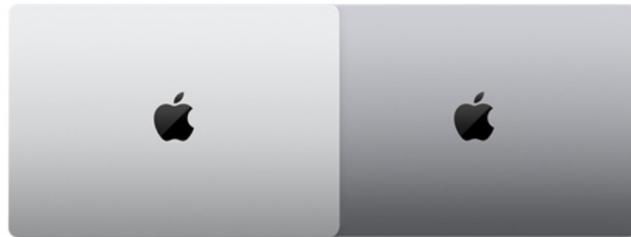# MacBook Pro

14-inch

Finish

Silver

Space Gray

Chip

Apple M1 Pro chip

8-core CPU with 6 performance cores and 2 efficiency cores

14-core GPU

16-core Neural Engine

200GB/s memory bandwidth

Media engine

Hardware-accelerated H.264, HEVC, ProRes, and ProRes RAW

Video decode engine

Video encode engine

ProRes encode and decode engine

Apple M1 Pro chip

10-core CPU with 8 performance cores and 2 efficiency cores

16-core GPU

16-core Neural Engine

200GB/s memory bandwidth

Media engine

Hardware-accelerated H.264, HEVC, ProRes, and ProRes RAW

Video decode engine

Video encode engine

ProRes encode and decode engine

Configurable to:

M1 Pro with 10-core CPU and 14-core GPU, M1 Pro with 10-core CPU and 16-core GPU, M1 Max with 10-core CPU and 24-core GPU, or M1 Max with 10-core CPU and 32-core GPU

Configurable to:

M1 Max with 10-core CPU and 24-core GPU or M1 Max with 10-core CPU and 32-core GPU

Display

Liquid Retina XDR display

14.2-inch (diagonal) Liquid Retina XDR display; 3024-by-1964 native resolution at 254 pixels per inch

XDR (Extreme Dynamic Range)

Up to 1000 nits sustained (full-screen) brightness, 1600 nits peak brightness

1,000,000:1 contrast ratio

Color

1 billion colors

Wide color (P3)

True Tone technology

Refresh rates

ProMotion technology for adaptive refresh rates up to 120Hz

Fixed refresh rates: 47.95Hz, 48.00Hz, 50.00Hz, 59.94Hz, 60.00Hz

Memory

16GB

16GB unified memory

Configurable to:

32GB (M1 Pro or M1 Max) or 64GB (M1 Max)

Battery and Power

Up to 17 hours Apple TV app movie playback

Up to 11 hours wireless web

70-watt-hour lithium-polymer battery

67W USB-C Power Adapter (included with M1 Pro with 8-core CPU)

96W USB-C Power Adapter (included with M1 Pro with 10-core CPU or M1 Max, configurable with M1 Pro with 8-core CPU)

USB-C to MagSafe 3 Cable

Fast-charge capable with 96W USB-C Power Adapter

Storage

512GB	**1TB**
512GB SSD	1TB SSD
Configurable to:	**Configurable to:**
1TB, 2TB, 4TB, or 8TB	2TB, 4TB, or 8TB

Charging and Expansion

SDXC card slot

HDMI port

3.5 mm headphone jack

MagSafe 3 port

Three Thunderbolt 4 (USB-C) ports with support for:

Charging

DisplayPort

Thunderbolt 4 (up to 40Gb/s)

USB 4 (up to 40Gb/s)

SDXC Thunderbolt 4 HDMI

MagSafe 3   Headphone jack

Thunderbolt 4

Video Support

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 at over a billion colors (M1 Pro) or Up to three external displays with up to 6K resolution and one external display with up to 4K resolution at 60Hz at over a billion colors (M1 Max)

Thunderbolt 4 digital video output

Native DisplayPort output over USB-C

VGA, HDMI, DVI, and Thunderbolt 2 output supported using adapters (sold separately)

HDMI digital video output

Support for one display with up to 4K resolution at 60Hz

DVI output using HDMI to DVI Adapter (sold separately)

Keyboard and Trackpad

Backlit Magic Keyboard with:

78 (U.S.) or 79 (ISO) keys including 12 full-height function keys and 4 arrow keys in an inverted-T arrangement

Touch ID

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

Force Touch trackpad

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

1080p FaceTime HD camera
Advanced image signal processor with computational video

Audio

High-fidelity six-speaker sound system with force-cancelling woofers

Wide stereo sound

Support for spatial audio when playing music or video with Dolby Atmos on built-in speakers

Spatial audio with dynamic head tracking when using AirPods (3rd generation), AirPods Pro, and AirPods Max

Studio-quality three-mic array with high signal-to-noise ratio and directional beamforming

3.5 mm headphone jack with advanced support for high-impedance headphones

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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 (1.55 cm)

Width: 12.31 inches (31.26 cm)

Depth: 8.71 inches (22.12 cm)

Weight: 3.5 pounds (1.6 kg)

12.31 inches
(31.26 cm)

8.71 inches
(22.12 cm)

0.61 inch

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.

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.

Features include:

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

In the Box

14-inch MacBook Pro

67W USB-C Power Adapter (M1 Pro with 8-core CPU) or 96W USB-C Power Adapter (M1 Pro with 10-core CPU or M1 Max)

USB-C to MagSafe 3 Cable (2 m)