

IBM PS/2 Model 76 and 77 (i/s)

| IBM® PS/2®: | Model 76i | Model 76s | Model 77i | Model 77s | |
|---|---|--|---|---|--|
| Type Models | 9576 AU9 = 170M AUB = 270M ANB = 270M ATB = 270M | 9576 BUB = 270M BNB = 270M BTB = 270M | 9577 AUB = 270M ANG = 527M ANB = 270M ATG = 527M ATB = 270M | 9577 BUB = 270M BNG = 540M BNB = 270M BTG = 540M BTB = 270M ECC: VTG = 540M | |
| Processor / MHz Processor upgrade(s) | All: U = 486SX at 33 MHz ; N = 486DX2 at 66/33 MHz ; T = DX4 at 100/33 MHz All: 486SX-33 to 486DX-33, 486DX2-66/33, DX4-100/33, or P24T 486DX2-66 to DX4-100/33, or P24T DX4-100 to P24CT (in 1996) | | | Multimedia: 6NB = 270M 7NG = 540M 7NB = 270M 6TG = 540M 6NG = 540M 7TG = 540M | |
| Upgrade method | All: Replace CPU in 237 pin Zero Insertion Force (ZIF) socket (Intel® Socket 3) | | | | |
| L2 cache - std / max L2 cache - write policy L2 cache - method | All: U = 0 KB / 256 KB; N = 128 KB / 256 KB; T = 256 KB / 256 KB All: Write-through with write buffer / direct mapped / 20 ns All: 1 total SIMM connector for 128 KB or 256 KB SIMM per above | | Memory controller uses a 512 byte, 4 way set associative write buffer to allow performance similar to having a write-back L2 cache | | |
| Memory - std / max Memory - speed / pins Memory - supported SIMMs Mem - total sockets / avail Memory - type Memory controller RAS | All: 8 / 64 MB (VTG = 16 MB ECC) All: 70 ns / 72 pin All: 70 ns only (4, 8, 16 MB SIMMs) All: 4 sockets / 3 available All: Parity (IBM or industry std) All: Dual RAS (IBM presence detect bits) which halt system. | | The memory controller is actually Error Checking and Correcting (ECC) . It supports either parity or ECC SIMMs (parity SIMMs ship standard except on 77s-VTG). If using ECC SIMMs, it supports 4, 8, or 16 MB ECC 70 ns only. ECC detects and corrects any single bit errors on the fly; all 2 bit errors are found which halt system; some 3 and 4 bit errors are found | | |
| Micro Channel® slots / avail (all 32 bit slots) | 3 slots / 3 avail All: 40 MB/sec streaming and data parity support | 3 slots / 2 avail (SCSI adapt) SCSI-2 Fast Adapter/A | 5 slots / 5 avail | 5 / 4 avail (SCSI in one) 6xx, 7xx: 5 slots / 3 avail | |
| Disk controller(s) | IDE / 2 drops (IDE disk std) | IDE / no cable(SCSI disk std) SCSI-2 Fast Adapter/A | IDE / 2 drops (IDE disk std) | IDE / no cable(SCSI disk std) SCSI-2 Fast Adapter/A ¹ | |
