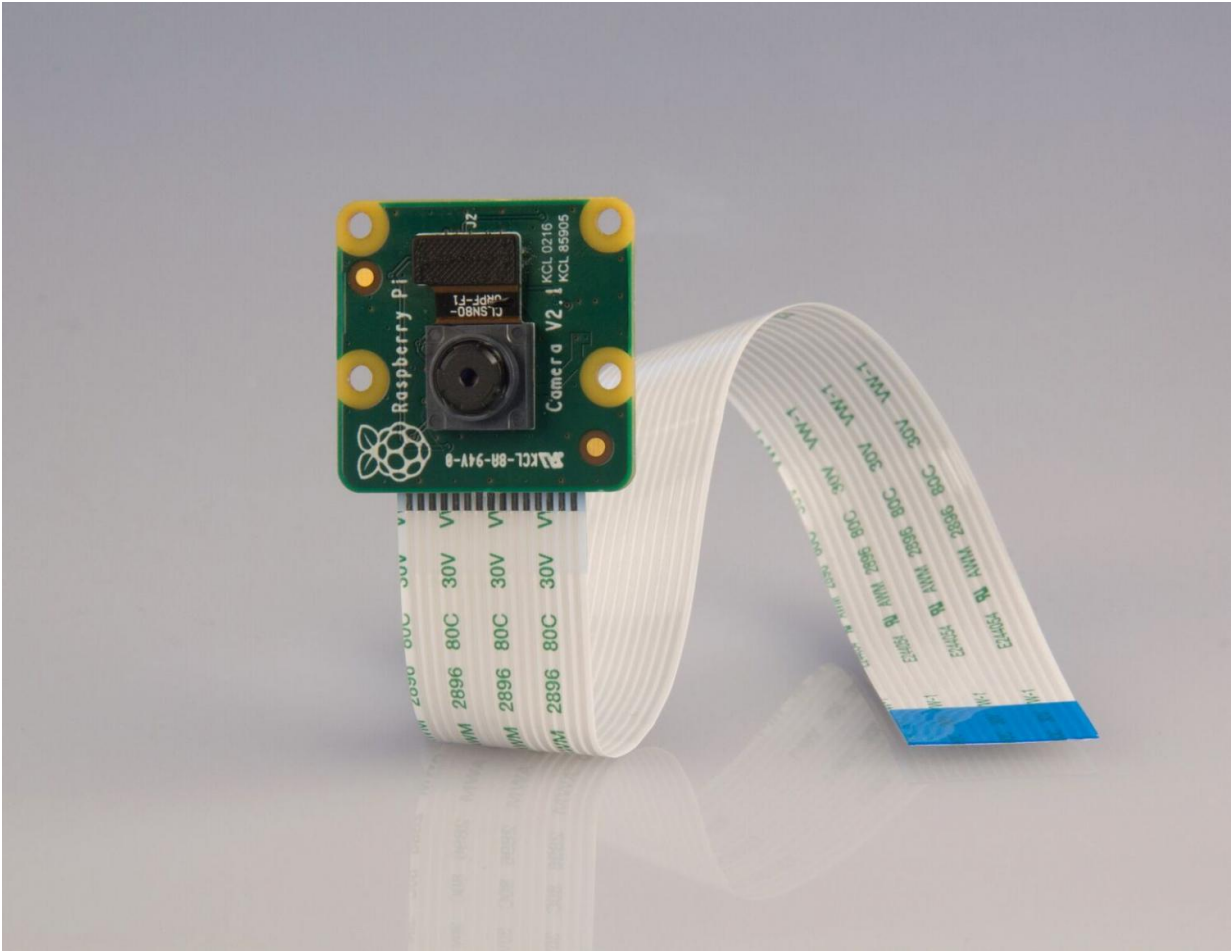


Raspberry Pi reaches for 8MP camera sky

April 26 2016, by Nancy Owano



The visible light camera

An 8-megapixel Sony sensor upgrade has been bestowed upon the Raspberry Pi. This low-price tiny computer enjoyed by so many students

and tinkerers is in the news because the official camera module for it has been [upgraded](#).

The Raspberry Pi module has graduated from 5 megapixels to 8 megapixels. Namely, this is thanks to a Sony IMX219 8-megapixel image sensor, and the upgraded devices are on sale now.

