

## Summarize

**A** faster chip, more RAM, a better camera, and a change in ports make the M4 iMac the best buy it's ever been.

By Roman Loyola Senior Editor, Macworld NOV 7, 2024 6:00 am PST



Image: Foundry

## Expert's Rating — Our Verdict

The upgrade to the M4, the new 16GB RAM standard, the implementation of Thunderbolt across the board, the improved FaceTime camera, and the Nano-texture glass option are all winning moves by Apple. The combination of features, design, and performance makes this the best iMac Apple has produced.

The 2023 M3 iMac was one helluva Mac. Its performance was stellar for the general consumer. Its design, while a couple of years old, was still relevant, attractive, and functional. And its price was pretty decent, too.

Could Apple do anything to make the iMac an even better deal? Yes, it could. It didn't reinvent the wheel, but numerous small changes make Apple's all-in-one even better at the same price. The chip is even faster, the rear port configuration is smarter, it makes you look even better on video calls, and it supports more external displays. In all, the iMac marches on as an icon for the company, and it has the features not just to back up its lofty status but also raise it.

This review is structured based on how the major updates will influence your buying decision. We first look at the M4 chip and its performance first, followed by, the screen and camera, the Thunderbolt ports, and other factors.

## M4 iMac: Our model's specifications

Apple offers three standard configurations of the iMac. We reviewed the high-end model with customizations that increase the price to \$2,379/£2,379. Our review unit has the following specifications:

- CPU: M4 with 10 cores (4 performance cores, 6 efficiency cores), 16-core Neural Engine
- GPU: 10 core
- Memory: 24GB unified memory (120GBps memory bandwidth)
- Storage: 1TB SSD
- Display: 23.5-inch Retina; 4480-by-2520 native resolution at 218 pixels per inch; 500 nits brightness, 1 billion colors; P3 color gamut; True Tone; Nano-texture glass
- Ports: 4 Thunderbolt 4/USB-C; 3.5mm audio; gigabit ethernet
- Networking: Wi-Fi 6E (802.11ax); Bluetooth 5.3; gigabit ethernet
- Input devices: USB-C Magic Keyboard with Touch ID and Numeric Keypad; USB-C Magic Mouse; USB-C Magic Trackpad
- Weight: 9.79 pounds (4.44 kg)
- Dimensions: 18.1 x 21.5 x 5.6 inches (46.1 x 54.7 x 14.7 cm)
- Price (as tested): \$2,379/£2,379

## M4 iMac: Performance



The M4 iMac looks like the M3 and M1 iMacs but it has several upgrades that make it a better value.

The M4 makes its way into the iMac after debuting in the iPad Pro this past spring. Apple offers two variants of the M4 in the iMac: An 8-core CPU (four performance and four efficiency cores), 8-core GPU in the low-end (\$1,299/£1,299) iMac, and a 10-core CPU (four performance and six efficiency cores), 10-core GPU in the \$1,499/£1,499, \$1,699/£1,699, and \$1,899/£1,899 models. As noted above, the M4 in this review is the 10-core CPU/10-core GPU version.

The chip upgrade comes with a major change for *all* Mac models: now they all come standard with 16GB of unified memory, double the previous 8GB. It's a change that users have been demanding and a long time coming. The best thing about the upgrade (besides the better general performance) is that Apple didn't increase the prices of its Macs. Oh yeah!

The M4 offers many improvements over the M3: improved branch prediction, increased memory bandwidth, updated video processing, and more. (You can learn

more about the M4 here.) While we tend to look at the generation-to-generation improvements in our Mac reviews, it's important to keep in mind the overall picture: this is the fourth generation of the M-series chip in the Mac (though just the third for the iMac), and it has now hit a price/performance point that's more attractive than ever. The base M4 offers impressive speed and is *fast* for general consumers.

If you don't have an M-series Mac and you're wondering if you should invest in the M4 iMac from a pure performance perspective, you absolutely should. If you already have an Apple silicon iMac, you might want to. Here's how the M4 iMac compares to the iMacs that preceded it.

