 | HP NetServer LD Pro |
|--|---|---|---|
| Processor | Pentium Pro 200 MHz | Pentium Pro 180 & 200MHz | Pentium Pro 180MHz & 200MHz |
| 2x SMP Enabled | Yes-Dedicated Cache | Yes-Dedicated | Yes-Dedicated Cache |
| I/O Bus | PCI/EISA | PCI/ISA | PCI/EISA |
| Total I/O Slots | 6 tot/5 or 6 avail/ 1 PCI + 4 shared | 7 tot/7 avail/ 5 PCI | 6 tot/6 avail/ 4 PCI |
| Standard RAM (std./max.), Speed | 32MB/1GB, 60ns | 32MB/512MB, 60ns | 32MB/512MB, 60ns |
| EDO ECC Memory | Standard | Standard | Standard |
| L2 Cache (std./max.) | 256KB/512KB | 256KB/256KB | 256KB/256KB |
| Standard Disk | Open bay or 2.25GB | Open Bay | 2.1GB |
| Maximum Internal Storage | 27.14GB | 27.3GB | 25.2GB |
| Disk Interface | Wide UltraSCSI | PCI UltraWide | PCI UltraWide |
| Hot-Swap Disk | Not Available | Standard | Standard |
| LAN Adapter | Integrated PCI Ethernet | Netelligent | Optional |
| Total Bays | 7 | 5 | 7 |
| Power Supply | 250W | 325W | 350W |
| Rack Mountable | Yes | Yes | Yes |
| CD-ROM | 8X SCSI | 4X SCSI | 4X SCSI |
| Standard Software | ServerGuide, IBM NetFinity, QA Plus/Pro, APC PowerChute Plus, Lotus Domino Server R 4.5 single processor edition, IBM AntiVirus | SmartStart, Insight Manager, NetWare, NT, SCO, UnixWare | NetServer Navigator, Assistant, NetWare NT, SCO |

Competitive Advantages

SMP Capable

Power for the asking with an upgrade to SMP

PCI UltraSCSI Disk Controller

Fast access to information on the network

Massive Memory Expansion

UP to 1GB of EDO ECC Memory

Five Industry Standard PCI Adapter Slots

132MB/s performance and maximum expandability.

ServerGuide

The fastest way to configure and install your IBM PC Server

IBM NetFinity

IBM NetFinity provides complete systems and asset management functions through multiple protocol networks

Lotus Domino R 4.5, single processor edition

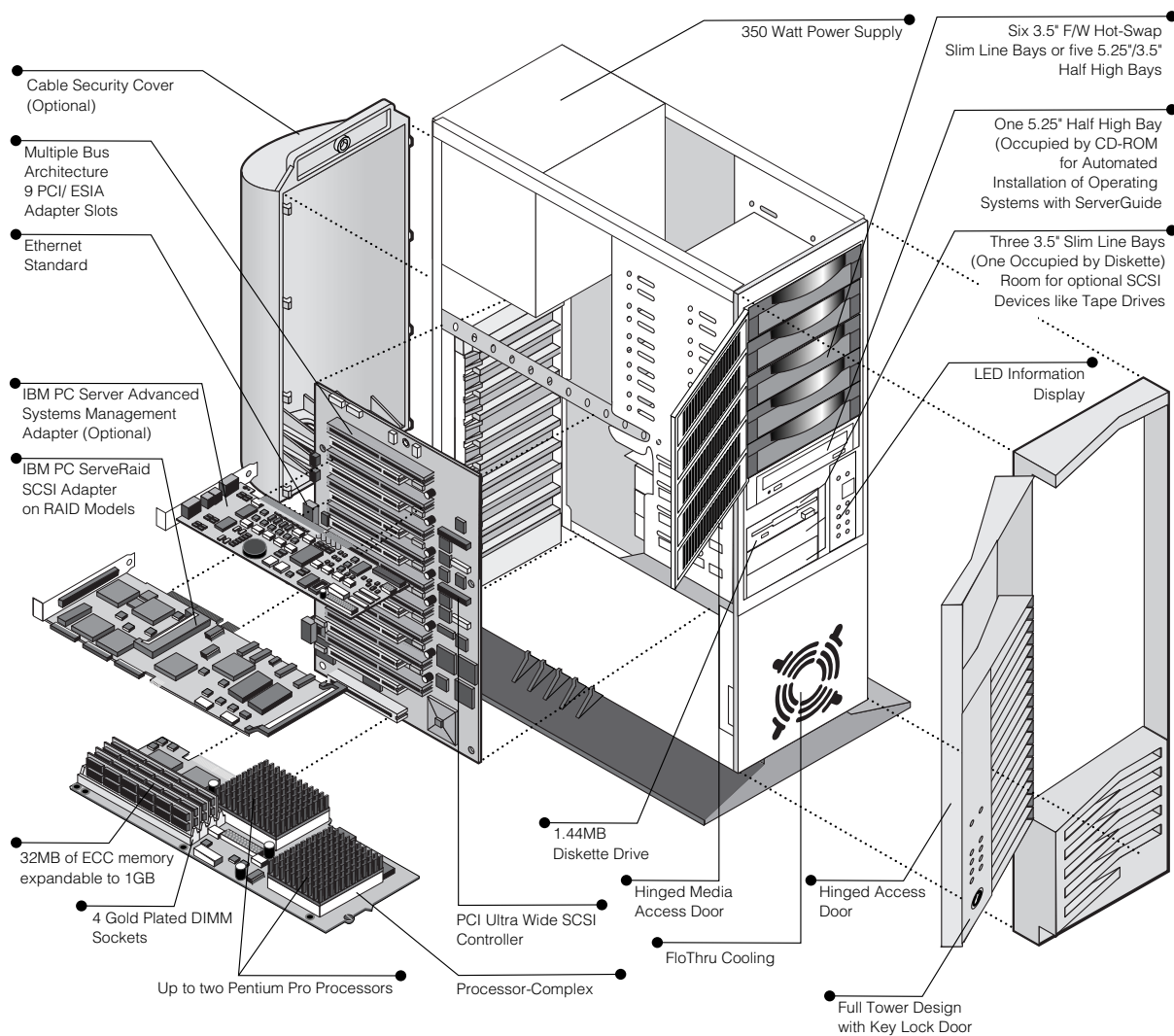
The acclaimed groupware and messaging standard

Industry Leading Service and Support

With three-year on-site limited warranty, the best service and support stands behind every IBM PC server.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Server 330 Series



IBM PC SERVER 330

Note: Descriptions of image may vary depending on model.



IBM PC Server 330 Essentials

PC Server 330

8640

High-powered server performance and expansion capability - they're absolute requirements for enterprise network environments. But now you need something more - the security that comes from knowing your server can run virtually around the clock. For that kind of

assurance, you need a server that offers hot-swap capability, RAID disk configuration, and a high-availability solution. You need the IBM PC Server 330. It gives you the power and configuration flexibility to build the network you need now and want tomorrow.

Benefits

Maximum performance capability

Power your network to new heights with up to two way 200MHz Pentium Pro processors, each with 256KB of L2 cache integrated on the processor.

Lotus Domino Server R 4.5, single processor edition

Network computing has never been easier with PC Servers and Lotus Notes at no additional charge.

Industry leading service and support

With ServerGuide, IBM NetFinity, TechConnect and Three-Year On-Site limited warranty, IBM PC Servers lead the industry with service and support that are designed to help reduce the total cost of ownership through the list of the PC Server while keeping your business up and running.

Standard Features

Processor & L2 Cache

200MHz Pentium Pro processor with 256KB of L2 cache (8640-xSx) or 200MHz Pentium Pro processor with 512KB of L2 cache (8640-xMx) integrated in a 387-pin ZIF socket on a two-way SMP capable processor card. The 200MHz with 256KB of L2 cache models may be upgraded to a 200MHz with 512KB of L2 cache

When upgrading systems to two way SMP processors must be identical. Mixing microprocessors of different speeds or caches is not supported.

Weight & Dimensions

Weight: 19.5kg max.

With pedestal (WxDxH): 315 x 473 x 651mm

Memory

32MB ECC EDO DIMM installed in one of four DIMM sockets. System memory maximum is 1GB via four 256MB ECC EDO DIMM modules. Memory may be installed in any combination of 32MB, 64MB, 128MB or 256MB ECC EDO DIMM modules.

Memory Controller

ECC

Architecture

PCI/EISA

Usability

LED information panel containing status lights for the following: power-on, unattended power-on, POST activity, hard drive activity, processor 1 activity, processor 2 activity, Ethernet transmit, Ethernet receive activity, Ethernet link status, security.

Graphics and Video Resolution

Integrated Cirrus Logic 5436 with 1MB of DRAM supporting up to 1024 x 768 with 256 colors

Upgradeable to 2MB of video memory (part number 76H0238).

Hard Drives

Open bay non-RAID (8640-ES0), open bay non-RAID hot-swap (8640-ES2 & 8640-EM2), 2x2.0GB RAID hot-swap (8640-ESS); 8.0ms access time, 1 inch high, hot-swap tray, and S.M.A.R.T (Self Monitoring, Analysis and Reporting Technology) when used with IBM NetFinity.

Non-hot-swap models are expandable to 45.5GB of internal storage via 5 x 9.1GB non hot-swap HH hard. Hot-swap models are expandable to 27.06GB of internal storage via 6 x 4.51GB hot-swap slim line hard disk drives.

CD-ROM

Front tray loading 8x, multisession, SCSI-2 interface, bootable, 150ms average access time, 1200KBps average data transfer rate, 5.0MBps data burst (sync. or async. mode), 256KB buffer

SCSI Controller

All Models

Wide Ultra SCSI PCI controller with two 68-pin SCSI connectors supporting up to 15 devices. One 16-bit cable with seven 68-pin drops. CD-ROM uses 68-pin to 50-pin converter.

RAID Model

IBM PC ServeRAID SCSI Adapter supporting RAID levels 0, 1, hybrid 1, 5 supporting up to 45 devices (8 independent arrays and 8 logical arrays), 32-bit PCI adapter in slot number three.

Three (two internal and one internal/external channels) all using 68-pin, 16-bit connectors.

Diskette Drive

3.5", 1.44MB

Keyboard

Basic 101-key

Mouse

IBM Two-Button Mouse, 400dpi

BIOS

256KB in Flash EEPROM (SurePath)

Slots and Bays

Hot-Swap Non-Hot-Swap Models* Models

| | | |
|---------|----------|--------------------------------------|
| 3.5" SL | | 5.25" HH (access) |
| 3.5" SL | | 5.25" HH (access) |
| 3.5" SL | | 5.25" HH (access) } or Full Height |
| 3.5" SL | | 5.25" HH (access) } or Full Height |
| 3.5" SL | | 5.25" HH (access) } or Full Height |
| 3.5" SL | | 5.25" HH (access) } or Full Height |
| | CD-ROM | 3.5" SL (access) diskette only |
| | diskette | 3.5" SL (access) } or Half Height |
| | | 3.5" SL (no access) } or Half Height |

Slot 1: fullsize, 32-bit PCI 2.1 (5.0v), primary PCI bus-used by PC ServeRAID Adapter on RAID models

Slot 2: fullsize, 32-bit PCI 2.1 (5.0v) or 32-bit EISA/16-bit ISA, primary PCI bus

Slot 3: halfsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus

Slot 4: halfsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus

Slot 5: halfsize, 32-bit PCI 2.0 (5.0v) or 32-bit EISA/16-bit ISA, secondary PCI bus

Slot 6: fullsize, 32-bit EISA/16-bit ISA

Slot 7: halfsize, 32-bit EISA/16-bit ISA

Slot 8: halfsize, 32-bit EISA/16-bit ISA

Slot 9: halfsize, 32-bit EISA/16-bit ISA

Hot-swap carrier on hot-swap models

Note *: RAID model has std. disks in hot-swap bays in the Hot-Swap Backplane III; 76H2670

Note: Non-Hot-Swap models cannot be upgraded to a Hot-Swap Backplane

Ports

Two 9-pin serial (UART 16550A, 115.2Kbps maximum supported speed, non-DMA), one parallel (supporting SCP,ECP,EPP, adhering to IEEE 1284 standard, 2Mbps maximum speed), Infrared (requires optional 4MB Infrared Dongle, Part Number 75H7987), Ethernet 10baseT (RJ45), keyboard, mouse, SVGA.