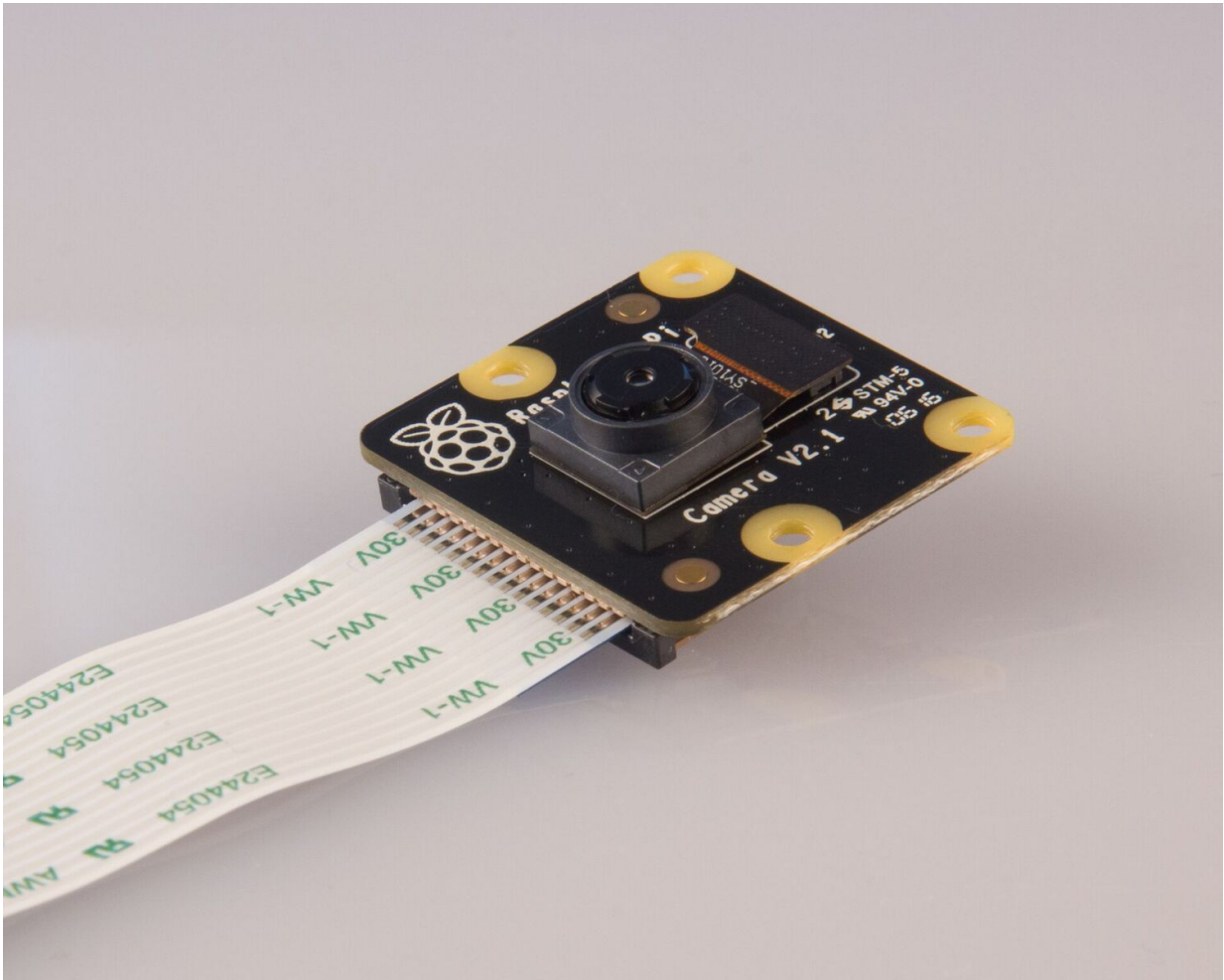
This is a feature milestone. In 2013, the device got its 5-megapixel visible-light camera board as a feature accessory and the 5-megapixel camera module stayed the same through the years.

Paul Miller in *The Verge* referred to the old 5-megapixel camera as endearingly horrible and still haunting DIY projects to this [day](#).

Raspberry Pi Founder Eben Upton appeared to be quite happy with the IMX219 and on Monday blogged his reasons for calling it a "fantastic choice."

He said, "this is more than just a resolution upgrade: it's a leap forward in image quality, color fidelity and low-light performance."

To be sure, as *Hot Hardware* pointed out, a higher number of megapixels is not the only indicator of improvement. Paul Lilly wrote: "There's a lot going on behind the scenes when you take a [photo](#). While the number of megapixels remains a popular metric for comparing cameras, it's not necessarily an indicator of quality. With the IMX219, Sony put a lot of work into the tuning process, and specifically towards lens shading and auto white balance (AWB) to ensure that the true colors of a scene are reproduced no matter what type of lighting is used."



The infrared camera

There is a Sony story behind this new move. Upton blogged on Monday: "The OmniVision OV5647 sensor used in both boards was end-of-lifed at the end of 2014. Our partners both bought up large stockpiles, but these are now almost completely depleted, so we needed to do something new."

(The original Pi Camera, and a non-infra red version which was released in 2013 have been used for telescopes, kites and science lessons among

other things, said *TechWeekEurope*, and now the sensor used to power it, as Upton said in the blog, has been discontinued.)

Upton said he and his team had already had a conversation with Sony's image sensor division, and that is how the new camera based on Sony IMX219 8-megapixel sensor came about .

It's 25 mm x 23 mm x 9 mm in size and weighs just [over](#) 3 g, said *BetaNews*.

Steve McCaskill in *TechWeekEurope* noticed another benefit than just unchanged price: The Pi [Camera](#) V2 and Pi Camera NoIR V2 not only have the same \$25 price tag as their predecessors, but they are also backwards compatible. "This means that so long as a Raspberry Pi is using the most up to date version of the Raspian OS, it can be interchanged with the older model."

Miller remarked that "it's about as good as it gets for tinkerers who want actual control over a camera sensor at the hardware level."

The new [camera](#) comes in infrared and visible light versions and both are based on the Sony sensor.

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