| Controller implementation Diskette drive | 16 bit IDE on planar / slave All: 2.88 MB 3.5" diskette drive / dust cover / media sense to correctly format, read, write 1, 2, and 4 MB diskettes | 16 bit SCSI adapter / slave | 16 bit IDE on planar / slave | 16 bit SCSI adapter / slave | |
| Graphics - controller Graphics - vendor / type Graphics - memory std/max Graphics - arch/data path Media access slot | All: 86C928 (on planar) All: S3 / SVGA accelerator All: 1 / 2 MB (VRAM) 70 ns All: VESA local bus / 32 bit All: Media access slot on planar (see below) | on DX2-66/33: WinMark 3.11 = 27 WinMark 4.0 = 12 | 9576 - Three bays: ① 5.25", SL 1", access, std diskette ② 5.25", HH 1.6", access, open ③ 3.5", SL 1", no access, std disk | diskette disk ② | |
| Serial ports | All: Two 9 pin serial ports / DMA support / UART 16550A / 345.6 Kbps max speed | | 9577 - Four bays: ① 5.25", SL 1", access, std diskette ② 5.25", HH 1.6", access, open ² ③ 5.25", HH 1.6", access, open ④ 3.5", HH 1.6", no access, std disk | diskette disk ② ③ | |
| Parallel port | All: One (DMA) bidirectional / 100 KBps max spd | | | | |
| Security features: Tamper evident cover Privileged-access passwd Power-on password Cover key lock U Bolt support Security options | All: No All: Yes All: Yes All: Yes All: Yes All: Cable Cover / Enhanced 2.88 MB diskette drive with electronic eject and removable media security | All: Vital Product Data (VPD) enabled All: SVGA graphics controller meets ISO 9241-3 requirements All: Display Power Mgmt Signaling (DPMS) support | All: Fast startup mode (hit ESC) All: Keyboardless operation All: F1 for Setup and Diagnostics | | |
| System Partition Software | All: 6 MB System Partition (Reference Diskette, diagnostics on disk) that is visible via FDISK All: Choice of five op sys (not preinstalled): ① IBM OS/2® 2.1 (until 11/21/94), ② IBM OS/2 2.11, ③ IBM DOS 5.02 / Windows™ 3.1 (until 11/21/94) ④ IBM DOS 6.1 / Windows 3.1 (until 11/21/94) | | | | |
| BIOS | All: 256 KB Flash memory (SurePath™) and in System Partition ⑤ IBM DOS 6.3 / Windows 3.11 | | | | |
| Keyboard | All: Choice of four keyboards ① Enhanced 101 key & IBM Enhanced mouse ③ Enhanced 101 key with TrackPoint™ II ② Quiet (rubber dome) 101 key & IBM Enhanced mouse ④ Quiet Touch 84 key with TrackPoint II | | | | |
| Power supply Available date | 118 watts / universal / automatic voltage sensing All: June 1994 (multimedia models in November 1994) | | 197 watts / universal / manual switch setting | | |

