

Let a million eyes see - computer insect cameras revealed

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These [insect eye cameras](#) are smaller than a finger nail. They have infinite focus without moving parts. Once production ramps up they will be super cheap. Combine with micro transmission chips for a super mobile camera that is so cheap it could be thrown away after single use.

Just think where you could put cameras using this, or where a government or corporation could put them... Every object in a room, car, books, eye glasses, on micro drones, balloons, even on food for sale, plants, pets, children, shoes, inventory equipment, on credit cards. To track, monitor behavior, prevent theft, control rioters... Everyone could become a super spy with this technology. Who needs a billion dollar spy satellite when you can use a bunch of 1 cent cameras sprinkled around an area? Every action and change could be recorded.

The insect eye lens can also be used in reserve in a micro projector that can put a clear image on an uneven surface and is only 6 mm thick. Think movies and adverts from your cell phone. Or embedded in the streets like the personalized ads in the movie Minority Report.

Integral Photography

How a light-field camera works

Individual lenses

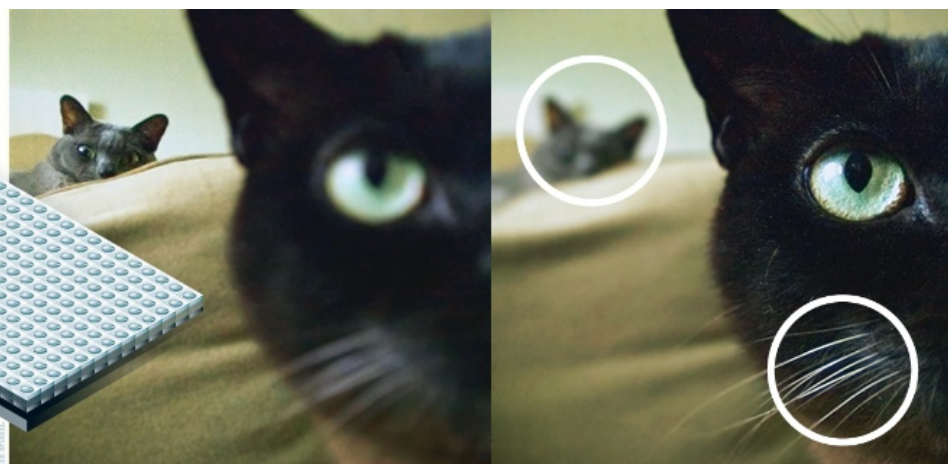
each with a sensor that can only capture a few pixels



Microlenses
Substrate
Sensor

Light-field chip

with hundreds of individual lenses



1 Each of the large number of microlenses captures a section of what will become the photo.

2 A computer assembles the multiple individual images into a composite image.

3 The multiple perspectives allow the software to retroactively focus on different parts of the image.