

Rivalry Over Wireless High-Def TVs

By PETER SVENSSON, AP Technology Writer

Thursday, January 3, 2008

(01-03) 03:34 PST New York (AP) --

Flat-panel TVs look lovely on a wall — the cords hanging from them, less so. After a few years of false starts, the industry finally seems close to tackling that problem. At least three dueling wireless technologies for high-definition TVs will be on display at the Consumer Electronics Show in Las Vegas, which starts Monday. Manufacturers promise that sets incorporating these technologies will be in stores before the next holiday season.

The heavyweight entry in the field is WirelessHD, a consortium that includes the biggest Asian names in electronics, including Sony Corp. and Toshiba Corp.

It's an unusual group, in that the home entertainment industry hasn't generally been a leader in wireless technologies — most of them have been pioneered by makers of cell phones or computer networking gear.

But the consortium is set to announce Thursday that Intel Corp. is joining the group, which could broaden the reach of the technology from home entertainment applications to computers. Intel has been a champion of wireless technologies including Wi-Fi, and more recently, WiMax, a longer-range cousin.

The WirelessHD group is also announcing that it has completed the blueprints for chips that can beam HD audio and video from set-top boxes, DVD players and digital cameras to TV sets. The chips can be made small, and the intention is to have them built into devices, rather than be supplied in add-on adapters.

The technology uses a virgin band of the radio spectrum, around 60 gigahertz. That lets it avoid interference from other wireless networking gear and allows for extremely high data transfer rates, according to John Marshall, chairman of WirelessHD. Unlike other wireless TV solutions, WirelessHD won't need to compress the signal, which can result in a loss of quality.

To satisfy concerns by the Motion Picture Association of America, the organization of Hollywood studios, WirelessHD has intentionally limited the range of the technology.

"What WirelessHD has done is that we've made sure that the technology can cover a whole room — even a large room, up to 10 meters (30 feet) — but we've used techniques that make sure that it can't leak into the apartment next door," Marshall said.

That also means the signal won't reach from the living room into other rooms in the same home.

Jim Williams, chief technology officer of the MPAA, said in a statement that the group was "encouraged by WirelessHD's commitment to foster content protection in the wireless, digital age."

The chipmaker that is best positioned to take advantage of the specification and supply transmitting and receiving chips is SiBEAM Inc., a privately held Sunnyvale, Calif. startup that has been part of the WirelessHD group since its founding in 2006.

The other big electronics companies in the group are Matsushita Electric Industrial Co. (known for its Panasonic brand), NEC Corp., LG Electronics Inc. and Samsung Electronics Co.

Wireless streaming of HD video has been talked about for years, and several companies have announced products that have failed to show up, sunk by technical problems. At last year's show, Philips Electronics NV revealed a kit consisting of two antennas for streaming video, saying it would be on sale in 2007. It hasn't been heard of since.

Chip designer Pulse-Link Inc. is another past victim of optimism: it said in 2004 that it would be shipping chips that send HD signals wirelessly in 2005.

"It's just not that easy. And it took us a whole lot longer than we thought it would," Pulse-Link's president and chief operating officer,



said Wednesday.

This year, Pulse-Link is ready. At CES, Westinghouse Digital Electronics will be showing an LCD TV with a built-in Pulse-Link receiver chip.

The 47-inch LCD flat panel won't be aimed at the home market, but at retail and public displays. It will go on sale in the second quarter and will come with a transmitter box that takes a standard HDMI, or High-Definition Multimedia Interface, signal and beams it up to 40 feet.

The price has not been set, but John Araki, a vice president at Westinghouse Digital, said each end of the wireless link adds about \$100 to the cost. Consumer models could show up later this year if all goes well.

Pulse-Link's wireless technology is so-called ultra-wideband, or UWB. It allows for fast transfer speeds at short ranges, but not as fast as the 60 GHz WirelessHD technology, so some compression of images is necessary, but Watkins said it won't be noticeable.

Other companies, like Tzero Technologies Inc., are also creating chips that send video signals over UWB.

Lastly, LG Electronics of Korea will be at CES demonstrating LCD and plasma sets that will use run-of-the-mill Wi-Fi as the wireless link. Wi-Fi is a tried and true technology for data networking, but is less than ideal for streaming video. It's the slowest of the three wireless alternatives, and requires the most compression when used for HD video.

Hewlett-Packard Co. already makes two models of Wi-Fi enabled HDTVs, but the wireless link only connects them to home PCs, not with set-top boxes or the rest of the entertainment center.

Starting early this year, LG will be selling two Wi-Fi enabled LCD models, at 47 inches and 52 inches, and two plasma models, at 50 inches and 60 inches. The LCD models will include a wireless transmitter with a 50-foot range. The transmitter will be optional for the plasma models.

Prices have not been announced.

Of course, none of these technologies will let an HDTV go completely wireless: there's still the power cord. People are working on wireless power as well, but we'll have to wait much longer for that.

On the Net:

www.wirelesshd.org

www.sibeam.com

www.pulse-link.com

www.westinghousedigital.com

LG Electronics: us.lge.com

<http://sfgate.com/cgi-bin/article.cgi?f=/n/a/2008/01/02/financial/f210209S37.DTL>

Associated Press Sections

Go

© 2008 Hearst Communications Inc. | [Privacy Policy](#) | [Feedback](#) | [RSS Feeds](#) | [FAQ](#) | [Site Index](#) | [Contact](#)