



## HomePlug Update

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Between endless meetings with IP video purveyors at last week's Supercomm and hit- and-run assaults on Metro Ethernet market vendors, Broadband Business Forecast made some time to squeeze in a quiet breakfast with in-home broadband- over-powerline purveyor Intellon for an exclusive update on what's happening in that niche of the broadband world.

What we're seeing right now is the proverbial lull before the storm, says Cameron McCaskill, vice president of business development at Intellon, whose chips command a majority of today's market. Sales of chips - and thus widgets for end users - following the **HomePlug** 1.0 specification have "stabilized," he said, after what had been a period of nearly-vertical sales growth as customers wait for a one-two punch of new generations with much faster technology.

The first devices of the next generation, called **HomePlug** Turbo, should be on retail shelves within weeks, McCaskill said. **HomePlug** Turbo promises the ability to deliver 15-20 Mb/s broadband over a home's electric wiring, or about four times the usable bandwidth of the initial **HomePlug** devices that have been on the market. The term "usable" is an important one in the broadband-over- powerline business, since noise on the electric lines from hair dryers, blenders and many other devices is a major impediment. Turbo, for instance, has a "fire rate" of 85 Mb/s compared to its usable 15-20 Mb/s after interference is overcome.

At first the Turbo devices will be available in Europe only, with Devolo the first manufacturer out the gate, says McCaskill, with U.S. distribution to follow in late summer or early fall. The choice of Europe for launch first, he says, is because Turbo delivers enough bandwidth for a single video feed, which is typically all that is needed for average European homes at this time. "For Europeans the turbo product is terrific," says McCaskill.

## Killer Product

In the U.S., where homes may sport as many TVs as there are people, the killer product is yet to come. That's **HomePlug** AV, which will have a 200 Mb/s fire rate and a "real" throughput at the application layer of 50 Mb/s - enough for multiple high definition IP video feeds.

The specifications for **HomePlug** AV, McCaskill says, are finally within weeks of being finished. Tape out of chips following the spec will follow "soon," he says, with the current schedule now calling for first silicon samples in late October, and prototype devices ready for the Consumer Electronics Show in January. Some time in the first half of next year initial volume production should start rolling off assembly lines.

## Surprise Market

Meanwhile, McCaskill says a surprise market has started to emerge for **HomePlug** technology - devices designed to attach not to household electric lines but rather to the TV coaxial cable found in a majority of American homes. McCaskill says because the coaxial cable doesn't suffer from the interference found on electric cable, the devices are functioning at nearly full fire rate, creating 30 Mb/s networks with the **HomePlug** devices that deliver only 4-5 Mb/s over the powerlines they were designed for. **HomePlug** AV devices, he said, will yield 120 Mb/s in-home networks over coax.

McCaskill cites "customer pull" for creating the market, rather than any effort by the **HomePlug** community.

## BBF's Take On the Situation

Broadband Business Forecast remains enamored with the potential of using broadband- over-powerline technology to create home networks. For starters, such networks eliminate the need to pull any sort of new

wiring in homes - an expensive proposition. Secondly, while wireless technology can do a similar job, there are security issues with wireless that simply don't occur on a hard-wired network.

With the latest developments in **HomePlug**, the technology is on the verge of finally delivering speeds that can accommodate the rush into IPTV - speeds that McCaskill candidly admits the **HomePlug** industry didn't contemplate as recently as a year ago.

We envision the day when **HomePlug** is built into devices of all sorts - simply plug in your PC and you're on your home network and even the Internet. The same for a printer. And perhaps plug the TV into the wall and the IPTV signal instantly starts flowing.