## **Geekbench 6.3 CPU benchmarks**

In our Geekbench 6.3 testing for all-around CPU performance, The M4 iMac was 16 and 21 percent faster than the M3 iMac in Single-Core and Multi-Core benchmarks. That's the improvement we usually see from one chip generation to another.

The results are more impressive if you look at how the M4 does against Intel chips. The M4 iMac is a speedy 53 percent faster than an iMac Pro, and 137 percent faster than an Intel Core i7 iMac. If you're still using an Intel iMac, you're wasting time.

## **Cinebench 2024**

With Cinebench 2024, we saw a 20-, 32-, and 23-percent increase over the M3 iMac in the GPU, CPU Multi Core, and CPU Single Core benchmarks, respectively. We don't have data for the M1 chip, but we do for the M1 Pro, and the comparison is interesting: the M4 and M1 Pro CPU Multi Core results are similar but the M4 has a clear edge in GPU performance.

## **Handbrake 1.8.2 video encode**

We converted the 4K Tears of Steel video to a 1080p H.265 file using Handbrake 1.8.2. Back when we tested the M3 iMac, we found a 25 percent improvement over the M2 and the story repeats itself with the M4 versus the M3.

## **iMovie 4K video export**

When the M3 iMac was released, it doubled the performance of the M1 iMac in our iMac 4K ProRes export test, thanks to improved codecs in the chip. The improvement is even more eye-opening between the M4 and M1 iMacs. When exporting the video at the High, the M4 improvements aren't as dramatic, hovering around the typical upticks we see from generation to generation of each chip.

## Blackmagic Disk Test

I'm not sure what to make of the SSD results from the Blackmagic Disk Test, which has essentially shown the same performance through each chip (There's a 10 percent difference between the M3 and M4 iMacs' write scores, but that's within the standard deviation.) Not that this is bad, but that I hoped to see *something* after four generations of Apple silicon. Though, this is likely more an indication of the development of SSD technology than anything else.

## Geekbench 6 Compute

The Geekbench 6 Compute benchmark tests the GPU performance using either the Metal or OpenCL APIs—Metal is Apple's 3D graphic API, but a lot of marquee games use OpenCL. The M4 iMac's score shows an 18 percent increase over the M3 iMac, but its results over the M1 iMac are 75 percent better.

## Videogame benchmarks

We still test with *Rise of the Tomb Raider* and *Civilization VI* even though they are older games written for Intel and not optimized for Apple's Metal graphics API. Both games have built-in benchmark tools that make it easy to gauge performance, but they also offer insight as to how older top titles will run. The good news is that performance continues to improve and not plateau.

## M4 iMac: Display and camera

The iMac has a 23.5-inch Retina display with a native resolution of 4480-by-2520 resolution, a brightness of 500 nits, and support for one billion colors and the P3 color gamut. It comes standard with a glossy glass front, but Apple introduced a new Nano-texture glass option (\$200/£200) that essentially gives it a matte finish. If you are concerned with glare, the Nano-texture is \$200 well spent, but keep in mind that it does dampen the vividness of the display a bit.



The new Nano-texture glass option (left) does a better job of diffusing glare and reflections than the standard glossy glass (shown on the MacBook Air, right). You can see how the Nano-texture glass diffuses the white wall behind me, while it is clearly shown over my shoulder on the glossy display.

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The display (glossy or Nano-texture) is a general-purpose, consumer-level display that's suitable for most users. Professionals who are more demanding about the color and image quality will want to connect

an external display. There's some good news there too: the iMac can run up to two external displays at a maximum of 6K resolution at 60Hz for each, or only one external display at 8K/60Hz. That's another upgrade from the M3 iMac, which supported only one external display at 6K/60Hz. All external displays connect to the iMac via Thunderbolt.

The M1 and M3 iMacs have a 1080p FaceTime camera that was...fine. It worked, but it wasn't impressive. With the M4 iMac, Apple finally upgraded to a 12MP Center Stage camera, the same one Apple introduced to the Mac lineup in 2022 through its Studio Display. Why we had to wait over two years to see it on an iMac only Apple knows, but it's here and it's fantastic. The video below is a demonstration of it in action in Zoom.

