# **Technical Information**

# **General specifications**

#### **Processor**

PowerPC<sup>™</sup> G3 processor at 250 megahertz (MHz) processor speed (at 50 MHz system bus speed)

#### Cache

512 kilobyte (KB) level 2 (L2) "backside" cache (at 100 MHz)

#### Memory

- 32 megabytes (MB) of low-power dynamic random-access memory (DRAM) on the main logic board, expandable to 160 MB
- 4 MB read-only memory (ROM)
- 2 MB video RAM (VRAM) for up to 24 bits per pixel (bpp) resolution on external monitor; 16 bpp on internal display

#### Disk drives

- 5.0 gigabyte (GB) 2.5" ATA hard drive
- Removable 1.44 MB floppy disk drive (in the expansion bay), reads and writes Macintosh 800K and 1.4 MB floppy disks, as well as Windows, DOS, and OS/2 720K and 1.44 MB floppy disks
- 20x-speed (maximum) CD-ROM drive (for use in the expansion bay)

# Video display

12.1" diagonal, 800 x 600 active matrix (SVGA), thousands of colors

# **Battery**

Rechargeable 47 watt-hour lithium ion (LiIon) battery provides 2–4 hours of operation, depending on battery-saving features used and machine configuration

#### **Backup battery**

60 milliampere-hour (mAh) rechargeable nickel-metal-hydride (NiMH) battery for calendar/clock maintenance, also backs up the contents of RAM for a few minutes while you change batteries when your Macintosh PowerBook is in sleep mode

#### Sound

- 16-bit stereo sound in and out supporting 44.1 kilohertz (kHz) ("CD quality" sound), 22 kHz, and 11 kHz sample rates
- Four built-in speakers; two housed in the PowerBook's display and two 20 mm stereo speakers at the top of the keyboard

#### Interfaces

- Two PC Card (PCMCIA card) slots support either two Type I or Type II cards, or one Type III card; the lower slot also supports "Zoomed Video," a method of displaying video signals sent from a PC Card
- Expansion bay slot accepts a removable expansion bay module, including a 1.44 MB floppy disk drive (installed at the factory), CD-ROM drive, or other modules
- Built-in infrared support for two types of transmission—230-kilobit-persecond IRTalk and 1-megabit-per-second IrDA
- Internal PCI card slot, optionally with Ethernet/modem card or Ethernet card installed
- Apple Desktop Bus (ADB) port for keyboard, mouse, or other input devices using a low-speed, synchronous serial bus
- Serial port for printer, modem (including GeoPort support), LocalTalk network, or other serial devices (RS-422)
- SCSI port (HDI-30 connector) for hard disk drives, scanners, printers, and other devices; also supports PowerBook SCSI disk mode
- Sound output port for external audio amplifier/powered speakers, stereo minijack, 3-connector, standard 3.5 mm stereo miniplug

- Sound input port for stereo sound input (line level), stereo minijack,
   3-connector, standard 3.5 mm stereo miniplug; a PlainTalk microphone can also be connected to the sound input port
- Video port for up to 24-bit/millions-of-color video output to most Apple monitors (with the supplied adapter), VGA monitors (640 x 480), and SVGA monitors (800 x 600, 1024 x 768); supports VESA DDC2/B specification.

#### Power adapter

- *Input*: AC 100–240 volts (V), 50/60 hertz (Hz)
- Output: DC 24 V, 1.875 A nominally

# Keyboard

- 3.0 mm travel keyboard
- 19 mm vertical pitch, 19 mm horizontal pitch

# **Trackpad**

Integrated, solid-state trackpad provides precise cursor movement

# Weight

- Macintosh PowerBook G3 with the floppy drive expansion bay module:
   3.4 kg (7.5 lb.)
- Macintosh PowerBook G3 with the CD-ROM drive expansion bay module:
   3.5 kg (7.7 lb.)
- Macintosh PowerBook G3 with the PC Card storage case in the expansion bay: 3.2 kg (7.1 lb.)

#### **Dimensions**

293 mm x 239.5 mm x 65.6 mm (11.5 in. x 9.5 in. x 2.4 in.)

# Apple Desktop Bus (ADB) power requirements

Maximum current draw for all ADB devices is 200 mA.

*Note:* The maximum number of ADB devices recommended in a daisy chain connected to the ADB port is three.

### **RAM configurations**

All models ship with 32 MB of RAM on the main logic board. Additional RAM may be installed by means of a RAM expansion card. Additional RAM cards are available from any Apple-authorized dealer.

RAM expansion cards must use EDO 3.3 volt RAM chips rated at 60 nanosecond (ns) access time or faster, and must have TSOP low-profile RAM chips only. Installing a card with high-profile chips may damage your computer.

# Microphone/sound

The internal microphone is an omnidirectional electret type.

An external audio source may be used with this PowerBook if it generates line-level output. To input sound from audio equipment with line-level output, you need the appropriate adapters, which are available from most electronics stores.

The Apple PlainTalk microphone may be used with PowerBook G3 computers.

The Apple Omni microphone is not compatible with this computer.

#### **Environment**

- *Operating temperature*: 10° C to 35° C (50° F to 95° F)
- Storage temperature:  $-25^{\circ}$  C to  $60^{\circ}$  C  $(-13^{\circ}$  F to  $140^{\circ}$  F)
- Relative humidity: 20% to 80% noncondensing
- Operating altitude: 3048 m (10,000 ft.) maximum
- Shipping (non-operating) altitude: 4572 m (15,000 ft.) maximum

# Laser (in CD-ROM drive)

- *Type:* Semiconductor laser GaAlAs
- Wavelength: 780 nanometers (nm)
- Output power: 0.6 milliwatts (mW)
- Beam divergence:  $53.4^{\circ} \pm 1$

# **Options and accessories**

The following are available as options and accessories for your Macintosh PowerBook computer. (Part numbers have additional letters at the end to indicate localized versions; asterisks are placeholders for those letters.)

| Item  | Part number |
|---|-------------|
| Macintosh PowerBook Power Adapter for<br>Macintosh PowerBook G3, 3400 series, and 1400 series                         | M4895**/A   |
| Macintosh PowerBook Lithium-Ion Rechargeable Battery for Macintosh PowerBook G3                                       | M6138**/A   |
| Macintosh PowerBook 16 MB RAM Expansion Card for Macintosh PowerBook G3 and 3400 series                               | M5141**/A   |
| Apple HDI-30 SCSI Disk Adapter for SCSI disk mode   | M2539**/A   |
| Apple SCSI Peripheral Interface Cable for SCSI to SCSI connection   | M0207       |
| Apple HDI-30 SCSI System Cable for PowerBook to SCSI connection   | M2538**/A   |
| for SCSI disk mode  Apple SCSI Peripheral Interface Cable for SCSI to SCSI connection  Apple HDI-30 SCSI System Cable | M0207       |





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# Technical Information

Specifications for Macintosh PowerBook G3 computers