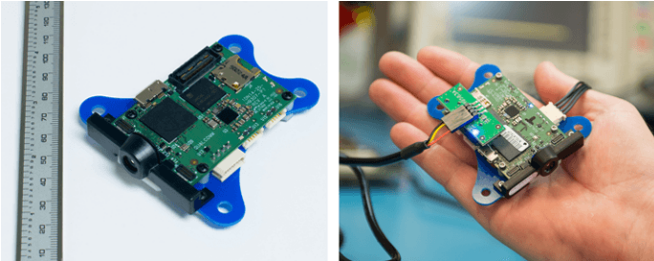


Snapdragon Flight platform: Qualcomm smartens drones

3 January 2016, by Nancy Owano



Snapdragon Flight robotics development platform

CES will be the venue for numerous headlines for a while as business after business announces a new concept in smart cars, smart kitchens and smarter robots and as booths keen on attracting business partners tell their stories to pitch why their technology should be taken to the next level.

Even more surprising than novel gadgets and platforms shown off in Vegas is, when looking back, the speed of advancements in consumer electronics, matched by speed in which marketers dream up use-case scenarios to entice you with hardware and software you never dreamed you needed (and maybe never will).

Consider that we can still remember when tablets, HD TVs, curved-edge phone screens, and wristbands that convey how many calories you burned were actually interesting.

A curtain-raising overview of CES 2016 was provided recently by the BBC's Leo Kelion and among the product categories he said one can expect to be shown this year is what he called "[flying tech](#)" including [drones](#).

Enter Qualcomm. The company will make an entrance in the drone sector; they have released a video designed to rev up interest in the

Snapdragon Flight platform.

The Snapdragon Flight [development platform](#) features an autonomous navigation system. It enables "the intelligence to perceive objects in flight paths for safer and more reliable navigation." *The Verge* said this video shows how much smarter drones will get in 2016.

The pitch includes telling people that just as a Qualcomm Snapdragon processor can enable a smartphone to capture and share moments in video, the same makes all of that possible in the Flight platform. Fundamentally, it's "a special 'drone' version of its Snapdragon system on a chip," said *iProgrammer*.

"We're proud to announce Qualcomm Snapdragon Flight, a next-generation development platform designed to help manufacturers build the future of consumer robots and [drones](#)," said Qualcomm.

The platform is based on the Snapdragon 801 processor, and Snapdragon Flight handles 4K video. The smart drone transmits data or communicates using dual-band 2x2 802.11n Wi-Fi and Bluetooth 4.0.



Snapdragon Flight reference drone

James Vincent, London reporter for *The Verge*, called up something important Qualcomm's platform effort—the impact on price. According to the company, Snapdragon Flight processors will bring down the cost of drones.

Qualcomm's Raj Talluri told *The Verge* in October that "We believe that, with this chip, we can cut the price of the average 4K camera drone from \$1,200 down to \$300 or \$400." Talluri said they also think they can extend the [battery life](#) from 20 minutes to 45 to 60 minutes. That would pave the way toward a broader audience and new [applications](#).

Could this be the next generation not only of smart drones but of everything? *IProgrammer*: "It is worth pointing out that the same chip set could come in handy for any autonomous device that needs to [navigate](#)...AI and robotics will become a lot easier as the algorithms are transferred to the hardware and all that is left for the software to do is integrate the system. This is how robots will become a commodity item."

The video mentions features such as 4K video, stereo cameras, optical flow camera, visual inertial odometry, motion planning and obstacle mapping. This is all about autonomous path planning; the technology is such that the drone will get back home no matter what obstacles get in the way.

Qualcomm is not shy on its own descriptions. Speed? "Breathtaking." Battery life? "Epic."

More information:

www.qualcomm.com/news/snapdrag...-platform-one-worlds

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APA citation: Snapdragon Flight platform: Qualcomm smartens drones (2016, January 3) retrieved 20 October 2019 from <https://techxplore.com/news/2016-01-snapdragon-flight-platform-qualcomm-smartens.html>

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