

March 3, 2010

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Notice of Ex Parte Presentation, CS Docket No. 97-80, CSR-8229-Z, CSR-8251-Z, CSR-8252-Z*

Dear Ms. Dortch:

On March 2, 2010, Dan Jensen and DJ Johnson of Texas Instruments Incorporated (“Texas Instruments”) and Jonathan Mirsky, counsel, met with:

1. Joshua Cinelli, Media Advisor to Commissioner Copps;
2. Steven Broeckaert, Rekha Chandrasekher, Mary Beth Murphy, Nancy Murphy, Brendan Murray, Alison Neplokh, and Jeffrey Neumann of the Media Bureau; and
3. Rosemary Harold, Legal Advisor to Commissioner McDowell.

On March 3, 2010, Dan Jensen, DJ Johnson, and Jonathan Mirsky met with:

1. Brad Gillen, Legal Advisor to Commissioner Baker; and
2. Rick Kaplan, Acting Chief of Staff to Commissioner Clyburn.

At the meetings, Texas Instruments discussed its opposition to the waivers of the IEEE-1394 set-top box requirement requested by Intel Corporation, Motorola, Inc., and TiVo, Inc. Texas Instruments explained why IEEE-1394 is a technologically superior solution to Ethernet and why IEEE-1394 is a low-cost solution. IEEE-1394 is a low-cost solution because IEEE-1394 is commercially available at a price of less than \$1.00 and because IEEE-1394 results in lower-cost peripherals. Peripherals that use Ethernet, in contrast, require more processing power, which makes those peripherals more expensive for consumers to purchase at retail.

Texas Instruments also explained that Intel, Motorola, and TiVo have not shown unique circumstances or hardship that would justify a waiver. Rather, Intel, Motorola, and TiVo are attempting to rescind the IEEE-1394 standard, adopted through notice and comment rulemaking, through the waiver process. Texas Instruments pointed out that granting a waiver to Intel, Motorola, and TiVo – or even to all manufacturers – would punish those manufacturers that have played by the Commission’s rules and invested in integrating IEEE-1394 into their chipsets.

Finally, Texas Instruments recommended that the Commission tackle set-top box port bi-directional functionality. Texas Instruments pointed out that an Ethernet port would not allow consumers to network PVRs, Blu-Ray recorders, and other devices purchased at retail so long as the cable MSOs continue to disable the capability of the port to send content into the set-top box. Texas Instruments stated that if the Commission wants to look anew at the set-top box interface standard, it should do so in conjunction with evaluating set-top box bi-directional functionality in order to promote home networking innovation.

In addition to the oral presentations described herein, Texas Instruments provided the FCC attendees with the attached written materials.

Respectfully submitted,



Jonathan B. Mirsky

Counsel to Texas Instruments Incorporated

cc: Steven Broeckaert
Rekha Chandrasekher
Joshua Cinelli
Brad Gillen
Rosemary Harold
Rick Kaplan
Mary Beth Murphy
Nancy Murphy
Brendan Murray
Alison Neplokh
Jeffrey Neumann

