iPhone 12: everything we think we know about Apple's 2020 5G iPhones

We're likely just weeks away from Apple taking the wraps off its 2020 iPhones, and the rumor mill is in full swing, hinting at some major changes this year.

If you've been hanging on to your first-generation iPhone SE because you just love its squared-off edges, the newest iPhones could be the ones for you – there are already *a lot* of rumors pointing to a brand new design with squared edges instead of rounded ones. (If you're keeping that SE because of its smaller size, there might be good news for you this year, too.)

And all signs are pointing toward this being the year the iPhone gets 5G, which should set you up for faster data speeds – once the networks can reliably deliver them.

There is still a lot of mystery surrounding the next iPhones – they haven't leaked quite as much as, say, recent Google Pixel or Samsung Galaxy handsets – but there's enough out there to piece together a decent picture of what Apple is planning.

The likeliest rumor of them all? We're getting *four* new iPhones this year.

Four new iPhones this fall, with two new screen sizes

All of the most trusted sources of Apple rumors seem to agree: instead of announcing three new iPhone models, like Apple did in 2017, 2018, and 2019, the company will reveal four:

- A new 5.4-inch model, which would be smaller screen than

the 5.8-inch iPhone 11 Pro (and presumably be an entirely smaller phone)
- A low-end 6.1-inch model — the same screen size as the iPhone 11 — with similar specs as its 5.4-inch sibling
- A *second* 6.1-inch model with high-end specs
- A new 6.7-inch model, which would be a bigger screen than the 6.5-inch iPhone 11 Pro Max (and likely be larger in size as well)

Originally, the credible rumor came from Apple analyst Ming-Chi Kuo, who's reliably predicted the sizes and features of new iPhones for several years now — but *The Wall Street Journal* also corroborated those screen sizes in April, and as of this past week, *Bloomberg* is reporting them as fact as well.

A new industrial design reminiscent of the iPhone 4 and 5

Apple has stuck with the same basic silhouette for the iPhone — a rounded rectangle with rounded sides — since the iPhone 6, a phone that came out all the way back in 2014. But this year, rumors indicate the newest iPhones could have flat edges, returning iPhone design to the glory days of the iPhone 4, iPhone 5, and iPhone SE. (Or the recent iPad Pros, if you want a newer point of reference.)

Apparent dummy models of the phones have been floating around this summer, based on the expected dimensions of the upcoming iPhones, and they give us our best idea of what that new design could look like, and how their size compares to other phones in Apple's lineup.

Check out this photo of those dummy models from *MacRumors*. They kind of remind me of the iPhone 4:

Image: MacRumors

Bloomberg is reporting that all four new iPhones will have squared-off edges, and will continue to have stainless steel edges on the pricier models and aluminum on the less expensive ones.

If you want to get a sense of how these phones might size up to Apple's 2019 iPhones, check out this *MacRumors* post:

I find this next *MacRumors* photo particularly intriguing, comparing the rumored 5.4-inch model (middle) to the first generation iPhone SE (left) and the second-generation iPhone SE (right). I've wanted an iPhone that's smaller than the iPhone X / XS / 11 Pro with an edge-to-edge display *so badly,* and the size of this dummy model looks almost perfect to me.

Image: MacRumors

Plus, if you want to see what the rumored new iPhone sizes could look like in person, check out MKBHD's video where he goes hands-on with a set of dummy models:

[embedded content]

The first iPhones with 5G, but which flavors?

2020's iPhones are expected to be the first to supports 5G cellular networks, which means the phones might be able to take advantage of faster network speeds – depending on the 5G coverage in your area, and possibly depending on which version of the next iPhone you end up buying.

The Wall Street Journal reported in April that "some" of this year's iPhones would get 5G, while *Bloomberg* said that 5G will

be added to “as many as four new handset models.” *Fast Company* has a source that claims only the top-of-the-line model will offer the fastest mmWave flavor of 5G.

All the way back in January, Ming-Chi Kuo said that all four upcoming iPhone models will support both sub-6GHz and the faster (but far shorter range) mmWave 5G, and we’d generally weight his rumors a tad higher than the rest… but even Kuo revised his guidance this past week to say that shipments of mmWave 5G iPhones would be “lower than expected,” without specifying whether any iPhones had dropped the technology.

So it seems like a safe bet that 5G should come to new iPhones — Qualcomm and Apple fought hard to make it happen — but right now, it’s just not clear which phones might have which forms of 5G.

An OLED screen in every iPhone, but what about refresh rates?

Apple’s entire fall iPhone lineup is finally expected to have OLED screens this year, *The Wall Street Journal* reported in April, and *Bloomberg* now agrees. Despite much of the industry moving on to OLED years ago, LCD screens have hung around in some of Apple’s recent phones, including 2018’s iPhone XR and 2019’s iPhone 11. OLED screens have some advantages over LCD — because each pixel on an OLED screen is individually lit, the screen can just turn those pixels off when showing blacks. That can mean deeper blacks, truer colors, more vibrance, and sometimes better battery life.

Flagship Android phones have also moved on to high-refresh-rate screens for smoother scrolling, animations and games, but it’s unclear if that technology will arrive on any iPhones this year. We’ve heard rumors both ways, and some sources say Apple has tested prototypes with and without the feature.

