

IBM PS/2 (Enhanced Model 95 XP 486)/PC Server 95 - Technical Specifications

[IBM Personal System/2 95 XP 486 Series / Server 95 Series / Server 95A Series](#)



[Inside the 9595 \(59kb\)](#)

[A close look at 95-series processor complexes \(215kb\)](#)

General information

Machine type: 9595

Announce date: October, 1992

Excerpt from the original announcement letter;

"The Personal System/2(R)(PS/2(R)) Model 95 XP 486 family of systems is expanded to include International Organization for Standards (ISO) capable servers. These new 9595 machine type systems replace selected models of machine type 8595. The PS/2 Model 95 XP 486 (9595-0LF, 0MF and 0MT) system units feature the IBM PS/2 XGA(tm)-2 Display Adapter/A with 256 colours, higher screen refresh rates and non-interlaced scanning, providing enhanced ergonomic benefits in the form of reduced screen flicker at high resolution (1024 x 768) when used in conjunction with appropriate software and the new IBM 95XX Colour Monitors. The PS/2 Model 95 XP 486 (9595-0LF, 0MF and 0MT) system units support the same features and provide the same basic functions previously announced with the corresponding 8595 system units. All IBM 9595 systems will be shipped by IBM with OS/2 and will include a mouse at no additional charge."

System characteristics

Microprocessor: Intel 80486 DX, DX2, or Pentium processor

Clock speed: DX2-50, DX2-66, DX50, P60, or P66 MHz

Coprocessor: integrated into DX/DX2/Pentium processor

Type of BUS: 32-bit Micro Channel

Total number of expansion slots: 8 (tower case)

Ports: PS/2 keyboard, PS/2 mouse, 1 DMA serial, DMA parallel, XGA-2 or SVGA, SCSI

Memory

Min/Max on system board: 8/64MB (see "configurations" info below for max. memory)

Type of memory:

RAM: DRAM (PS/2 72-pin SIMM, ECC) 70ns parity checked (8 sockets)

ROM: 128kb

Cache: 8kb L1 (all), 0kb L2 (DX2-50), optional 256kb L2 (DX2-66), 256kb L2 (DX50)

Physical description

Power supply: 335w, 110-220VAC manual switch

Weight: 22.7kg (50 lbs) (one fixed disk installed)

Dimensions (HxWxD): (501 x 203.2 x 508mm)

Mass storage

Drive bays: 7 (1 x 3.5" HH, 6 x 5.25" HH (4 accessible)) (9 bays on 95A models)

Floppy Disk

Size: 3.5 inch

Capacity: 2.88MB

Hard disk

Size: 3.5 inch half-height

Capacity: 400MB (0LF, 0MF), 1GB (0MT)

Access time: 11.5ms (400MB), 11ms (1GB)

Interface: SCSI (PS/2 enhanced SCSI adapter/A with cache - includes external SCSI port)

Display

Size:

Display type: Optional Analog CRT

Graphics modes supported: XGA-2 Display adapter/A (1MB)

1024x768, 256 colours

640x480, 64k colours

Keyboard

Type: 101 key enhanced, 122 key host connect, 84 key space saving

Software

Operating systems: IBM PC DOS Versions 5.0 and higher, OS/2 2.0 (XR06050) and higher, NetWare 3.11, AIX PS/2 1.3, SCO

UNIX System V/386 3.2V4.0, Banyan Vines/486 4.0

Configurations

Various memory, diskette drive, hard drive, monitor, and keyboard configurations including;

9595 XP 486

9595-0LF - System Unit 486DX2-50 (Type 2), 8/64MB, 400MB, 2.88, 101 keyboard

9595-0LG - System Unit 486DX2-50 (Type 2), 8/64MB, 540MB, 2.88, 101 keyboard

9595-0MF - System Unit 486DX-50 (Type 3), 16/64MB (ECC), 400MB, 2.88, 101 keyboard

9595-0MG - System Unit 486DX-50 (Type 3), 16/64MB (ECC), 540MB, 2.88, 101 keyboard

9595-0MT - System Unit 486DX-50 (Type 3), 16/64MB (ECC), 1.0GB, 2.88, 101 keyboard

