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ANSI/CEA Standard

SD Card Common Interface Standard

ANSI/CEA-2040

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Approved American National Standard

ANSI

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Consumer Electronics Association

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(Formulated under the cognizance of the CEA's **R4.8 DTV Interface Subcommittee**.)

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FOREWORD

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R4.8 DTV Subcommittee.

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SD Card Common Interface Standard

1. Scope

This document describes interfaces between a Common Interface Module (CI Module) located on a microSD card and a Terminal device. The purpose of this standard is to specify the hardware, signaling, and application interface between a digital consumer electronics device e.g. television receiver (hand-held, stationary or otherwise) and a small removable, replaceable CI Module that implements and embodies significant portions of a Conditional Access System (CAS).

2. Normative References

The following references contain provisions, which, through reference in this text, constitute normative provisions of this standard. At the time of publication, the editions indicated below were valid. All documents are subject to revision, and parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.

2.1 Normative Reference List

1. ATSC A/65:2009, “Program and System Information for Terrestrial Broadcast and Cable”, Advanced Television Systems Committee, 2009.
2. SD Memory Card Specifications, Part 1, Physical Layer Specification, v3.01, May 2010.
3. ISMA Encryption and Authentication Vers. 1.1, Internet Streaming Media Alliance, Sept. 15, 2006. Available at http://www.isma.tv/specs/ISMA_E&Aspec1.1.pdf
4. RFC 3640, “RTP Payload Format for Transport of MPEG-4 Elementary Streams”, IETF.
5. RFC 3602, “The AES-CBC Cipher Algorithm and its use with IPsec”, IETF.
6. ISO: “ISO 639.2, Code for the Representation of Names of Languages — Part 2: alpha-3 code,” as maintained by the ISO 639/Joint Advisory Committee (ISO 639/JAC), http://www.loc.gov/standards/iso639-2/iso639jac.html.

2.2 Normative Reference Acquisition Lists

The normative references listed in section 1 may be acquired from the following sources:

ATSC Standards:

- Advanced Television Systems Committee (ATSC), 1750 K Street, N.W., Suite 1200, Washington, DC 20006, Phone 202-872-9160; Fax 202-872-9161; Fax 202-828-3131; Internet http://www.atsc.org

DVB Registry:

- DVB Services Sàrl is 17A Ancienne Route, CH -1218 le Grand Saconnex, Switzerland; Internet http://www.dvbservices.com/identifiers/cp_system_id.

SD Memory Card specifications:

- SD Association, c/o Global Inventures, Inc., 2400 Camino Ramon, Suite 375, San Ramon, CA 94583; Phone 925-275-6615; Fax 925-886-4870; Internet http://www.sdcard.org

Internet Engineering Task Force standards:

- IETF Secretariat, c/o Association Management Solutions, LLC (AMS), 48377 Fremont Blvd., Suite 117, Fremont, California 94538; Phone: 510-492-4080; Fax: 510-492-4001; Internet: http://www.ietf.org

Internet Streaming Media Alliance specifications: