



# MacBook Pro (13-inch, Mid 2010) – Technical Specifications

Languages English

## Size and weight

Height:

0.95 inch (2.41 cm)

Width:

12.78 inches (32.5 cm)

Depth:

8.94 inches (22.7 cm)

Weight:

4.5 pounds (2.04 kg)<sup>1</sup>

## Connections and expansion

- MagSafe power port
- Gigabit Ethernet port
- One FireWire 800 port (up to 800 Mbps)
- Mini DisplayPort
- Two USB 2.0 ports (up to 480 Mbps)
- SD card slot
- Audio in/out
- Kensington lock slot

## Communications

- AirPort Extreme Wi-Fi wireless networking<sup>2</sup> (based on IEEE 802.11n specification); IEEE 802.11a/b/g compatible
- Bluetooth 2.1 + EDR (Enhanced Data Rate) wireless technology
- 10/100/1000BASE-T Gigabit Ethernet (RJ-45 connector)

## Audio

- Stereo speakers with subwoofers
- Omnidirectional microphone
- Combined headphone/line in (supports digital output)
- Support for Apple iPhone headset with microphone

## Environmental Status Report

MacBook Pro is designed with the following features to reduce its environmental impact:

- Highly recyclable aluminum and glass enclosure
- Mercury-free LED-backlit display
- Arsenic-free display glass
- BFR-free
- PVC-free<sup>3</sup>
- Reduced packaging volume
- Meets ENERGY STAR Version 5.0 requirements
- Rated EPEAT Gold<sup>4</sup>

## Acoustic Performance

DECLARED NOISE EMISSIONS in accordance with ISO 9296

	Sound Power Level L <sub>WAd</sub> (B) 1 B = 10 dB		Sound Pressure Level Operator Position L <sub>pAm</sub> (dB)	
	2.4 GHz	2.66 GHz	2.4 GHz	2.66 GHz
<b>Idle</b>	2.8	2.8	17	17
<b>Hard drive accessing</b>	2.8	2.8	16	16
<b>CD drive accessing</b>	3.4	3.4	30	26

1.  $L_{WAd}$  is the statistical upper-limit A-weighted sound power level (rounded to the nearest 0.1 B).
2.  $L_{pAm}$  is the mean A-weighted sound pressure level measured at the operator position (rounded to the nearest dB).
3. 1 B (bel) = 10 dB (decibel).

## Display

- 13.3-inch (diagonal) LED-backlit glossy widescreen display with support for millions of colors
- **Supported resolutions:** 1280 by 800 (native), 1152 by 720, 1024 by 640, and 800 by 500 pixels at 16:10 aspect ratio; 1024 by 768, 800 by 600, and 640 by 480 pixels at 4:3 aspect ratio; 1024 by 768, 800 by 600, and 640 by 480 pixels at 4:3 aspect ratio stretched; 720 by 480 pixels at 3:2 aspect ratio; 720 by 480 pixels at 3:2 aspect ratio stretched

## Graphics and video support

- NVIDIA GeForce 320M graphics processor with 256MB of DDR3 SDRAM shared with main memory<sup>5</sup>
- Dual display and video mirroring: Simultaneously supports full native resolution on the built-in display and up to 2560 by 1600 pixels on an external display, both at millions of colors
- iSight camera
- Mini DisplayPort

## Pure digital video output

**DVI output** using Mini DisplayPort to DVI Adapter (optional)

**VGA output** using Mini DisplayPort to VGA Adapter (optional)

**Dual-link DVI output** using Mini DisplayPort to Dual-Link DVI Adapter supports 30-inch Apple Cinema HD Display (optional)

**HDMI output** using a third-party Mini DisplayPort to HDMI Adapter

## Input

- Full-size backlit keyboard with 78 (U.S.) or 79 (ISO) keys, including 12 function keys and 4 arrow keys (inverted “T” arrangement)
- Multi-Touch trackpad for precise cursor control; supports inertial scrolling, pinch, rotate, swipe, three-finger swipe, four-finger swipe, tap, double-tap, and drag capabilities

## Processor and memory

- 2.4GHz or 2.66GHz Intel Core 2 Duo processor with 3MB on-chip shared L2 cache
- 1066MHz frontside bus
- 4GB (two 2GB SO-DIMMs) of 1066MHz DDR3 memory; two SO-DIMM slots support up to 8GB

## Storage

- 250GB or 320GB 5400-rpm Serial ATA hard drive; optional 320GB or 500GB 5400-rpm hard drive, or 128GB, 256GB, or 512GB solid-state drive<sup>6</sup>
- 8x slot-loading SuperDrive (DVD±R DL/DVD±RW/CD-RW)
- Maximum write: 8x DVD-R, DVD+R; 4x DVD-R DL (double layer), DVD+R DL (double layer), DVD-RW, DVD+RW; 24x CD-R; 10x CD-RW
- Maximum read: 8x DVD-R, DVD+R, DVD-ROM; 6x DVD-ROM (double layer DVD-9), DVD-R DL (double layer), DVD+R DL (double layer), DVD-RW, DVD+RW; 24x CD

## Battery and power<sup>7</sup>

- Up to 10 hours wireless productivity
- Built-in 63.5-watt-hour lithium-polymer battery
- 60W MagSafe Power Adapter with cable management system
- MagSafe power port

## Electrical and operating requirements

- Line voltage: 100V to 240V AC
- Frequency: 50Hz to 60Hz
- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: -13° to 113° F (-24° to 45° C)
- Relative humidity: 0% to 90% noncondensing
- Maximum operating altitude: 10,000 feet
- Maximum storage altitude: 15,000 feet
- Maximum shipping altitude: 35,000 feet

