



It's that time of year again. Samsung is getting ready to unpack some shiny new high end smartphones at the world's biggest mobile confab. And Android fans are getting ready to cheer.

The TechCrunch team will be on the ground at [MWC](#) in Barcelona in two weeks' time to bring you all the news. But if you're wondering what Sammy's got cooking ahead of the official Galaxy unboxing, read on...

S9 and S9+ unpacked

While most major Android smartphone handset makers are skipping a flagship launch at MWC 2018 — perhaps feeling the pinch from [shrinkage in the Chinese smartphone market](#) — Samsung most definitely is not. [Not this year.](#)

The world's biggest smartphone maker by marketshare is expected to unbox the Galaxy S9 and S9+ at the show.

Indeed there's a pretty gigantic clue to that in the invitation for its pre-MWC press event — in the shape of a purple-hued number '9'...

Samsung's timing means the S9 and its phablet-sized S9+ fellow are being outted about a month earlier than [last year's S8/S8+](#), when it switched to a post-MWC launch in New York.

Some have suggested Samsung felt the need to move up the S9's reveal by a month after Apple skipped an iPhone digit with its [fall unboxing of the iPhone X](#) (and iPhone 8/8Plus). Although that theory doesn't really hold water, given Samsung has debuted new Galaxy flagship(s) on the eve of the MWC conference for years — and consistently so, until 2017.

Last year was the anomaly. And that beat-skip can be explained by it [falling behind](#) its usual release schedule after the [Note 7 recall](#) — and the subsequent pressing need to spend time making changes to its product safety processes after having such high profile problems with, er, exploding batteries.

Samsung is clearly hoping to put all that mess behind it now. And how better to project a 'business as usual' message than by returning to its usual pre-MWC global stage for the S9 launch?

And things are looking pretty good for Samsung to hog the hardware limelight at MWC 2018: Huawei, its main Android phone challenger in global marketshare terms, isn't expected to launch much, having announced its own Paris-based press event for late March.

While the Nokia-branded upstart HMD can't — surely — hope to [tug on the nostalgia heartstrings](#) twice in a row and pull another retro mobile phone trick this year.

Camera capabilities in focus

Of course Samsung is hoping its new smartphones grab attention on their own merits. And it's drawing explicit attention to the camera as the eye-catching upgrade here.

In many ways this is a curiously quaint kind of premium smartphone marketing message. And not just because of the subtle allusion to film photography in the shape of the graphic. But because of how much engineering attention has already been lavished on smartphone cameras over the past decade. And how high the premium bar has consequently gotten.

A truly reimagined smartphone camera would have to have real superpowers — like being able to shoot through walls. Which would also be horribly weird and disturbing. So happily no one is expecting the S9 to be able to do that.

Apple's iPhone X is a better explanation for Samsung's teaser that the S9 camera will be "reimagined", given Cupertino's top-of-the-range iPhone packs dedicated depth sensors for powering augmented reality experiences via the camera lens — such as face masks and animated emoji that can track facial expressions.

The iPhone X also features a new biometric authentication method which relies on capturing a facial biometric using the same TrueDepth camera unit.

So Samsung trying to do more with sensing hardware to chase Apple's lead here seems probable.

That said, judging by leaked device images — obtained by trusted smartphone leaker Evan Blass (see below) — the S9/S9+ don't appear to be packing any additional sensor hardware up top vs last year's [S8/S8+](#).

Last month [Samsung did make some noise](#) about its latest smartphone chipset, explicitly touting the potential for the silicon to power similar experiences to what Apple has done with the iPhone X — writing that "through depth sensing" the chipset could be used to "scan a user's face in 3D for hybrid face detection". So, well, [insert thinking emoji face here].

Another possibility: Samsung could use an engineering workaround that combines multiple existing biometrics (i.e. the S8's face + iris scanning systems) to try to up its game vs Apple's FaceID. This has been [rumored](#).

And that approach might make most sense for the S9, given Apple has not yet pushed the TrueDepth camera across all iPhones. Indeed, the iPhone X's sensor-packed notch remains iPhone X only. And so do associated iOS features — like Animoji and FaceID.

