

MacBook Pro (13-inch, M1, 2020) – Technical Specifications

Languages English 



Finish

- Silver
- Space Gray

Display

- Retina display
- 13.3-inch (diagonal) LED-backlit display with IPS technology; 2560-by-1600 native resolution at 227 pixels per inch with support for millions of colors
- Supported scaled resolutions:
 - 1680 by 1050
 - 1440 by 900
 - 1024 by 640
- 500 nits brightness
- Wide color (P3)
- True Tone technology

Chip

- **Apple M1 chip**
 - 8-core CPU with 4 performance cores and 4 efficiency cores
 - 8-core GPU
 - 16-core Neural Engine

Battery and Power¹

- Up to 17 hours wireless web
- Up to 20 hours Apple TV app movie playback
- Built-in 58.2-watt-hour lithium-polymer battery
- 61W USB-C Power Adapter

Memory

- **8GB**
 - 8GB unified memory
 - Configurable to: 16GB*

Storage²

- 256GB SSD
 - Configurable to 512GB SSD, 1TB, or 2TB SSD*

Charging and Expansion

Two Thunderbolt / USB 4 ports with support for:

- Charging
- DisplayPort
- Thunderbolt 3 (up to 40Gb/s)
- USB 4 (up to 40Gb/s)
- USB 3.1 Gen 2 (up to 10Gb/s)
- Headphone

Keyboard and Trackpad

- Backlit Magic Keyboard with:
 - 65 (U.S.) or 66 (ISO) keys including 4 arrow keys in an inverted-T arrangement

- Touch Bar
- Touch ID sensor
- Ambient light sensor
- Force Touch trackpad for precise cursor control and pressure-sensing capabilities; enables Force clicks, accelerators, pressure-sensitive drawing, and Multi-Touch gestures

Wireless

- **Wi-Fi**
802.11ax Wi-Fi 6 wireless networking
IEEE 802.11a/b/g/n/ac compatible
- **Bluetooth**
Bluetooth 5.0 wireless technology

Camera

- 720p FaceTime HD camera

Display Support

Simultaneously supports full native resolution on the built-in display at millions of colors and:

- One external display with up to 6K resolution at 60Hz

Thunderbolt 3 digital video output

- Native DisplayPort output over USB-C
- VGA, HDMI, DVI, and Thunderbolt 2 output supported using adapters (sold separately)

Video Playback

- Supported formats include HEVC, H.264, and ProRes
- HDR with Dolby Vision, HDR10, and HLG

Audio Playback

- Supported formats include AAC, MP3, Apple Lossless, FLAC, Dolby Digital, Dolby Digital Plus, and Dolby Atmos

Audio

- Stereo speakers with high dynamic range
- Wide stereo sound
- Support for Dolby Atmos playback
- Studio-quality three-mic array with high signal-to-noise ratio and directional beamforming
- 3.5 mm headphone jack

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 (-25° to 45° C)
- Relative humidity: 0% to 90% noncondensing
- Operating altitude: tested up to 10,000 feet
- Maximum storage altitude: 15,000 feet
- Maximum shipping altitude: 35,000 feet

Size and Weight

- Height: 0.61 inch (1.56 cm)
- Width: 11.97 inches (30.41 cm)
- Depth: 8.36 inches (21.24 cm)
- Weight: 3.0 pounds (1.4 kg)³

Operating System

macOS

macOS is the most advanced desktop operating system in the world. macOS Monterey introduces powerful new features to help you connect, share, and create like never before. Learn more about latest operating system

Accessibility

Accessibility features help people with disabilities get the most out of their new MacBook Pro. With built-in support for vision, hearing, mobility, and learning, you can create and do amazing things. Learn more about Accessibility

Features include:

- Voice Control
- VoiceOver
- Zoom
- Increase Contrast
- Reduce Motion
- Siri and Dictation
- Switch Control
- Closed Captions
- Text to Speech

Built-in Apps⁴

- App Store
- Books
- Calendar
- Contacts
- FaceTime
- Find My
- GarageBand
- Home
- iMovie
- Keynote
- Mail
- Maps
- Messages
- Music
- News
- Notes
- Numbers
- Pages
- Photo Booth
- Photos
- Podcasts
- Preview
- QuickTime Player
- Reminders
- Safari
- Shortcuts
- Siri
- Stocks
- Time Machine
- TV
- Voice Memos

In the Box

- 13-inch MacBook Pro
- 61W USB-C Power Adapter
- USB-C Charge Cable (2 m)