Power Supply

350 Watts, 110/220 Universal, Manual Switch

Network Adapter

Integrated 10Mbps PCI Ethernet Controller

Security

Power-on and privileged access password, keyboard password, mechanical lock, selectable boot, tie-down via U-Bolt, keyboardless and displayless operation, optional security cover, optional tamper evident cable kit.

Supported Operating Systems

Microsoft Windows NT 3.51 Workstation, Windows NT 3.51 Server and Windows NT 4.0 Server, Solaris 2.5, OS/2 V2.11 for SMP, OS/2 Warp 3.0, OS/2 Warp Connect 3.0, OS/2 Warp 3.0 with WinOS/2, OS/2 Warp V4, OS/2 Warp Server V4, OS/2 Warp Server Advanced V4, OS/2 Warp Server for SMP V4, OS/2 LAN Server 4.0 Entry, OS/2 LAN Server 4.0 Advanced, PC Disk Operating System (PC DOS) 6.3 and 7, Novell NetWare 3.12, 4.1, 4.1 SMP and 4.11SMP, OpenServer 5.0, UnixWare 2.1.

Standard Software

ServerGuide, IBM NetFinity, APC PowerChute Plus, Lotus Domino, single processor edition, IBM AntiVirus

Support

TechConnect

Warranty

Three-year on-site limited warranty

Selected Options

Accessory

Other

All Models

| | |
|--|---------|
| PC Server 300 Security Cover II | 94G4606 |
| PC Server 330 Security Cable Kit | 94G6399 |

Communications/Networking

ARTIC

All Models

| | |
|---|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC960 PCI Adapter | 39H8058 |
| ARTIC Multiport..... | 61G3862 |
| ARTIC Co-Processor 512KB | 85X2706 |
| X.25 Interface Co-Processor PCI Adapter | 55H4501 |
| X.25 Interface Co-Processor | 71G6460 |

Ethernet

All Models

| | |
|--|---------|
| 100/10 PCI EtherJet Adapter | 86H2432 |
| IBM EtherJet 10Base-T ISA Adapter..... | 73G9379 |

Other

All Models

| | |
|--|---------|
| PC Server Advanced Systems Management Adapter..... | 94G5570 |
| IBM TurboWays 25 ATM PCI Adpater | 85H9035 |

Token-Ring

All Models

| | |
|---------------------------------------|---------|
| Triple LANStreamer PCI Adapter | 25H6304 |
| PCI Token-Ring Adapter (CD-ROM) | 75H9800 |

Memory

DIMM

All Models

| | |
|---------------------------|---------|
| 32MB EDO 60ns 3.3V | 94G6473 |
| 64MB EDO 60ns 3.3V | 94G6474 |
| 128MB EDO 60ns 3.3V | 94G6475 |
| 256MB EDO 60ns 3.3V | 94G7079 |

Video/Graphics

All Models

| | |
|-------------------------------|---------|
| 1MB EDO Video DRAM 60ns | 76H0238 |
|-------------------------------|---------|

Power

Accessories

All Models

| | |
|--|---------|
| American Power Conversion Smart-UPS 700 | 94G4073 |
| American Power Conversion Smart-UPS 1000 | 94G4074 |
| American Power Conversion Smart-UPS 1400 | 94G4075 |
| American Power Conversion Smart-UPS 2200 | 94G4076 |

Processor Up-Grades

PC Server

All Models

| | |
|---|---------|
| PC Server SMP 200MHz/256KB Proc Upg | 94G6175 |
| PC Server SMP P6-200MHz/512KB Upgrade | 94G6463 |

Storage

Adapters

All Models

| | |
|---|---------|
| IBM SSA RAID Adapter for PC Servers..... | 32H3811 |
| PC ServeRAID Adapter | 70G8489 |
| PC Server UltraSCSI F/W PCI Adapter | 76H5407 |

Diskette Drives

All Models

| | |
|---------------------------------|---------|
| 3.5" 1.44MB Diskette Drive..... | 70G8499 |
|---------------------------------|---------|

Enclosures

All Models

| | |
|--|---------|
| PC Server Enterprise Expansion Enclosure | 3518001 |
| SCSI Multi-Storage Enclosure | 44H7634 |
| SSA Entry Storage Subsystem for PC Servers | 44H7645 |

Hard Disk Drives

All Models except 8640ES0

| | |
|--|---------|
| 2.25GB SCSI-2 F/W Hot-Swap Disk Drive III..... | 70G9862 |
| 4.5GB F/W SCSI-2 SL Hot-Swap Drive III..... | 94G6494 |
| 4.51GB Wide Ultra SCSI HS HDD | 94G7491 |
| 9.1GB Wide Ultra SCSI HS HDD | 94G7492 |
| 8640ES0 | |
| Ultrastar 2ES 2.16GB Ultra SCSI(Wide) | 76H5813 |
| UltraStar 2ES 4.33GB Wide Ultra SCSI HDD | 76H5815 |
| Ultrastar 2XP 4.51GB Wide Ultra SCSI HDD..... | 76H2687 |
| Ultrastar 2XP 9.10GB Wide Ultra SCSI HDD..... | 76H2689 |

Other

All Models

| | |
|--|---------|
| SCSI-2 F/W Hot-Swap Drive Tray III | 70G9860 |
|--|---------|

Tape Drives

All Models

| | |
|--|---------|
| 4/8GB TR4 Internal SCSI Tape Drive | 06H9716 |
| 20/4m 8mm Tape Drive | 76H0485 |



IBM PC Server 330 Industry Comparison

| | IBM PC Server 330 | Compaq ProLiant 2500 | HP NetServer LH Pro |
|--|--|--|--|
| Processor | Pentium Pro 200 | Pentium Pro 200MHz | Pentium Pro 200MHz |
| 2x SMP Enabled | Yes | Yes | Yes |
| I/O Bus | PCI/EISA | PCI/EISA | PCI/EISA |
| Total I/O Slots | 9, 1 PCI, 4 EISA, 4 shared (PCI or EISA) | 8: 2 PCI, 5 EISA, 1 Shared (PCI or EISA) | 9: 4 PCI, 4 EISA, 1 Shared (PCI or EISA) |
| Standard RAM (std./max.), Speed | 32MB/1GB, 60ns | 32MB/1GB, 60ns | 64MB/1GB, 60ns |
| EDO ECC Memory | Optional/Standard | Standard | Standard |
| L2 Cache (std./max.) | 256KB/512KB or 512KB/512KB | 512KB | 256KB |
| Standard Disk | Open bay or 2x2.25GB | Open Bay | Open Bay |
| Maximum Internal Storage | 27GB (Bare) or 18.5GB hot swap | 21.5GB | 25.2GB |
| Disk Interface | PCI UltraSCSI or PCI ServeRAID | PCI UltraSCSI | PCI SCSI-2 Fast & Wide |
| Hot-Swap Disk | Standard or Bare | Standard | Standard |
| LAN Adapter | Integrated PCI Ethernet | NetFlex-2 | Optional |
| Total Bays | 9 or 10 | 8 or 9 | |
| Hot Swap Bays | 6 or none | | |
| Power Supply | 350W | 325W | 350W |
| Rack Mountable | Yes | Yes | Yes |
| CD-ROM | 8X SCSI | 4X SCSI | 4X SCSI |
| Standard Software | ServerGuide, IBM NetFinity, QA Plus/Pro, APC PowerChute Plus, Lotus Domino Server R 4.5 single processor edition, IBM Anti-Virus | SmartStart, Insight Manager | NetServer Navigator, Assistant |

Competitive Advantages

SMP Capable

Power for the asking with an upgrade to SMP.

LED Information Display

Keep track of the PC Server with a quick glance.

ServerGuide

The fastest way to configure and install your IBM PC Server.

IBM NetFinity

IBM NetFinity provides complete systems and asset management functions through multiple protocol networks.

Lotus Domino R 4.5, single processor edition

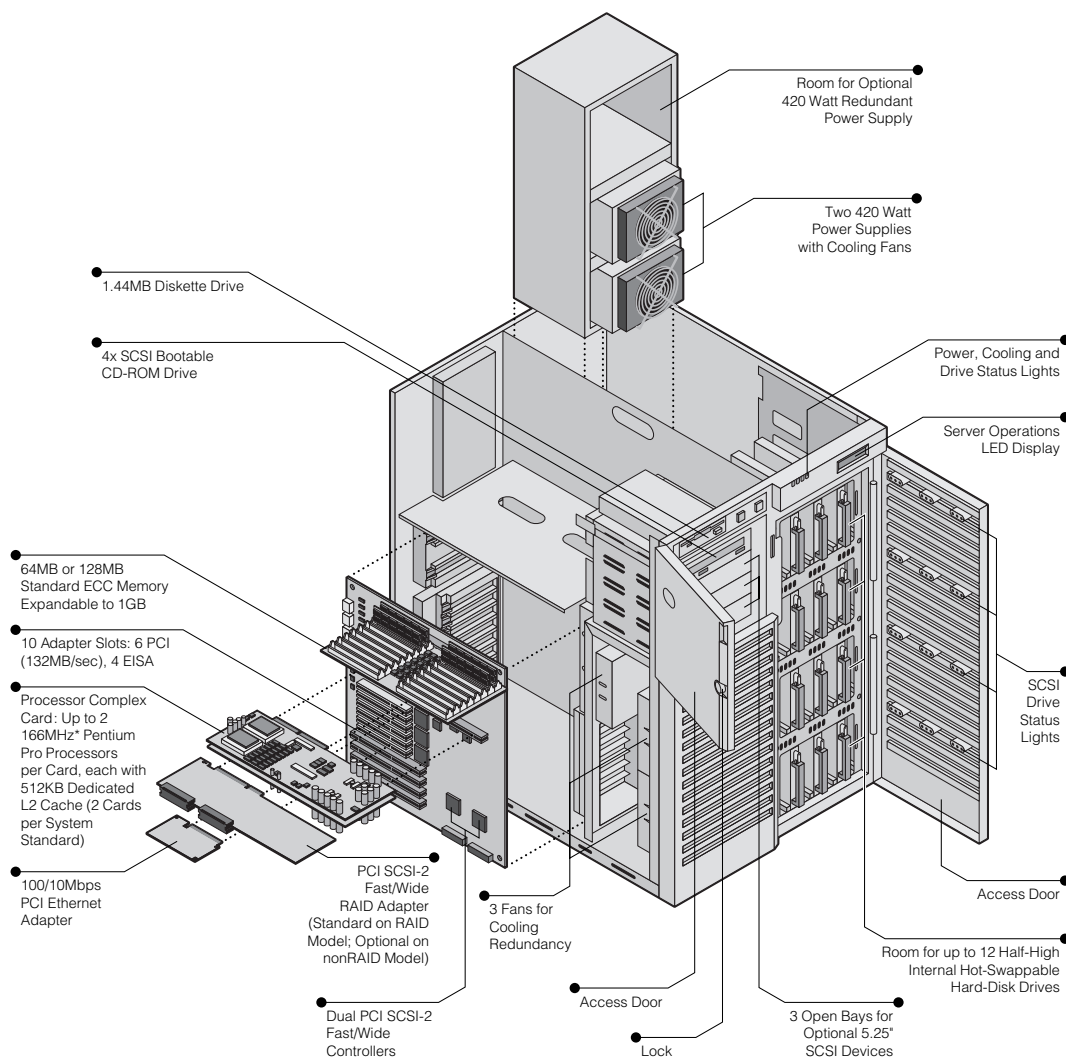
The acclaimed groupware and messaging standard.

