Society of Cable Telecommunications Engineers

ENGINEERING COMMITTEE
(Data Standards Subcommittee)

AMERICAN NATIONAL STANDARD

ANSI/SCTE 140 2007

Cable Modem IPv4 and IPv6 eRouter Specification

NOTICE

The Society of Cable Telecommunications Engineers (SCTE) Standards are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability and ultimately the long term reliability of broadband communications facilities. These documents shall not in any way preclude any member or non-member of SCTE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE members, whether used domestically or internationally.
SCTE assumes no obligations or liability whatsoever to any party who may adopt the Standards. Such adopting party assumes all risks associated with adoption of these Standards, and accepts full responsibility for any damage and/or claims arising from the adoption of such Standards.

Attention is called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this standard have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE web site at http://www.scte.org.

140 Philips Road
Exton, PA 19341

Note: DOCSIS® and eDOCSIS™ are trademarks of Cable Television Laboratories, Inc., and are used in this SCTE standard with permission.

Contents

Figures

Tables

1 SCOPE

This standard defines a core set of features that enable multiple subscriber devices to gain access to operator provided high speed data service using DOCSIS. This core set of features allow for both IPv4 and IPv6 enabled devices to gain connectivity to the Internet.

The eRouter is specified as an Embedded Service/Application Functional Entity (eSAFE) device as defined in [SCTE 107] that is implemented in conjunction with a DOCSIS Cable Modem device.

The core set of features defined in this standard includes the ability to provision multiple CPE devices, a description of how to forward data to and from CPE devices and also the ability to forward IP Multicast traffic to CPE devices.