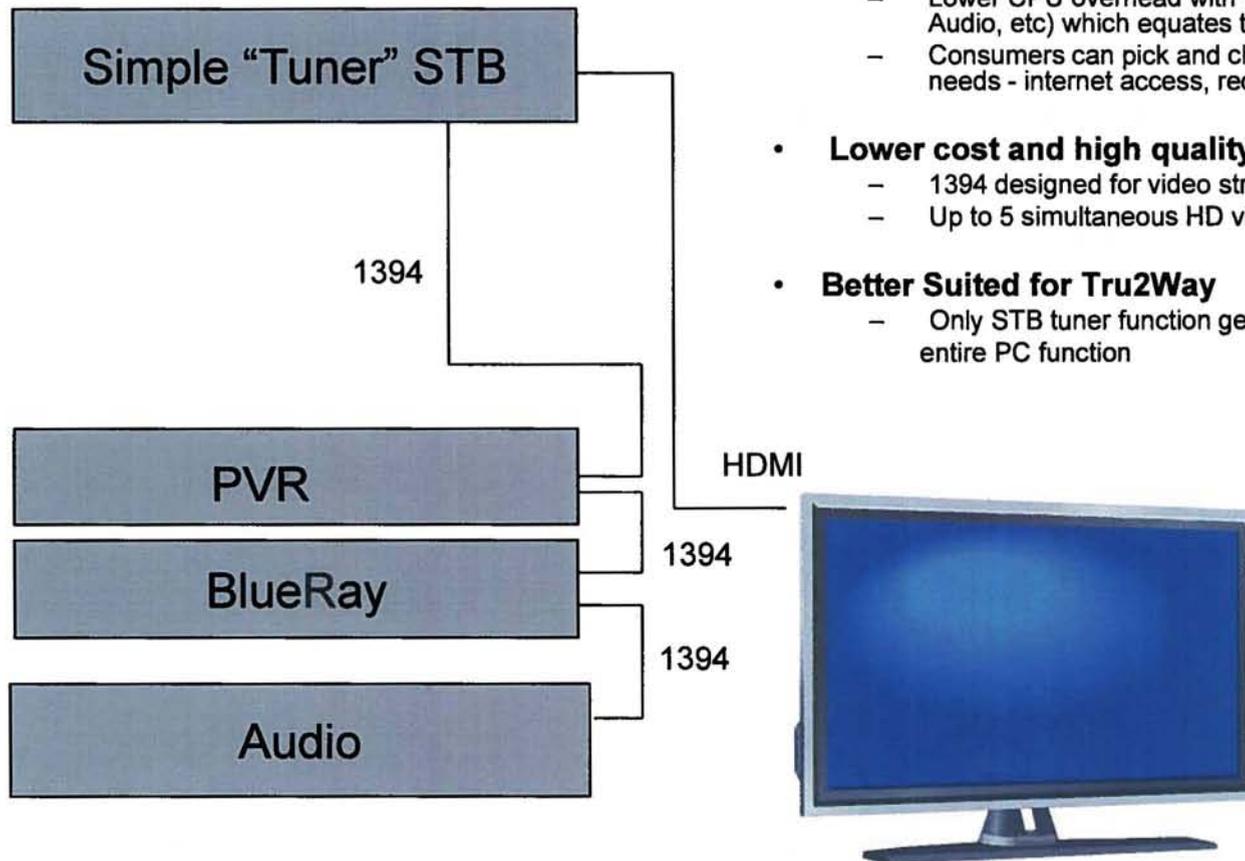
What is 1394?

- Also known as iLink, Firewire, and DV
- IEEE-1394 is a high speed serial interface
- 1394 offers speeds of 100 / 200 / 400/ 800 Mbps today. Specification supports 1600/3200Mbps in the future
- 1394 is a true Peer to Peer network interface
 - Up to 63 nodes can be attached to a 1394 network

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1394

A Consumer Friendly Approach



- **CE Approach**

- Lower CPU overhead with 1394 peripheral devices(PVR, BlueRay, Audio, etc) which equates to lower cost for the consumer
- Consumers can pick and choose retail purchased boxes that meet their needs - internet access, recording, audio streaming

