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Tru2way™ Platform for Bidirectional Cable Communication Launches

Comcast Corporation and Panasonic have announced the first deployment of Tru2way**™** bidirectional digital cable technology. Tru2way was developed by CableLabs based on the OpenCable™ specification and is a Java-based open application platform. It is being promoted as a digital CableCARD™ system that enables two-way communication between a digital-cable-ready TV set or other device and a cable operator's head end to provide viewers with a rich interactive experience. According to a statement from Panasonic, "the technology creates a common software platform that will enable cable companies, consumer electronics companies, content developers, network programmers and others to extend interactivity to the TV set and other kinds of devices."

On October 15, 2008, Comcast activated the technology on its cable systems in Chicago and Denver. Panasonic HDTV sets with tru2way capability were also made available at selected retail outlets in these areas. The new Panasonic 42" and 50" *Viera* sets have built-in tru2way CableCARD slots enabling consumers to receive the cable electronic program guide and access two-way digital cable programming, like video on demand, pay-per-view, and other services, without a cable operator-supplied set-top box. To see the announcement from Panasonic and Comcast click here. Another announcement, from the Consumer Electronics Association, is available here.

Screen shot of Interactive Cable Menu on Panasonic HDTV Using Tru2way

The advantage of the bidirectional cable card for consumers is that it removes the need for another set-top device around the TV and potentially reduces the equipment fee cable operators charge to lease their set-top components. However, it also enables other DTV devices to have bidirectional cable capability.

Comcast will supply tru2way CableCARDS to subscribers who request them and will provide Multistream cards, which enable tuning up to two channels simultaneously for recording one while watching a different program. While the initial tru2way products rolled out by Panasonic in Chicago and Denver are integrated televisions without recording capability, at the Consumer Electronics Show (CES) in January this year, Panasonic and Comcast announced that a tru2way set-top box with DVR was undergoing trials and would be available later in 2008. At CES, they also showed a tru2way-enabled portable digital video recorder (P-DVR) known as the Comcast *AnyPlay™*, expected to be available in 2009. This device incorporates DVR functionality into a portable DVD player, which, when placed in a docking station connected to cable, functions as a full-featured DVR (for more details, click here).

This deployment of a bidirectional cable card system is the end of a long-drawn-out process. In the Communications Act of 1996, Congress first sought to provide cable television customers with the opportunity to purchase their own navigation devices (i.e., set-top boxes). This finally led to the FCC's *Plug and Play Order* of September 2003 that provided consumers with the possibility for purchasing an alternative to the set-top box rented from the cable company. However the adopted specifications provided for a one-way system only, with no upstream or bi-directional capabilities and no support for services such as electronic program guides, video on demand, pay-per-view or other interactive features.

As reported in *TV TechCheck* of July 9, 2007, the cable industry and the consumer electronics industries subsequently submitted different proposals for bidirectional plug-and-play systems, neither of which gained acceptance. This eventually led to the FCC in June 2007 releasing a *Notice of Proposed Rule Making*, stating that consumers had not shown significant interest in one-way services and soliciting comments on the two different proposals for bidirectional cable solutions. In reply comments to that NPRM, the National Cable and Telecommunications

Panasonic/Comcast AnyPlay Portable DVR

Association (NCTA) set out the case for adopting the OpenCable™ platform developed by CableLabs (for the NCTA comments click here).

The OpenCable platform was subsequently renamed **tru2way** and announced at the Consumer Electronics Show in January this year by Comcast and several consumers electronics manufacturers as an agreed software platform to enable digital televisions and other devices to access cable's two-way interactive services without the need for a set-top box. This was confirmed by binding memorandums of understanding on tru2way technology signed in June 2008, between six U.S. cable operators (Comcast, Time Warner, Cox, Cablevision, Charter, and Bright House Networks) and consumer electronics manufacturers including Panasonic, Samsung, Sony, and also with set-top box makers ADB and Digeo, and chip manufacturer Intel.

While not codified by the FCC, it does seem that tru2way will be the *de facto* cable industry standard for interactive cable systems. Its capabilities are summarized in the Host License agreement (click here) and the full OpenCable specifications are available at www.opencable.com/specifications.

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Last Call for 63rd NAB Broadcast Engineering Conference Proposals

The NAB Show will host the 63rd NAB Broadcast Engineering Conference (BEC) on April 18 – 23 at the Las Vegas Convention Center in Las Vegas, Nev. This world-class conference addresses the most recent developments in broadcast technology and focuses on the opportunities and challenges that face broadcast engineering professionals around the world. The BEC is a highly technical conference where presenters deliver technical papers ranging over a variety of topics relevant to the broadcast and allied industries. We invite you to submit a proposal to present a technical paper at our conference. The deadline for submitting your proposal is **October 27, 2008**.

To submit a technical paper proposal, click here and complete the electronic form. If you have questions regarding the NAB Broadcast Engineering Conference, please contact John Marino.