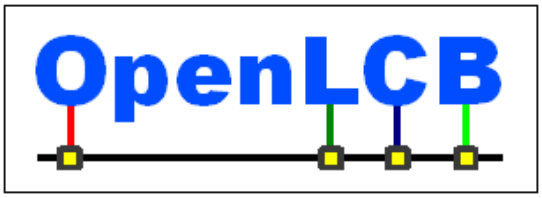

OpenLCB Standard	
Protocol Identification Protocol	
Jul 22, 2012	Preliminary

1 Introduction (Informative)

OpenLCB defines various optional protocols. If another node attempts to use a protocol that the target node doesn't implement, there are well-defined rules for how the target node will either signal an error or ignore the request.

For some uses, it's convenient to be able to tell whether a node implements a protocol before attempting to use it. This protocol defines a method for doing that.

2 Intended Use (Informative)

This Standard defines an optional protocol. OpenLCB nodes may, but are not required to, implement it.

3 References and Context (Normative)

This Standard defines message transfers that must be done via the mechanisms defined in the OpenLCB standards for message networking:

- OpenLCB Message Network Standard
- OpenLCB-CAN Message Network Standard
- OpenLCB-TCP Message Network Standard

For more information on format and presentation, see:

- OpenLCB Common Information Technical Note

4 Messages (Normative)

4.1 Protocol Support Inquiry

Name	Dest ID	Event ID	Simple Node	Common MTI	CAN format	Data Content
Protocol Support Inquiry	Y	N	N	0x32E0	0x1Edd,dsss 2E	(none)

4.2 Protocol Support Reply

Name	Dest ID	Event ID	Simple Node	Common MTI	CAN format	Data Content
Protocol Support Reply	Y	N	N	0x32F0	0x1Edd,dsss 2F	Six bytes identifying the supported OpenLCB protocols; see Section 6 below for coding.

5 Interactions (Normative)

Upon receipt of a Protocol Support Request message addressed to it, a node implementing this protocol shall return a Protocol Support Reply with correct values in the data bytes.

6 Protocol Identification Values (Normative)

A 1 bit in a position indicates that the corresponding protocol is supported by the sending node. A 0 bit in a position indicates that the corresponding protocol is not supported by the sending node.

vv vv vv vv vv vv	Protocol
0x80 00 00 00 00 00	Protocol Identification Protocol
0x40 00 00 00 00 00	Datagram Protocol
0x20 00 00 00 00 00	Stream Protocol
0x10 00 00 00 00 00	Memory Configuration Protocol
0x08 00 00 00 00 00	Reservation Protocol
0x04 00 00 00 00 00	Event Exchange (Producer/Consumer) Protocol
0x02 00 00 00 00 00	Identification Protocol
0x01 00 00 00 00 00	Teaching/Learning Configuration Protocol

vv vv vv vv vv vv	Protocol
0x00 80 00 00 00 00	Remote Button Protocol
0x00 40 00 00 00 00	Abbreviated Default CDI Protocol
0x00 20 00 00 00 00	Display Protocol
0x00 10 00 00 00 00	Simple Node Information Protocol
0x00 00 00 00 00 08 0x00 00 00 00 00 04 0x00 00 00 00 00 02 0x00 00 00 00 00 01	Reserved for expansion to a longer protocol bit vector. Shall be sent as 0. Frames which contain 1 in any of these bits shall be ignored.
All others	Reserved. Shall be sent as 0 and ignored upon receipt.

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