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• IBM PC 700 Series -- Pentium/ISA Systems

October 17, 1994

Announcement Number: 194-349

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#### Abstract

Desktop computing is entering a new era, and IBM is leading the way with the Personal Computer 700 Series systems. These desktop systems greatly increase system power to help you process, manage, and interpret vital business data in more sophisticated and valuable ways than ever before.

Each PC 700 Series system includes powerful new software tools, Easy Tools, for managing your desktop computing assets easily and effectively. Potential benefits include increased productivity, higher user satisfaction, and a lower cost of computing.

The IBM PC 700 Series systems provide leadership technology, advanced industrial design, and IBM quality, service, and support. The technology of these systems encompasses:

Intel\*\* Pentium\*\* processors

PCI/Industry Standard Architecture (ISA) SelectaBus(TM)

Advanced graphics

Description

PC 750-P75 (6885-3xx)

Enhanced PCI Local Bus IDE Controller

The PC 730 is a three-slot/three-bay Spacesaver design -- the PC 750 is a five-slot/five-bay Desktop design. All IBM PC 700 Series systems come with a three-year warranty and HelpWare(R) support. HelpWare is a comprehensive offering of service and support. Whether you are selecting personal computers for a large enterprise, a small business, or for your own use, you are aware of how complex your choices are. With the PC 700 Series, we are making it simple to select the features and performance you need for your critical business applications. A Model Numbering Guide, included in the Charges section, offers a building block approach for system components.

The 730-P75, 730-P100, 750-P75, and 750-P100 have not been approved by the Federal Communications Commission (FCC). These systems are not, and may not be, offered for sale or lease, or sold or leased, until the approval of the FCC has been obtained.

Planned Availability

PC 730-P90 (6875-4xx)	November 16, 1994 *
PC 750-P90 (6885-4xx)	November 16, 1994 *
PC 730-P75 (6875-3xx)	First quarter 1995

PC 730-P100 (6875-5xx) First quarter 1995

PC 750-P100 (6885-5xx) First quarter 1995

\*\* Product or company name is a trademark or registered trademark

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First quarter 1995

of its respective holder.

- (TM) Trademark of International Business Machines Corporation
- (R) Registered trademark of International Business Machines Corporation
- \* SCSI, CD-ROM, and high-performance video models will have limited availability.
- (1) The Energy Star emblem does not represent EPA endorsement of any product or service. EPA, as a matter of policy, does not endorse any particular company and its products.

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### IN BRIEF . . .

S	ystem Characteristics
0	New Pentium 75MHz, 90MHz and 100MHz processors
o	High capacity/performance hard files: 364MB, 540MB, 728MB,
	and 1GB (MB = million bytes, GB = 1,000 million bytes)
0	PCI/ISA SelectaBus technology
0	High performance SVGA PCI local bus video
0	Support for up to four PCI local bus IDE DASD devices
0	8MB or 16MB parity memory standard with 192MB maximum memory
0	Enhanced business audio
0	PC DOS 6.3/WIN 3.1 or OS/2(R) Warp preinstalled on hard file
	models
o	Easy Tools
0	Superior expansion capability
C	ommon to All Models
0	One 3.5-inch, 1.44MB diskette drive standard
0	Support for 2.88MB diskette drives
0	1MB video RAM standard (DRAM)
0	External 256KB L2 cache standard
0	PCI local bus SVGA video: 640 x 480, 800 x 600, 1024 x 768,
	1280 x 1024

```
o Two high-speed serial ports (nine-pin) and one high-speed parallel port

o Keyboard and pointing device ports

o IBM Enhanced Keyboard/Mouse

o Fully upgradeable with Intel's future Pentium processor technology

o Plug and Play capability

o Advanced Power Management capability with support of EPA Energy Star requirements(1)

o HelpWare(R) for a full range of service and support

o HelpCenter(R) (800-772-2227)
```

#### **DESCRIPTION**

The IBM PC 700 Series systems provide leadership technology, advanced industrial design, and IBM quality, service, and support.

### **Leadership Technology**

75MHz, 90MHz, and 100MHz Pentium Processor The Pentium processor is the latest generation in the Intel family, providing the highest performance of all Intel processors available today. The processor is compatible with most operating systems and application software for IBM-compatible personal computers.

SelectaBus technology The PC 700 Series systems incorporate SelectaBus technology. This technology gives you the choice of PCI/Micro Channel(R) or PCI/ISA bus architecture. Refer to Hardware Announcement 194-350, dated October 17, 1994, for the Micro Channel models.

Buffered Level 2 cache standard Buffered 256KB Level 2 cache improves performance by keeping the most recently used data available for instant access. The 256KB Level 2 cache is expandable to 1MB.

Enhanced PCI local bus IDE hard file controller or high-speed PCI SCSI Advances in IDE controller design double the number of

devices supported and increase the speed of operation by placing the devices on the PCI bus. Two IDE connectors provide attachment for high-speed devices on one connector with standard devices on the other. For even more demanding environments, a high-speed SCSI adapter supports seven devices on the PCI bus.

PCI local bus graphics controller or advanced PCI graphics adapter A PCI-bus attached graphics controller provides exceptional graphics performance with a full range of graphics modes supported. An advanced graphics adapter provides even better performance with support for video playback in a window or full screen.

Business audio standard Business audio provides support for such emerging applications as voice navigation, text to speech, and voice annotation.

Advanced Power Management and System Asset Management The power management features lower the power consumption of the system when it is not in use. In addition, features are available to help manage the maintenance and security of the system.

### **Advanced Industrial Design**

Choice of three-slot/three-bay or five-slot/five-bay design The PC 700 Series systems provide either a three slot and three bay Spacesaver package or a five slot and five bay Desktop package.

Vertical or horizontal orientation Either mechanical design may be oriented vertically in a desk-side manner or horizontally on the desktop. A floor stand and decorative base panel is provided standard on the Desktop system.

Choice of keyboards The standard keyboard is the IBM Enhanced 101-key Keyboard. A selection of TrackPoint 101 or TrackPoint(TM) 84-key keyboard is available.

Quiet and cool operation All PC 700 Series systems have a variable speed fan that provides optimum cooling for internal components and quiet operation.

Front access PCMCIA support With an optional adapter, the PC 700 Series supports the ability to attach PCMCIA adapters through the front of the system. You can move storage devices from a portable computer to the desktop for transfer of data and programs.

