



*The 2020 iMac with a nano texture screen.*

# THE NEW 27-INCH IMAC'S WEBCAM ISN'T JUST BETTER; IT'S SMARTER

*Plus, some impressions of the nano texture  
screen option*

By [Dieter Bohn@backlon](#) Aug 6, 2020, - The Verge

I've had a review unit of the new 27-inch iMac for about two days now — long enough to start poking at it and give you some impressions of what it's like. Most of the improvements on the iMac bring it up to the specs you'd expect in a 2020 computer: 10th Gen Intel processors, SSDs standard, and so on. My unit also has [Apple's \\$500](#)

nano texture finish on the glass, which Apple says is a big improvement over traditional matte displays. (For \$500, it had better be.)

But there's one spec bump that is wildly out of character for Apple, even in this pandemic year: the quality of the webcam has finally been improved. If you're videoconferencing a lot, the new 1080p webcam is likely going to be the thing that improves your day-to-day the most. I hate to tell you this, but you really do look more professional to your colleagues when your camera is just a little sharper.

I don't think it's worth upgrading to a new iMac just for the webcam, of course, but I am glad that Apple has made it better. I also don't know that I'd say it's the best I've used, but it's no longer vaguely embarrassing like most of Apple's other webcams.

Let's just give you the goods. Here's the difference, taken from a still frame out of the QuickTime recorder. I happen to have a 2017 iMac for work, so it's a direct comparison:



Left: 2017 iMac with 720p camera; Right: 2020 iMac with 1080p camera. Since the 1080p image has more pixels (duh), it's slightly larger than the 720p camera, resulting in the framing you may see in this slider.

The webcam isn't just better because it has more pixels; it's also better because Apple is finally applying some modern image processing to the video stream. The iMac has a T2 chip, which is used to control lots of the components in the Mac. Apple is using it to process certain elements of this webcam's image. It is able to do tone mapping, exposure control, and face detection.



*2017 iMac on the left, 2020 iMac on the right. The difference in webcam quality is instantly apparent.*

The face detection is for prioritizing keeping your face well-lit with accurate skin tones. I can move my face around in the frame and see it adjusting the exposure in real time, ensuring that my face is never too dark or blown-out. It feels very much like what the iPhone does

with faces. (Apple says it's not doing any face smoothing, if you're wondering.)

It works really well, and luckily, it doesn't just work in Apple's own apps. Since these fixes are coming via the T2 chip, the improved performance is just the webcam video stream that any videoconferencing app will get.

One thing that doesn't feel modern at all with the 2020 iMac is logging in. Unless you have an Apple Watch and use it to unlock your computer, the only way to get in is to type out your password like an animal. Apple's T2 chip controls Touch ID fingerprint login on Mac laptops, but Apple opted not to add a fingerprint sensor to the keyboard or a Face ID array in this iMac.

It's annoying, but it's also a function of Apple's decision to not change anything about the design of this iMac. It has the same Thanos-esque chin, the same screen, and the same ports as before.

There are some upgrades in those areas, though. The screen is identical, but that T2 chip I keep mentioning means that you can turn on True Tone to match it to the color balance in your room.

The other big upgrade is that nano texture option. It is great, but I have some reservations. But first, here's a photo showing that it does its job, reducing glare:



*2020 iMac on the left, 2017 iMac on the right. The nano texture finish on the 2020 iMac all but erases glare.*

My first two big reservations are, unfortunately, the sorts of things that can't be resolved with just two days of testing. One is the price: at \$500, it's a super expensive upgrade, and only your tolerance for glare can tell you if it's worth the price. Another thing that might help you decide if it's worth is whether the finish is durable. That's my second reservation: I just don't know.

To explain why, I need to explain what this nano texture finish even is. Instead of just putting a matte coating on top of the glass, Apple is literally etching the glass at a nanometer scale. That process gives the nano texture

finish a leg up on traditional matte screens in that images won't look fuzzified. On matte screens, the light from the pixels gets scattered *out*. Apple's finish, the company claims, mainly diffuses the light that hits from the outside and doesn't scatter the light from the pixels as much.

It's a very fancy, very expensive solution to the problem. It's very Apple. Also very Apple: the instructions that come with it that specify that you **should only clean it the included microfiber cloth and that doing otherwise could damage the finish**. Yikes.

A delicate screen on a \$5,000 Pro Display XDR used in professional settings by professional adults who know what they have is one thing. A delicate screen on the iMac in the family room where dirt-covered children will paw at it because they rightly assume all screens should be touchscreens is something else entirely.

I asked Apple about the durability of the finish. I was told that they don't want to give anybody the impression that it's fragile, but that, yes: over time, using something too abrasive could mess up that finish. Unlike other screens, there's really no coating on top of the nano finish; it's just etched, bare glass.

I doubt that anybody but Apple has a critical mass of user data on how the texture has fared on the XDR that could

inform you whether it's a responsible thing to pay for on a family iMac.

So, again, I can't tell you if it's a good option. But I can tell you that it works great. It fully eliminates glare to the point where, for the first time, I was able to position my computer with a window behind me in my living room. It also doesn't affect the sharpness of images or text on the screen much at all — but if you truly squint up close, you can see a little fuzziness.

This sort of thing is nearly impossible to photograph. (I've tried.) You'll just have to trust me that it's nigh imperceptible straight on and not bad at all at an angle.



*The 2020 27-inch iMac.*

Beyond those two big things, I don't have a lot to tell you that can't be covered by a bunch of benchmarks. It looks and operates like a very fast iMac. One tangible example that isn't just about render times: going to a standardized SSD is long overdue because there are definitely moments when my old iMac has odd pauses because it's spinning up the hard disk in the Fusion Drive.

There's one more variable in the decision process of buying this iMac: at some point in the next two years, it will be replaced by another model that uses Apple's own ARM processors instead of Intel's. Presumably, that iMac will finally get a refresh that does away with the honking chin and inability to log in biometrically. But whether ARM Macs are a good buy is impossible to say today — as is guessing if you should wait for them.

Apple has given every indication that it will fully support Intel-based Macs for a long time, and I have every hope that the programs and apps you need will continue to be compatible with Intel-based Macs for a long time as well. What I'm saying is: if you need a 27-inch iMac, this is a good iMac, and you should buy it. I'm sorry that the process is going to include 45 minutes of checking and unchecking the nano texture option while you make up your mind.

**original article:**

<https://www.theverge.com/21356416/apple-imac-27-new-webcam-nano-texture-screen-impressions-test-hands-on?scrolla=5eb6d68b7fedc32c19ef33b4>