| <p>Maximum disk capacity: Internal for Model 76i and 77i: 1.54 GB Only supports one 1 GB IDE (a 540 MB IDE would be master in this case) Internal for Model 76s: 2.0 GB (two IBM 1 GB SCSI-2 disks; the IBM 2.0 GB SCSI-2 disk is not supported internally due to thermal issues) Internal for Model 77s: 4.54 GB (two IBM 2 GB SCSI-2 disks and one 540 MB; thermal issues prevent three 2.0 GB)</p> | <p style="text-align: center;">MULTIMEDIA MODELS</p> <p>Model 77-6xx, 7xx:</p> <ul style="list-style-type: none"> ➤ Audiovation™ Adapter (sound card) <ul style="list-style-type: none"> - Mwave™ DSP based sound adapter - 16 bit; up to 44.1 kHz record and playback - Sound Blaster™ emulation - Internal connection for audio of CD-ROM - Software upgradeable for new sound features ➤ MediaBurst Movie Adapter MediaBurst Movie Adapter expands up to 4x the window size of many software motion video compression algorithms and provides access to the VESA Media Channel (VMC) ➤ CD-ROM/XA (double speed) plugged into Audiovation adapter ➤ Microphone; integrated speaker ➤ Front mounted headphone and microphone jacks ➤ 6xx: IBM DOS 6.3 and Windows 3.11 preinstalled ➤ 7xx: IBM OS/2 2.11 preinstalled ➤ Applets peinstalled: <ul style="list-style-type: none"> - Band-In-A-Box 1.0 (MIDI music appl) - TalkWorks 2.0 (Audio Recorder/Editor) - Talk-To Plus 1.3 (Speech navigation) - Monologue 1.5 (text to speech) | <p>Model 77s-VTG (ECC model) uses SCSI-2 Fast/Wide Adapter/A instead of SCSI-2 Fast Adapter/A</p> <p>All models have Media Access Slot on planar to plug in either:</p> <ul style="list-style-type: none"> ① Additional 1 MB VRAM for 928 ② MediaBurst Movie Adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|----------------|----------------|-----------|--------|------|---------|-----------|----|------|-----|-----------|------------|------|-----|-----------|--------|------|--------|------------|----------|-------------|--------|------------|------------|------|-----|-------------|--------------|------|----|-------------|------------|-------------|-----|--|
| <p style="text-align: center;">S3 86C928 VIDEO MODES</p> <table border="1"> <thead> <tr> <th>Resolution</th> <th>Frame Rate (Hz)</th> <th>Mem-ory</th> <th>Maximum colors</th> </tr> </thead> <tbody> <tr> <td>640 x 480</td> <td>60, 75</td> <td>1 MB</td> <td>16.7mil</td> </tr> <tr> <td>640 x 480</td> <td>70</td> <td>1 MB</td> <td>256</td> </tr> <tr> <td>800 x 600</td> <td>56, 70, 75</td> <td>1 MB</td> <td>256</td> </tr> <tr> <td>800 x 600</td> <td>60, 76</td> <td>1 MB</td> <td>65,536</td> </tr> <tr> <td>1024 x 768</td> <td>43.5 (I)</td> <td>2 MB</td> <td>65,536</td> </tr> <tr> <td>1024 x 768</td> <td>60, 70, 80</td> <td>1 MB</td> <td>256</td> </tr> <tr> <td>1280 x 1024</td> <td>43.5 (I), 60</td> <td>1 MB</td> <td>16</td> </tr> <tr> <td>1280 x 1024</td> <td>45 (I), 60</td> <td>2 MB</td> <td>256</td> </tr> </tbody> </table> | Resolution | Frame Rate (Hz) | Mem-ory | Maximum colors | 640 x 480 | 60, 75 | 1 MB | 16.7mil | 640 x 480 | 70 | 1 MB | 256 | 800 x 600 | 56, 70, 75 | 1 MB | 256 | 800 x 600 | 60, 76 | 1 MB | 65,536 | 1024 x 768 | 43.5 (I) | 2 MB | 65,536 | 1024 x 768 | 60, 70, 80 | 1 MB | 256 | 1280 x 1024 | 43.5 (I), 60 | 1 MB | 16 | 1280 x 1024 | 45 (I), 60 | 2 MB | 256 | <p style="text-align: center;">PS/2 WARRANTY SERVICE SUPPORT</p> <ul style="list-style-type: none"> ➤ 3 year warranty ➤ On site warranty all 3 years ➤ All cities in all states ➤ 24 hour / 7 day service coverage ➤ 4 hour response time ➤ 24 hour / 7 day telephone support ➤ 24 hour / 7 day bulletin board ➤ 24 hour / 7 day fax support ➤ IBM or dealer warranty/service ➤ 30 day money back guarantee |
| Resolution | Frame Rate (Hz) | Mem-ory | Maximum colors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 640 x 480 | 60, 75 | 1 MB | 16.7mil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 640 x 480 | 70 | 1 MB | 256 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800 x 600 | 56, 70, 75 | 1 MB | 256 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800 x 600 | 60, 76 | 1 MB | 65,536 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1024 x 768 | 43.5 (I) | 2 MB | 65,536 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1024 x 768 | 60, 70, 80 | 1 MB | 256 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1280 x 1024 | 43.5 (I), 60 | 1 MB | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1280 x 1024 | 45 (I), 60 | 2 MB | 256 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

All trademarks are the property of their respective owners (listed on Trademark sheet)

Note 1: Model 77s-VTG uses SCSI-2 Fast/Wide Adapter/A Note 2: CD-ROM in multimedia models

No warranties are expressed or implied in this summary (7677) Compiled by Roger Dodson, IBM. September 1994