Broadcom's new 5-in-1 DVR chip

Whenever Irvine's Broadcom Corp. unveils a new chip, we know it probably does three things: Combine two or more older chips, use less power and cost less than existing technology.

Its latest chip, announced today, does just that for the home TV's digital video recorder, the DVR.

The Broadcom's BCM7125 conceivably can change the DVR world by offering consumers a smaller set-top box packed with all the features the most-advanced DVR offers. Stuff like multi-room viewing, video transfer from cell phone to set-top box and back, slide shows streamed from a home PC, and a plethora of on-screen widgets.

"If you look at the 7125, typically in the basic box there are two tuners, front-end with DOCSIS, HD backend and MoCA," said Peter Schenitzki, senior product group manager at Broadcom's Broadband Communications Group.

Essentially, he said, "So five chips are now in one chip."

On top of this convergence, the chip can cut power consumption by shutting down unused features. An example: When the always-on DVR isn't recording or broadcasting an HD show, it could shut down the HD decoder.

What's also key is that this new chip enables newer technologies like Multimedia over Coax Alliance (MoCA), which is in the 2Wire cable modem and some Motorola set-top boxes; and the Digital Living Room Alliance (DLNA), which has popped up in the PlayStation 3 and Moxi's DVR.

MoCA is a wired technology invading living rooms that doesn't require people to install new wires. Short for Multimedia over Coax Alliance, the technology uses existing coaxial cable to send HD video throughout the home. This helps consumers who didn't build fiber-optic cables into their walls. While it really just another way to create a home network to transfer HD video, MoCA is more reliable than a Wi-Fi home network.

A set-top box with Broadcom's chip will utilize the coax cable, Wi-Fi and even wired Ethernet network to move video from box to box, or PC to the box, or cell phone to the box. Stephen Palm, a technical director at Broadcom, demonstrated this to me last month during a visit to the company's Irvine headquarters. He sent a video from a set-top box to his iPhone, thanks to a mix of technologies, including MoCA, Wi-Fi and DLNA.

All these technologies help devices share video with one another and if they are MoCA or DLNA-certified, devices work together without consumers having to adjust settings or reboot.

While all the features mentioned are available in some consumer electronic products today, Broadcom's new chip targets service providers, such as your local cable TV company. Let's hope cable providers add such features soon.

Schenitzki said that when he talks to TV service providers about what the new chip can do, "Their jaws drop."

The chip is being tested by TV service companies. For more details, see Broadcom's site.