9595 Server 95 (AKA "Server 95 466", "Server 95 560", "Server 95 566") (req. Type 4 ref. disk)

9595-1NG - System Unit 486DX2-66, 16/256MB (ECC), 540MB SCSI-2, 2.88, 101 keyboard
9595-1NT - System Unit 486DX2-66, 16/256MB (ECC), 1GB SCSI-2, 2.88, 101 keyboard
9595-1NV - System Unit 486DX2-66, 16/256MB (ECC), 2GB SCSI-2, 2.88, 101 keyboard
9595-0PT - System Unit Pentium 60, 16/256MB (ECC), 1GB SCSI-2 F/W, 2.88, 101 keyboard
9595-0PTF - As above - Canadian French
9595-0PV - System Unit Pentium 60, 16/256MB (ECC), 2GB SCSI-2 F/W, 2.88, 101 keyboard
9595-0QT - System Unit Pentium 66, 16/256MB (ECC), 1GB SCSI-2 F/W, 2.88, 101 keyboard
9595-0QTF - As above - Canadian French
9595-0QV - System Unit Pentium 66, 16/256MB (ECC), 2GB SCSI-2 F/W, 2.88, 101 keyboard
9595-PQG - System Unit Pentium 66, 16/256MB (ECC), 540MB SCSI-2 F/W, 2.88, 101 keyboard
9595-PQT - System Unit Pentium 66, 16/256MB (ECC), 1GB SCSI-2 F/W, 2.88, 101 keyboard

9595 Server 95 Array Models (Also referred to as 95A) (9 drive bays - req. Type 4 ref. disk)
9595-3NG - System Unit 486DX2-66, 16/256MB (ECC), 3 x 540MB SCSI-2, 2.88, 101 keyboard
9595-3NT - System Unit 486DX2-66, 16/256MB (ECC), 3 x 1GB SCSI-2, 2.88, 101 keyboard
9595-3PG - System Unit Pentium 60, 16/256MB (ECC), 3 x 540MB SCSI-2 F/W, 2.88, 101 keyboard
9595-3PT - System Unit Pentium 60, 16/256MB (ECC), 3 x 1GB SCSI-2 F/W, 2.88, 101 keyboard
9595-3QG - System Unit Pentium 66, 16/256MB (ECC), 3 x 540MB SCSI-2 F/W, 2.88, 101 keyboard
9595-3QT - System Unit Pentium 66, 16/256MB (ECC), 3 x 1GB SCSI-2 F/W, 2.88, 101 keyboard

NOTE: 95A comes with Fast & Wide RAID adapter, but only Fast drives!

NOTE: 0Mx & SERVER 95 models come w/ ECC (Error Checking & Correcting Memory)

NOTE: 9595 XP models are identical to 8595 XP models but with these additional features:

1. ISO-compliant
2. Premier line has 3 year on-site warranty
3. XGA-2 with 1MB VRAM

SERVER 95 models are different, part number-wise and functionally.

1. SERVER 95 comes with SCSI-2 Fast adapter
2. 95 ARRAY models come with SCSI-2 Fast/Wide RAID controller - supporting RAID levels 0,1 or 5, and "spare pooling". The drives are hot-pluggable. The 95A comes with 3 hard drives configured in one array, but NOTE that they are Fast, not Fast & Wide, drives.
3. All SERVER 95's (including ARRAY) have SVGA adapters
4. All have SurePath BIOS, upgradeable by flash EPROM

NOTE: SERVER 95 -PQG & -PQT models come with MGA Ultima Video Graphics Adapter, CD-ROM-II drive, and 3-button mouse

Options

System Board Memory	Feature Number	Part Number
IBM Personal System/2 2MB Memory Module Kit-70ns	129	6450902
IBM Personal System/2 4MB Memory Module Kit-70ns	128	6450128
IBM Personal System/2 8MB Memory Module Kit-70ns	5116	6450130
IBM Personal System/2 4MB ECC Mem. Mod. Kit-70ns	1158	6451158
IBM Personal System/2 8MB ECC Mem. Mod. Kit-70ns	1159	6451159
IBM Personal System/2 2MB Memory Module Kit-80ns	5214	6450608
IBM Personal System/2 4MB Memory Module Kit-80ns	3933	87F9977
IBM Personal System/2 8MB Memory Module Kit-80ns	1401	6450129
IBM Personal System/2 1MB Memory Module Kit-85ns(*)	5212	6450603
IBM Personal System/2 2MB Memory Module Kit-85ns(*)	5213	6450604
(*) xMx models only		

Fixed Disks / Diskette Drives	Feature Number	Part Number
IBM PS/2 1GB Hard Disk Drive	1052	6451052
IBM Personal System/2 2.88MB 3.5-Inch Diskette Drive(A)	1065	6451065
IBM Personal System/2 1.44MB 3.5-Inch Slim-High Diskette Drive(A)	1072	6451072
IBM Personal System/2 80MB SCSI Fixed Disk Drive	1045	6451045
IBM Personal System/2 160MB SCSI Fixed Disk Drive	1046	6451046
IBM Personal System/2 320MB SCSI Fixed Disk Drive	1108	6451234
IBM Personal System/2 400MB SCSI Fixed Disk Drive	1081	6451235
IBM Personal System/2 3.5 inch Rewritable Optical Drive	0162	6450162
IBM Personal System/2 Micro Channel(R) SCSI Adapter	1005	6451109
IBM Personal System/2 Micro Channel SCSI	1132	6451133

