High-Definition Multimedia Interface

Specification Version 1.3a

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Philips Consumer Electronics, International B.V.

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Preface

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Document Revision History

1.3a	2006/11/10	Cable and Sink modifications for Type C (Table 4-20, 4.2.6) Source termination recommendation (after Table 4-15) Removed undershoot and max rise/fall time limits (4.2.4). Modified slope of TP1 and TP2 eye diagrams (4.2.4, 4.2.5) HDMI cable assembly AC-coupling support required (4.2.6) CEC capacitance limits changed (4.2.10) Valid range for RGB video quantization added (6.6) Added audio sample rate exceptions for ARC (7.3, 7.3.1, 7.3.2) Added Audio Rate Control Overview (7.11)
1.3	2006/06/22	Significant new features: - Type C “Mini-Connector” (4.1.9.5, 4.1.9.6) - Cable Categories 1 and 2 (4.2.6) - Deep Color [4:4:4] (6.5, 8.3.2) - Reference Cable Equalizer (4.2.3.2, 4.2.5, 4.2.6) - Higher-speed single-link (4.1.2, 4.2.3,through 4.2.6, 8.3.2) - xvYCC Enhanced Colorimetry (6.7.2.3) - Gamut Metadata transmission (5.3.12, 6.7.3, Appendix E)) - DST audio format (5.3.10, 7.6.3) - High-bitrate compressed audio formats (5.3.11, 7.2.4, 7.3.3, 7.6.2) - Auto-Lipsync Correction feature (8.3.2, 8.9) Updated normative reference from CEA-861-B to –D (1.2, throughout). Updated Overview for new features (3) Several minor editorial (throughout)
1.2a	2005/12/14	Changes to CEC supplement (see supplement for details) Eliminated I_{OFF} and made V_{OFF} normative (4.2.4) Changed CEC resistance to 5 ohms (4.2.10) Clarified DVI device discrimination (8.3.3) Several minor editorial (throughout)
1.2	2005/08/22	Removed limitations on Type A connector usage (4.1.2, 6.1) Required new connector mechanical features, optional in 1.1 (4.1.9) Required Sink support for future AC-coupled Sources (4.2.5) Add note regarding maximum ratings of Sink (4.2.5) Clarified Cable Assembly use of +5V Power (4.2.7) Removed incorrect testing method for DDC capacitance (4.2.8) Clarified when separate CEC lines on inputs are allowed (4.2.10) Add maximum resistance spec for interconnected CEC line (4.2.10) Remove CEC leakage current limit while in standby (4.2.10) Relaxed YC_BC_R output requirement for RGB devices (6.2.3) Added support for additional video formats (6.2.4, and 7.3.3, 8.2.1) Corrected sample rate requirement from 1000 ppm to ±1000 ppm (7.2.6) Clarified use of Speaker Allocation Data Block (7.4) Added support for One Bit audio (7.9, and throughout) Clarified exception for 640x480p (VGA) declaration in EDID (8.3.4) Loosened requirement for duplicated DTD declarations (8.3.4)

		Added recommendation for setting Supports_AI (9.2) Clarified the behavior of Repeater to Sink with Supports_AI (9.3.2) Clarified rule for DVD-Audio ACP Packet transmission (9.3.5) Additional minor editorial (throughout)
1.1	2004/05/20	Permitted multi-rate native format support on Type A Sinks (4.1.2) Changed connector mechanical spec (4.1.9) Changed connector electrical spec (4.1.7) Removed CEC / +5V Power dependency for Source (4.2.7) Loosened regulation requirements for +5V Power (4.2.7) Made HPD voltages consistent with new +5V Power (4.2.9) Clarified CEC connection requirements (4.2.10) Restricted CTLx values allowed in non-Preamble periods (5.2.1) Added new Packet Types (5.3.1) Clarified InfoFrame Packet requirements (5.3.5) Added ACP and ISRC Packet definitions and usage (5.3.7, 8.8, 9.3) Specified recommended handling of non-Subpacket 0 CS blocks (7.1) Clarified audio sample rate requirements (7.2.6) Disallowed Layout 1 2-channel (7.6) Clarified AVI transmission requirements (8.2.1) Added extension fields and clarified HDMI VSDB (8.3.2) Clarified DVI/HDMI device discrimination (8.3.3) Clarified HPD behavior (8.5) Clarified EDID values of Physical Addresses (8.7) Made minor editorial changes (throughout)
1.0	2002/12/09	Initial Release

Intellectual Property Statement

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Contact Information

The URL for the HDMI Founders web site is: http://www.HDMI.org.

Contribution

Silicon Image, Inc has made a significant contribution to this standard by editing the specification and developing the core technologies upon which this specification is based; including Transition Minimized Differential Signaling (TMDS®) technology.

Acknowledgement

HDMI founders acknowledge the concerted efforts of employees of Japan Aviation Electronics Industry, Limited and Molex Japan, who have made a significant contribution to this standard by developing the connector technology and the mechanical and electrical specifications for the required plugs and receptacles.

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