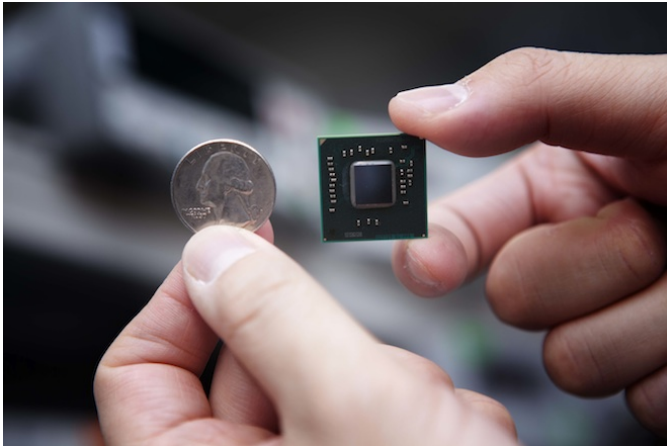


Intel Integrates Wifi in Processors

Written by Marco Attard
22 February 2012

Intel shows off a breakthrough in making faster and more energy efficient wifi-- integrating a 2.4GHz wifi radio and a dual-core Atom processor on the same chip, codenamed "Rosepoint."



The chip was seen at the 2012 IEEE Solid-State Circuits Conference (ISSCC), San Francisco.

The wifi radio inside Rosepoint is digital RF, and uses only 2 voltage levels. The chip itself is built using a 32nm process, and Intel tells *Wired Magazine* it brings [Moore's Law](#) to the world of RF and radio circuits.

The integrated wifi technology will not hit the market until a few years, and Intel is already working on a version carrying a cellular radio and a built-in antenna. Such technology can result in the more energy efficient internet-connected devices of the future.

Wireless radio and CPUs do not make ideal partners-- radiation from a CPU corrupts data the RF module is receiving, while radio waves mess with microprocessors. The wifi radio and the Atom processor also happen to operate using similar frequencies, demanding the use of noise cancelling and radiation-shielding.

An other Intel development seen at ISSCC 2012 is an experimental solar powered processor, codenamed "Claremont." Also known as a Near-Threshold Voltage (NTV) CPU, it operates at voltage levels starting from as low as 280 minivolts (running at 3MHz) to up to 1.2V (running at 1GHz).

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