Industry Leading Service and Support

With three-year on-site limited warranty, the best service and support stands behind every IBM PC server.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Server 704 Series



IBM PC SERVER 704

Note: Descriptions of image may vary depending on model.



IBM PC Server 704 Essentials

PC Server 704

8650

The first IBM Pentium Pro superserver, with the power of up to four 200MHZ Pentium Pro processors, each with 512KB of L2 Cache will speed you through your compute intensive network applications. The PC Server 704 is ready to handle your most demanding

database and transaction based applications with ease. Like all of our PC Servers, the PC Server 704 comes standard with IBM NetFinity which makes managing your servers and clients easy even from remote locations through NETBios, IPX, TCPIP, serial connections, and over the Internet using standard Web Browsers.

Benefits

Massive Internal Expansion

Over 108GB of Wide Ultra SCSI hard disk storage capacity and RAID 5 capability.

Processors

The first IBM Pentium Pro superserver with up to four way Pentium Pro processing power for your network.

Microsoft "Wolfpack" Certified

Tested and certified for Microsoft "Wolfpack" clustering initiative

SAP Certified

Tested and certified for SAP R/3 under Microsoft Windows NT Server.

Industry leading service and support

With IBM NetFinity, TechConnect and three-year on-site limited warranty, IBM PC Servers lead the industry with service and support that are designed to help reduce the total cost of ownership through the life of the systems while keeping your business running.

Lotus Domino 4.5, Single Processor Edition At No Additional Charge

The world's leading software solution that combines messaging, groupware and the Internet. Domino transforms your Web sites into an integral part of your operations, to let you easily run your business on the net, even extending the power of Notes to anyone in your organization without a Web browser.

IBM NetFinity

This industry leading, award winning server and client systems and asset management program comes standard with every IBM PC Server.

Standard Features

Processor

200MHZ (8650-4M0, 8650-6MM)

Standard with two dual processor complexes (unpopulated). One of the four ZIF sockets on the two processor complexes is populated, leaving room for up to three 200MHZ Pentium Pro processors to be added via 387-pin ZIF sockets.

Weight and Dimensions

Weight: 90lbs, Height: 27.4 inches, Width: 18 inches, Depth: 24.75 inches

L2 Cache

512KB of write back 4-way associative integrated on each Pentium Pro processor

Memory

8650-4M0; 128MB (4x32MB), 12 sockets available, ECC Memory expandable to 2GB.

All memory SIMMs installed into one standard memory card with 16 sockets (2 banks of 8 sockets). Memory must be installed in sets of 4MB, 8MB or 16MB identical SIMMs per bank. 64MB or 128MB SIMMs can not coexist with 16MB or 32MB SIMMs. Memory SIMMs are parity with ECC implemented by the memory controller.

8650-6MM; 256MB (4x64MB), 12 sockets available, ECC Memory expandable to 2GB.

All memory SIMMs installed into one standard memory card with 16 sockets (2 banks of 8 sockets). Memory must be installed in sets of 4MB, 8MB or 16MB identical SIMMs per bank. Memory SIMMs are parity with ECC implemented by the memory controller.

Memory Controller

ECC

Architecture

PCI/EISA

Graphics and Video Resolution

Integrated Cirrus Logic CL-GD5424 supporting SVGA with 512KB of DRAM. Up to 1024x768 with 16 colors at 72Hz.

Diskette Drive

3.5", 1.44MB, dust cover, diskette; cable has a second drop with card edge connector

CD-ROM

4X (4M0) or 8X (6MM) SCSI-2 bootable CD-ROM drive

Hard Drive

8650-4M0, 8650-6MM: Open bay. System maximum beyond 108GB using 12 x 9.1GB Wide Ultra SCSI hot swap hard disk drives. Two internal 16-bit cables (both active) from dual AIC-7870 compatible controllers to two backplanes. One 8-bit cable with 3 cable drops from top backplane to CD-ROM.

SCSI Controller

NonRAID: 2 x SCSI-2 Fast/Wide PCI Controllers using Adaptec AIC-7870P compatible controllers.

RAID

8650-6MM: ServeRaid adapter std.

Keyboard

Basic 101-key

Mouse

IBM Two-Button Mouse, 400 dpi

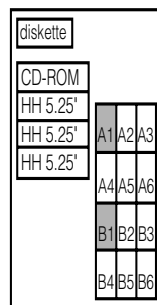
BIOS

512KB of EEPROM, Plug and Play BIOS support

Bays and Slots

Disk models:

Disks installed beginning in A1 and B1 with disks mirrored by two SCSI controllers or two RAID channels



Bank 1: 3 HH 3.5" bays

Bank 1: 3 HH 3.5" bays

Bank 2: 3 HH 3.5" bays

Bank 2: 3 HH 3.5" bays

Slot 1: fullsize, 32-bit PCI

Slot 2: fullsize, 32-bit PCI

Slot 3: fullsize, 32-bit PCI-

Ethernet Adapter

(some models)

Slot 4: fullsize, 32-bit PCI

Slot 5: fullsize, 32-bit PCI

Slot 6: fullsize, 32-bit PCI-

RAID Adapter

(some models)

Slot 7: fullsize, 32-bit EISA

or 16-bit ISA

Slot 8: fullsize, 32-bit EISA

or 16-bit ISA

Slot 9: fullsize, 32-bit EISA

or 16-bit ISA

Slot 10: fullsize, 32-bit EISA

or 16-bit ISA

Cooling Design

FloThru air flow design utilizing three fans for cooling redundancy and full length front venting to allow electronics and drive components to run cooler for longer life.

Ports

Two 9-pin serial, UART 16550A max 56KBps, one parallel (ECP/EPP, IEEE 1284, 2MBps), keyboard, mouse, SVGA, SCSI-2 FastWide.

Triple connector on ServeRaid adapter.

Power Supply

86504M0: Two Universal 420 Watts power supplies operating concurrently.

Optional: 420 Watts Redundant Power Supply Option, which backs up the two standard power supplies, installs in third power supply bay.

86506MM: 3 hotswap redundant power supply std.

Security

Power-on password, administrator password, one front door key lock (for left and right front door), hot swap bay door padlock support, both side covers can be locked with a padlock (optional), selectable boot, keyboard and mouse disable, power-on and reset button disable, diskette write inhibit

Standard Software

ServerGuide, IBM NetFinity, IBM AntiVirus, QAPLus/PRO, Lotus Domino R4.5, single processor edition

Supported Operating Systems

IBM OS/2 Warp 3.0, IBM OS/2 Warp 3.0 with WinOS/2, IBM OS/2 Warp Connect 3.0, IBM OS/2 SMP V2.11, IBM OS/2 Warp Server V4, IBM OS/2 Warp Server Advanced V4 (includes SMP enhancements), IBM OS/2 LAN Server 4.0 Entry, IBM OS/2 LAN Server 4.0 Advanced, Microsoft Windows NT 3.51/4.0 Workstation, Microsoft Windows NT 3.51/4.0 Server, Novell NetWare 3.12/4.1/4.11/4.1 SMP, SCO UnixWare 2.x, SCO Open Server 5.0, SCO Open DeskTop/Open Server 3.0, SunSoft Solaris 2.5

Support

TechConnect

Warranty

Three-year on-site limited warranty

Selected Options

Communications/Networking

ARTIC

All Models

| | |
|---|---------|
| Multiport Adapter Model 2 | 33F8791 |
| ARTIC960 PCI Adapter | 39H8058 |
| X.25 Interface Co-Processor PCI Adapter | 55H4501 |
| ARTIC Multiport..... | 61G3862 |
| X.25 Interface Co-Processor | 71G6460 |
| ARTIC Co-Processor 512KB | 85X2706 |

ATM

All Models

| | |
|--|---------|
| IBM TURBOWAYS 25 ATM ISA Adapter..... | 42H0525 |
| IBM TurboWays 25 ATM PCI Adpater | 85H9035 |

Ethernet

All Models

| | |
|--|---------|
| IBM EtherJet ISA Adapter | 04H6550 |
| PCI Ethernet Adapter | 13H9237 |
| 100/10 PCI Ethernet Adapter | 25H4374 |
| IBM EtherJet 10Base-T ISA Adapter..... | 73G9379 |

Other

All Models

| | |
|--|---------|
| PC Server Advanced Systems Management Adapter..... | 94G5570 |
| Adv. Systems Management Power Unit..... | 94G5571 |
| Systems Management Cable | 94G6970 |

Token-Ring

All Models

| | |
|---------------------------------------|---------|
| PCI Token-Ring Adapter (CD-ROM) | 75H9800 |
|---------------------------------------|---------|

Memory

ECC

All Models

| | |
|---|---------|
| PC Server 704 16MB Memory Option..... | 94G5877 |
| PC Server 704 32MB Memory Option | 94G5878 |
| PC Server 704 64MB Memory Option | 94G5879 |
| PC Server 704 128MB Memory Option | 94G6682 |

Power

Accessories

All Models

| | |
|--|---------|
| American Power Conversion Smart-UPS 1400 | 94G4075 |
| American Power Conversion Smart-UPS 2200 | 94G4076 |
| PC Server 704 420W HS Redundant Power Option | 94G7490 |

Processor Up-Grades

PC Server

All Models

| | |
|---|----------|
| SMP Pentium Pro 200MHz Processor Upgrade..... | 94G6678 |
| PC Server 704 SMP 200MHz Processor Card | 94G6681* |

*For 86504BW and 86507AX only.

Storage

Adapters

All Models

| | |
|---|---------|
| IBM SSA RAID Adapter for PC Servers..... | 32H3811 |
| PC ServeRAID Adapter | 70G8489 |
| PC Server Wide Ultra SCSI PCI Adapter..... | 76H5407 |
| PC Server SCSI-2 F/W Enhanced Repeater..... | 94G7585 |

CD-ROM Drives

All Models

| | |
|-------------------------------|---------|
| 8X SCSI External CD-ROM..... | 3509709 |
| 8X SCSI Internal CD-ROM | 76H3215 |

Enclosures

All Models

| | |
|--|---------|
| PC Server Enterprise Expansion Enclosure | 3518001 |
| PC Server 3519 Rack Storage Expansion Enclosure..... | 3519R01 |
| SCSI Multi-Storage Enclosure | 44H7634 |
| SSA Entry Storage Subsystem for PC Servers | 44H7645 |

Hard Disk Drives

All Models

| | |
|--------------------------------------|----------|
| SSA Dummy Disk Drive Module | 05J6411* |
| 2.25GB SSA Hot-Swap Disk Drive | 05J6413* |
| 4.51GB SSA Hot-Swap Disk Drive | 05J6414* |
| 4.51GB Wide Ultra SCSI HDD..... | 94G7098 |
| 9.1GB Wide Ultra SCSI HDD | 94G7099 |

* Require 32H3811 and 352 7001 enclosure.