Lockable DASD The PC 700 Series systems have a sliding door on the front of the system. The door can be locked to secure diskette, CD-ROM, and PCMCIA devices (750 only).

### **Easy Tools**

Easy Tools is a unique set of software tools that help you manage your desktop computing asset with ease and effectiveness. Easy Tools includes:

Welcome The first time users power-on their IBM PCs, they will receive a unique multimedia presentation. It leads users through a simple checklist for setting up their systems. Welcome also includes an online library with comprehensive tutorials on OS/2 and DOS/Windows+ function. The tutorials are available at any time simply by clicking on an icon.

NetFinity\*\* Services NetFinity Services simplifies asset management by allowing LAN administrators to remotely gather system configuration details such as memory size, adapters installed, operating system used, and more. This information can be stored in a database for record keeping and reporting.

QA Plus\*\* This diagnostic software tool enables users and system support staff to accurately diagnose common problems on all major system components. The diagnostics may be run by clicking on an icon rather than booting from a diskette.

Online HouseCall This tool lets administrators remotely connect with and control user systems to resolve problems quickly and easily. The file transfer function enables administrators to dynamically download device drivers and configuration files. The Chat Box function lets users exchange text messages with administrators.

Rapid Resume\*\* Rapid Resume provides three power management modes, Standby and Suspend, a Scheduler, and Wake Up on Ring. These features combine to provide Advanced Power Management and efficient unattended operation of your system.

AnyView\*\* AnyView for DOS/Windows lets you establish the ideal graphics resolution and color settings for each application on your system. The display is automatically set up for the active application.

Diskette Factory This utility helps you easily create install level diskettes for your IBM PCs.

Plug and Play Utility This software facility for DOS/Windows provides easy installation capability for Plug and Play adapters.

#### IBM Quality, Service, and Support

Compatible with most industry-standard interfaces and devices All IBM products undergo extensive compatibility tests against IBM and industry standards.

Manufactured to meet IBM's high standards IBM's reliability testing comprises three phases -- pre-production, mid-production, and post-production. Each is designed to enhance the reliability of the product.

HelpWare IBM HelpWare is a comprehensive set of offerings designed to provide you with a full range of service and support options in making your computing experience more productive and enjoyable. As part of our commitment to provide you with the support you demand, we provide many complimentary HelpWare services during the warranty period of your IBM Personal Computer and additional services are available from the HelpWare Support Family. For detailed information on HelpWare, refer to Services Announcement

694-029, or call the HelpCenter(R) at 800-772-2227.

### **PRODUCT POSITIONING**

The IBM PC 700 Series is positioned as the high-end models of the Enhanced Commercial Desktop family of systems. They are

designed for computing environments that require high levels of processor performance, high-resolution graphics and large storage capacities. The flexibility of configuring a Spacesaver 3x3 or Desktop 5x5 using IDE or SCSI hard drives and up to 192MB of memory, allow these systems to be positioned as a stand-alone system, a client on a network, or an entry server.

The enhanced function of the 700 Series, including the high-speed Pentium processors, video performance, parity memory, and enhanced 101-key keyboard make these systems suitable in multitasking, compute- and graphics-intensive business applications, and in meeting your mission-critical requirements.

The 700 family is also desirable for general business applications including desktop publishing, training, education, public access and merchandising, for customers in small, medium, and large companies.

#### STATEMENT OF GENERAL DIRECTION

IBM intends to support Desktop Management Interface (DMI) technology in the PC 300 Series and 700 Series systems with planned availability in December 1994.

#### **PUBLICATIONS**

The following publications are shipped with the products. Additional copies of these publications can also be ordered.

Title	Order Number	Part Number
Setting Up Your Personal		
Computer	None	83G9820
Using Your Personal Computer	S83G-9822	83G9822
Installing Options in		

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Your Personal Computer

S83G-9824

83G9824

The following additional diskette packages are shipped with systems without hard files.

Title	Order Number	Part Number
S3 Vision864 SVGA DOS and		
Windows drivers	None	83G7786
Diagnostic Diskette for		
65XX and 68XX	None	83G9826
CrystalWare Windows 3.1		
Device Drivers	None	19H1208
Mouse Control Center	None	19H1251

The PCI SCSI Package (19H1209) is shipped with SCSI models.

The PCI Video Package (06H5233) is shipped with high-performance video models.

The DOS/Windows Publication (10H3083) is shipped with PC DOS/Windows models.

The following publications are shipped with OS/2 models:

Title	Order Number	Part Number
OS/2 Publication	None	83G8109
IBM NetFinity for OS/2	None	84G0061

The following publications are available immediately. To order, contact your IBM representative.

Order

Part

Title	Number	Number
Understanding Your Personal		
Computer	S83G-8299	83G8299
Technical Information Manual	S19H-1185	19H1185
Hardware Maintenance Manual	S83G-7789	83G7789
Diagnostic Diskette for		
65XX and 68XX	S83G-7787	83G7787
Crystal Audio Driver and		
Utilities User Guide	S19H-1247	19H1247
S3 Vision864 Device Driver		
Installation Guide	S19H-1188	19H1188

IBM's System Library Subscription Service (SLSS) is available.

Displayable Softcopy Publications: Understanding Your Personal Computer, S3 Vision864 Installation Instructions, AnyView Professional User's Manual, and VoiceType(TM) Control for Windows User's Guide are offered in displayable softcopy form. These displayable manuals can be used with the BookManager(R) READ licensed programs in any of the supported environments. Terms and conditions for use of the machine-readable files are shipped with the system.

Source File Publications: Understanding Your Personal Computer, S3 Vision864 Installation Instructions, AnyView Professional User's Guide, and VoiceType Control for Windows User's Guide are offered as no-charge features.

These files can be used with the BookMaster(R) and DCF licensed programs to create unmodified printed copies of the manuals. The source files can also be used with the BookManager Build licensed program to create unmodified displayable softcopy manuals. Terms and conditions for use of the machine-readable files are shipped with the system.

#### **EDUCATION SUPPORT**

No self-study/classroom courses will be available specifically for PC 730 and 750.

Call IBM Education and Training at 800-IBM-TEACH (426-8322), for education catalogs, schedules, and enrollments.

