

ANSI/CEA Standard

Node Medium Access Control Sublayer

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

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CEA 600.42 NODE MEDIUM ACCESS CONTROL SUBLAYER

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EIA 600.42 Medium Access Control Sublayer

This part of the CEBus[®] standard is a technical specification of the services and protocol for the Node Medium Access Control Sublayer. Before working with this document, the reader is urged to review the introductory material found in *Description of the Node Data Link Layer*.

1. Medium Access Control Sublayer Interface Service Specifications.

This section specifies the Medium Access Control Sublayer interfaces to the Logical Link Control Sublayer and to the Layer System Management. The interfaces are described in terms of service primitives, which are abstract interfaces across a layer boundary. A service primitive represents an exchange of information into or out of a layer. Although service primitives are defined using a format similar to that of programming language procedure calls, no implementation technique is implied.

1.1 Logical Link Control Sublayer/Medium Access Control Sublayer Interface Service Specification.

This section details the service provided to the Logical Link Control Sublayer by the Medium Access Control Sublayer. The Medium Access Control Sublayer provides two types of service: Unacknowledged Connectionless Service and Acknowledged Connectionless Service. These services provide connectionless data transfer of MAC Service Data Units (MSDUs) between peer Logical Link Control entities. (The term "MSDU" is more fully defined in Section 2, MAC Sublayer PDU Structure.) The data transfer may be point-to-point unacknowledged, multicast (to more than one destination) unacknowledged, or point-to-point acknowledged. The Medium Access Control Sublayer functionality is categorized as Carrier Sense Multiple Access with Contention Resolution and Collision Detection (CSMA/CRCD).

1.1.1 Unacknowledged Connectionless Service Description.

Unacknowledged connectionless service facilitates the exchange of MSDUs between Logical Link Control entities without acknowledgment of receipt. Both individual and broadcast addressing are permitted. The data transfer may pass through one or more routers.

1.1.2 Acknowledged Connectionless Service Description.

Acknowledged connectionless service facilitates the exchange of MSDUs between Logical Link Control entities with positive or negative acknowledgment from the receiving Medium Access Control Sublayer. Individual addressing is the only type of addressing permitted. The data transfer may pass through one or more routers.