Tape

All Models

| | |
|-------------------------------|---------|
| 20/40 GB SCSI Tape Drive..... | 76H0485 |
|-------------------------------|---------|



IBM PC Server 704 Industry Comparison

| | IBM PC Server 704 | Compaq ProLiant 6000 | HP NetServer LX Pro |
|--|---|---|--|
| Processors/L2 Cache Per Processor | 1-4 Pentium Pro 200MHz/512KB | 1-4 Pentium Pro 200MHz/512KB | 1-4 Pentium Pro 166MHz/512KB, or 1-4 200MHz/512KB |
| Processor Speeds | Must be the same | Must be the same | Must be the same |
| L2 Cache Speed | 12ns | 10ns | 10ns |
| Standard RAM (std./max.), Speed | 256MB/2GB, 60ns | 128MB/4GB, 60ns | 64MB or 128MB/2GB, 60ns |
| Total I/O Slots | 10: 6 PCI/4 EISA | 10: 6 PCI, 1 EISA, 3 shared (PCI or EISA) | 10: 6 PCI/4EISA |
| ECC Memory | Standard | Standard | Standard |
| SCSI-2 controller | 2 x SCSI-2 F/W or 2 x Wide Ultra SCSI and PCI Ultra ServeRaid | 2 x Ultra Wide, PCI FastWide(opt) | 2 x SCSI-2 F/W or 2 x SCSI-2 F/W and SCSI-2 F/W RAID |
| Hard disk drives, Speed of drives | Wide Ultra SCSI, 9ms or 8ms | Ultra Wide, 9ms | SCSI-2 F/W, 9ms |
| Standard Disk | Open Bay | Open Bay | Open Bay |
| Maximum Internal Storage | 109.2GB | 109.2GB | 109GB |
| Hot-Swap Disk | Standard | Standard | Standard |
| LAN Adapter | Optional | NetFlex-2 | Optional |
| Total Bays | 17 | 18 | 17 |
| Hot-Swap Bays | 12 Half-Height | 12 Half-Height | 12 Half-Height |
| Power Supply | 2 x3 420 Watts | 1 x 488 Watts | 3 x 410 Watts Hot-Swap |
| Redundant Power | Yes | Yes (option) | Standard |
| Rack Mountable | No | Yes | Yes |
| Standard Software | ServerGuide, IBM NetFinity, QA Plus/Pro, APC PowerChute Plus, Lotus Domino Server R 4.5 single processor edition, IBM AntiVirus | SmartStart, Insight Manager | NetServer Navigator, Assistant |

Competitive Advantages

4 Way SMP Pentium Pro

The first IBM superserver based on Pentium Pro technology for compute-intensive network applications.

IBM NetFinity

IBM NetFinity provides complete systems and asset management functions through multiple protocol networks.

Lotus Domino R 4.5, single processor edition

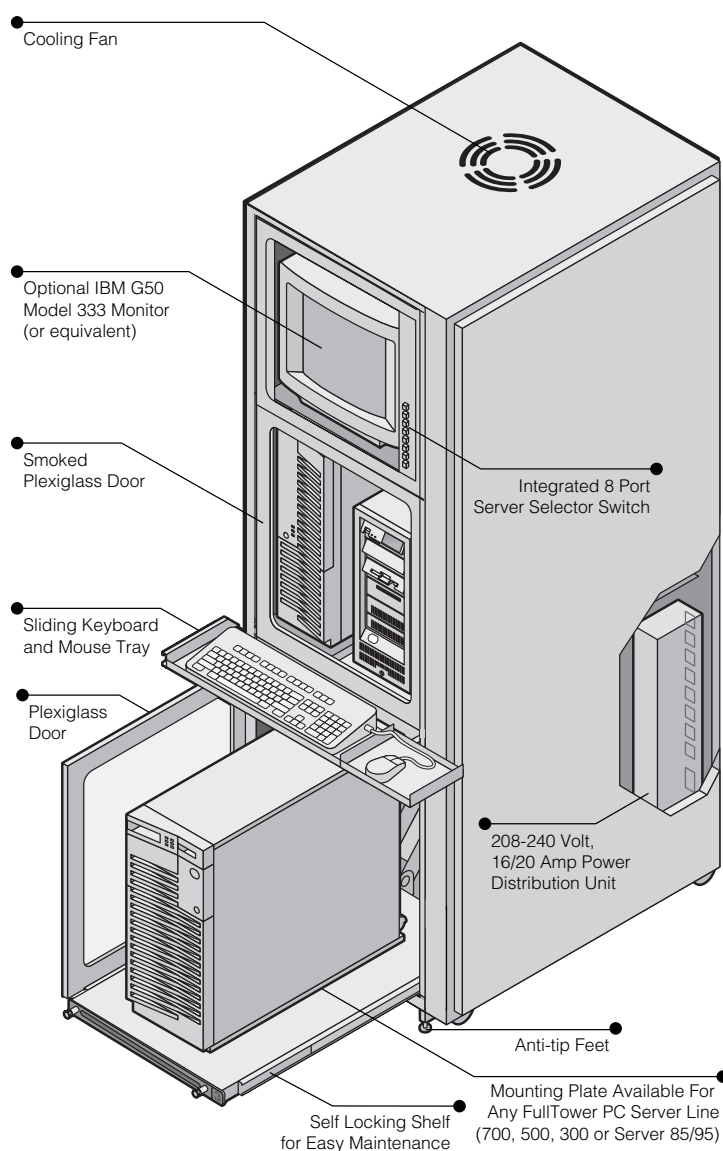
The acclaimed groupware and messaging standard.

Industry Leading Service and Support

With three-year on-site limited warranty, the best service and support stands behind every IBM PC Server.

Note: Data on competitive products has been obtained from publicly available sources and is subject to change without notice. Please contact the manufacturer for the most recent information.

IBM PC Server Rack Enclosure Series





IBM PC Server Racks Enclosures Essentials

**PC Server 24 inch Quad
Rack Enclosure
PC Server 24 inch Quad
Expansion Rack Enclosure**

94G5000

94G5002

The IBM PC Server Rack Enclosures are available in two pre-wired, pre-assembled models. The PC Server 24-inch Quad Rack Enclosures come factory ready to accommodate up to four IBM PC Servers. The 24-inch Quad Enclosure also supports the Enterprise Expansion Enclosure (3518). The IBM PC Server Rack Enclosures are designed to provide efficient space management for housing multiple IBM PC Server systems. PC Server Rack Enclosures include the capability to share a single monitor, keyboard and pointing device across up to eight servers.

Benefits

Easy to Install

Pre-assembled and pre-wired for easy setup and installation. Standard caster wheels make moving the PC Server Rack Enclosures easy. And the 76" height makes moving the PC Server Rack Enclosures easy through any standard door opening.

Safe and Secure

Servers are installed on self-locking shelves to insure safety.

Space Management for Multiple PC Servers

Up to four PC Servers may be installed in a single Quad PC Server Rack Enclosure, which make organizing your PC Servers easy while taking up less space than four separate PC Servers. Up to eight PC Servers may be shared by one Multi-Port Selector switch when used in a Rack Suite.

Integrated Power Distribution

Providing additional system protection and enhanced operational safety.

Standard Features

Weight & Dimensions

24 inch Quad PC Server Rack Enclosures (Enclosure and Expansion): Weight: 227kg., Height: 1937mm., Width: 754mm, Depth: 953mm.

Keyboard & Point Device Tray

A slide-tray for keyboard and pointing device is standard on the Primary Enclosures (94G5000). The slide shelf may be extended without opening the doors on the PC Server Rack Enclosure.

Monitor Requirements

An IBM G50-333 (6543333, or equivalent) is required. The monitor must fit the dimensions of the monitor compartment, and support the 200-240V AC power of the Rack Enclosure. A special rack monitor stand is provided to be used with the IBM G50 monitor in place of their standard tilt/swivel stand.

Multi-Port Server Selector Switch

A push-button Server Selector Switch which can control up to eight servers is standard in each Primary PC Server Rack Enclosure (94G5000). The Server Selector Switch may be set to rotate between installed servers without interruption to server operation. Lighted buttons show which server is selected.

Video Supported

VGA, when SVGA resolutions are required, an optional Enhanced Video Cable option is available, part number 94G5458

Cooling Design

Specially designed front compartment doors and high capacity fan extend the IBM PC Server FloThru cooling features.

Rack Suites

Primary PC Server Rack Enclosures can be combined with Expansion PC Server Rack Enclosures to form Rack Suites for housing additional servers. When combining 19 inch and 24 inch PC Server Rack Enclosures an optional Rack Attachment Kit, part number 0965459, is required to complete the installation.

Power Supply

Integrated power distribution unit 208-240VAX, 16A, 50/60Hz. An NEMA I6-20P outlet with a 20 amp circuit breaker is required. If an external UPS is used, it may require a three phase circuit. Servers with switchable power supplies must be set to the high voltage range setting.

Cable Management

Internal rack cables, prewired at the factory for power, monitor, keyboard and mouse cables. Neatly tied to a hinged cable trough that carries the cables as the server slide tray is moved. Allowing the servers to be slid out for servicing and returned without disrupting the cabling. Can be used for additional cabling, such as network cables. Reusable cable ties are provided for additional cables.

Security

Self-Locking Trays allow only one server per shelf to be extended at a time.

24 in. PC Server Primary and Expansion Rack Enclosures:

Key lock on the rear door

Support

TechConnect

Warranty

Three-year on-site limited warranty

Selected Options

Mounting Plates

PS/2 Servers 85/95 Mounting Plate..... Part #: 94G4995
 PC Server Series 300 Mounting Plate Part #: 94G4996
 PC Server Series 500/700 Mounting Plate Part #: 94G4997

Video Cable

Enhanced Video Cable Part #: 94G5458

Other

PC Server Rack Attachment Kit Part #: 09G5459
 PC Server 24-inch Side Panel..... Part #: 94G5462

Monitors

G50 General Purpose Monitor..... Part #: 6543333

Keyboards

Enhanced KeyboardPart #: 92G7453
 Enhanced Keyboard with TrackPoint II (White).....Part #: 92G7461
 Enhanced Keyboard with TrackPoint II (Black).....Part #: 13H6705

Usable w/9306 Models:

| | 94G5000 | 94G5002 |
|--------------------------------------|---------|---------|
| Server 85/95 Mounting Plate | • | • |
| Series 300 Mounting Plate | • | • |
| Series 500/700 Mounting Plate | • | • |
| Enhanced Video Cable | • | • |
| 19/24 Attachment Kit | • | • |
| 24-inch Side Panel | | • |

Server Supported:

| | 85 / 95 | 300 / 320* | 325 / 330** | 500 / 520 | 720 |
|--------------------------------------|---------|------------|-------------|-----------|-----|
| Server 85/95 Mounting Plate | • | | | | |
| Series 300 Mounting Plate | | • | • | | |
| Series 500/700 Mounting Plate | | | | • | • |
| Enhanced Video Cable | • | • | • | • | • |

Expansion Enclosure:

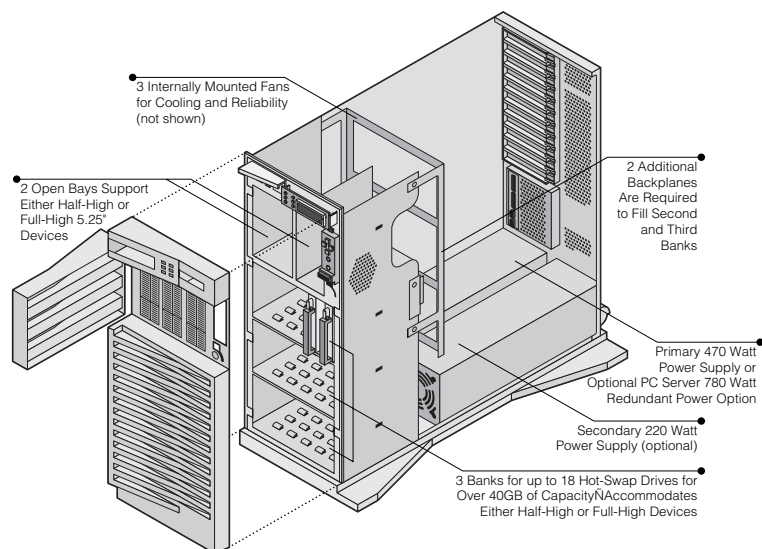
| | |
|--------------------------------------|---|
| Server 85/95 Mounting Plate | |
| Series 300 Mounting Plate | |
| Series 500/700 Mounting Plate | • |
| Enhanced Video Cable | |

*IBM PC Server 310 not supported.

