



MacBook Pro M4 Pro (2024)

Technical Specifications

Year introduced: 2024

Finish

- Space Black

Chip

- 12-core CPU with 8 performance cores and 4 efficiency cores
- 16-core GPU
- Hardware-accelerated ray tracing
- 16-core Neural Engine
- 273GB/s memory bandwidth
- Media engine
 - Hardware-accelerated H.264, HEVC, ProRes, and ProRes RAW
 - Video decode engine
 - Video encode engine
 - ProRes encode and decode engines
 - AV1 decode

Memory

- 24GB unified memory

Storage

- 512GB SSD

Display

- 14.2-inch Liquid Retina XDR display.
- 3024x1964 native resolution at 254 pixels per inch.
- XDR (Extreme Dynamic Range)

Battery and Power

- 72.4-watt-hour lithium-polymer battery.
- 70W USB-C Power Adapter
- USB-C to MagSafe 3 Cable

Connections and Expansion



- Three Thunderbolt 5 (USB-C) ports with support for:
 - Thunderbolt 5 (up to 120Gb/s)
 - DisplayPort
 - USB 4 (up to 120Gb/s)
 - Charging
- SDXC Card Slot
- HDMI Port
- 3.5 mm Headphone Jack
- MagSafe 3 Port

Display Support

- **M4 Pro**
Simultaneously supports full native resolution on the built-in display at 1 billion colors and:
Up to two external displays with up to 6K resolution at 60Hz over Thunderbolt, or one external display with up to 6K resolution at 60Hz over Thunderbolt and one external display with up to 4K resolution at 144Hz over HDMI.
One external display supported at 8K resolution at 60Hz or one external display at 4K resolution at 240Hz over HDMI.
- **Thunderbolt 5 Digital Video Output**
Support for native DisplayPort 2.1 output over USB-C.
- **HDMI Digital Video Output**
Support for one display with up to 8K resolution at 60Hz or 4K resolution at 240MHz.

Video Playback

- Supported formats include HEVC, H.264, AV1, and ProRes
- HDR with Dolby Vision, HDR10+/HDR10, and HLG

Audio Playback

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

Wireless

Wi-Fi

- Wi-Fi 6E (802.11ax)

Bluetooth

- Bluetooth 5.3

Camera

- 12MP Center Stage camera with support for Desk View
- 1080p HD video recording

Size and Weight

- Height: 0.61 inch (1.55 cm)
- Width: 12.31 inches (31.26 cm)
- Depth: 8.71 inches (22.12 cm)
- Weight (M4 Pro): 3.5 pounds (1.60 kg)



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 (-25° to 45° C)
- Relative humidity: 0% to 90% noncondensing
- Operating altitude: tested up to 10,000 feet (3000 meters)

In the Box

- 14-inch MacBook Pro
- 70W USB-C Power Adapter
- USB-C to MagSafe 3 Cable (2 m)



Operating System macOS