Center Stage keeps you in the center of the frame; shift to either side, and the camera follows you. The camera also supports Desk View, which can show the space in front of the iMac. Apple tweaked the camera to produce better low-light images than the Studio Display. If you do a lot of video conferencing, these features will make your experience much better.

## M4 iMac: Ports and connectivity

The \$1,299/£1,299 iMac has two Thunderbolt 4 ports. But the rear ports of the iMac in this review feature a major change by Apple. On the \$1,499/£1,499 and higher models, Apple is now implementing four Thunderbolt 4 ports, which is much better than the previous setup of two USB-C ports and two Thunderbolt ports. With Thunderbolt, you can connect Thunderbolt or USB-C devices, while with USB-C, you can only connect USB-C devices. The change means users no longer fret over connecting their devices to the proper port.



The ports on the M4 iMac are unlabeled but they're now all of the Thunderbolt 4 variety.

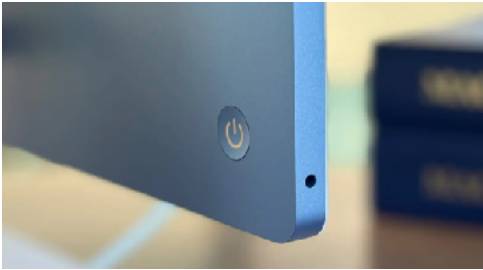
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The \$1,499/£1,499 and higher iMacs have gigabit ethernet with the port built into the power adapter (which costs \$30 on the entry level model). The iMac also includes Wi-Fi 6E (802.11ax) and Bluetooth 5.3, which is the same as the M3 iMac. Wi-Fi 7 is now the

current standard and Apple uses it in the iPhone 16 lineup but didn't add it to any of the M4 Macs. It's not a big deal because you need an expensive router to take advantage of it, but, curiously, Apple decided not to future-proof its new Macs as much as it could have.

## M4 iMac: Design and build

Apple introduced the iMac design with the M1 in 2020 and has stuck with it, for a good reason: it's a great combination of functionality and elegance. Macworld readers have told me that they wish that Apple would create an iMac design that makes it almost completely indistinguishable from a computer display—in other words, get rid of the iMac's "chin." I'm indifferent about that.



The iMac's 35mm headphone jack is on the side of the display.

One change I wish Apple would make is with the aluminum stand, which only pivots forward and back. It doesn't offer height adjustment or an build-to-order option to do so like the Studio Display, and I wish it did so I can finally get rid of my 2001 San Francisco Pacific

Bell White Pages phone book that I use to prop it up.

Apple offers the iMac in blue, green, orange, pink, purple, yellow, and silver, and all the colors are available on every model. Apple previously reserved orange, purple, and yellow for the higher-end models. Our review unit is blue and it's nice, but I'd choose either an orange or green one instead.



Apple includes USB-C accessories that match the color of the iMac.

## M4 iMac: Keyboard, mouse, and trackpad

Apple still includes a Magic Mouse and Magic Keyboard with the iMac, and they still come in matching colors. The one major change with these devices is that they no longer have a Lightning port. They now have USB-C ports for charging and Apple includes a USB-C charging cable. The switch to USB-C is generally a good thing; it's more versatile than Lightning at this point, and the USB-C plug is much sturdier (I've seen a fair share of bent Lightning connectors).

Apple includes a Magic Keyboard, but the one in the \$1,299/£1,299 model does not have Touch ID. If you do want Touch ID (I highly recommend it), you must opt for the Magic Keyboard with Touch ID and Numeric Keypad for an extra \$80/£80—Apple eliminated the \$50/£50 option to buy the Touch ID Magic Keyboard without the

Numeric Keypad. Interestingly, the higher-priced iMacs do include a Touch ID keyboard without a numeric keypad, which costs an additional \$30/£30.



Yes, we're still doing this.

The Magic Mouse comes standard, but if you'd rather have the Magic Trackpad, it's an additional \$50/£50. Apple no longer has the option to get both the Magic Mouse and Trackpad for \$129/£129.

