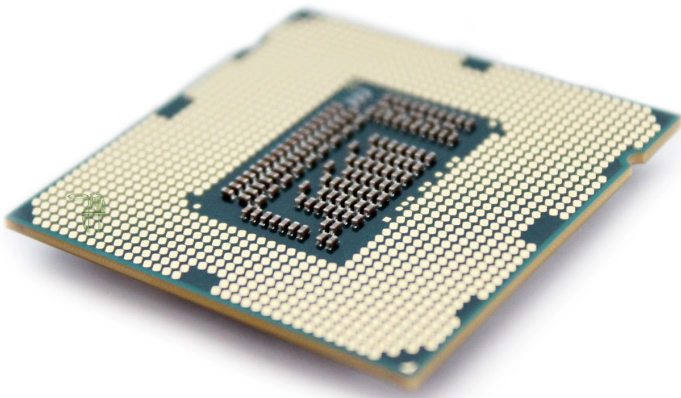


Researchers create microdevice to track pills in body

15 September 2017 | News

Integrated with sensors, resonators and wireless transmission technology that simulate magnetic resonance properties of atoms, the microdevices can be located using magnetic fields.



Researchers at the California Institute of Technology (Caltech) in the US have developed the prototype of a miniature device that can be inserted and tracked in smart pills to diagnose and treat diseases.

Based on magnetic resonance imaging (MRI) principles, the new addressable transmitters operated as magnetic spins (ATOMS) are silicon chip devices that allow accurate identification within the body.

Integrated with sensors, resonators and wireless transmission technology that simulate magnetic resonance properties of atoms, the microdevices can be located using magnetic fields.

The devices are intended to monitor the gastrointestinal tract, blood or brain through the measurement of various factors such as pH, temperature, pressure and sugar concentrations that are relayed to doctors.

It is expected that the devices can also be instructed to release drugs within the body.