

ANSI/CEA Standard

Control Network Protocol Specification

ANSI/CEA-709.1-D

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(Formulated under the cognizance of the CEA **R7 Home Networks Committee.**)

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Foreword

This standard was developed under the auspices of the CEA R7 Home Networks Committee.

Unless otherwise indicated, the designator 709 and 709.1 refers to the latest revision of CEA-709.1, which at the time of this writing was CEA-709.1-D.

Unless otherwise indicated, the designator 852 refers to the latest revision of CEA-852, which at the time of this writing was CEA-852-C.

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CONTROL NETWORK PROTOCOL SPECIFICATION

1 Scope

This specification applies to a communication protocol for networked control systems. The protocol provides peer-to-peer communication for networked control and is suitable for implementing both peer-to-peer and master-slave control strategies. This specification describes services in layers 2-7. In the layer 2 (data link layer) specification, it also describes the MAC sub-layer interface to the physical layer. The physical layer provides a choice of transmission media. The interface described in this specification supports multiple transmission media at the physical layer. In the layer 7 specification, it includes a description of the types of messages used by applications to exchange application and network management data.

2 Normative References

The following standards contain provisions that, through reference in this text, constitute normative provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed in 2.1.

2.1 Normative Reference List

- [1] CEA-852-C Tunneling Device Area Network Protocols Over Internet Protocol Channels, April 2014

2.2 Normative Reference Acquisition

CEA Standards:

- Global Engineering Documents, World Headquarters, 15 Inverness Way East, Englewood, CO USA 80112-5776; Phone 800-854-7179; Fax 303-397-2740; Internet <http://global.ihs.com>; Email global@ihs.com

IETF Documents:

- Internet Engineering Task Force (IETF) Secretariat, c/o Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191-5434, USA; (703) 620-8990 / (703) 620-9071 (FAX); URL: www.ietf.org, IETF RFCs may be downloaded from www.ietf.org/rfc.html, IETF Internet drafts may be downloaded from www.ietf.org/ID.html

3 Related Documents

For complementary specifications, see references listed in the bibliography at the end of this document.