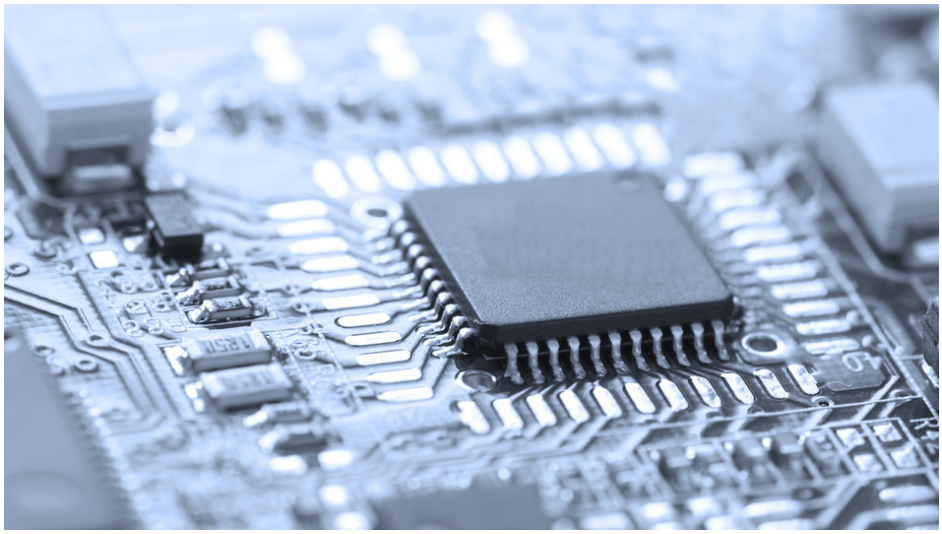
Honey, Intel Shrunk the Mobile Processor


[1]

Intel [1] will be ready to produce its next-generation mobile processors at high volumes in 2013, the company said at an industry conference yesterday. The new chips will use Intel's 22-nanometer technology, already present in current PCs and Macs.

It's harder to integrate new chip tech in mobile processors because of their system-on-a-chip (SoC) nature, which includes things like RAM and graphics (those components are typically separated on a PC). Intel's 22nm tech would be the world's smallest -- the most advanced chips from Qualcomm (based on ARM architecture) are 28nm, according the the original report [2] from *Reuters*. Current Intel mobile chips, which carry the Atom name, are 32nm.

Those chips are hard to come by, however. Intel's presence in mobile devices is practically nonexistent. There are only a few Intel-based phones for sale, and they're only available in places like China [3] and India [4]. However, many manufacturers -- including Lenovo [5], Samsung [6] and Acer [7] -- have debuted Windows tablets based on Intel mobile processors, although it's unclear how well they're selling.

Intel's biggest challenge in mobile has been to build chips that have similar power efficiency as ARM-based processors. The chip technology -- which powers the vast majority Windows-based PCs -- tends to emphasize performance, although Intel has been iterating its Atom processors to improve efficiency over the past few years.

With 22nm tech, new Intel phones would theoretically be even better on that score. We may get more of a sense of Intel's plans for 2013 at the annual Consumer Electronics Show (CES) in January.

Would you buy a phone with Intel inside? Why or why not?

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