Given that premium gating by Apple, Samsung could be spying an opportunity to build some 'animojish' flashy and fun camera features that work across its S9 flagships — even if its FaceID competitor isn't yet ready for the prime time.

(And — a little more fuel — a [Blass source](#) claims the S9 will include a selfie mode with "animated avatars kinda like animoji".)

Apple also used the opportunity of a major sensor upgrade on the iPhone X to ditch the home button and switch to a more gesture-heavy user interface on the device. Which, in some ways, is unfortunate as it has bifurcated the iPhone UI. (Something Cupertino will presumably move to unify again in future.)

Samsung was ahead on killing the home button, having removed the physical key on [last year's S8](#) to maximize screen real estate. Though it didn't go all in on swipe-based navigation. Instead it added a virtual touch-sensitive button with haptic feedback at the bottom of its otherwise near-edge to edge display.

It will therefore be interesting to see whether Samsung decides to entirely remove that usability crutch on the S9. And, indeed, there have been a few rumors of a new, S9-only user interface incoming.

On the other hand, a major break with interface convention would really demand a more radical hardware upgrade than Samsung appears to have in the pipe here. So we wouldn't bank on any overly sweeping interface changes landing here.

Look, no notch!

These are the Samsung Galaxy S9 and S9+ <https://t.co/deXGg39m0d>
[pic.twitter.com/RNGezrF4Bs](https://t.co/deXGg39m0d)

— Evan Blass (@evleaks) [January 26, 2018](#)

Blass got his hands on the above leaked images of the S9 and S9+ late last month. He's since posted a few more (see below).

An immediate takeaway from looking at these is there's no notch on the S9/S9+. The notch being the shaped sensor unit that takes an unfortunate bite out of the iPhone X's screen.

Indeed, the sensor configuration on the leaked S9 images looks identical to the S8. So if Samsung is squeezing more sensing hardware into that slender space at the top of the phone it's not *obviously* doing so.

(For the record the iPhone X's TrueDepth camera unit contains: An infrared camera; a flood illuminator; a proximity sensor; an ambient light sensor; a dot projector; and a 7MP camera, as well as housing a speaker and microphone. While the S8's bevy of front sensors includes an SVC LED; a proximity sensor (detector) & light sensor; a proximity sensor (emitter) and Iris LED — the latter powering an iris scanning biometric feature.)

The visual design consistency between the S8 and the S9 heavily suggests Samsung doesn't yet have sensing hardware to directly challenge the capabilities of the iPhone X's TrueDepth camera.

And the company's [own PR](#) specifies that its aforementioned top-of-the-line chipset hardware does also need depth sensing hardware to be able to power 3D face scanning "for hybrid face detection" (which then enables "realistic face-tracking filters as well as stronger security

when unlocking a device with one's face", as Samsung sells it).

So unless it's managed to radically miniaturize the necessary depth sensing hardware on the S9, shrinking it to fit into pretty much the same S8 form factor — and at a time when it was also retooling its smartphone processes with a focus on safety concerns — then a comparable FaceID-style face-unlocking feature seems unlikely to be about to be unpacked.

Though Samsung may still manage to drum up a few animojish flourishes using the sensors it has been able to bake in.

So get ready to cue up your jokes about the S9's 'invisible notch'.

The other glaring design point of note is there isn't really anything new in the look of the S9 vs the S8. Unless you could the fuchsia-ish shade of purple/lilac.

Design wise it's essentially more of the same, curved screen edges — love 'em or hate 'em! — and all.

And talking of more of the same, we reckon Samsung won't do an Apple and will keep the 3.5mm headphone jack on the S9/S9+.

Why? Because why look [a rival's gifthorse](#) in the month and pointlessly squander an unexpected competitive advantage. Courage be damned.

Sticky fingers

Moving on, Blass also got his hands on some rear shots of the S9/S9+ and associated components — which show a fingerprint reader in a newly positioned location right underneath the rear camera(s). Which would certainly be a welcome tweak on the awkward S8 side-of-camera placing.