#### **TECHNICAL INFORMATION**

# **Specified Operating Environment**

Hard File Specifications:

	Formatted   Capacity*	364MB	540MB	   728MB	   1080MB	
	Average   Media Data  Rate	34Mb/sec	•	    37.6Mb/sec   4.7MB/sec		
	Average   Seek Time	12ms	12ms	   12ms	   10.5ms   	
	Average   Latency	6.7ms	6.7ms	   6.7ms	   5.56ms	

   Sector	•		+  
Interface   AT(IDE)		AT(IDE)	AT(IDE)
or SCSI		or SCSI	or SCSI
Read/			
	96KB	96KB	448KB
	+	+	

\* MB equals million bytes. Mb equals million bits. Actual user-accessible capacity may vary slightly based on different operating environments.

Mechanical Specifications:

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PC 730 Dimensions/Weights:
       Width: 360 mm (14.2 inches)
       Depth: 450 mm (17.7 inches)
       Height: 130 mm (5.1 inches)
       Weight: 8.6 kg (19.0 pounds) (Minimum configuration)
       Weight: 10.4 kg (23.0 pounds) (Maximum configuration)
   PC 750 Dimensions/Weights:
       Width: 420 mm (16.5 inches)
       Depth: 448 mm (17.6 inches)
       Height: 160 mm (6.3 inches)
       Weight: 12.7 kg (28.0 pounds) (Minimum configuration)
       Weight: 14.1 kg (31.1 pounds) (Maximum configuration)
Electrical Power Specifications:
   PC 730
       145-watt supply with variable speed fan
       110-volt or 220-volt operation controlled by a switch on the back of the unit
       Built in overload and surge protection
   100-125 (nominal) V AC; 50-60Hz; 3 Amp (maximum)
   200-240 (nominal) V AC; 50-60Hz; 1.5 Amp (maximum)
   Input kilovolt amperes (kVA) (approximately):
       Minimum configuration: 0.08 kVA (as shipped)
```

Maximum configuration: 0.30 kVA

PC 750

200-watt supply with variable speed fan

110-volt or 220-volt operation controlled by a switch on the back of the unit

Built in overload and surge protection

100-125 (nominal) V AC; 50-60Hz; 5.2 Amp (maximum)

200-240 (nominal) V AC; 50-60Hz; 2.6 Amp (maximum)

Input kilovolt amperes (kVA) (approximately):

Minimum configuration: 0.08 kVA (as shipped)

Maximum configuration: 0.52 kVA

Ambient Air Temperature Specifications:

System on: 10(degs) to 32(degs)C (50(degs) to 90(degs)F at 0 to

2134 m) (0 to 7000 feet)

System off: 10(degs) to 43(degs)C (50(degs) to 110(degs)F at 0 to

2134 m) (0 to 7000 feet)

Advanced Power Management: The PC 700 Series systems are designed to meet the EPA Energy Star requirements for using less than 30 watts of power in idle mode, when enabled by the power management software provided with the systems. All of the systems released in this announcement meet this requirement of less than 30 watts of power consumption in idle mode, when the power management function is fully enabled.

Power consumption is dependent upon many variables including system memory, L2 cache, video memory, number and type of hard files, and adapter cards installed. All of the PC 700 Series systems have processors and hard files that support power management.

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Noise Level Specifications: Declared acoustical noise emissions (idle mode): LWAd = 4.8 Bels

Note: The noise emission level stated is the declared (upper limit) A-weighted sound power level, in Bels, for a random sample of machines, typically configured and operating in idle mode; that is, powered on, but no disk drive read/write or other I/O activity. All measurements have been made in accordance with ANSI S12.10 and ISO 7779, and reported in conformance with ISO 9296.

**Equipment Approvals:** 

FCC -- Certified to comply with Part 15 FCC Rules, Class B limits

The 730-P75, 730-P100, 750-P75, and 750-P100 have not been approved by the Federal Communications Commission. These systems are not, and may not be, offered for sale or lease, or sold or leased, until the approval of the FCC has been obtained.

UL -- UL 1950, First Edition (U.S. legal -- OSHA)

CSA -- C22.2 No. 950 (Canada legal)

ISO Compliance: All PC 730 and 750 systems are ISO 9241-3 capable when used with an ISO-compliant monitor and appropriate software with ISO-compliant fonts.

A Supplier's Declaration will be available for systems. This document will contain detailed test results of product platforms against recognized National and International Standards/Guidelines on Ergonomics, Emissions, Product Safety, Acoustics and Thermal. A significant part of this document will address the ISO 9241 and ANSI/HFS 100 Ergonomics Standards. This Declaration will demonstrate IBM's commitment to product excellence and will be available through local IBM offices.

Operating Environment:

PC 730 Operating Environment:

Temperature: 10(degs) to 32(degs)C (50(degs) to 90(degs)F)

Relative Humidity: 8% to 80%

Wet Bulb (calorific value): 515 Btu (maximum)

Electrical Power:

90 -- 137 V AC, .08 kVA maximum

180 -- 265 V AC, .30 kVA maximum

Capacity of Exhaust: .56 cubic meter/minute 20 CFM

Noise Level: 4.8 dB

Leakage and starting current: 750 uA/95 amperes

PC 750 Operating Environment:

Temperature: 10(degs) to 32(degs)C (50(degs) to 90(degs)F)

Relative Humidity: 8% to 80%

Wet Bulb (calorific value): 1060 BTU (maximum)

Electrical Power:

90 -- 137 V AC, .08 kVA maximum

180 -- 265 V AC, .52 kVA maximim

Capacity of Exhaust: .56 cubic meter/minute 20 CFM

Noise Level: 4.8 dB

Leakage and starting current: 750 uA/95 amperes

Hardware Requirements: Monitors

Monitors supported by the IBM PC 730 and 750 systems are:

PS/ValuePoint(TM) Color Monitor 6312

PS/ValuePoint Color Monitor 6314

PS/ValuePoint Color Monitor 6317

PS/ValuePoint Color Monitor 6318

PS/ValuePoint Color Monitor 6319

IBM 6315 Color Monitors (Energy Star capable)

IBM 6321-001/003/004 Color Monitors

IBM 6321-011/013/014 Color Monitors

IBM 6322-002 Color Monitors

IBM 6322-022 Color Monitors (Energy Star capable)

IBM 6324 Color Monitors (Energy Star capable)

IBM 6325 Color Monitors (Energy Star capable)

IBM 6327-001/002/004 Color Monitors (Energy Star capable)

IBM 6327-023 Color Monitors (Energy Star capable)

IBM 9524 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9525 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9527 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9521 Color Monitors (Energy Star and NUTEK capable, touch screen)\*

IBM PS/2(R) Color Displays 8511, 8512, 8513, 8518 (VGA only)

IBM PS/2 Color Displays 8514,8515 (VGA and 1024 x 768(I))

IBM PS/2 Color Displays 8516 (VGA and 1024 x 768(I) touch screen)

IBM PS/2 Mono Monitor 8504 (VGA only)

\* When power managed to the VESA "Off" state, the 9521 Color Monitors require the monitor power on switch to be pressed to

return the monitor to the normal power on state.

(2) (I) indicates interlaced.

The PC 730 and 750 support VESA Display Power Management Signaling (DPMS).

The PC 730 and 750 support VESA Display Data Channel (DDC). The DDC protocol allows basic configuration information to be passed between a system unit and its attached monitor. This capability enables a DDC-enabled system unit to automatically configure the graphics adapter to drive an attached DDC-capable monitor in its optimum display mode (highest resolution and refresh rate).

The 6315, 6317, 6322, 6324, 6325, 6327, 9524, 9525, 9527, and 9521 monitors are ISO capable.

Video: All PC 730 and 750 systems have a S3 Vision864 video controller on the PCI local bus providing SVGA graphics. Operating system/driver support is required to provide the following VGA and SVGA video modes. All systems have 1MB of video memory (DRAM) standard and support the following video modes.

640 x 480, 256 colors (60,72,75,85Hz)

640 x 480, 32K colors (60,72,75Hz)

640 x 480, 64K colors (60,72,75Hz)

640 x 480, 16M colors (60,72,75Hz)

800 x 600, 16 colors (56,60,72,75Hz)

800 x 600, 256 colors (56,60,72,75,85Hz)

800 x 600, 32K colors (56,60,72,75Hz)

800 x 600, 64K colors (56,60,72,75Hz)

1024 x 768, 16 colors (43(I), 60,70,72,75Hz)

1024 x 768, 256 colors (43(I), 60,70,72,75Hz)

1280 x 1024, 16 colors (43(I), 60,72,75Hz)

With 2MB of video DRAM (optional) the following additional modes are supported:

