

ANSI/CEA Standard

Node Logical Link Control Sub Layer

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CEA 600.43 NODE LOGICAL LINK CONTROL SUBLAYER

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CONTENTS

1. Logical Link Control Sublayer Interface Service Specifications.	1
1.1 Network Layer/Logical Link Control Sublayer Interface Service Specification.	1
1.1.1 Unacknowledged Connectionless Service Description.	1
1.1.2 Acknowledged Connectionless Service Description.	1
1.1.3 Unacknowledged Connectionless Service.	2
1.1.3.1 Overview of Primitives.	2
1.1.3.2 Detailed Specification of Primitives.	2
1.1.3.2.1 LL_DATA.request	2
1.1.3.2.2 LL_DATA.indication	3
1.1.3.2.3 LL_DATA.confirm	4
1.1.4 Acknowledged Connectionless Service.	5
1.1.4.1 Overview of Primitives.	5
1.1.4.2 Detailed Specification of Primitives.	5
1.1.4.2.1 LL_ACK_DATA.request	6
1.1.4.2.2 LL_ACK_DATA.indication	7
1.1.4.2.3 LL_ACK_DATA.confirm	8
1.2 Layer System Management/Logical Link Control Sublayer Interface Service Specification.	10
1.2.1 Overview of Primitives.	10
1.2.2 Detailed Specification of Primitives.	10
1.2.2.1 LL_INITIALIZE_PROTOCOL.request	10
1.2.2.2 LL_INITIALIZE_PROTOCOL.confirm	11
1.2.2.3 LL_SET_VALUE.request	11
1.2.2.4 LL_SET_VALUE.confirm	11
1.2.2.5 LL_READ_VALUE.request	12
1.2.2.6 LL_READ_VALUE.confirm	12
1.2.2.7 LSM_EVENT.indication	13
1.2.2.8 LL_FAILURE_REPORT.indication	14
1.3 Logical Link Control Sublayer/Medium Access Control Sublayer Interface Service Specification.	15
2. Logical Link Control Protocol Data Unit Structure.	16
2.1 General.	16
2.2 Information Field.	16
2.3 Other LPDU Fields.	16
2.4 Definition of an Invalid LLC PDU.	16
2.5 Priority Usage.	16
2.6 Bit Order.	17
3. Logical Link Control Sublayer State Machine Description.	18
4. Logical Link Control Sublayer Revision Control.	19

EIA 600.43 Node Logical Link Control Sublayer

This part of the CEBus® standard is a technical specification of the services and protocol for the Node Logical Link 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. Logical Link Control Sublayer Interface Service Specifications.

This section specifies the Logical Link Control Sublayer interfaces to the Network Layer 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 Network Layer/Logical Link Control Sublayer Interface Service Specification.

This section details the services provided to the Network Layer by the Logical Link Control Sublayer. The Logical Link Control Sublayer provides two types of service: Unacknowledged Connectionless Service and Acknowledged Connectionless Service. These services provide connectionless data transfer of LLC Service Data Units (LSDUs) between peer Network Layer entities. (The term "LSDU" is synonymous with "Network Layer Protocol Data Unit", or "NPDU", and is more fully defined in Section 2, LLC Sublayer PDU Structure.)

Note that all of the functions which provide both unacknowledged and acknowledged service are actually performed by the Medium Access Control (MAC) Sublayer. Typically, the Logical Link Control Sublayer is used to establish, maintain, and remove Data Link Layer connections. However, since the CEBus Network currently offers only connectionless service, the Logical Link Control Sublayer serves only as a pass-through layer between the Network Layer and the Medium Access Control Sublayer.

1.1.1 Unacknowledged Connectionless Service Description.

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