If the iPhone 12 does offer 120Hz, don’t be surprised if Apple

calls it “ProMotion” on stage — that’s the brand name it uses for its iPad Pros, which have had high refresh rate screens since 2017.

Don’t expect four cameras, but high-end iPhones could get LIDAR

This year’s iPhones are expected to keep a dual-camera setup for the lower-end models and a triple-camera setup for the higher-end models. The highest-end model could also be getting something new, according to *Bloomberg*: a LIDAR sensor, which can detect objects using lasers. That, in theory, can enable better augmented reality experiences, because your phone could have a better sense of your surroundings.

Apple first added a LIDAR sensor to the iPad Pros in March, and in his review, my colleague Dieter Bohn found that the LIDAR sensor “seems quite advanced but built for a software future that hasn’t arrived yet.” We’ll have to wait and see if Apple can make a strong case for it in the iPhone.

No charger or headphones in the box

One of the biggest changes to this year’s iPhone lineup could be in the box they come in. Apple is rumored to remove both the in-box charger *and* earbuds, analyst Ming-Chi Kuo reported in June. This would be a big shift, as iPhones have come with power adapters and earphones since the first iPhone launched in 2007. But perhaps Apple is just trying to avoid giving everyone *yet another* extra power adapter or set of headphones that just get shoved in a drawer. (The decision could also significantly reduce e-waste.)

That doesn’t mean Apple won’t offer ways to charge your phone — the new iPhones will apparently still come with a Lightning to USB-C cable, according to Kuo, which would let you connect your phone to a computer or a power adapter with a USB-C port. (That rumor of a Lightning to USB-C cable suggests the phone

itself likely won’t have a USB-C port this year, even though the iPad Pro switched over to USB-C in 2018.)

Kuo also said that Apple would sell a new 20-watt charger, which may have been corroborated by this picture posted to Twitter. If this charger is a real Apple product, it might charge your devices faster than the 18-watt charger included with the iPhone 11 Pro and likely *much* faster than the anemic 5-watt charger included with the iPhone 11.

And without an included charger and headphones, the new iPhones may have a thinner box. Instagram account conceptsiphone posted a render of a tray that could be included in the new box, and it seems to only have space for a coiled-up cable and perhaps some papers and instructions.

That smaller box could help Apple claim that these iPhones are even more environmentally-friendly than in previous years.

Like usual, the new iPhones should have a new processor

This year’s iPhones are expected to have yet another new Apple-designed processor. *Bloomberg* reports that the new phones will have “a significant upgrade to the processor with an emphasis on speeding up artificial intelligence and AR tasks.”

It seems like a safe bet that the next iPhones’ processor will have A14 in the name, as the iPhone 11 series processor was called the A13 Bionic. Apple has tagged that “Bionic” moniker to the A11 and A12 as well, so perhaps we’ll be seeing an A14 Bionic this year.

This year’s iPhones are launching later than normal

The release of a new iPhone in September almost feels like

something you could set your clock to, but Apple has already said that this year's iPhones will be available "a few weeks later" than their usual September launch date. *Bloomberg* says we'll get the less expensive iPhones soon than the higher-end models, too.

None of this rules out Apple holding its usual pre-iPhone release keynote sometime in September, however – perhaps alongside the launch of iOS 14.

And even though restrictions on in-person gatherings due to the COVID-19 pandemic mean that Apple probably won't host some kind of grand in-person iPhone unveiling at the Steve Jobs Theater, there's always the chance the company does another highly-produced video keynote like it did for this year's Worldwide Developers Conference.

Other tidbits: battery, storage, price, name

There are a few other rumors floating around about the upcoming iPhones. Apple leaker @L0vetodream said in May the low-end phones may start with 64GB of storage, while the high-end models may have a base of 128GB. They also said the low-end iPhone would have 4GB of RAM and the high-end one would have 6GB.

We may also have an idea about the battery sizes for the new phones, thanks to reported certifications. The rumored 5.4-inch iPhone could have a 2227mAh battery, the 6.1-inch iPhones may both have a 2775mAh battery, while the 6.7-inch iPhone might get a 3687mAh pack. By comparison, those batteries would be smaller than the reported capacities of similar-sized iPhones in the current lineup (apparently, the 5.8-inch iPhone 11 Pro has a 3,045mAh battery, the 6.1-inch iPhone 11 has a 3,110mAh battery, and the iPhone 11 Pro Max has a 3,969mAh battery).

And despite the lowest-end iPhone likely being physically smaller than the current iPhone 11, it’s unclear if Apple will change the starting price of this year’s iPhone lineup to reflect that change. The iPhone 11 starts at $699, which itself was a $50 price drop from 2018’s similarly-sized iPhone XR. Here’s hoping Apple lops off yet another $50 for a starting price of $649.

We also don’t know what the next iPhones might be called. If you ask me, the rumored design changes and addition of 5G seem like significant enough departures from the iPhone 11 series for Apple to skip the “S” it sometimes uses for spec bumps and jump straight to iPhone 12, iPhone 12 Pro, and so on.

But with four new models on top of the iPhone SE it already launched this year, perhaps Apple will take this opportunity for a new naming scheme. “iPhone 11 Pro Max” still sounds pretty ridiculous, after all.

https://www.theverge.com/21423811/apple-iphone-12-max-pro-leaks-rumors-specs-design-2020