- **Lower cost and high quality of service**

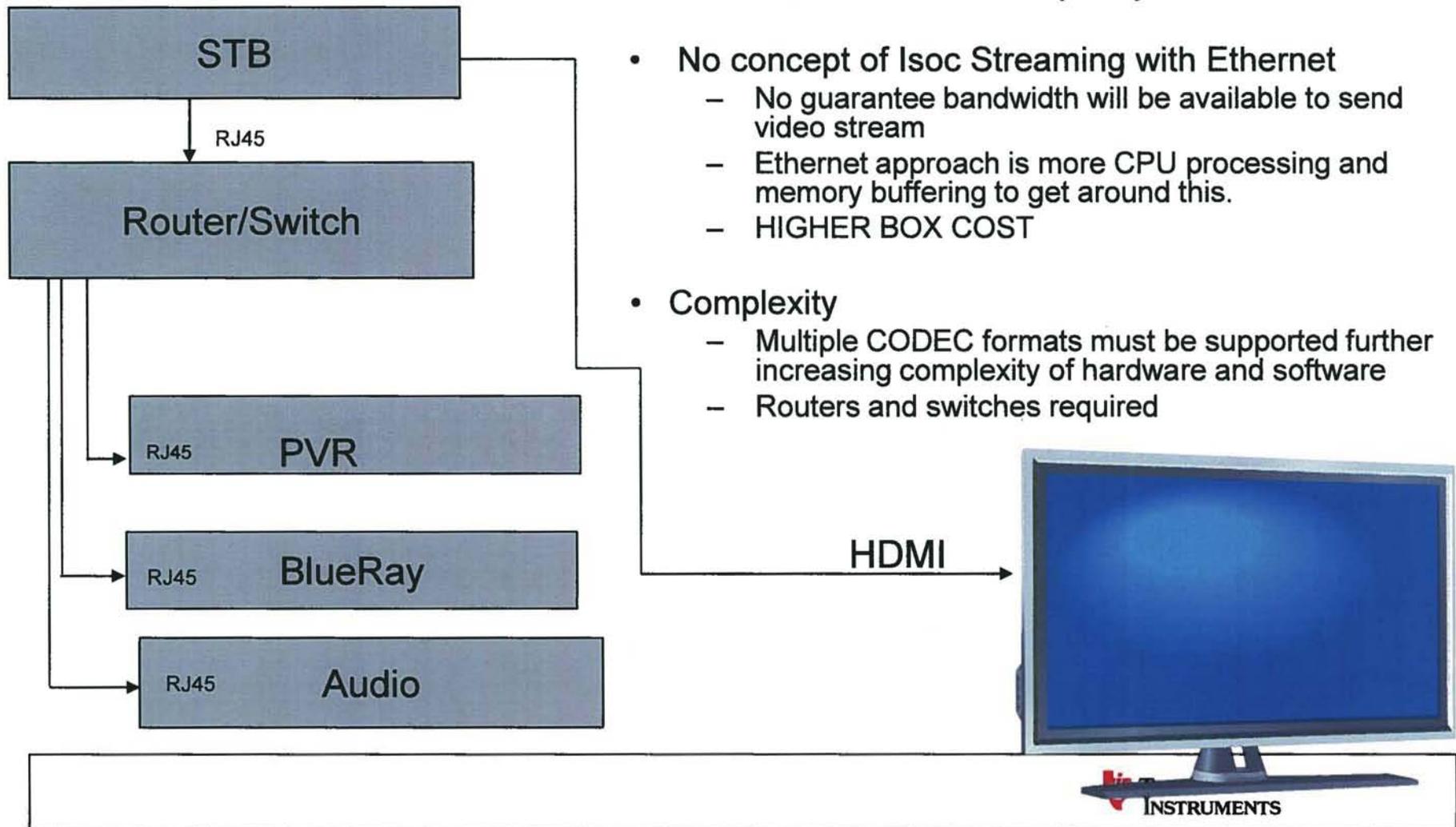
- 1394 designed for video streaming with guaranteed bandwidth
- Up to 5 simultaneous HD video streams at 400Mbps speeds

- **Better Suited for Tru2Way**

- Only STB tuner function gets integrated into TV, not entire PC function

Ethernet Proposed Approach

- “PC Like” approach
 - Constant software updates
 - Blue Screens
 - Hardware refresh every 1-3 years
- No concept of Isoc Streaming with Ethernet
 - No guarantee bandwidth will be available to send video stream
 - Ethernet approach is more CPU processing and memory buffering to get around this.
 - HIGHER BOX COST
- Complexity
 - Multiple CODEC formats must be supported further increasing complexity of hardware and software
 - Routers and switches required



Why 1394 for Digital Cable STBs

- In April 2008, the 1394TA reported that More Than One Billion FireWire Ports Have Now Shipped Worldwide with an expected Annual Growth of 15 Percent or More. See article at:
http://www.businesswire.com/portal/site/home/news/sections/?ndmViewId=news_view&newsLang=en&newsId=20080409005398
- The original intent of the 1394 mandate was to give consumers the option of replacing their VCR with a “digital equivalent” recording device they can purchase in the retail channel. 1394 is still the best technology for enabling this conversion.
- TI has shipped 1394-based products to STB customers that are less than \$0.70. 1394 is not expensive
- The Tru2Way initiative(www.tru2way.com) includes a 1394 port. As STBs get integrated into the DTV as part of this initiative, 1394 makes even more sense. DTVs will not integrate a HDD as is the case in STB PVRs. Ethernet(IP) does not provide the Quality of Service that 1394 provides for this application

1394 is Deployed in 25M STBs yet it is not widely used, Why?

- 1394 is not widely used because Digital Cable MSO's do not enable the full functionality of ANY bi-directional digital interface
 - HDMI is a one way streaming video pipe for display. You can not record and play back on HDMI without the use of expensive encoders
 - It is important to note that Ethernet functionality was integrated into the STB chipsets before the 1394 mandate even took effect, yet it is only used as a service port
- Expectation by consumers is that they can purchase a recording and/or internet access device in the retail channel, plug it into the STB and have access to the program guide info for advanced recording
 - Although the hardware path is in place, Cable MSO's block the ability to send recorded content or internet content into the STB for display via the HDMI port
- The best solution is for the FCC to engage the MSO's on the functionality issue
 - Bi-directional functionality for record and playback
 - Access to program guide information from a retail purchased box
 - Support necessary remote control commands such that functionality is seamless between the retail purchased box and STB
- If the cable MSOs enable the full functionality of the port, CE manufactures will build the boxes(PVRs, BlueRay Recorders, Internet Access Boxes, etc)