Statement of Jeffrey T. Lawrence, Director of Global Content Policy, Intel Corporation: Public En Banc Hearing on Broadband and the Digital Future Carnegie Mellon University, Pittsburgh, Pennsylvania July 21, 2008

(As Prepared for Delivery)

Mr. Chairman, Commissioners. I am Jeffrey Lawrence, Director of Global Content Policy for Intel Corporation. I am responsible for a wide range of content related initiatives at Intel, and have spent most of the past ten years working on ways to enable competitive retail market segments using horizontal content protection technologies and interoperability standards.

We appreciate this chance to talk a little bit about home networking and an important opportunity for the Commission to demonstrate continued leadership as we move forward with the digital transition. Although the Cable Plug and Play proceedings have presented a lot of complex issues over the years, we believe that the time is right to enable home networking and home gateway type functionality on every digital STB. Content should flow freely from a consumer's digital STB into their home network, creating for example a "whole home DVR" type experience, and consumers should be able to move content from their networked devices into their STBs if they chose.

In 2003 the Commission adopted regulations as part of a deal between the cable industry and the consumer electronics industry to enable one way retail boxes and lay the groundwork for the two way discussions. Those regulations included a requirement that the cable industry include on all of its HD STBs an IEEE 1394 connector. We believe the intention was to make sure that consumers could connect devices in their home and personal network to their STBs to make digital recordings and such. Although a worthy goal, those 1394 connectors have scarcely been used by consumers as the market has made a dramatic shift away from 1394 to Internet Protocol, which is also known as IP. In this context, we believe the time is right for the commission to replace this costly 1394 STB requirement with a standards based IP connector that is capable of meaningful home networking, or at least to allow the use of such a connector instead. An IP based home networking connector will enable consumers to extend the reach of their digital STBs throughout their home and personal network without the need for a STB in every room. This relatively simple regulatory change

will catalyze innovation and bring immediate consumer value in the digital transition. This is a win-win opportunity, and we encourage the Chairman to demonstrate continued leadership in support of this change.

There are several market forces that support making this change, and making it NOW.

First, IP based home networking is real. Millions of consumers today have routers and switches in their homes that all speak Internet Protocol. The market has spoken loudly, and Internet Protocol simply IS networking. IP is also the waive of the future and the platform for a wide range of other services. A useful home networking IP connector will enable innovation both in the STB and in connected devices.

Second, last year CableLabs joined in the global acceptance of Digital Transmission Content Protection (DTCP) over Internet Protocol when it approved DTCP over IP as a protected digital output for all premium entertainment content delivered by Cable service. This approval joins a growing list of premium content sources that have approved DTCP IP in the home network, including DVD content and Blu-Ray Disc.

Third, The Digital Living Network Alliance, DLNA, a premier collection of the world's leading CE/IT/Cable and Content Companies, has selected Internet Protocol as the standard on which device discovery and other important interoperability standards can be erected. DLNA has also adopted DTCP over IP as the content protection technology on the home network, and DLNA products are shipping in the market today.

Fourth, we understand that CableLabs is also working hard with leading CE and IT companies in its Home Networking group to harmonize certain Cable specifications with DLNA and explore the use of DTCP over IP.

Fifth, and maybe most important, the things a consumer would be able to do with a whole home DVR are just great. Imagine sending content to your Den's PC to take advantage of its great new digital display, or moving content to your laptop or Mobile Internet Device for that long trip to the west coast, or even sending content from a rabbit ears digital TV on your home network to a STB DVR for later viewing. With a meaningful IP connector on every STB that truly enables home networking, one that is

standards based so that it can actually interoperate, the possibilities are tremendous.

Simply put, Mr. Chairman, the time is right to replace the 1394 digital STB requirement with a requirement to include a home networking IP connector. It's a win win. It is an opportunity for the Commission to lead, to leverage market forces and stimulate innovation around digital STBs. It is an opportunity for consumers to extend the reach of their digital STBs throughout their home and personal networks, and an opportunity for Cable to enhance the value of its services in a consumer's home. It is an opportunity to save device makers and of course consumers millions of dollars every year by replacing a very costly and un-used connector with a highly useful connector based on Internet Protocol, which is the very foundation of digital convergence.

Thank you again for this opportunity to speak on behalf of home networking.