```
800 x 600, 16M colors (56,60,72,75Hz)

1024 x 768, 32K colors (43(I), 60,70,72,75Hz)

1024 x 768, 64K colors (43(I), 60,70,72,75Hz)

1280 x 1024, 256 colors (45(I), 60,70,75Hz)

1600 x 1200, 256 colors (49.0(I))
```

A high-performance PCI bus video adapter, which occupies a PCI slot, is available with the following functions:

Graphic accelerator

2MB of VRAM

170MHz Palette DAC

Video playback in a window or full screen

The video adapter with 2MB of VRAM supports the following video modes:

640 x 480, 16 colors (60-100Hz)

640 x 480, 256 colors (60-100Hz)

640 x 480, 32K colors (60-100Hz)

640 x 480, 64K colors (60-100Hz)

640 x 480, 16M colors (60-100Hz)

800 x 600, 16 colors (60-100Hz)

800 x 600, 256 colors (60-100Hz)

800 x 600, 32K colors (60-100Hz)

800 x 600, 64K colors (60-100Hz)

800 x 600, 16M colors (60-100Hz)

1024 x 768, 16 colors (60-100Hz)

1024 x 768, 256 colors (60-100Hz)

1024 x 768, 32K colors (60-100Hz)

1024 x 768, 64K colors (60-100Hz)

1280 x 1024, 16 colors (60-95Hz)

1280 x 1024, 256 colors (60-95Hz)

1600 x 1200, 16 colors (66Hz)

1600 x 1200, 256 colors (66Hz)

The video adapter with 4MB of VRAM supports the following video modes:

1024 x 768, 16M colors (60-100Hz)

1280 x 1024, 65K colors (60-95Hz)

1280 x 1024, 16M colors (60-95Hz)

1600 x 1200, 65K colors (66Hz)

The 2MB VRAM upgrade kit (256 x 8 SOJ/VRAM) is available from:

Diamond Computer Systems, Inc.

1130 East Arques Avenue

Sunnyvale, CA 94086

Telephone: 408-736-2000

Fax: 408-730-5750

#### Note:

All modes are non-interlaced unless otherwise noted. (I) indicates interlaced.

The monitor attached should support the modes and frequencies desired.

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MFI modes 2, 3 and 4; MFI mode 5 (132 columns) is supported in some graphics modes. The monitor attached should support the modes and frequencies desired.

### **Software Requirements**

Operating System Software: The primary operating system environments for PC 730 and 750 is PC DOS 6.3 and Microsoft Windows 3.1 or OS/2 Warp. These operating systems will be preinstalled on selected models. Systems that are preinstalled will not ship with operating system diskettes, but will be preinstalled with Diskette Factory, a utility that allows customers to produce the diskette images of the preinstalled software.

PC 730 and 750 will be tested for compatibility with the following operating systems. A documented statement of compatibility will be made available to marketing and support channels when testing is complete. This support statement will also be made available to users via various IPCC Bulletin Boards

**IBM DOS 5.02** 

PC DOS 6.1

PC DOS 6.3

MS DOS\*\* 6.0

MS DOS 6.2

OS/2 2.1 (with S3 805 Drivers)

OS/2 2.11 (with S3 DXP Drivers)(3)

OS/2 Warp, Version 3

OS/2 Extended Services(TM) 1.0

Windows 3.1

Windows for Work Groups\*\* 3.11

Windows NT\*\*

OS/2 LAN Server 2.0

OS/2 LAN Server 3.0

Novell\*\* NetWare\*\* 2.2

Novell NetWare 3.11

Novell NetWare 4.0

DEC PathWorks\*\*

**DEC NET\*\*** 

SCO\*\* UNIX\*\* 3.2v.4

AIX(R) 1.3

Solaris\*\*

UnixWare\*\*

(3) OS/2 2.11 supports only SVGA 256 color drivers. Additional SVGA drivers are available on the OS/2 Bulletin Board. Additional drivers are also needed for SCSI, IDE CD-ROM, and audio and are available on the OS/2 Bulletin Board.

Note: Operating System video graphics driver support is required for IBM PC 730 and 750 SVGA graphics capabilities. Although these systems will be compatibility tested with the above operating systems, additional video driver support may be required from the operating system vendor.

The IBM Personal Computer 300 and 700 Series will have models preloaded with the latest version of OS/2 Warp Version 3. Some customers who have standardized on previous levels of OS/2 may have a requirement for an earlier version. PSP has agreed to provide those customers with an additional OS/2 2.11 license for a minimal fee. Customers who require an additional licenses can call the IBM Personal Computer HelpCenter at 800-772-2227 to receive instructions on removing the preloaded version of OS/2, the process for obtaining additional 2.11 licenses, and the associated fee.

BIOS: IBM PC 730 and 750 use SurePath\*\* BIOS. FLASH ROM supports Compatibility BIOS (CBIOS) and POST.

Plug and Play Support: IBM PC 730 and 750 support the Plug and Play specifications designed to make it easier for users to install, upgrade, and make changes to their personal computers. Plug and Play systems utilizing Plug and Play adapter cards are self-configuring when the preinstalled Plug and Play software is used.

All PC 730 and 750 have BIOS support and a Plug and Play Utility that support this emerging technology for hardware and software.

The PC 730 and 750 setup utility contains a list of IBM monitors the user can select. When a monitor is selected, the refresh rate is set to the highest rate for each resolution. The default resolution for PC DOS/WIN and OS/2 preloads is 640 x 480, 256 colors, 60Hz. If a higher resolution driver is installed, the setup utility will select the highest refresh rate the monitor will support. For non-IBM monitors, the user can customize the refresh rate by specifying the maximum horizontal refresh rate the monitor can support for each resolution. A monitor setup application is preinstalled to provide easy access to setup for monitor refresh rates.

Advanced Power Management (APM): The PC 730 and 750 support the APM Specification Version 1.1.

Advanced Power Management provides a cooperative environment in which applications, operating systems, device drivers, and BIOS (basic input/output system) work together to reduce power consumption.

The PC 700 Series systems have an advanced power management feature called standby. The power management feature places the system in standby mode after a user-defined time interval has elapsed with no activity. The system resumes operation when the keyboard or mouse is used. Systems with preinstalled software come with this power management feature already set up. The setup utility program has a default setting of 20 minutes for automatically initiating power management of the display, processor, and hard

disk.

The Scheduler feature is used to start events when the system is off. The scheduler may start events such as power-off, power-on, and program initiation.

The Rapid Resume Manager may be set up to save memory to the hard file when the power is turned off or an automatic power-off is scheduled. Memory is restored and operation continues when the power is turned on or automatic power-on is scheduled. Network operation is not maintained during power-off.

The Wake Up on Ring feature allows an incoming call to an attached modem to turn on the system.

Remote Diagnostics: The diagnostics provided with the system have a cosession feature. This feature allows the diagnostics to be run remotely over a phone line when a modem is attached to the system.