Adapter with Cache		
IBM Personal System/2 Micro Channel SCSI Adapter with Cache	1018	6451110
IBM Personal System/2 External Enclosure for SCSI Devices	3508	
IBM Personal System/2 External SCSI disk drive Enclosure	3510-0A0	
IBM Personal System/2 CD-ROM Drive	1113	6451113
IBM Personal System/2 External CD-ROM Drive	3509	
IBM Personal System/2 CD-ROM-II Drive	1104	6451104
IBM Personal System/2 5.25-inch Slim High Diskette Drive(A)	1066	6451066
IBM Personal System/2 High Availability Disk Array	3514-001 and 3514-004	
IBM Personal System/2 High Performance Disk Subsystem	3515-010, 3515-510 and 3515-520	
IBM Personal System/2 3515 Adapter Card	3550	45G2815
IBM Personal System/2 3515 Add'l 1.07GB File Module	3110	07G5171
IBM Personal System/2 3515 10-m Serial-Link Cable	3010	07G4860
(A) F/C 1065, 1066 and 1072 cannot be installed in the D bay.		

Communications	Feature Number	Part Number
IBM Personal System/2 LAN Adapter for Ethernet	7171	48G7171
IBM Personal System/2 Adapter/A for Ethernet Networks	1091	6451091
IBM Personal System/2 Dual Async Adapter/A	1014	6451013
The IBM 3270 Connection	2000	74F3465
System/370(tm) Channel Emulator/A	3205	1674899
IBM System 36/38 Workstation Emulation Adapter	6279	69X6279
IBM PC Network Baseband Adapter/A	1223	1501223
IBM PC Network Adapter II/A	1222	1501222
IBM PC Network Adapter II/A -- Frequency 2	5647	96X5647
IBM PC Network Adapter II/A -- Frequency 3	5648	96X5648

IBM Token-Ring Network 16/4 Trace and Performance Adapter/A	5130	74F5130
IBM Token-Ring Network Adapter/A	4790	69X8138
IBM Token-Ring Network Remote Program Load	8881	25F8887
IBM Token-Ring Network 16/4 Adapter/A	0149	74F9410
IBM Token-Ring Network 16/4 Busmaster Adapter/A	4041	74F4140
IBM Personal System/2 300/1200/2400 Internal Modem/A	1755	94X1755
IBM Personal System/2 Multiprotocol Adapter/A	3043	6451114
IBM Realtime Interface Co-Processor 6-Port V.35 Interface Board/A	1210	72F0163
IBM Realtime Interface Co-Processor 6-Port V.35 Interface Board/A HML	1212	72F0166
IBM High-Speed Communication Co-Processor	0619	04G5835
IBM High-Speed Communication Co-Processor HML	0618	04G5831
IBM Realtime Interface Co-Processor Multiport/2 (512KB)(B)	6263	09F1897
IBM Realtime Interface Co-Processor Multiport/2 (1MB)(B)	6247	16F1820
IBM Realtime Interface Co-Processor Multiport/2 8-Port RS-232 Interface Board	6265	09F1952
IBM Realtime Interface Co-Processor Multiport/2 8-Port RS-422A Interface Board	6326	15F8852
IBM Realtime Interface Co-Processor Multiport/2 6-Port RS-232C Synchronous Interface Board	6327	15F8861
IBM Realtime Interface Co-Processor Multiport/2 4-Port RS-232 Interface Board	6267	09F1955
IBM Realtime Interface Co-Processor Multiport/2 RS-232/RS-422 Interface Board	6266	09F1958
IBM Realtime Interface Co-Processor Portmaster(tm) Adapter/A (512KB)(B)	6360	53F2601
IBM Realtime Interface Co-Processor Portmaster Adapter/A (1MB)(B)	6364	53F2604
IBM Realtime Interface Co-Processor Portmaster Adapter/A (2MB)(B)	6368	53F2607
IBM X.25 Interface Co-Processor/2	6401	16F1858
IBM Realtime Interface Co-Processor Surge Protection Adapter	6361	53F2625
IBM Realtime Interface Co-Processor 8-Port RS-232	6362	53F2610

