

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

FILED/ACCEPTED

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Federal Communications Commission
Office of the Secretary

In the Matter of)
)
Intel Corporation)
Petition for Waiver of 47 C.F.R. §76.640(b)(4))
)
Implementation of Section 304 of the)
Telecommunications Act of 1996:)
Commercial Availability of Navigation)
Devices)

CSR-8229-Z

CS Dkt. No. 97-80

REPLY COMMENTS OF MOTOROLA, INC.

Motorola, Inc. ("Motorola") respectfully files these reply comments in the above-captioned proceedings in support of Intel Corporation's ("Intel's") petition for waiver of the IEEE 1394 requirement in Section 76.640(b)(4) of the Commission's rules ("1394 Rule") as applied to set-top boxes that incorporate Intel's system-on-a-chip media processors.¹ Intel has made the requisite showing in support of its Petition, and its Petition (and similar petitions) should be granted promptly.

Waiver is justified given the lack of marketplace demand for the 1394 interface and the costs of compliance with the 1394 Rule. As Intel explained in its Petition, "the marketplace indisputably has migrated toward IP as the protocol of choice for networking of video content in the home and personal environment."² In contrast, IEEE 1394

¹ See *In the Matter of Intel Corporation Petition for Waiver of 47 C.F.R. § 76.640(b)(4)*, Petition for Waiver, CSR-8229-Z, CS Dkt. No. 97-80 (Oct. 7, 2009) ("Intel Petition" or "Petition").

² *Id.* at 8.

No. of Copies rec'd 0 of 4
List ABCDE

“remains a little-used technology” and is essentially “an electronic bridge to nowhere.”³

Furthermore, Intel underscored the significant costs that the 1394 Rule imposes on manufacturers, their cable customers, and consumers, as compared to the costs of the most commonly used IP connectors. Intel reported to the Commission that “the implementation costs of IP are a few cents per device, as compared to more than \$5 for a chip that supports IEEE 1394.”⁴

In their oppositions to the Intel Petition, Texas Instruments and the 1394 Trade Association assert that 1394 is widely deployed and accepted by consumers.⁵ However, the large number of set-top boxes shipped with the 1394 interface is merely a function of the Commission’s mandate, not of any existing marketplace demand for, and consumer interest in, 1394.⁶ In fact, as Intel advised the Commission, “[v]irtually none of the other home entertainment products that receive content from [set-top boxes] and other consumer electronics entertainment products relies on IEEE 1394 ports for recording or home networking.”⁷ To the extent that the 1394 interface continues to be used by

³ *Id.* at 8-9.

⁴ *Id.* at 5.

⁵ *See* Texas Instruments Opposition, CSR-8229-Z, CS Dkt. No. 97-80, at 1-2 (Dec. 10, 2009); 1394 Trade Association Opposition, CSR-8229-Z, CS Dkt. No. 97-80, at 3 (Dec. 9, 2009).

⁶ The number of 1394 ports shipped pales in comparison to deployments of commonly-used IP connectors. For example, over six billion USB devices have been sold to date. *See* http://en.wikipedia.org/wiki/Universal_Serial_Bus.

⁷ Intel Petition at 6; *see also id.* at 5 (“IEEE 1394 is not used as a networking technology on common consumer electronics products intended for the living room.”). Moreover, while IP can run over 1394, *see* Texas Instruments Opposition at 2-3, that does not address the fact that the costs associated with 1394 far outweigh any consumer benefits. It is also worth noting that while “out-of-the-box” Ethernet is an IP networking technology, 1394 needs the applicable drivers in order to support IP networking. Furthermore, it is unclear whether such drivers actually exist for legacy TVs that include 1394.

consumers, such use is generally limited to the transport of data files from camcorders and other electronics devices to personal computers, and even in that context, the 1394 interface is being replaced with USB and other digital connectors.⁸

Texas Instruments further states that granting the Intel Petition will “fragment the market” for connectors.⁹ If Texas Instruments means that denial of the Intel Petition will insulate 1394 from competition from other connectors, that may make good business sense for Texas Instruments, but it clearly would not be in the interests of consumers. There are numerous other connectors in the marketplace today, such as Ethernet, MoCA, and wireless IP, and grant of the Intel Petition and similar requests would give manufacturers greater flexibility in assessing and meeting marketplace demand for such connectors. It plainly would benefit the public interest if manufacturers could select connectors that consumers actually want and use in lieu of a mandated technology that is largely obsolete.¹⁰

In sum, waiver of the 1394 Rule would enable Intel to avoid the unnecessary costs associated with including support for the 1394 interface in its new media system-on-a-chip processors, and focus its efforts on deploying chip processors that support IP,

⁸ See *In the Matter of Motorola, Inc.’s Request for Waiver of 47 C.F.R. §76.640(b)(4), Request for Waiver*, CS Dkt. No. 97-80, CSR-____, at 5 (Nov. 25, 2009) (“Motorola Request”); see also Edward C. Baig, *Time to buy a computer? Tips for making the right choice*, USA Today, Dec. 17, 2009 (describing FireWire as “a port for hooking up older camcorders”).

⁹ Texas Instruments Opposition at 4.

¹⁰ The main TV web page on the Best Buy web site notes that 19 TVs include Ethernet ports, 38 TVs are Internet connectable, 2 TVs have iPod docks, 20 TVs include media card slots, 201 TVs have PC inputs, and 95 TVs have USB ports. There is no reference to any TVs with 1394 connectors. See <http://www.bestbuy.com/site/TV-Video/Televisions/abcat0101000.c?id=abcat0101000> (listing of “Television Features”) (last visited Dec. 18, 2009).

consistent with the pro-innovation goals of the Commission's waiver policies.¹¹ Furthermore, as Motorola explained in its own waiver request,¹² the Commission should apply waiver relief even-handedly to all manufacturers of HD set-top boxes. As CEA pointedly noted in its comments on the Intel Petition, the 1394 requirement is an "obsolete prescriptive measure."¹³ Given the fact that the 1394 interface imposes the *same* unnecessary cost on *all* HD set-top box manufacturers, there would be no justifiable basis for granting waivers to certain manufacturers but not others.

¹¹ Congress instructed the Commission to "avoid actions which could have the effect of freezing or chilling the development of new technologies and services" in implementing the navigation device statute S. Conf. Rep. No. 104-230 at 181 (1996); *see also In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices; Cable One, Inc.'s Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, Memorandum Opinion and Order, 24 FCC Rcd. 7882, ¶ 16 (2009) (granting waiver of the 1394 Rule based on weighing of public interest costs and benefits).

¹² *See Motorola Request* at 8-9.

¹³ CEA Comments, CSR-8229-Z, CS Dkt. No. 97-80, at 4 (Dec. 10, 2009).

For the foregoing reasons, Motorola respectfully urges the Commission to grant the Intel Petition and similar requests for waiver of the 1394 Rule.

Respectfully submitted,

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