| OpenLCB Standard | |
|---|---|
| Protocol Identification Protocol | |
| Jun 10, 2012 | Draft |

# 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<br>0x00 00 00 00 00 04<br>0x00 00 00 00 00 02<br>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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