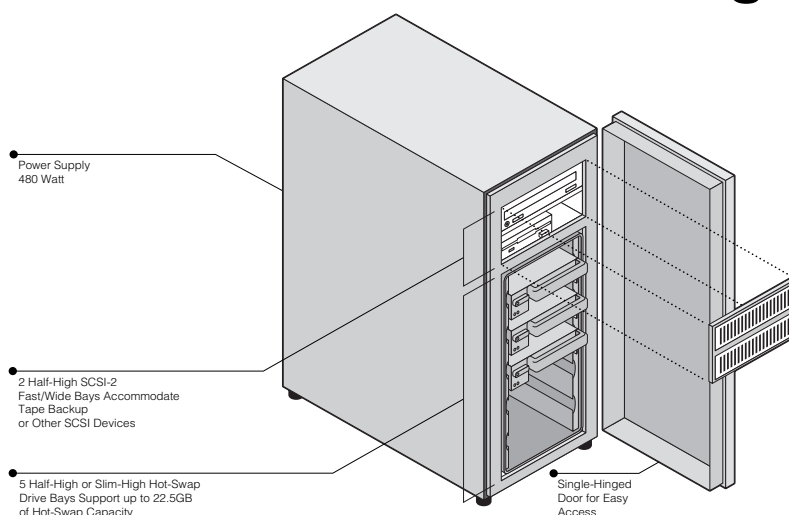
**IBM PC Server 325 Rack Drawer Model 8639-RS0 not supported.

IBM PC Server Expansion Enclosure Series

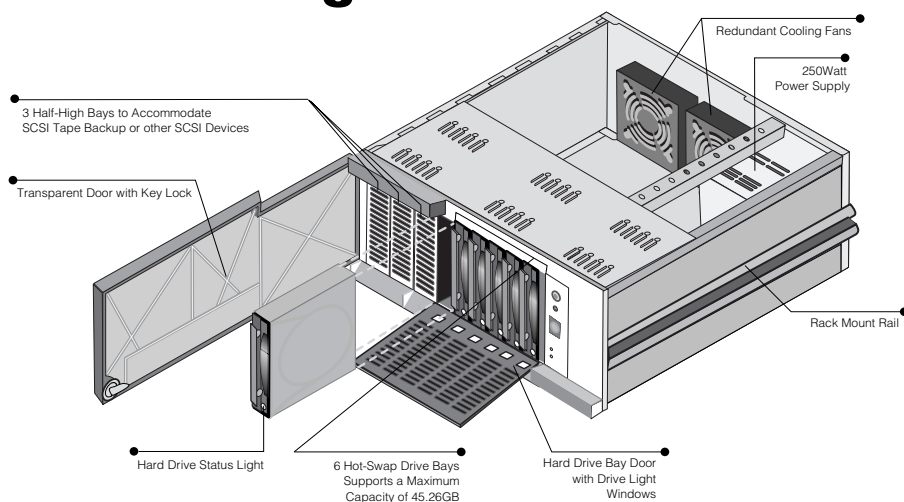
Enterprise Expansion



SCSI Multi-Storage



Rack Storage



IBM RACK EXPANSION ENCLOSURE

For the latest information on PC Products, visit the PC Company World Wide Web sites.
Australia: <http://www.au.pc.ibm.com> - New Zealand: <http://www.nz.pc.ibm.com>



IBM PC Server Expansion Enclosures Essentials

PC Server Rack Storage Expansion Enclosure 3519-R01 PC Server Enterprise Expansion Enclosure 3518-001 SCSI-Multi Storage Enclosure 3517-001

IBM's 3519 Rack Storage Expansion Enclosures helps you confidently build a reliable storage foundation for your networked business systems. By bringing the power, control and service you expect from larger systems to industry-standard platforms, the 3519 Rack Storage Expansion Enclosures provides affordable and dependable storage that meets a wide variety of business computing needs.

The IBM PC Server Enterprise Expansion Enclosure-3518 provides an

excellent flexible external storage expansion solution. A flexible mix of disk drives capacities are supported, plus bays for tape drives or other SCSI device options.

The IBM PC Server SCSI-2 F/W Repeater is supported. This allows the cable length between the PC Server and Enclosure to be up to 4.3 meters for installation in an IBM PC Server Rack Enclosure.

The IBM SCSI Multi-Storage Enclosure-3517 provides flexible external expansion capacity for PC Servers needing additional storage or media options. A flexible mix of disk drive capacities are supported, plus bays for tape drive or other SCSI devices.

Benefits

Ready To Grow

PC Server Rack Storage Expansion Enclosure 3519, Enterprise Expansion Enclosure 3518 and SCSI Multi-Storage 3517 are ready to grow your data. You can add 45.5GB (3519), 100.1GB (3518) or 45.5GB (3517) of additional storage capacity to an existing or new server.

NetFinity 5.0 Support

Integrated easy to use RAID management system.

Standard Features

Weight & Dimensions

3517: Weight: 20kg, Height: 407mm, Width: 197mm, Depth: 483mm

3518: Weight: 20kg, Height: 635mm, Width: 247mm, Depth: 635mm

3519: Weight: 14.3kg, Height: 216mm, Width: 482mm, Depth: 465mm

Limitations

One 3517 enclosure can be attached to a single-ended SCSI adapter.

Hardware Requirements

3517: SCSI-2 Interface on PC Server or other server

3518: SCSI-2 Interface on PC Server or other server

3519: SCSI-2 Interface on PC Server or other server

Number of Hot-Swap Drive Bays

3517: 5

3518: 18

3519: 6

Maximum Storage Capacity

3517: 45.5GB using 5 x 9.1GB hard drives

3518: 81.9GB using 9 x 9.1GB hard drives

3519: 27.06GB using 6 x 4.51GB hard drives

| Description | System/Model | Adapter |
|-----------------------------------|-------------------------|------------|
| PS/2 Model 85 (9585) | 0KG, 0KT, ONG, ONT | a, b |
| PS/2 Model 95 | 1NG, 1NT, 0PT, 0QT | a, b |
| | 3NG, 3NT, 3PG, 3PT, 3QT | a, b |
| PC Server 320 PCI/EISA | 8640-all | c, d, f |
| PC Server 320 PCI/MC | 8640-all | b, c, d, f |
| PC Server 325 and 325 Rack Drawer | 8639-all | g |
| PC Server 330 | 8640-all | f, g |
| PC Server 500 | 8641-all | a, b |
| PC Server 520 PCI/EISA | 8641-all | c, d, f |
| PC Server 520 PCI/MC | 8641-all | b, c, d, f |
| PC Server 720 | 8642-all | b, d, e, f |

(PC Server 704 supports the PC Server Enterprise Expansion Enclosure-3518 only.)

- a. IBM SCSI-2 Fast/Wide Adapter/A
- b. IBM SCSI-2 Fast/Wide Streaming-RAID Adapter/A
- c. PC Server SCSI-2 Fast/Wide PCO adapter
- d. PC Server SCSI-2 Fast/Wide PCI RAID Adapter
- e. PC Server SCSI-2 Fast/Wide PCI Adapter II
- f. PC ServeRAID SCSI Adapter
- g. PC Server Ultra SCSI PCI Controller (integrated)

Supported Drives

3517: 1.1GB, 2.2GB, 4.51GB and 9.1GB hard disk drives in hot-swap trays one or two 4MM DAT tape drives in media bays providing 4GB or 8GB uncompressed capacity (10GB or 20GB compressed)

3518: 1.0GB, 1.12GB, 2.25GB, 4.51GB and 9.1GB hard disk drives in hot-swap trays, room for two SCSI devices in two media bays

3519: 2.25GB, 4.51GB and 9.1GB hard disk drives in hot-swap trays or 4MM DAT tape drives in media bays providing 4GB or 8GB uncompressed capacity (10GB or 20GB compressed)

Bays

3517:

| | | | | | | |
|---------|-------------------|-------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Bay 1 | Bay 2 | Bay 3 | Bay 4 | Bay 5 | Bay 6 | Bay 7 |
| 7 Bays: | Bay 1 | Bay 2 | Bay 3 | Bay 4 | Bay 5 | Bay 6 |
| | 5.25" HH | 5.25" HH | 5.25" SL/HH | 5.25" SL/HH | 5.25" SL/HH | 5.25" SL/HH |
| | access | access | access | access | access | access |
| | open (SCSI-2 F/W) | open (SCSI-2 F/W) | open (SCSI-2 F/W hot-swap) | open (SCSI-2 F/W hot-swap) | open (SCSI-2 F/W hot-swap) | open (SCSI-2 F/W hot-swap) |

3518:

| | | | | | | |
|---|---|--------|--------------------|--------------------|--------|--|
| B | B | Bays: | Bay B | 5.25" HH or FH | access | open (SCSI-2 F/W) |
| | | | Bay B | 5.25" HH or FH | access | open (SCSI-2 F/W) |
| | | | (or Bay A, B 1 FH) | | | |
| | | Bank C | Bays 1-6 | 5.25" SL, HH or FH | | |
| | | Bank D | Bays 1-6 | 5.25" SL, HH or FH | | |
| | | Bank E | Bays 1-6 | 5.25" SL, HH or FH | | Bank holds 6 SL or 3HH (or 4SL/1 HH; or 2 SL/2 HH) |

3519:

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|-----------------------|--------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Bay 1: 5.25", HH | access | open (Wide Ultra SCSI or SCSI-2 F/W) |
| | | | | | | | | | Removeable media only | | |
| | | | | | | | | | Bay 2: 5.25", HH | access | open (Wide Ultra SCSI or SCSI-2 F/W) |
| | | | | | | | | | Removeable media only | | |
| | | | | | | | | | Bay 3: 5.25", HH | access | open (Wide Ultra SCSI or SCSI-2 F/W) |
| | | | | | | | | | Removeable media only | | |
| | | | | | | | | | Bay 2: 5.25", HH | access | open (SCSI-2 F/W)-Removeable media only |
| | | | | | | | | | Bay 3: 5.25", HH | access | open (SCSI-2 F/W)-Removeable media only |
| | | | | | | | | | Bay 4: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |
| | | | | | | | | | Bay 5: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |
| | | | | | | | | | Bay 6: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |
| | | | | | | | | | Bay 7: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |
| | | | | | | | | | Bay 8: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |
| | | | | | | | | | Bay 9: 5.25", SL/HH | access | open (Wide Ultra SCSI or SCSI-2 F/W hot-swap) |

Note: 3519 has bay 4, 5, 6, 7, 8, 9 as SL only. HH is not supported.