...and (by popular demand) Coral Blue. pic.twitter.com/NCTEB3GIDj

— *Evan Blass (@evleaks)* [February 7, 2018](#)

So — depending on your view — Samsung is taking a ‘cake and eat it’ biometrics approach vs Apple, which simply doesn’t offer iPhone X owners the option of using a fingerprint biometric (they can either choose to register a robust, depth-mapped facial biometric, or do without biometric authentication entirely).

Or Samsung is not entirely confident in the robustness of its own facial biometric authentication systems — which have [previously been shown](#) to be [pretty trivially fooled](#). Hence retaining the fingerprint scanner is helpful because it offers an alternative option for users not comfortable with the company’s iris or face scanning systems.

In security terms at least, Apple appears to be making the iPhone X’s dedicated sensing hardware [count](#). (Unless you happen to have an identical evil twin.) So Samsung keeping the fingerprint reader alive also fits with the notion of the S9 being more of a stopgappish, iterative upgrade than a major step change for its smartphone strategy.

On the plus side, at least these phones aren’t going to force you to face unlock if you don’t want to.

Blur when you want it

Another takeaway from Blass’ leaked images: The S9+ does have one very visible camera hardware difference vs the S9 — it’s packing two rear camera lenses. At long last!

This fits with [widely reported rumors](#) that Samsung is finally adding dual cameras to its flagship smartphones — having initially brought the hardware feature to its premium phablet, the [Galaxy Note 8](#).

...in Lilac Purple. pic.twitter.com/p506mqDci4

— *Evan Blass (@evleaks)* [February 5, 2018](#)

As with the Note 8, the S9+’s dual lenses will be used for enhanced photography depth effects — such as bokeh (where a subject gets crisply picked out against a pleasingly blurred backdrop), on account of the stereoscopic data that the two lenses can gather.

And for boosting low light photography — a perennial challenge for smartphone cameras, with camera sensors having to be squeezed into such small spaces.

On the Note 8, Samsung also uses the dual cameras for other stuff too — like a photo feature that can capture additional imagery outside the framed composition.

The bottom line here is it’s playing necessary catch-up. Apple introduced dual cameras to the iPhone line up back in 2016, [on the iPhone 7 Plus](#). So Samsung definitely needs to close the gap.

A video version of the S9 invite which it tweeted last month emphasizes bokeh by fading out in a blur of glory. The animation also hints at a super slow-mo video capture feature — [another widely reported rumor](#) which we’re expecting will be stood up.

From 02.25.2018. [#Unpacked](#) will change how you experience everything. pic.twitter.com/lIrGt0Q6gF

— *Samsung Mobile (@SamsungMobile)* [January 25, 2018](#)

Samsung’s oddly worded claim that the S9 launch will “change how you experience everything” could be an allusion to camera-powered AR features or a hint — as has also been

[widely rumored](#) — that the S9 will have a mechanically variable aperture too. (Or else, well, it's just some horribly overreaching PR.)

What's the point of a variable aperture? It allows a camera to switch between different focal lengths by controlling the amount of light entering through the lens — literally by expanding or contracting the hole through which it enters.

Which in turn allows for greater control over the look of photos/videos by being better able to adapt to different shooting conditions. So, again, the promise is improved smartphone photos/video, including in low light conditions.

But, as with all the expected features, we're talking 'welcome improvements' and 'nice-to-have enhancements'. Not a smartphone with X-ray vision.

Don't get too excited — yet

All in all, we're expecting Samsung to have a few nice extras up its sleeve for the S9/S9+. But its next Galaxys look more like they're playing catch up — and doing the usual bit of beefing up (expect processor and battery upgrades too, of course) — than shooting for smartphone fame.

But — but! — if you're hankering for a more radical Samsung smartphone upgrade in 2018, well, [other rumors are available](#). Even though MWC 2018 probably isn't going to be the event where Sammy finally unboxes its very-long-slated-in-the-R&D-works foldable smartphone (though the company did say, as recently as last month, that it plans to release foldable phones in 2018). If it does, well, Samsung has been keeping that powder very dry indeed.

Nor — we're fairly sure — will the company be pulling out its intended iPhone X killer in Barcelona. Though, again, it might have 'one more thing' on that front later this year.