Mouse Control Center: The Mouse Control Center provides an easy-to-use icon interface to set the operating characteristics of the mouse for DOS/Windows. It is provided on diskette for systems without hard files and as part of the preinstalled software for DOS/Windows systems.

Crystal Utilities: The Crystal Utilities provide additional drivers for the enhanced business audio. They are provided on diskette for systems without hard files.

# **Compatibility and Supported Products**

Power for Supported Products: The user should ensure that the total power required to support desired system configuration is within the power provided by the PC 730 and 750 system.

Hardware Compatibility: PC 730 and 750 hardware is designed to maintain compatibility with adapters, and devices which fully support the following interfaces and physically fit into the system. PC 730 and 750 will be tested with the following adapters and devices plus additional IBM and non-IBM hardware for compatibility. A documented statement of compatibility will be made available

to marketing and support channels when testing is completed. This compatibility document will also be made available to users via various IPCC Bulletin Boards.

For adapters/options that are not included in the compatibility test list, the user should contact the manufacturer or place of purchase to validate compatibility.

Hard Files: AT IDE Interface (ATA Revision 3.0)

Description	Feature Number	Part Number
IDE Hard File Optional Features		
	4000	
270MB IDE Hard File	1928	70G8487
364MB IDE Hard File	1929	70G8488
527MB IDE Hard File	1926	70G8486
728MB IDE Hard File	1989	70G8511
1GB IDE Hard File	3955	94G3186
ValuePoint(TM) IDE Hard File Cable	2593	06H3610
	Feature	Part
Description	Number	Number
SCSI Hard File Optional Features		
270MB SCSI Hard File	3486	94G2439
364MB SCSI Hard File	3490	94G2440
00 1110 0001 Hara 1 110	5-7-7-0	7-42-7-0

540MB SCSI Hard File	3491	94G2441
728MB SCSI Hard File	3492	94G2442

A SCSI adapter is required to support these hard files.

I/O Adapter Card Optional Features:

Adapters that are AT/ISA bus compatible and operate at  $8\mbox{MHz}$ 

Adapters that are PCI bus compatible (Rev. 2.0)

Diskette Drives: AT Interface

Description	Feature Number	Part Number
Diskette Optional Features		
1.44MB 3.5-inch Diskette Drive 1.2MB 5.25-inch Diskette Drive 2.88MB 3.5-inch Diskette Drive Enhanced 2.88 Diskette Drive	1969	70G8499 70G8500 32G4338 32G4340

CD-ROM Optional Feature

IBM IDE Dual Speed CD-ROM	3589	70G8519
Enhanced Internal SCSI CD-ROM		
(SCSI adapter required)	5512	70G8503

Processor Upgrade Optional Features: Intel's future OverDrive\*\* processors based on Pentium\*\* processor technology (ZIF socket provided).

Monitors:

VGA or SVGA (operates at VGA or higher frequencies)

Physical interface compatible with IBM's PS/2 VGA interface

### Monitor Optional Features:

IBM 6315 Color Monitors (Energy Star capable)

IBM 6321-001/003/004 Color Monitors

IBM 6321-011/013/014 Color Monitors

IBM 6322-002 Color Monitors

IBM 6322-022 Color Monitors (Energy Star capable)

IBM 6324 Color Monitors (Energy Star capable)

IBM 6325 Color Monitors (Energy Star capable)

IBM 6327-001/002/004 Color Monitors (Energy Star capable)\*

IBM 6327-023 Color Monitors (Energy Star capable)\*

IBM 9524 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9525 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9527 Color Monitors (Energy Star and NUTEK capable, touch screen)

IBM 9521 Color Monitors (Energy Star and NUTEK capable, touch screen)\*

IBM PS/2 Mono Monitor 8504 (VGA only)

\* When power managed to the VESA Off state, the 6327 and 9527 Color Monitors require the monitor power on switch to be

pressed to return the monitor to the normal power on state.

#### Notes

The IBM PC 730 and 750 support VESA Display Power Management Signaling (DPMS).

The 6315, 6322, 6324, 6325, 6327, 9524, 9525, 9527, 9521 monitors are ISO capable.

Description	Feature Number	Part Number	
1MB Video Memory Upgrade 60ns	2453	92G7443	

Serial Ports: Two 16550 9-pin connectors with RS-232-D electrical interface.

Note: In order to use the two serial I/O ports simultaneously, devices connected to the serial ports must have a small 9-pin connector, otherwise there is not enough space. For devices that do not provide a small 9-pin connector, IBM has available an optional adapter cable part number 68 X 3873.

Parallel Port: One bi-directional ECP/EPP port

Pointing Device: IBM PS/2-compatible mouse

Keyboard Device

	Feature	Part
Description	Number	Number
Enhanced Keyboard (101 keys)		
(Standard)	5650	61G2838
Basic Keyboard (101 keys)		
(Option)	7420	71G4644

Space Saving Keyboard		
(84 keys) (Option)	5109	1396050
Host Connect Keyboard		
(122 keys) (Option)	6400	1396400
Enhanced Keyboard with		
<pre>TrackPoint II(TM) (Alternate)</pre>	9081	82G3281
Quiet Touch Keyboard with		
Trackpoint II (Alternate)		92G7458

Memory: IBM 72-pin industry-standard SIMMs (one-inch high): 4MB, 8MB, 16MB, 32MB (70ns) installed in matched pairs. Memory Optional Features

	Feature	Part
Description	Number	Number
•		
4MB Memory Module Kit-70ns	2201	92G7201
8MB Memory Module Kit-70ns	2637	92G7520
16MB Memory Module Kit-70ns	2211	92G7204
32MB Memory Module Kit-70ns	2096	92G7206
1MB L2 Cache	4858	92G7549

# Communications:

	Feature	Part
Description	Number	Number

Communications Optional Features

16/4 ISA-16 Adapter		73G2032
Network 16/4 II		03F0215
LAN Adapter For Ethernet		48G7169
LAN Adapter For Ethernet CX		60G0615
LAN Adapter For Ethernet TP		60G0605
ISA 14.4Kbps Data/Fax Modem/		
Wake Up on Ring	4213	13H6686
	Feature	Part
Description	Number	Number

Other Optional Features

TWO STOL FIONL ACCESS PUMCIA		
Adapter for ISA	4836	81G4246
Personal Computer Floor Stand	4162	82G4984

# **Software Compatibility**

PC DOS 6.3: PC 730 and 750 are designed to maintain compatibility with applications that operate under PC DOS 6.3 and/or Microsoft Windows 3.1. Although various applications have been tested, the user should consult the software publisher to validate support.

# **OS/2 Warp Version 3**

PC 730 and 750 are designed to maintain compatibility with applications that operate under IBM OS/2 Warp Version 3. Although

various applications have been tested, the user should consult the software publisher to validate support.

# **Systems Compatibility Report**

PC 730 and 750 will be tested for compatibility with numerous IBM and non-IBM operating systems, software applications, and programs. A documented statement of compatibility will be made available to marketing and support channels when testing is completed. This compatibility document will also be made available to users via various IPCC Bulletin Boards.

For software not included in the compatibility test report the user should contact the manufacturer or place of purchase to validate compatibility.

#### Limitations:

With 32-bit addressing the maximum memory address space on PC 730 and 750 models is 4GB. Of the 192MB of maximum system memory, the system requires 348K for its use. This leaves the customers with a maximum of 191.6MB of the memory address space for their usage.