Cooling Design

3517 and 3519: Variable speed fan
 3518: Flo-Thru air flow design utilizing three fans, a heat sensing speed control, and full length front venting to allow electronics and drive components to run cooler for longer life.

Power Supply

3517: 480 Watts
 3518: 470 Watts worldwide voltage sensing
 Optional: 220 Watts power supply and PC Server 780 Watts Power Option, replaces standard 470 Watts power supply and eliminates the need for the 220 Watts optional power supply.
 3519: 200 Watts

RAID Level(s) Supported

0,1 and 5 when used with an array capable server

Security

3517 & 3519: Lockable door
 3518: Lockable door, U-Bolt tie-down support, optional PC Server Security Cover

Supported Operating Systems

OS/2 2.11, IBM OS/2 V2.11 SMP, IBM OS/2 Warp 3.0, IBM OS/2 Warp 3.0 with WIN-OS/2, IBM OS/2 Warp Connect V3.0, Novell NetWare V3.12/ 4.1/4.1 SMP, SCO OpenDesktop/OpenServer V3.0, Microsoft Windows NT Workstation and Server V. 3.51

Support

TechConnect.

Warranty

Three-year on-site limited warranty -- IBM on-site repair, 8:00am to 5:00pm Monday through Friday, with eight hour average response time.

Selected Options

Storage

For 3519 models:

4/10GB 5.25" Internal SCSI DAT Tape DrivePart #:87G1469

For 3518 Models:

24/48GB Internal Tape AutoloaderPart #:94G2725

For 3517 and 3518 models:

1.12GB SCSI-2 (Fast/Wide) Hot Swap Disk Drive IIIPart #:70G9861

For 3517, 3518 and 3519 models:

2.25GB SCSI-2 (Fast/Wide) Hot Swap Disk Drive IIIPart #:70G9862

4.51GB SCSI-2 (Fast/Wide) Hot Swap Disk Drive IIIPart #:70G9863

4.51GB Wide UltraSCSI Hot Swap Disk Drive Part #94G7491

9.1GB Wide UltraSCSI Hot Swap Disk Drive Part #94G7492

4/10GB Internal SCSI DAT Tape DrivePart #:87G1469

(Requires converter, #32G3925 for models with F/W SCSI Adapters and 16-bit internal cables)

TR4 4/8GB Internal SCSI Tape DrivePart #:06H9716

(Physical limitation prevents the security door from closing when a tape cartridge is inserted in the tape drive. Not supported on RAID Adapter)

Trays

For 3517 and 3518 Models:

SCSI-2 (Fast) Hot Swap Drive Tray IIIPart #:70G9856

For 3517, 3518 and 3519 Models:

SCSI-2 (Fast/Wide) Hot Swap Drive Tray IIIPart #:70G9860

Backplane

For 3518 Models:

IBM PC Server Hot Swap Backplane IIIPart #:70G9855

(Requires cable, #70G9876)

PC Server SCSI-2 Fast/Wide RepeaterPart #:94G5565

Power

For 3518 Models:

220 Watts Power Supply**Part #:70G9739

PC Server 780 Watts Redundant Power OptionPart #:94G4701

Cables

For 3518 Models:

Backplane to Media Bay CablePart #:70G9864

Expansion Enclosure Backplane CablePart #:70G9876

Expansion Enclosure to Media Bay CablePart #:70G9877

Backplane to Backplane CablePart #:94G4070

SCSI Internal Converter 16-bit to 8-bitPart #:32G3925

3.0m SCSI-2 Fast/Wide CablePart #:94G5567

(For use with SCSI-2 Fast/Wide Repeater)

4.3m SCSI-2 Fast/Wide Rack CablePart #:94G5566

(For use with SCSI-2 Fast/Wide Repeater in an IBM PC Server Rack Enclosure)

Other

For 3518 Models:

PC Server Security CoverPart #:70G9742

SCSI-2 Card to Option CablePart #:06H3231

(Required if the host adapter contains either Micro Channel SCSI-2 F/W Adapter/A or Micro Channel SCSI-2 F/W Streaming RAID Adapter/A)

SCSI-2 Cart to Option CablePart #:70G9857

(Required if the host system contains PCI SCSI-2 F/W Adapter or PCI

SCSI-2 F/W RAID Adapter)

68-pin SCSI-2 Fast/Wide ConverterPart #:94G5569

(Required to use above cables with either Micro Channel SCSI-2 Fast/Wide Adapter/A or Micro Channel SCSI-2 Fast/Wide Streaming RAID Adapter/A)

*Additional Backplanes can be added. Comes with necessary cabling to attach to disk controller.

**Either 70G9739 or 94G4701 required when adding first additional Hot Swap Backplane



IBM PC Server Options Compatibility Matrix

In Production

Part
Number

PC Server 704

PC Server 330

PC Server 325 and Rack Drawer

PC Server 315

PC Server 310 166MHz

PC Server 310 200MHz

Memory

IS SIMM

| | | | | | | | |
|---------------|---------|--|--|--|--|---|---|
| 16MB Kit 60ns | 92G7310 | | | | | . | . |
| 32MB Kit 60ns | 92G7312 | | | | | . | . |
| 64MB Kit 60ns | 92G7317 | | | | | . | . |

8-Byte DIMM

Parity

| | | | | | | | |
|-----------|---------|--|--|--|--|---|--|
| 32MB 60ns | 92G7339 | | | | | . | |
|-----------|---------|--|--|--|--|---|--|

ECC DIMM

| | | | | | | | |
|----------------|---------|--|---|---|--|--|--|
| 32MB EDO 60ns | 94G6473 | | . | . | | | |
| 64MB EDO 60ns | 94G6474 | | . | . | | | |
| 128MB EDO 60ns | 94G6475 | | . | . | | | |
| 256MB EDO 60ns | 94G7079 | | . | . | | | |

ECC SIMM

| | | | | | | | |
|------------|---------|---|--|--|--|--|--|
| 32MB 60ns | 94G5878 | . | | | | | |
| 64MB 60ns | 94G5879 | . | | | | | |
| 128MB 60ns | 94G6682 | . | | | | | |

L2 Cache

| | | | | | | | |
|-------|---------|--|--|--|--|---|--|
| 512KB | 92G7336 | | | | | . | |
|-------|---------|--|--|--|--|---|--|

Video/Graphics

| | | | | | | | |
|--------------|---------|--|---|--|---|---|---|
| 1MB DRAM EDO | 76H0238 | | . | | . | . | . |
|--------------|---------|--|---|--|---|---|---|

Processor Upgrades^D

| | | | | | | | |
|------------|---------|--|--|--|--|----|--|
| SMP 200MHz | 94G6496 | | | | | 14 | |
|------------|---------|--|--|--|--|----|--|

Pentium Pro^{DF}

| | | | | | | | |
|------------------|---------|---|---|---|---|--|--|
| SMP 166MHz | 94G5881 | . | | | | | |
| SMP 166MHz/512KB | 94G4908 | | . | . | | | |
| SMP 200MHz | 94G6678 | . | | | | | |
| SMP 200MHz/256KB | 94G6175 | | . | . | . | | |
| SMP 200MHz/512KB | 94G6463 | | . | . | | | |
| SMP 200MHz Card | 94G6681 | 1 | | | | | |

PC Server 704
PC Server 330
PC Server 325 and Rack Drawer
PC Server 315
PC Server 310 166MHz
PC Server 310 200MHz

Storage^B

Hard Disk Drives

Ultrastar ES 2.16GB SCSI

| | | | | | | | |
|------------|---------|--|---|---|---|---|---|
| Fast Ultra | 07H1126 | | | | • | • | • |
| Wide Ultra | 07H1128 | | 2 | • | • | • | |

Ultrastar 2ES 2.16GB SCSI

| | | | | | | | |
|------------|---------|--|----|---|---|---|---|
| Ultra | 76H5809 | | 10 | • | • | • | • |
| Wide Ultra | 76H5813 | | 10 | • | | | |

Ultrastar 2ES 4.33GB SCSI

| | | | | | | | |
|------------|---------|--|----|---|---|---|---|
| Ultra | 76H5811 | | 10 | • | • | • | • |
| Wide Ultra | 76H5815 | | 10 | • | • | | |

Ultrastar XP 2.25GB SCSI

| | | | | | | | |
|-----------|---------|--|---|---|--|----|--|
| Fast/Wide | 94G3055 | | 2 | • | | 20 | |
|-----------|---------|--|---|---|--|----|--|

Ultrastar XP 4.51GB SCSI

| | | | | | | | |
|---------------------------|---------|--|----|----|---|----|--|
| Fast/Wide | 94G3057 | | 2 | • | | | |
| Ultrastar 2XP 4.51GB SCSI | | | | | | | |
| Fast/Wide | 76H0945 | | 2 | 23 | | | |
| Wide Ultra | 76H2687 | | 21 | 23 | • | 16 | |
| Ultrastar 2XP 9.10GB SCSI | | | | | | | |
| Wide Ultra | 76H2689 | | 22 | 24 | • | 16 | |

Hot-Swap Drives^C

| | | | | | | | |
|-----------------------------|---------|---|---|--|--|--|--|
| 9.10GB Wide Ultra SCSI | 94G7492 | | • | | | | |
| 4.51GB Wide Ultra SCSI | 94G7491 | | • | | | | |
| 9.10GB Wide Ultra SCSI | 94G7099 | • | | | | | |
| 4.51GB Wide Ultra SCSI | 94G7098 | • | | | | | |
| 4.51GB SCSI-2 Fast/Wide III | 94G6494 | | • | | | | |
| 2.25GB Fast/Wide III | 70G9862 | | 7 | | | | |
| 2.14GB SCSI Fast/Wide | 94G5882 | • | | | | | |

SSA Hot-Swap Drives³

| | | | | | | | |
|---|---------|---|---|---|--|--|--|
| 2.25GB SSA Hot-Swap Drive III ¹⁰ | 05J6413 | 9 | 9 | 9 | | | |
| 4.51GB SSA Hot-Swap Drive III ¹⁰ | 05J6414 | 9 | 9 | 9 | | | |

Controller Adapters

| | | | | | | | |
|----------------------------------|---------|----|---|---|---|---|---|
| PC ServeRAID Adapter (PCI) | 70G8489 | 20 | • | • | • | | |
| PC Server 704 Raid Adapter (PCI) | 94G5884 | • | | | | | |
| SSA RAID Adapter (PCI) | 32H3811 | 9 | 9 | 9 | | | |
| PCI Wide Ultra SCSI Adapter | 76H5407 | • | • | • | • | • | • |
| SCSI Repeater Card | 94G7585 | • | | | • | | |

Hot-Swap Options

| | | | | | | | |
|-----------------------------------|---------|--|---|--|--|--|--|
| SCSI-2 | | | | | | | |
| Fast/Wide Hot-Swap Drive Tray III | 70G9860 | | • | | | | |

