

SCTE | **STANDARDS**

Data Standards Subcommittee

AMERICAN NATIONAL STANDARD

ANSI/SCTE 135-5 2022

**DOCSIS 3.0 Part 5: Cable Modem to Customer
Premise Equipment Interface**

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Document Types and Tags

Document Type: Specification

Document Tags:

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| <input type="checkbox"/> Test or Measurement | <input type="checkbox"/> Checklist | <input type="checkbox"/> Facility |
| <input type="checkbox"/> Architecture or Framework | <input type="checkbox"/> Metric | <input checked="" type="checkbox"/> Access Network |
| <input type="checkbox"/> Procedure, Process or Method | <input type="checkbox"/> Cloud | <input checked="" type="checkbox"/> Customer Premises |

Document Release History

Release	Date
SCTE 135-5 2009	10/6/2009
SCTE 135-5 2017	5/15/2017

Note: Standards that are released multiple times in the same year use: a, b, c, etc. to indicate normative balloted updates and/or r1, r2, r3, etc. to indicate editorial changes to a released document after the year.

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1. Introduction

1.1. Executive Summary

The present document provides the SCTE endorsement of CableLabs specification: CM-SP-CMCIv3.0-I03-170510.

1.2. Scope

This interface specification is one of a family of interface specifications designed to facilitate the implementation of data services over Hybrid Fiber-Coax (HFC) cable networks, as well as over coaxial-only cable networks. Figure 5-1 provides the context for this specification in relation to the data over cable reference architecture and the other interface specifications in the family. This specification defines the interface requirements for data over cable services between a cable modem and the customer premise equipment (CPE). The CPE may include PCs, Macintoshes, workstations, network computers, and other electronic equipment. This specification defines the applicable communications standards and protocols as needed to implement a cable modem interface to the CPE. This specification is a replacement for [CMCI] and only applies to DOCSIS 3.0 (and forward) cable systems employing HFC (Hybrid Fiber Coax) and coaxial architectures. The primary changes from [CMCI] include:

- Elimination of the Internal CPE Interfaces (like PCI)
- Elimination of the CPE Controlled Cable Modems (CCCM)
- Addition of 100BASE-TX and 1000BASE-T interface options.

This specification:

- Describes the communications protocols and standards to be employed
- Specifies the data communication requirements and parameters that will be common to all units
- Describes any additional application-unique interface requirements to ensure support for data-over-cable services.

This document specifies open protocols, with a preference for existing, well-known and well-accepted standards. This interface specification is written to provide the minimal set of requirements for satisfactory communication between the cable modem and CPE. "Cable Modem to Customer Premise Equipment Interface" (CMCI) is the general term used to describe this interface

2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References

No normative references are applicable.

2.2. Standards from Other Organizations

- [1] Cable Modem to Customer Premise Equipment Interface Specification, CM-SP-CMCIv3.0-I03-170510, May 10, 2017 Cable Television Laboratories, Inc. www.cablelabs.com

2.3. Published Materials

No normative references are applicable.

3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

3.1. SCTE References

No informative references are applicable.

3.2. Standards from Other Organizations

No informative references are applicable.

3.3. Published Materials

No informative references are applicable.

4. Compliance Notation

<i>shall</i>	This word or the adjective “ <i>required</i> ” means that the item is an absolute requirement of this document.
<i>shall not</i>	This phrase means that the item is an absolute prohibition of this document.
<i>forbidden</i>	This word means the value specified shall never be used.
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<i>deprecated</i>	Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of this document. Implementations should avoid use of deprecated features.

5. Abbreviations and Definitions

5.1. Abbreviations

For the purposes of the present document, the abbreviations given in CableLabs specification: CM-SP-CMCIv3.0-I03-170510 [1] apply.

5.2. Definitions

For the purposes of the present document, the definitions given in CableLabs specification: CM-SP-CMCIv3.0-I03-170510 [1] apply.

6. Endorsement Notice

All elements of CableLabs specification: CM-SP-CMCIv3.0-I03-170510 [1] *shall* apply without modifications.