Mac Studio M2 Ultra (2023) – Technical Specifications

Year introduced: 2023

Finish
- Silver

Chip
- 24-core CPU with 16 performance cores and 8 efficiency cores
- 60-core GPU
- 32-core Neural Engine
- 800GB/s memory bandwidth
- Media engine
  - Hardware-accelerated H.264, HEVC, ProRes, And ProRes RAW
  - Two video decode engine
  - Four video encode engines
  - Four ProRes encode and decode engines

Memory
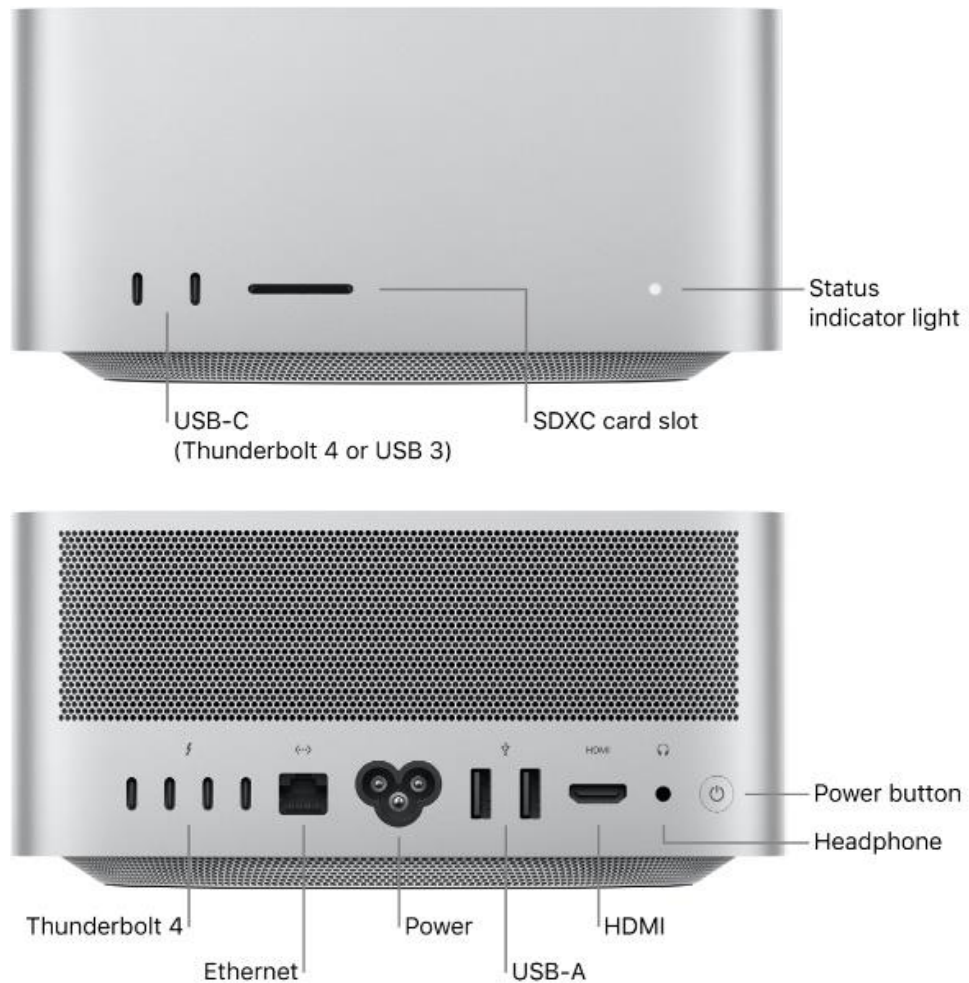- 64GB unified memory

Storage
- 1TB SSD

Display Support
- Simultaneous support for up to eight displays:
  - Eight displays with 4K resolution at 60Hz
  - Six displays with up to 6K resolution at 60Hz
  - Three displays with up to 8K resolution at 60Hz

Audio
- Built-in speaker
- 3.5 mm headphone jack with advanced support for high-impedance headphones
- HDMI port supports multichannel audio output

Connections and Expansion

Status indicator light

USB-C
(Thunderbolt 4 or USB 3)

SDXC card slot

Power button

Headphone

Thunderbolt 4

Ethernet

Power

USB-A

HDMI

- Four Thunderbolt 4 ports with support for:
  - Thunderbolt 4 (up to 40Gb/s)
  - DisplayPort
  - USB 4 (up to 40Gb/s)
  - USB 3.1 Gen 2 (up to 10Gb/s)
  - Two USB-A ports (up to 5Gb/s)
  - HDMI port
  - 10Gb Ethernet
  - 3.5 mm headphone jack
- On front:
  - Two Thunderbolt 4 ports (up to 40Gb/s)
  - SDXC card slot (UHS-II)

Communications

Wi-Fi
- Wi-Fi 6E (802.11ax)

Bluetooth
- Bluetooth 5.3

Ethernet
- 10Gb Ethernet (Nbase-T Ethernet with support for 1Gb, 2.5Gb, 5Gb, and 10Gb Ethernet using RJ-45 connector)

Size and Weight

- Height: 3.7 inches (9.5 cm)
- Width: 7.7 inches (19.7 cm)
- Depth: 7.7 inches (19.7 cm)
- Weight (M2 Ultra): 7.9 pounds (3.6 kg)

7.7 inches
(19.7 cm)

7.7 inches
(19.7 cm)

3.7 inches
(9.5 cm)

Electrical and Operating Requirements

- Line voltage: 100–240V AC
- Frequency: 50Hz to 60Hz, single phase
- Maximum continuous power: 370W
- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: –40° to 116° F (–40° to 47° C)
- Relative humidity: 5% to 95% noncondensing
- Operating altitude: tested up to 16,400 feet (5000 meters)

In the Box

- Max Studio
- Power cord

Operating System   macOS