PC Server 704
PC Server 330
PC Server 325 and Rack Drawer
PC Server 315
PC Server 310 166MHz
PC Server 310 200MHz

**Part
Number**
CD-ROM Drives^A

| | | | | | | | |
|-------------------------------|---------|---|----|---|---|---|--|
| Internal 8X SCSI CD-ROM Drive | 76H3215 | • | 17 | • | • | • | |
| External 8X SCSI CD-ROM Drive | 3509709 | • | • | • | | | |
| External 4X SCSI CD-ROM Drive | 3509707 | • | | | | • | |

Tape Backup^E

| | | | | | | | |
|---|---------|---|----|---|---|---|---|
| 24/48GB Internal Tape Autoloader | 94G2725 | 5 | 4 | 4 | | | |
| TR4 (4.0/8.0GB) Internal SCSI Tape Drive ¹¹ | 06H9716 | • | • | • | • | • | • |
| TR4 (4.0/8.0GB) External SCSI Tape Drive | 3502900 | | • | • | • | • | • |
| 4/10GB 4mm Internal 5.25" SCSI Tape Drive | 87G1469 | • | 12 | • | • | • | • |
| 4/ 10GB 4mm Internal 3.5" SCSI Tape Drive | 87G1470 | • | 12 | • | • | | • |
| 20/40GB 8mm Internal SCSI Tape Drive | 76H0485 | • | • | • | • | | |

Diskette Drives

| | | | | | | | |
|----------------------------|---------|--|---|---|--|--|--|
| 3.5" 1.44MB Diskette Drive | 70G8499 | | • | • | | | |
| 3.5" 2.88MB Diskette Drive | 32G4338 | | • | • | | | |

Enclosures

| | | | | | | | |
|---|---------|----|----|----|----|----|----|
| External SCSI Enclosure | 35100V0 | | • | • | | • | |
| 3519 Rack Storage Expansion Enclosure | 3519R01 | | | | • | | |
| External SCSI Enclosure | 35100V0 | | • | • | | • | |
| 3517 SCSI Multi-Storage Enclosure | 3517001 | 13 | 13 | 13 | 13 | 13 | 13 |
| PC Server Enterprise Expansion Enclosure | 3518001 | 13 | 13 | 13 | 13 | 13 | |
| SSA Storage Entry Subsystem | 3527001 | 3 | 3 | 3 | | | |

Networking/Communications
Token-Ring

| | | | | | | | |
|------------------------|---------|----|----|----|----|----|---|
| PCI Token-Ring Adapter | 41H8900 | • | • | • | • | | • |
| Triple LANStreamer | 25H6304 | 26 | 26 | 26 | 26 | 26 | |

Ethernet

| | | | | | | | |
|-------------------------------|---------|----|----|----|----|----|----|
| PCI Ethernet Adapter | 13H9237 | • | • | • | | | |
| 100/10 PCI Ethernet Adapter | 25H4374 | 26 | 26 | 26 | 26 | 26 | 26 |
| EtherJet ISA Adapter | 04H6550 | • | | | • | • | • |
| 100/10 ISA Ethernet Adapter | 25H3501 | • | | | • | | |
| EtherJet 10 BaseT ISA Adapter | 73G9379 | • | • | • | | • | |

Emulation Adapters

| | | | | | | | |
|--|---------|--|--|--|--|---|--|
| Enhanced 5250 Display Station Emulation Adapter | 30F5383 | | | | | • | |
| Emulation Adapter and Cable Kit | 30F5622 | | | | | • | |

| | | Part Number | PC Server 704 | | | | PC Server 330 | | | | PC Server 325 and Rack Drawer | | | | PC Server 315 | | | | PC Server 310 166MHz | | | | PC Server 310 200MHz | | | |
|---|--|----------------|---------------|----|----|----|---------------|---|--|--|-------------------------------|--|--|--|---------------|--|--|--|----------------------|--|--|--|----------------------|--|--|--|
| ATM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interphase 5515 PCI UTP ATN Adapter | | 85H4041 | 18 | | | | | | | | | | | | | | | | | | | | | | | |
| TURBOWAYS 25 ISA Adapter | | 42H0525 | • | | | | | | | | | | | | | | | | | | | | | | | |
| ARTIC^B | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARTIC X.25 Interface Co-processor PCI Adapter | | 55H4501 | 19 | 6 | 6 | 19 | 19 | | | | | | | | | | | | | | | | | | | |
| ARTIC X.25 Interface Co-processor ISA Adapter | | 71G6460 | 19 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | | | | | | | |
| ARTIC960 PCI Adapter | | 39H8058 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | | | | | | | | |
| ARTIC Multiport Model II (1MB) | | 33F8791 | 19 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | | | | | | | |
| ARTIC Multiport (512KB)–3.5" media | | 61G3862 | 19 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | | | | | | | |
| ARTIC Dual Port | | 85X2706 | 19 | 19 | 19 | 19 | 19 | | | | | | | | | | | | | | | | | | | |
| Systems Management | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC Server Solution for Windows NT | | 94G6621 | • | | | • | | | | | | | | | | | | | | | | | | | | |
| PC Server High Availability Solution for OS/2 Warp | | 94G6620 | • | | | • | | | | | | | | | | | | | | | | | | | | |
| PC Server High Availability Solution for NetWare | | 94G6622 | • | | | • | | | | | | | | | | | | | | | | | | | | |
| Power | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APC Smart UPS 700 | | 94G4073 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| APC Smart UPS 1000 | | 94G4074 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| APC Smart UPS 1400 | | 94G4075 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| APC Smart UPS 22000 | | 94G4076 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| PC Server 704 (420 Watts) Redundant Power Option | | 94G5880 | • | | | | | | | | | | | | | | | | | | | | | | | |
| Security | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security Cover II | | 94G4606 | | • | | | | | | | | | | | | | | | | | | | | | | |
| PC Server 330 Security Cable Kit | | 94G6399 | | • | | | | | | | | | | | | | | | | | | | | | | |
| PC Server 325 Security Cover Kit | | 94G6471 | | | | • | | | | | | | | | | | | | | | | | | | | |
| PC Server 325 Security Cable Kit | | 94G6398 | | | | • | | | | | | | | | | | | | | | | | | | | |
| Monitors | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IBM G52 Color Monitor (17" FST/13.6" Viewable Image Size) | | 654601S | | • | • | • | | | | | | | | | | | | | | | | | | | | |
| IBM G42 Color Monitor (14" Convent./13.2" Viewable Image Size) | | 654002S | | 27 | 27 | 27 | | | | | | | | | | | | | | | | | | | | |
| IBM G50 Color Monitor (15" FST/13.4" Viewable Image Size) | | 6543304 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| IBM P200 Color Monitor (20" Trinitron CRT/ 19.1" Viewable Image Size) | | 6555774 | | | | | | | | | | | | | | | | | | | | | | | | |
| IBM P70 Color Monitor (17" Trinitron CRT/15.9" Viewable Image Size) | | 6554674 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |

PC SERVER OPTIONS COMPATIBLE

| | Part Number | PC Server 704 | PC Server 330 | PC Server 325 and Rack Drawer | PC Server 315 | PC Server 310 166MHz | PC Server 310 200MHz |
|--|-------------|---------------|---------------|-------------------------------|---------------|----------------------|----------------------|
| Other | | | | | | | |
| Advanced Systems Management Adapter ^A | 94G5570 | 8 | 8 | 8 | | | |
| Advanced Systems Management Adapter ^G | 94G7578 | 15 | 15 | 15 | 15 | 15 | |

Key to chart footnotes:

- ^A Appropriate cable, terminator or converter may be required.
- ^B Appropriate cable and/or daughter card may be required.
- ^C When referring to hard disk drive capacity, MB equals a million bytes and GB equals a billion bytes. Capacity is prior to the installation of an operating system. The total user-accessible capacity may vary slightly based on operating system environment.
- ^D MHz denotes internal clock speed of the microprocessor only; other factors affect application performance.
- ^E Tape Drive data compression capacity may vary.
- ^F In SMP systems, processors must be identical. In PC Server 720, it is possible to mix processors. For added performance it is recommended that the higher speed processors are located in lower numbered slots. Due to a thermal condition, no 200MHz processors are supported in slot 5.
- ^G Planned availability, third quarter 1997.
- ¹ Required on 166MHz models (with suffix of 003 or lower on the safety label on the rear panel of the PC Server) when upgrading to 200MHz..
- ² Requires hot-swap Fast/Wide tray 70G9860 when installed in hot-swap bays.
- ³ IBM PC Server SSA RAID Adapter 32H3811 must be used in conjunction with SSA Storage Entry Subsystem 3527001 and are required when installing SSA Hard Disk Drives.
- ⁴ RAID systems require attachment of this device to the SCSI-2 Fast/Wide controller to support the autoloader feature.
- ⁵ Must be attached to the integrated SCSI controller.
- ⁶ Must be installed in a primary PCI Bus slot. Requires server system BIOS level 26A or later. All ARTIC options supported by this adapter are supported in the server.
- ⁷ Must be installed in a hot-swap model or install hot-swap bay option 94G2763.
- ⁸ Requires power unit option 94G5571 to support monitoring and control of PC Server when system is without power.
- ⁹ 32H3811 Adapter must be used with 3527001 enclosure and appropriate SSA hot-swap hard drives.
- ¹⁰ Not supported in hot-swap model.
- ¹¹ Requires a non-RAID SCSI Adapter or the IBM ServeRAID Adapter 70G8489.
- ¹² Not supported in hot-swap models or bays.
- ¹³ Requires use of hard drives and controllers that are supported with this enclosure.
- ¹⁴ xEx (166MHz) models only. In SMP systems processors must be the same speed.
- ¹⁵ Requires power unit option 94G6970 to support monitoring and control of PC Server when system is without power.
- ¹⁶ Fits in 5.25" bay only. Kit (70G8165) required to install in 5.25" bay.
- ¹⁷ Supported only in model E50.
- ¹⁸ After driver installation, do not shut down. Close Control Panel, then reopen it, then choose LEC configuration icon. This allows the user to add LES address and frame size.
- ¹⁹ All ARTIC options supported in this adapter are supported in the server.
- ²⁰ Server must be set at BIOS level 7 or higher and the PCServRAID SCSI Adapter firmware and BIOS must be at level 2.
- ²¹ Except model ESO due to possible excessive noise this drive should only be used at FAST SCSI transfer rates. All models need hot-swap tray III (70G9860) for installation with type III backplane and the drive cannot be installed in the bottom of the bay.
- ²² In model ESO, the drive is not supported in the bottom bay. Drives can only be placed in alternating bays due to thermal limitations.
- ²³ This drive is not supported in the upper 5.25" bay of this system.
- ²⁴ This drive is not supported in the upper 5.25" bay in this system, and can only be placed in alternating bays due to thermal conditions.
- ²⁵ .Kit(70G8165)required to install in 5.25"bay
- ²⁶ When Using this card with Microsoft NT 3.51, it is necessary to apply Service Pak 5.
- ²⁷ Two versions of this monitor will be available in North and Latin America respectively, due to different electromagnetic fields produced in North and South America.

