

# MacBook Pro (15-inch, Early 2013) – Technical Specifications

## Size and weight

- Height: 0.95 inch (2.41 cm)
- Width: 14.35 inches (36.4 cm)
- Depth: 9.82 inches (24.9 cm)
- Weight: 5.6 pounds (2.54 kg)<sup>1</sup>



## Connections and expansion



- MagSafe power port
- Gigabit Ethernet port
- FireWire 800 port (up to 800 Mbps)
- Two USB 2.0 ports (up to 480 Mbps)
- Thunderbolt port (up to 10 Gbps)
- Audio line in
- Audio line out
- SDXC card slot
- Kensington lock slot

## Communications

- 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 (located under left speaker grille)
- Audio line in minijack (digital/analog)
- Audio line out/headphone minijack (digital/analog)
- 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>
- Energy Efficient Ethernet
- Reduced packaging volume
- Meets ENERGY STAR Version 5.2 requirements
- Rated EPEAT Gold<sup>4</sup>

## Display

- Glossy
- Antiglare
- 15.4-inch (diagonal) LED-backlit glossy or optional antiglare widescreen display with support for millions of colors
- **Supported resolutions:** 1440 by 900 (native), 1280 by 800, 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

- AMD Radeon HD 6490M graphics processor with 256MB of GDDR5 memory on 2.0GHz configuration; or AMD Radeon HD 6750M graphics processor with 1GB of GDDR5 memory on 2.2GHz configuration
- Intel HD Graphics 3000 with 384MB of DDR3 SDRAM shared with main memory<sup>5</sup>
- Automatic graphics switching
- 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
- FaceTime HD camera
- Thunderbolt port

## **Thunderbolt digital video output**

- Native Mini DisplayPort 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 audio and video 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**

- 2.0GHz or 2.2GHz quad-core Intel Core i7 processor with 6MB shared L3 cache; or optional 2.3GHz quad-core Intel Core i7 processor with 8MB shared L3 cache
- 4GB (two 2GB SO-DIMMs) of 1333MHz DDR3 memory; two SO-DIMM slots support up to 8GB

## **Storage**

- 500GB or 750GB 5400-rpm Serial ATA hard drive; optional 750GB 5400-rpm hard drive, 500GB 7200-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 7 hrs wireless web

- Built-in 77.5-watt-hour lithium-polymer battery
- 85W 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
- 85W 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)

### **15-inch Configurations**

**2.0GHz MacBook Pro (MC721LL/A)**

**2.2GHz MacBook Pro (MC723LL/A)**

#### **Enclosure**

Precision aluminum unibody

#### **Processor**

2.0GHz quad-core Intel Core i7

2.2GHz quad-core Intel Core i7

#### **L3 cache**

6MB shared

6MB shared

### **Memory**

4GB (two 2GB SO-DIMMs) of 1333MHz DDR3 SDRAM; supports up to 8GB

### **Hard drive<sup>6</sup>**

500GB Serial ATA; 5400 rpm

750GB Serial ATA; 5400 rpm

### **Slot-loading optical drive**

8x SuperDrive (DVD±R DL/DVD±RW/CD-RW)

### **Graphics**

Intel HD Graphics 3000<sup>5</sup> and AMD Radeon HD 6490M with automatic graphics switching

Intel HD Graphics 3000<sup>5</sup> and AMD Radeon HD 6750M with automatic graphics switching

### **Graphics memory**

256MB GDDR5

1GB GDDR5

### **Video**

FaceTime HD camera; Thunderbolt port with support for DVI, VGA, dual-link DVI, and HDMI (requires adapters, sold separately)

### **Display**

15.4-inch (diagonal) LED-backlit glossy widescreen display, 1440-by-900 resolution

### **Expansion**

One Thunderbolt port (up to 10 Gbps), one FireWire 800 port (up to 800 Mbps), two USB 2.0 ports (up to 480 Mbps), SDXC card slot

### **Audio**

Stereo speakers with subwoofers, omnidirectional microphone, audio line in minijack (digital/analog), audio line out/headphone minijack (digital/analog)

### **Networking**

10/100/1000BASE-T (Gigabit) Ethernet

### **Wireless**

Wi-Fi (based on IEEE 802.11n specification)<sup>2</sup>; Bluetooth 2.1 + EDR (Enhanced Data Rate) wireless technology

### **Hardware accessories**

85W MagSafe Power Adapter, AC wall plug, power cord

## **Limited warranty and service**

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.

## **Apple and the global environment**

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.

## **Recycling**

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**

- 750GB (5400-rpm) hard drive
- 500GB (7200-rpm) hard drive
- 128GB, 256GB, or 512GB solid-state drive
- Up to 8GB of 1333MHz DDR3 SDRAM
- 1680-by-1050 high-resolution glossy display
- 1680-by-1050 high-resolution antiglare display
- 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