72-pin (70ns) industry-standard memory SIMMs (one-inch high), 192MB maximum memory

Maximum external (L2) cache memory supported is 1MB

Maximum system board video RAM supported is 2MB

Maximum of four IDE hard files supported

Maximum single IDE hard file size supported is 1GB

Maximum of two diskette drives supported

Standard audio is not Sound Blaster\*\* hardware compatible

A mouse cannot be used with the IBM Quiet Touch Keyboard with TrackPoint II (84-key)

If a power failure occurs during a flash update, the system board may be unusable. A service call would be required to replace the

system board.

SVGA PC DOS/Windows support is on the video driver diskettes shipped with the systems.

The IBM Token-Ring Network Adapter II is designed and recommended to be used in systems with a maximum of 16MB of memory.

If all I/O card slots are populated, average wattage of the I/O cards should be limited to 8.5 watts. Populating all I/O card slots with options that have an average load of greater than 8.5 watts will cause recommended thermal limits in the I/O card area to be exceeded.

# **Planning Information**

Customer Responsibilities: The PC 730 and 750 are designated as customer setup (CSU). CSU allowance is one day.

Cable Orders: There are no cabling requirements, other than for system power, keyboard and mouse connections. All cables are provided with the system unit and the instructions are provided as part of initial setup.

The 220-volt power cables are provided by the countries at the point of sale.

To support more than two IDE devices on the PC 730 and 750, customers may purchase the IDE Hard File Cable Option (#2593, 06H3510).

Installability: The PC 730 and 750 is designed to function in either the horizontal (desktop) or vertical position using an approved floor stand. The floor stand is shipped with all IBM 750 models.

By following the setup instructions, the user attaches the keyboard, peripherals, and verifies that the AC voltage switch on the power supply is set to the correct position. Power is then turned on and setup is run after the computer has successfully completed initial self tests.

The Configuration Utility resides in ROM. In some instances, the user will be prompted to run this utility, or the user may invoke it by pressing the F1 key during memory POST.

The PC 730 and 750 have a universal power supply that operates with either 115 V AC or 230 V AC. The setting is selected by manually operating the switch on the rear of the systems. All power supplies have built-in overload protection and surge protection.

Problem Determination: If a failure is found at initial installation, a message will appear on the screen. If POST is successfully completed, the system attempts to load an operating system from the A drive. If an operating system is not found, the system attempts to load one from the C drive. If an operating system is not found, the user will be prompted to insert a diskette via an icon.

The trouble-shooting procedures consist of a power-on self test and easy-to-follow trouble-shooting charts designed to assist the user in isolating a defective machine element. The failing element (display, keyboard or mouse) can then be replaced or repaired under existing warranty provisions. Customers should contact the Personal Systems HelpCenter 800-722-2227 for service assistance.

Packaging:

PC 730 and 750

System Unit (6875, 6885)

Hardware Assembly Package

Power cord (110 V AC)

Mouse

Microphone

Floor Stand/Base Cover (6885 only)

System publications

Software Publications Package (PC DOS/WIN) or

Software Publications Package (OS/2 Warp) Keyboard Carton Keyboard Enhanced 101-key (Default) TrackPoint-101 (Alternate) TrackPoint-84 (Alternate) World Trade Considerations: NLS support is provided for the following countries/languages: Arabic Belgian Dutch Belgian French Brazilian Portuguese Bulgarian Cyrillic Canadian French Czechoslovakian Czech Czechoslovakian Slovak Denmark Finland France Germany Greece Hungary Israel

Italy LA Spanish Netherlands Norway Poland Portugal Russian Cyrillic Serbian Cyrillic South Africa Spain Sweden Switzerland French Switzerland German Turkey United Kingdom English

The NLS support includes PC national language code page support, national language keyboard support, multilingual nomenclature, and translated documentation and machine-readable information as required by the individual countries.

# Security, Auditability, and Control

Yugoslavia

The PC 730 and 750 support the IBM LogicLock system through the following security features:

Cover key lock

Tamper evident covers through an electronic switch

Secure removable media

Secure fixed DASD

Power-on password

Setup utility password (administrator password)

Boot sequence control

Diskette boot inhibit

Boot without keyboard or mouse

Diskette write protect (jumper)

Diskette I/O control

Hard file I/O control

Serial port I/O control

Parallel port I/O control

U-Bolt anchoring feature

To assist in security, system management, and asset management, the following system identifiers (vital product data) are provided:

Machine type and model

System serial number

Manufacturing identifier

Motherboard part number

Motherboard serial number

Limitations: The SCSI adapter provided on some models has an external port for the attachment of external SCSI devices. A data security exposure exists since external SCSI controllers can attach through the external SCSI port and gain undetected read or write access to data stored on internal or external SCSI devices. Physical access to the system and external SCSI devices must be controlled to limit this exposure.

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

#### **TERMS AND CONDITIONS**

This product is available for purchase under the terms of the IBM Customer Agreement (ICA).

IBM Credit Corporation Financing: Term leases and installment payment plans are available for commercial and state and local government customers.

Warranty Period:

System Hardware: Three years; however, an optional one-year period is available via special bid

IBM Programs: Three months

Media: Three months

Non-IBM Programs: Not warranted by IBM, warranty, if any is as provided by the program's supplier

Licensing: IBM programs included with the PC 730 and 750 are licensed under the terms and conditions of the IBM Program License Agreement or IBM System Program License Agreement. A copy of these agreements is included in the documentation shipped with the system.

Non-IBM programs are available from IBM as distributed by the program supplier. Terms and conditions of the supplier apply. They are included in their respective program packages in the documentation that ships with the system and are passed on to the customer.

### Warranty Service:

# System Hardware:

First year, IBM On-Site Repair (IOR), 8:00 a.m. through 5:00 p.m. Monday through Friday, next-day response Second and third years, Customer Carry-In Repair (CCR)