## M4 iMac: Apple Intelligence

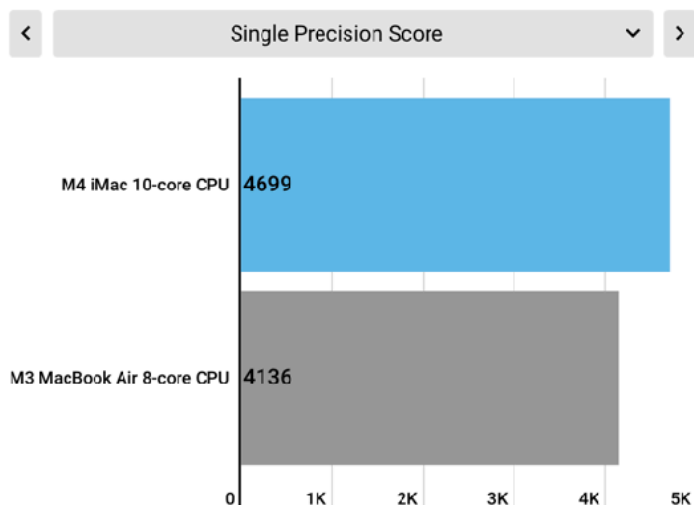
Apple Intelligence, the AI-based features built into macOS Sequoia, runs on any M-series Mac. However, the first shipments of M4 Macs have macOS Sequoia 15 installed, which doesn't have Apple Intelligence. Customers will need to head over to *Software Update* and install the 15.1 update, which has the first set of Apple Intelligence features.



Apple will be releasing Apple Intelligence features over time. The first available set now includes writing tools; Mail, Messages, Notifications, and Safari summaries; a cleanup tool in Photos; and Siri enhancements. Another set will be available with macOS Sequoia 15.2 is released in December and includes image generation, ChatGPT integration, Swift Assist, and more. Apple has put a lot of effort into promoting Apple Intelligence and there's no

doubt that the features are useful. We have separate coverage of our impressions on the first set of Apple Intelligence features (that article is focused on iOS 18.1, but the same thoughts apply to macOS Sequoia 15.1).

### Geekbench AI 1.0



The Geekbench AI benchmark for gauging the performance of the chip's Neural Engine was released last August so our dataset for comparison is limited. Frankly, you won't notice the difference with this first set of Apple Intelligence features. When the features become more and more generative, the difference will be more apparent.

## Should you buy the M4 iMac?

Yes, you should, it's that simple. The upgrade to the M4, the new 16GB RAM standard, the implementation of Thunderbolt across the board, the improved FaceTime camera, and the Nano-texture glass option are all winning moves by Apple. I'll even go so far as to say that even though the M4 iMac doesn't have the personality of the iMac G4 (I've previously proclaimed that one as the greatest *Mac* ever) nor the historical significance of the original iMac, its combination of features, design, and performance makes it the best iMac Apple has ever made.



The M4 iMac is an excellent value for the general consumer.

That being said, if you have an M1 or M3 iMac, you don't need to rush out and replace it with the M4 iMac. Chances are, you think that its performance is satisfying, so it becomes a question of whether you really want the new camera and/or the Nano-texture glass. Those aren't trivial features; they do influence your productivity and are worth considering.

If you have an Intel iMac and you've been putting off an upgrade, now's the time to do it. You're going to see a vast performance improvement, you can use Apple Intelligence, and you're going to appreciate the many other changes. You will have to buy USB-C adapters for your USB-A device, though.

There's one reason for not buying the M4 iMac: you want a bigger one. Rumor has it that it could appear in 2025 but we've not heard of any substantial reports of such an iMac. If that's what you really want, you'll have to continue to hold out and track the rumors.

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Roman is a Macworld Senior Editor with over 30 years of experience covering the tech industry, focusing on the Mac and other products in the Apple ecosystem. He is also the host of the Macworld Podcast. His career started at MacUser, where he received Apple certification as a repair technician (when Apple did that kind of thing). He's also worked for MacAddict, MacLife, and TechTV.