OpenLCB Standard	
Protocol Identification Protocol	
10/08/10	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-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

Message Type Indicator: 0x32E4

Destination address present: Yes

Simple subset: Yes

Priority group: 1

Content: None

CAN frame format: 0x18dd,dsss 32 E4

4.2 Protocol Support Reply

Message Type Indicator: 0x32F4

Destination address present: Yes

Simple subset: Yes

Priority group: 1

Content: Six bytes containing bits identifying the OpenLCB protocols supported by the sending node; see Section 6 below for coding.

CAN frame format: 0x18dd,dsss 32 E4 vv vv vv vv vv vv

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	Configuration Protocol
0x08 00 00 00 00 00	Reservation Protocol
0x04 00 00 00 00 00	Display Protocol
0x02 00 00 00 00 00	Identification Protocol
0x01 00 00 00 00 00	Teaching/Learning Configuration Protocol
0x00 80 00 00 00 00	Remote Button Protocol
All others	Reserved. Shall be sent as 0 and ignored upon receipt.

Table of Contents