If warranty service is required, the customer should call the IBM Personal Systems HelpCenter at 800-772-2227 or IBM authorized reseller. The HelpCenter and IBM authorized resellers will assist the user with problem isolation.

If a system hardware problem is identified by the IBM Personal Systems HelpCenter, the HelpCenter will assist the customer in obtaining service. Some parts of the system, such as the keyboard and mouse, are considered customer replaceable units (CRUs). The HelpCenter representative will explain IBM's exchange procedures for replacing defective CRUs. For IBM Optional Features that are within their warranty period, or purchased new and installed in an IBM system under warranty, the HelpCenter will explain IBM's exchange procedures for replacing defective Optional Features.

International Warranty Service: Customers who travel or need to move products to another country will be able to register the products for IBM International Warranty Service. Upon registering with the International Warranty Service Office (IWSO), IBM will issue an International Warranty Service Certificate that will be honored virtually worldwide, where IBM or IBM resellers sell and service IBM PC products. During the original warranty period, customers will be provided service through the service delivery methods available for their specific IBM system in the servicing country.

For more information on IBM International Warranty Service in the United States and Canada, or to register your IBM PC systems, contact IBM at 800-IWS-7426 (497-7426). Refer to Services Announcement 694-028, dated October 17, 1994.

Alternative Service: Two levels of warranty upgrade are available for an additional charge during the warranty period. IOR, 8:00 a.m. through 5:00 p.m. Monday through Friday, next-day response, is available for the second and third years, and IOR, 24 hours a day, 7 days a week, average four-hour response, is available for all three years.

Note: CSO/MRSO/SSA automatic On-Site Warranty upgrades are not applicable. The automatic on-site warranty upgrade applies to one year CCR warranty machines only.

IBM Maintenance Service (post warranty): IOR, 8:00 a.m. through 5:00 p.m. Monday through Friday, next-day response, or 24 hours a day, 7 days a week coverage, average four-hour response, is available for an additional charge.

Note: Non-IBM products installed in a system either on warranty or Maintenance Service may be serviced by IBM. additional service support charges may apply. Refer to the Charges section.

IBM Hourly Service Rate Classification: One

IBM Warranty Service, Maintenance Service or IBM Hourly Service may be obtained by calling 800-IBM-SERV (426-7378). IBM Hourly Service is available at the applicable rate and terms, including element exchange price if applicable.

Volume Maintenance Option: None

Mid-Range System Option: The PC 730 and 750 are eligible machines for the Mid-Range System Option\* of the ICA.

Eligible	Disc	Discount	
Types	Three-Year		
6875	5%	5%	
6885	5%	5%	

Corporate Service Option: The PC 730 and 750 are eligible machines for the Corporate Service Option\* of the ICA.

Eligible	Disc	Discount	
Types	Three-Year Five		
Network	7%	7%	
System	5%	5%	

Extended Maintenance Option: The announced product is an eligible machine under the Extended Maintenance Option\* of the ICA. Central Facility Maintenance Service Option: The announced product is an eligible machine for Central Facility Maintenance Service Option\* of the ICA.

A minimum of six machines are required to be at the central facility before requesting maintenance service. The Additional Maintenance Charge Factor is currently 0.5 hours. The terms and conditions are stated in the Attachment for Central Facility Maintenance Service Option.

\* A revised exhibit will be available at a later date.

Product Availability Status: New product available

Field Installable Features: Yes

Model Conversions: No

Customer Setup: Yes

Licensed Internal Code: No

National Education Price (NEP): A National Education Price is available.

# **CHARGES**

Product Charges: These products are available from IBM Authorized Remarketers and through IBM PC Direct. Contact an IBM

Authorized Remarketer or IBM PC Direct for prices.

The 730-P75, 730-P100, 750-P75, and 750-P100 have not been approved by the Federal Communications Commission. These systems are not, and may not be, offered for sale or lease, or sold or leased, until the approval of the FCC has been obtained.

# Standard Models:

Description	Machine	Model	Part Number
PC 730 (3x3, PCI/ISA)			
Pent-75 364HF, 8MB,			
DOS/WIN	6875	34F	687534F
Pent-75 364HF, 8MB, OS/2	6875	34G	687534G
Pent-90 364HF, 8MB,	/ OFF	4.45	/ OFF 4.4F
DOS/WIN Pent-90 364HF, 8MB,	6875	44F	687544F
OS/2 Warp	6875	44G	687544G
PC 750 (5x5, PCI/ISA)			
Pent-75 540HF, 16MB, DOS/WIN	6885	35H	688535H
Pent-75 540HF, 16MB,			

OS/2 Warp	6885	35J	688535J Part
Description	Machine	Model	Number
Pent-90 540HF, 16MB,			
DOS/WIN	6885	45H	688545H
Pent-90 540HF, 16MB,			
OS/2 Warp	6885	45J	688545J
Pent-90 540HF, 16MB,			
CD-ROM, DOS/WIN	6885	4RM	68854RM
Pent-90 540HF, 16MB,	(005	4514	(0054514
VP*, DOS/WIN	6885	45M	688545M
Pent-90 IGBHF, 16MB,	( 0 0 F	48M	/ 00E 40M
<pre>VP*, DOS/WIN Pent-90 540 SCSI, 16MB,</pre>	6885	4011	688548M
DOS/WIN	6885	4CH	68854CH
Pent-90 540 SCSI, 16MB,	0003	4011	00034011
OS/2 Warp	6885	4CJ	68854CJ
Pent-100 540HF, 16MB,			
DOS/WIN	6885	55H	688555H
Pent-100 540HF, 16MB,			
OS/2 Warp	6885	55J	688555J

# \* VP = High-Performance Video Adapter

The following configuration guide is provided to assist you in defining additional model configurations that meet your specific requirements. The product numbers (machine type and model) are constructed by using the Custom Configuration Matrix shown

below. Because the number of possible custom configurations is great, some configurations you construct may not be readily available and will require special bid terms and conditions.

Custom Configuration Matrix
6875-30E = Base Model Number
   68 _ 5
7 = Spacesaver 3x3 Form Factor   8 = Desktop 5x5 Form Factor
5 = 3V/PCI/ISA System Board
3 = Pentium 75MHz Processor (256 L2 Cache   Standard)
4 = Pentium 90MHz Processor (256 L2 Cache   Standard)
5 = Pentium 100MHz Processor (256 L2 Cache   Standard)
0 = No Hard File
E = 8MB Memory, (Open Bay systems)  F = 8MB Memory, DOS 6.3/Windows 3.1  G = 8MB Memory, OS/2 3.0 for Windows  H = 16MB Memory, DOS 6.3/Windows 3.1  J = 16MB Memory, 3.0 for Windows

### **Instructions for Using the Custom Configuration Matrix**

To use the matrix and custom configure a system to meet your requirements, always begin with the number "68". This designates the IBM PC 700 Series. To complete the machine type, simply read down the left side of the matrix and select the numeric or alpha character that designates the form factor and motherboard that you want. After you've completed the machine type designation, continue down the matrix and select the processor, hard file and memory/operating system that you want using the numeric and alphacharacters that correspond to your selections to designate the model. An example of this follows:

```
68 = PC 700 Series
68 8 = Desktop 5 x 5
688 5 = System Board with PCI/ISA
6885 4 = Pentium -- 90MHz
68854 4 = 540MB Hard file
688545 H = 16MB Memory, DOS 6.3 Windows 3.1
```

You have now custom configured a machine type model 6885-45F. The ordering part number is 688545F.

# Annual Minimum Maintenance Charges:

	IBM On-Site 24 X 7 1st year 4 Hour	IBM On-Site 8am 5pm 2nd/3rd year Next Day	IB On-S 24 ) 2nd/3r 4 H	ite X 7 d year
6875-xxx	\$30	\$30		\$40
6885-xxx	30	30		40
Part Number	Description	IBM On-Site 8am 5pm	IBM On-Site 24 x 7	CFMS
730 (3 x 3	, PCI/ISA)			
687534F	P75, 364HF, 8MB, D/W	\$145	\$196	\$137
687534G	P75, 364HF,	<b>\$14</b> 5	<b>\$190</b>	Φ137
	8MB, 0S/2	145	196	137
687544F	P90, 364HF, 8MB, D/W	145	196	137
687544G	P90, 364HF, 8MB, OS/2			
	Warp	145	196	137

750 (5 x 5, PCI/IS	75	50 (	5 >	x 5	5, P	CI/	ISA	ľ
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688535H	P75, 540HF,			
	16MB, D/W	225	304	213
688535J	P75, 540HF,			
	16MB, OS/2	225	304	213
688545H	P90, 540HF,			
	16MB, D/W	225	304	213
688545J	P90, 540HF,			
	16MB, OS/2	225	304	213
68854RM	P90, 540HF,			
	16MB,			
	CD-ROM, D/W	225	304	213
688545M	P90, 540HF,			
	16MB, VP∗,			
	D/W	225	304	213
688548M	P90, IGB HF,			
	16MB, VP*,			
	D/W	225	304	213
		IBM		
		On-Site	IBM	
Part		8am	On-Site	
Number	Description	5pm	24 x 7	CFMS
68854CH	P90, 540 SCSI,			

	16MB, D/W	225	304	213
68854CJ	P90, 540 SCSI,			
	16MB, OS/2	225	304	213
688555H	P100, 540HF,			
	16MB, D/W	225	304	213
688555J	P100, 540HF,			
	16MB, OS/2	225	304	213

Service Support Charge for Non-IBM Products in 6875, 6885: Desktop product

IBM On-Site Repair (IOR)

Warranty \$30 Maintenance Service 30

Note: In addition to the Service Support charge other charges may be applicable if the non-IBM product has a separate maintenance charge.

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