IBM PC Server Memory Configurations

IBM PC Server 310 (8639 Parity 166MHz models)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 16 | 16 | 16 | 16 | 16 | R ¹ -16 |
| Desired MB | 32 | 48 | 80 | 80 | 144 | 160 |
| Quantity MB | 16 (1) | 32 (1) | 32 (2) | 64 (1) | 64 (2) | 32 (1) 64 (2) |
| Part Number | 92G7310 | 92G7312 | 92G7312 | 92G7317 | 92G7317 | 92G7339 92G7317 |

IBM PC Server 310 (8639 Parity 200MHz models)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|
| Base MB | 32 | 32 | 32 | 32 | 32 | 32 |
| Desired MB | 48 | 64 | 96 | 96 | 160 | 160 |
| Quantity MB | 16 (1) | 32 (1) | 64 (1) | 32 (2) | 64 (2) | 64 (2) |
| Part Number | 92G7310 | 92G7312 | 92G7317 | 92G7312 | 92G7317 | 92G7317 |

IBM PC Server 315(8638 Parity EDO ECC)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 64 | 96 | 160 | 288 | 416 | 512 |
| Quantity MB | 32 (1) | 64 (1) | 128 (1) | 128 (2) | 128 (3) | 128 (4) |
| Part Number | 76H0279 | 76H0280 | 76H0281 | 76H0281 | 76H0281 | 76H0281 |

IBM PC Server 320 (8640 ECC PCI/Micro Channel; 100 & 133MHz models)

| | | | | | | |
|--------------------|-----------------|-----------------|------------------|------------------|--------------------|--|
| Base MB | 32 | 32 | 32 | 32 | R ¹ -32 | |
| Desired MB | 64 ² | 96 ² | 160 ² | 224 ² | 256 ² | |
| Quantity MB | 32 (1) | 64 (1) | 64 (2) | 64 (3) | 64 (4) | |
| Part Number | 11H0645 | 11H0648 | 11H0648 | 11H0648 | 11H0648 | |

IBM PC Server 320 (8640 ECC PCI/Micro Channel; 75 & 90MHz models)

| | | | | | | |
|--------------------|-----------------|-----------------|-----------------|------------------|------------------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 48 ² | 64 ² | 96 ² | 128 ² | 160 ² | 224 ² |
| Quantity MB | 8 (2) | 16 (2) | 16 (4) | 16 (6) | 32 (4) | 32 (6) |
| Part Number | 11H0618 | 11H0621 | 11H0621 | 11H0621 | 11H0624 | 11H0624 |

IBM PC Server 320 (8640 Parity PCI/Micro Channel)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|
| Base MB | 16 | 16 | 16 | 16 | 16 | 16 |
| Desired MB | 24 | 32 | 48 | 80 | 144 | 208 |
| Quantity MB | 4 (2) | 8 (2) | 16 (2) | 32 (2) | 32 (4) | 32 (6) |
| Part Number | 92G7201 | 92G7203 | 92G7204 | 92G7206 | 92G7206 | 92G7206 |

IBM PC Server 325 (8639 EDO)

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 64 | 96 | 160 | 288 | 544 | 800 |
| Quantity MB | 32 (1) | 64 (1) | 128 (1) | 256 (1) | 256 (2) | 256 (3) |
| Part Number | 94G6473 | 94G6474 | 94G6475 | 94G7079 | 94G7079 | 94G7079 |

**IBM PC Server 330** (8640 EDO)

| | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|--------------------|
| Base MB | 32 | 32 | 32 | 32 | 32 | 32 | R ¹ -32 |
| Desired MB | 64 | 96 | 160 | 288 | 544 | 800 | 1024 |
| Quantity MB | 32 (1) | 64 (1) | 128 (1) | 256 (1) | 256 (2) | 256 (3) | 256 (4) |
| Part Number | 94G6473 | 94G6474 | 94G6475 | 94G7079 | 94G7079 | 94G7079 | 94G7079 |

IBM PC Server 520 (8641 ECC PCI/EISA)

| | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|--------------------|---------|---------|--------------------|---------|---------|
| Base MB | 32 | 32 | 32 | 32 | R ¹ -32 | 64 | 64 | 64 | 64 | 64 |
| Desired MB | 64 | 96 | 160 | 224 | 256 | 96 | 128 | 160 | 192 | 256 |
| Quantity MB | 32 (1) | 64 (1) | 64 (2) | 64 (3) | 64 (4) | 32 (1) | 64 (1) | 32 (1) 64 (1) | 64 (2) | 64 (3) |
| Part Number | 11H0633 | 11H0636 | 11H0636 | 11H0636 | 11H0636 | 11H0633 | 11H0636 | 11H0633 11H0636 | 11H0636 | 11H0636 |

IBM PC Server 704 (8650 ECC)

| | | | | | | | |
|--------------------|---------|---------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Base MB | 64 | 64 | 64 | R ¹ -64 | R ¹ -64 | R ¹ -64 | R ¹ -64 |
| Desired MB | 128 | 256 | 384 | 512 | 1024 | 1024 | 2048 |
| Quantity MB | 16 (4) | 16 (12) | 16 (4) 32 (8) | 64 (8) | 64 (16) | 128 (8) | 128 (16) |
| Part Number | 94G5877 | 94G5877 | 94G5877 94G5878 | 94G5879 | 94G5879 | 94G6682 | 94G6682 |

IBM PC Server 704 (8650 ECC) Continued

| | | | | | |
|--------------------|---------|---------|---------------------|---------------------|---------------------|
| Base MB | 128 | 128 | R ¹ -128 | R ¹ -128 | R ¹ -128 |
| Desired MB | 256 | 512 | 1024 | 1024 | 2048 |
| Quantity MB | 32 (4) | 32 (12) | 128 (8) | 64 (16) | 128 (16) |
| Part Number | 94G5878 | 94G5878 | 94G6682 | 94G5879 | 94G6682 |

IBM PC Server 720 (8642 ECC)

| | | | | | | |
|--------------------|---------|------------------|--------------------|------------------|--------------------|--------------------|
| Base MB | 64 | 64 | R ¹ -64 | 64 | R ¹ -64 | R ¹ -64 |
| Desired MB | 128 | 192 ³ | 256 | 256 ³ | 512 | 1024 ⁴ |
| Quantity MB | 8 (8) | 8 (16) | 16 (16) | 8 (24) | 32 (16) | 32 (32) |
| Part Number | 94G2939 | 94G2939 | 94G2940 | 94G2939 | 94G2941 | 94G2941 |

IBM PC Server 720 (8642 ECC) Continued

| | | | | | |
|--------------------|---------|------------------|------------------|---------------------|---------------------|
| Base MB | 128 | 128 | 128 | R ¹ -128 | R ¹ -128 |
| Desired MB | 256 | 384 ³ | 512 ³ | 512 | 1024 ³ |
| Quantity MB | 16 (8) | 16 (16) | 16 (24) | 32 (16) | 32 (32) |
| Part Number | 94G2940 | 94G2940 | 94G2940 | 94G2941 | 94G2941 |

¹ R=Removal of base memory.² Parity models conversions require base memory to be removed and replaced with 2x16 ECC SIMMs to make up the base of 32.³ Requires 0-512 Memory Card.⁴ Requires 0-512 PC Server 720 Memory Card.

IBM Monitor Family Overview



IBM G42 Monitor



IBM G50 Monitor



IBM G52 Monitor



IBM G72 Monitor



IBM P70 Monitor



IBM P200 Monitor

IBM Monitors At-A-Glance



| | Part Number | CRT Size | Viewable Image Size | Tube Type | DDot Pitch/Stripe Pitch | Screen Treatment | Power Management | Limited Warranty | Top Flicker-Free VESA | Case Colour | Essentials Page |
|-------------|-------------|----------|---------------------|---------------|-------------------------|-----------------------------|---------------------------------|-------------------|-----------------------|-------------|-----------------|
| G42 | 6540-02S | 14" | 13.2" (335mm) | Conventional | .28 dotmm-D | Anti-reflective | EPA Energy Star compliant | 1 year | 800 x 600 at 75Hz NI | Pearl white | page 129 |
| G50 | 6543-304 | 15" | 13.4" (342mm) | FST CRT | .28 dotmm-D | Silica with ESF | EPA Energy Star compliant NUTEK | 3-year (NZ: 1-yr) | 1024x768 at 72 NI | Pearl white | page 129 |
| G52 | 6546-01S | 15" | 13.7" (347mm) | FST CRT | .28 dotmm-D | Silica with ESF | EPA Energy Star compliant NUTEK | 3-year | 1024x768 at 85Hz NI | Pearl white | page 129 |
| G72 | 6547-01S | 17" | 15.7" (399mm) | FST CRT | .28 dotmm-D | Multi-layer Anti-reflective | EPA Energy Star compliant NUTEK | 3-year | 1024x768 at 85Hz NI | Pearl white | page 129 |
| P70 | 6554-674 | 17" | 15.9" (404mm) | Trinitron CRT | .26mm-S | Multi-layer Anti-reflective | EPA Energy Star compliant NUTEK | 3-year | 1280x1024 at 77Hz NI | Pearl white | page 129 |
| P200 | 6555-774 | 20" | 19.1" (485mm) | Trinitron CRT | .31mm-S | Multi-layer bonded panel | EPA Energy Star compliant NUTEK | 3-year | 1280x1024 at 85Hz NI | Pearl white | page 129 |

IBM Monitors Essentials

G42
G50
G52
G72
P70
P200

Machine Type 6540
Machine Type 6543
Machine Type 6546
Machine Type 6547
Machine Type 6554
Machine Type 6555

Designed and built in response to user input, IBM monitors optimize system graphic capabilities and help increase productivity. Our monitors are IBM-designed and tested for IBM systems. Some models even offer a choice of pearl white or stealth grey to complement the look of your system. The G Series Monitors work like a charm running home or standard business applications such as word processing, data entry and basic graphics. The P Series Monitors thrive in graphics-intensive environments such as desktop publishing, CAD and imaging, or in any application where superb image quality is required.

Benefits

User Comfort

IBM keeps users in mind through compliance to comprehensive worldwide standards for front-of-screen ergonomics and low emissions, and by simplifying initial setup and use.

Compatibility

IBM monitors allow you to take advantage of virtually every major video standard that your IBM or IBM-compatible system utilizes.

Superior Images

All of IBM's monitors feature exceptionally bright, clear images. The P Series even goes a step further, with its Sony Trinitron tube technology built into each model.

Reliability and Support

IBM backs every monitor with a three-year limited warranty, except G42 with 1 year warranty. (G50 is warranted for 1year in NZ).

Standard Features

System Versatility

IBM Monitors are designed and tested to optimize IBM systems. In addition, most models are available in choice of pearl white or stealth grey to match IBM systems.

Asset Management

IBM Monitors' VESA DDC feature provides asset management capability when coupled with appropriate software, such as TME 10 NetFinity.

High Performance

You can expect flicker-free, non-interlaced high refresh rates on both P and G series monitors, with the P200 reaching all the way up to 1280 x 1024 at 85Hz.

Anti-Reflective Surface

All IBM Monitors offer superior anti-reflective screen treatments which virtually eliminate annoying glare for the user, without sacrificing brightness or color.

ISO Compliance

All monitors provide ISO 9241 Part 3 compliance, the international standard for monitor front-of-screen ergonomics, so our monitors are exceptionally easy on the eyes. IBM also offers a supplier's declaration of ISO 9241 Part 3 compliance.

Power Management

When attached to a suitably configured system, all IBM monitors satisfy Energy Star requirements which may reduce energy consumption and prolong the life of your monitor.

User Controls

Intuitive digital controls allow you to configure your viewing for each user preference.

Plug and Play

IBM's VESA DDC Plug and Play capability provides automatic display mode optimization when the monitor is attached to a DDC-enabled system.