## What's in the box

- MacBook Pro
- Display cleaning cloth

- 60W MagSafe Power Adapter, AC wall plug, and power cord
- Software DVDs
- Printed and electronic documentation

#### Software

- Mac OS X v10.6 Snow Leopard (includes iTunes, Time Machine, Quick Look, Spaces, Spotlight, Dashboard, Mail, iChat, Safari, Address Book, QuickTime, iCal, DVD Player, Photo Booth, Front Row, Xcode Developer Tools)
- iLife (includes iPhoto, iMovie, iDVD, iWeb, GarageBand)

#### 13-inch Configurations

	2.4GHz MacBook Pro (MC374LL/A)	2.66GHz MacBook Pro (MC375LL/A)
<b>Enclosure</b>	Precision aluminum unibody	
<b>Processor</b>	2.4GHz Intel Core 2 Duo	2.66GHz Intel Core 2 Duo
<b>L2 cache</b>	3MB shared	
<b>System bus</b>	1066MHz	
<b>Memory</b>	4GB (two 2GB SO-DIMMs) of 1066MHz DDR3 SDRAM; supports up to 8GB	
<b>Hard drive<sup>6</sup></b>	250GB Serial ATA; 5400 rpm	320GB Serial ATA; 5400 rpm
<b>Slot-loading optical drive</b>	8x SuperDrive (DVD±R DL/DVD±RW/CD-RW)	
<b>Graphics</b>	NVIDIA GeForce 320M graphics processor with 256MB of DDR3 SDRAM shared with main memory <sup>5</sup>	
<b>Video</b>	iSight camera; Mini DisplayPort output port with support for DVI, VGA, dual-link DVI, and HDMI (requires adapters, sold separately)	
<b>Display</b>	13.3-inch (diagonal) LED-backlit glossy widescreen display, 1280-by-800 resolution	
<b>Expansion</b>	One FireWire 800 port (up to 800 Mbps), two USB 2.0 ports (up to 480 Mbps), SD card slot	
<b>Audio</b>	Stereo speakers with subwoofers, omnidirectional microphone, combined headphone/line in (supports digital output)	
<b>Networking</b>	10/100/1000BASE-T (Gigabit) Ethernet	
<b>Wireless</b>	AirPort Extreme Wi-Fi (based on IEEE 802.11n specification) <sup>2</sup> ; Bluetooth 2.1 + EDR (Enhanced Data Rate) wireless technology	
<b>Hardware accessories</b>	60W MagSafe Power Adapter, AC wall plug, power cord	
<b>Limited warranty and service</b>	Your MacBook Pro comes with 90 days of free telephone support and a one-year limited warranty. Purchase the AppleCare Protection Plan to extend your service and support to three years from your computer's purchase date. Only the AppleCare Protection Plan provides you with direct telephone support from Apple technical experts and the assurance that repairs will be handled by Apple-authorized technicians using genuine Apple parts. For more information, visit Apple support or call 800-823-2775.	
<b>Apple and the global environment</b>	Learn more about Apple's dedication to reducing the environmental impact of our products and processes. The Apple Product Environmental Specification details the environmental attributes of our products.	
<b>Recycling</b>	Apple takes a holistic view of materials management and waste minimization. Learn more about how to recycle your Mac.	

#### Options

#### Time Capsule

Time Capsule is a full-featured AirPort Extreme base station with a built-in hard drive. Back up wirelessly and create a Wi-Fi network with one device.

- 1TB or 2TB server-grade hard drive
- Wi-Fi Certified for 802.11n 2.0
- USB port for connecting a USB printer or USB external hard drive

#### Configure to order

- 320GB (5400-rpm) hard drive
- 500GB (5400-rpm) hard drive
- 128GB, 256GB, or 512GB solid-state drive
- Up to 8GB of 1066MHz DDR3 SDRAM
- Apple Remote
- Apple Mini DisplayPort to DVI Adapter
- Apple Mini DisplayPort to Dual-Link DVI Adapter
- Apple Mini DisplayPort to VGA Adapter
- MagSafe Airline Adapter
- AppleCare Protection Plan
- Aperture
- Final Cut Express
- Logic Express
- iWork

#### Accessories

- Apple LED Cinema Display
- AirPort Extreme Base Station
- AirPort Express Base Station
- Apple Wireless Keyboard
- Magic Mouse
- Apple Keyboard with Numeric Keypad
- Apple Mouse

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1. Actual weight varies by configuration and manufacturing process.
  2. Wireless Internet access requires a base station or other wireless access point and Internet access; fees may apply. Some ISPs are not currently compatible with AirPort.
  3. PVC-free AC power cord is available in the U.S., Canada, Mexico, Colombia, El Salvador, Guatemala, Panama, Peru, Puerto Rico, U.S. Virgin Islands, and Venezuela.
  4. MacBook Pro achieved a Gold rating from EPEAT in the U.S., Canada, France, Germany, and the UK.
  5. Memory available to Mac OS X may vary depending on graphics needs. Minimum graphics memory usage is 256MB.
  6. 1GB=1 billion bytes; actual formatted capacity less.
  7. 13-inch MacBook Pro testing conducted by Apple in March 2010 using preproduction 2.66GHz Intel Core 2 Duo-based MacBook Pro units. Battery life depends on configuration and use. See [www.apple.com/batteries](http://www.apple.com/batteries) for more information. The wireless productivity test measures battery life by wirelessly browsing various websites and editing text in a word processor document with display brightness set to the middle setting.

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