Configure to Order

Configure your MacBook Pro with these options at apple.com:

- 16GB unified memory
- 512GB, 1TB, or 2TB SSD

MacBook Pro and the Environment

The 13-inch MacBook Pro is designed with the following features to reduce its environmental impact:⁵ See the 13-inch MacBook Pro Product Environmental Report

Made with better materials

- 100% recycled tin in the solder of the main logic board
- Enclosure made with recyclable, low-carbon aluminum
- 35% or more recycled plastic in multiple components

Energy efficient

- ENERGY STAR® certified⁶

Smarter chemistry⁷

- Arsenic-free display glass
- Mercury-free
- BFR-, PVC-, and beryllium-free

Green manufacturing

- Apple's Zero Waste Program helps suppliers eliminate waste sent to landfill
- All final assembly supplier sites are transitioning to 100% renewable energy for Apple production

Responsible packaging

- 100% of virgin wood fiber comes from responsibly managed forests
- Recyclable, majority-fiber packaging

Apple and the Environment

We're committed to making our products without taking from the earth, and to become carbon neutral across our entire business, including products, by 2030. See Apple's commitment

Acoustic Performance

Declared noise emission values in accordance with ECMA-109

| | Sound Power Level $L_{WA,m}$ (B) | Sound Pressure Level Operator Position $L_{pA,m}$ (dB) |
|--------------|-------------------------------------|--------------------------------------------------------------|
| Idle | 1.3 ($K_v = 0.3$) | 4 |
| Wireless web | 1.3 ($K_v = 0.3$) | 4 |

- $L_{WA,m}$ is the mean A-weighted sound power level, rounded to the nearest 0.1 B.
- $L_{pA,m}$ is the mean A-weighted sound pressure level measured at operator position (rounded to the nearest 1 dB).
- 1 B (bel) = 10 dB (decibel)
- K_v is the statistical adder for computing upper-limit of A-weighted sound power level.
- The quantity, $L_{WA,c}$ (formerly called $L_{WA,d}$) may be computed from the sum of $L_{WA,m}$ and K_v .
- The Wireless web test browses 25 popular websites.
- Configuration tested: Apple M1 chip, 8GB memory, 512GB storage.

- MacBook Pro with Apple M1 chip: Testing conducted by Apple in October 2020 using preproduction 13-inch MacBook Pro systems with Apple M1 chip, 8GB of RAM, and 512GB SSD. The wireless web test measures battery life by wirelessly browsing 25 popular websites with display brightness set to 8 clicks from bottom. The Apple TV app movie playback test measures battery life by playing back HD 1080p content with display brightness set to 8 clicks from bottom. MacBook Pro with Intel Core processor: Testing conducted by Apple in April 2020 using preproduction 1.4GHz quad-core Intel Core i5-based 13-inch MacBook Pro systems with 8GB of RAM and 256GB SSD; and preproduction 2.0GHz quad-core Intel Core i5-based 13-inch MacBook Pro systems with 16GB of RAM and 1TB SSD. The wireless web test measures battery life by wirelessly browsing 25 popular websites with display brightness set to 12 clicks from bottom or 75%. The Apple TV app movie playback test measures battery life by playing back HD 1080p content with display brightness set to 12 clicks from bottom or 75%. The standby test measures battery life by allowing a system, connected to a wireless network and signed in to an iCloud account, to enter standby mode with Safari and Mail applications launched and all system settings left at default. Battery life varies by use and configuration. See apple.com/batteries for more information.
- 1GB = 1 billion bytes and 1TB = 1 trillion bytes; actual formatted capacity less.
- Weight varies by configuration and manufacturing process.
- iMovie, GarageBand, Pages, Numbers, and Keynote are available on the Mac App Store. Downloading apps requires an Apple ID and a device that is compatible with the OS version required for each app.
- Data accurate as of product launch.
- ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency.

7. Apple defines its restrictions on harmful substances, including definitions for what Apple considers to be “free of,” in the Apple Regulated Substances Specification. Every Apple product is free of PVC and phthalates with the exception of AC power cords in India, Thailand (for two-prong AC power cords), and South Korea, where we continue to seek government approval for our PVC and phthalates replacement.

To access and use all the features of Apple Card, you must add Apple Card to Wallet on an iPhone or iPad with the latest version of iOS or iPadOS. Update to the latest version by going to Settings > General > Software Update. Tap Download and Install.

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