Interface Board/A		
IBM Realtime Interface Co-Processor 8-Port RS-232 Interface Board/A HML	6206	33F5338
IBM Realtime Interface Co-Processor 8-Port RS-422 Interface Board/A(C)	6363	53F2613
IBM Realtime Interface Co-Processor Selectable Interface Board/A	6365	53F2616
IBM Realtime Interface Co-Processor 8-Port RS-422 Interface Board/A HML	6207	33F5339
IBM Realtime Interface Co-Processor Selectable Interface Board/A HML	6208	33F5340
ISDN Co-Processor/2 Model 2	7228	44F7228
IBM Display Station Emulation Adapter/A	7743	92X0743
Store Controller Kit	6500	83X8187
Second Store Loop Adapter/A	6701	83X7575
IBM Personal System/2 FaxConcentrator(tm) Adapter/A	2530	94X2530
<p>(B) Due to physical limitations of these adapters, they cannot be installed in slot #4 of the PS/2 Model 95 XP 486 systems. The corrective service diskette (CSD) #UL79292 is required to support Realtime Interface Co-Processor OS/2 Support Version 1.03 (33F7220, 5662-281).</p> <p>(C) IBM Personal System/2 Model 95 XP 486 supports a maximum of five of these adapters (F/C #6360, 6364 and 6368).</p>		

Processor Upgrades	Feature Number	Part Number
IBM PS/2 486DX2-66 Processor Upgrade Option from 486SX/25	5284	32G3383
IBM PS/2 486DX2-66 Processor Upgrade Option from 486DX2-50	1163	32G3383
IBM PS/2 Enhanced 486/50 Processor Upgrade Option from 486SX/25	5273	6451269
IBM PS/2 Enhanced 486/50 Processor Upgrade Option from 486DX2-50	1162	6451269
IBM PS/2 Enhanced 486/50 Processor Upgrade Option from 486DX2-66	5277	6451269

Displays and Display Adapters	Feature Number	Part Number
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IBM Personal System/2 XGA(tm) Display Adapter/A	5887	75X5887
IBM Personal System/2 XGA-2(tm) Display Adapter/A	2561	87F4773
IBM Personal System/2 Enhanced M-Motion Video Adapter/A (D, E)	1991	95F1091
IBM Personal System/2 Video Memory Expansion Option	4007	75X5889
IBM Personal System/2 Image Adapter/A	4324	07F4400
IBM Personal System/2 Image Adapter/A 1MB	0072	44F9914
IBM Personal System/2 Image Adapter/A 3MB	0073	44F9919
IBM Personal System/2 Image Adapter/A 3MB (for 6091 Colour Display)	0074	44F9921
IBM Personal System/2 Image Adapter/A Printer/Scanner Option (req #4324, #0072, #0073 or #0074)	1632	07F4402
IBM Personal System/2 Image Adapter/A Memory Expansion Kit (requires #1632)	3231	07F4406
Action Media II Display Adapter 2MB	9730	69F9730
Action Media II Display Adapter/A	9732	69F9732
Action Media Capture Option	9734	69F9734
IBM Personal System/2 8504 Monochrome Display(D)		
IBM Personal System/2 Colour Display 8511(D)		
IBM Personal System/2 Colour Display 8512(D)		
IBM Personal System/2 Colour Display 8513(D)		
IBM Personal System/2 Colour Display 8514		
IBM Personal System/2 Colour Display 8515		
IBM Personal System/2 Colour Display 8516		
IBM Personal System/2 Colour Display 8518 (D)		
IBM 6091 Colour Display (requires #0074)		
IBM Colour Display 9515		
IBM Colour Display 9517		
IBM Colour Display 9518(D)		
(D) Supports VGA or lower resolution modes only. IBM Personal System/2 M-Motion Video Adapter/A does not support ISO displays 9515, 9517 or 9518. (E) The IBM Personal System/2 M-Motion Video Adapter/A requires the IBM M-Control Program/2 Version 2.0 Level 210 or higher.		

Scanners

3119 PageScanner
3119 Adapter/A (#5442, 94X2415)
2456 Image Scanner (64F7495) (supported for compatibility under OS/2 V2.0 with the fix to APAR #PJ04056)

Tape	Feature	Part
IBM Personal System/2 80/120MB Internal Tape Backup Unit	5279	30F5279
IBM Personal System/2 Internal Tape Backup Install Kit C (required to install #5279 on Models 90/95)	2992	87F9826
IBM Personal System/2 6157 Tape Drive Adapter/A	4160	92X1458
IBM 6157 Streaming Tape Drive Model 1(F)		
IBM 6157 Streaming Tape Drive Model 2(F)		
Personal System/2 2.3GB External SCSI Tape Drive	3509	
Personal System/2 2.3GB SCSI Tape Drive	1120	6451121
(F) Not compatible with Sytos Plus for OS/2 Version 2.0		

Other Devices	Feature	Part
IBM Personal System/2 Mouse	8770	6450350
ADCM (Asynchronous DCM)	42201	97D1108
Audio Capture/Playback Adapter/A	3909	87F9909
Video Capture Adapter/A	2785	34F2785
3812 Model 002 ImagePlus(R) Feature	4050	04F5425

Plus many more IBM and 3rd party adapter cards...
Note: Options may no longer be available from IBM.