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PowerBook 520: Specifications (5/96)

Revised: 5/31/96
Security: Everyone

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TOPIC -----

This article provides technical specifications for the PowerBook 520 computer.

DISCUSSION -----

Provides Macintosh Quadra performance in an all-in-one notebook computer

Microprocessor

- 50/25-MHz 68LC040 microprocessor (no FPU). (the two speeds refer to the internal processor and bus interface, respectively)
- 32-bit Address and Data bus
- Daughterboard (memory expansion) runs at 32-bit

RAM

- 4 MB RAM on logic board.
- Expandable to 36 MB with 70ns low power self-refreshing DRAM (Apple 8 MB RAM Expansion Kit, or Third Party higher density RAM card)

Storage

- One built-in 1.4 MB Apple SuperDrive disk drive that uses high-density floppy disks; it reads, writes, and formats Macintosh, MS-DOS, OS/2, and ProDOS disks.
- One internal 160 MB hard disk.

Display/Video Out

- 9.5-inch (diagonal), backlit, FSTN, passive matrix gray-scale display
- 640 x 480 pixels, 16 levels of gray

- Sleeps on close
- User-configurable
- External display port (mini DB-15) supports 8-bit video
- External display options:
 - Macintosh 12" Monochrome Display
 - Macintosh 12" RGB Display
 - AppleColor High Resolution RGB Display
 - Macintosh Color Display
 - Macintosh 16" Color Display
 - Macintosh Portrait Display
 - Some VGA and SVGA monitors (third party adapter required)
- Two video-out modes:
 - Video mirroring for simultaneous display of the same image on two screens.
 - Dual display for full use of both screens.

Networking

- Serial/LocalTalk
- Built-in High Speed Ethernet with Apple AUI connector

System Software

- Requires System 7.1.1 or later (5 High Density Disks)
- PowerBook 500 Series Enabler version 1.0.2 or later

Battery

- Nickel-metal-hydride PowerBook Intelligent Batteries each provide up to 3.5 hours of use before recharge.
- EverWatch battery-saver technology
- Batteries recharge in two hours when computer is in sleep or shutdown; four hours when running.
- PowerBook Control Strip allows user to monitor time remaining, charge time, and battery usage
- Backup rechargeable lithium battery maintains RAM in sleep mode while main battery is removed for up to three minutes.

Keyboard and Tracking Device

- Built-in keyboard with standard size keyboard with 76 (US) or 77 (ISO) keys including 12 function keys
- Two-level tilt adjustment
- Power-on key located on Keyboard
- Solid-state trackpad provides precise cursor control in response to the user's fingertip over its surface

Clock/Calendar

- CMOS custom chip with long-life lithium battery.

Microphone

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- Built-in omnidirectional; output voltage is 4 mV, peak to peak, at normal volume

Interfaces

- One Apple Desktop Bus (ADB) port for keyboard, mouse, and other devices.
- One RS-422 serial port for LocalTalk networking, printers, modems, and other devices.
- One high-speed Ethernet port
- One HDI-30 SCSI port for hard disks, scanners, CD-ROM drives, and other devices (up to 6 devices can be chained).
- One slot for optional modem.
- One video-out port, supporting 8 bit density and 256 colors.
- One stereo sound output port for external audio amplifier or headphones.
- One mono sound-in port.
- Security slot for use with third-party equipment to lock the computer.
- 90-pin processor direct slot (PDS) for connecting PDS devices or optional PowerBook PCMCIA Expansion Module allows use of two Type II or one Type III PCMCIA-type card).
- One RAM slot

Modem

- Optional Global Village PowerPort Mercury modem supports 19,200 bps data transmission and 14,440 bps fax

Built-in Stereo Sound

- CD-quality, 16-bit stereo sound capable of driving headphones or other stereo equipment.
- Two built-in stereo speakers
- Digital-to-analog and analog-to-digital conversion sampled at 11.035, 22.050, or 44.100 kHz.

Disability Access

- Easy Access and the ability to substitute visual cue for beep included with system software. These built-in solutions and third-party options provide alternative input and output devices for people with disabilities.

ADB Power Requirements

- Maximum current draw for all ADB devices is 200 mA (a maximum of three ADB devices is recommended)

Electrical Requirements

- Line voltage: 100 to 240 volts, 50 to 60 Hz

Environmental Requirements

- Operating temperature: 50 to 104° F (10 to 40° C)

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- Storage Temperature: -40°F to +149°F (-40 to +65° C)
- Relative humidity: 20% to 80% noncondensing
- Altitude: max. 10,000 ft. (3,048 m)
- Maximum Storage Altitude: 15,000 ft. (4,722 m)

Size and Weight

- Height: 2.3 in. (5.7 cm)
- Width: 11.5 in. (29.2 cm)
- Depth: 9.7 in. (24.5 cm)
- Weight: 6.3 lb. (2.8 kg)

Noise Level

- Noise free except for disk drive use.

Security

- Slot for security cable

Ordering Information

PowerBook 520 4/160

Order No. M2597LL/A

- PowerBook 520 computer with 4 MB of RAM, built-in 1.4MB Apple SuperDrive, and internal 160 MB hard disk drive
- PowerBook Intelligent Battery and AC adapter
- System 7
- Complete setup, learning, and reference documentation
- Training software
- Limited warranty
- PowerBook Mobility Bundle

PowerBook 8MB Memory Expansion Kit

Order No. M1913LL/A

PowerBook Active-Matrix

Color Display Upgrade

Order No. M3063LL/A

PowerBook Intelligent Battery

Order No. M1908LL/A

PowerBook AC Adapter

Order No. M1910LL/A

PowerBook PCMCIA Expansion Module

Order No. M2995LL/C

Apple HDI-30 SCSI Disk Adapter

Order No. M2539LL/A

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Apple HDI-30 SCSI System Cable
Order No. M2538LL/A

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