Qualcomm announces the Snapdragon 855 processor for 5G phones

Snapdragon 855. That’s the name of Qualcomm’s new flagship processor for mobile phones, the company just announced at its Snapdragon Technology Summit in Hawaii.

The announcement was expected: Qualcomm launched its predecessor, the Snapdragon 845, at the same conference almost exactly one year ago. But the new 855 isn’t just another spec bump. It’s the chip that will almost certainly appear in the first wave of 5G phones. Qualcomm has said this new platform will support “multi-gigabit” download speeds on 5G networks.

This year’s Snapdragon Technology Summit is also one of the last major milestones before blazing-fast 5G cellular networks launch in the United States for real, and both AT&T and Verizon are here with real 5G devices for us to try at the Grand Wailea hotel in Maui. That’s a first since most previous 5G demos were theoretical, behind closed doors, or experiential demos that didn’t use devices that real people will be able to buy.

This week, Verizon and AT&T will show off working 5G phones and hot spots based on Qualcomm’s chips, including the existing X50 LTE modem and likely this new Snapdragon 855 chip.

Qualcomm president Cristiano Amon holds the first Snapdragon 855 reference design smartphone.
Sean Hollister / The Verge

Because of Qualcomm’s dominance in the mobile space,

particularly in the United States, there’s really little question that the Snapdragon 855 will appear in most major flagship phones in 2019 (save Apple’s iPhone), whether or not it proves to be a big step forward in processing power, battery life, image processing, gaming, machine learning, or any of the other features that Qualcomm tries to improve each year.

So far, Qualcomm has only said that the chip will provide “up to three times the AI performance compared to the previous generation mobile platform,” and it will add a new dedicated computer vision processor (handy for intelligent cameras). “It will recognize who and what you’re capturing,” says Qualcomm Snapdragon boss Alex Katouzian. The chip will also apparently offer improved gaming and augmented reality experiences, but Qualcomm didn’t go into detail.

Qualcomm had previously confirmed its next Snapdragon would be on a 7nm manufacturing process, down from the 10nm of Snapdragon 845 and 835. Those smaller circuits generally mean improvements in efficiency, which could mean more performance, battery life, or both.

Separately, Qualcomm took the opportunity to rebrand its ultrasonic, under-the-screen fingerprint sensor technology initiative as the Qualcomm 3D Sonic Sensor, though it’s not clear if Qualcomm’s convinced any new manufacturers to buy in.

We’ll have additional details on the Snapdragon 855 tomorrow, as the Snapdragon Technology Summit continues, so check back for more.

https://www.theverge.com/2018/12/4/18125853/qualcomm-snapdragon-855-mobile-processor-announcement