OpenLCB Unique Identifier Assignments

For background, see NidUniqueAssignment.html; X means any; - means sub-assigned discriminator value

| Byte 1 | Byte 2 | Byte 3 | Byte 4 | Byte 5 | Byte 6 | Owner/Use |
|---|---|---|---|---|---|---|
| 0 | X | X | X | X | X | Reserved; Leading 0 byte indicates uninitialized or non-standard Node ID |
| 0 | 0 | 0 | 0 | 0 | 0 | Reserved; convenient value for "No node" |
| | | | | | | |
| 1 | - | X | X | X | X | Reserved for well-known global identifiers |
| 1 | 1 | 0 | 0 | 0 | 0 | Reserved for well-known EventIDs (see EidAllocations sheet; this is referred to as "OpenLCB vnode" there) |
| 1 | 1 | 1 | X | X | X | Reserved for CBUS-defined EventIDs (specifically when last two bytes zero); see EidAllocations sheet, where this is referred to as "CBUS vnode" |
| 1 | 99 | X | X | X | X | XpressNet translation |
| 1 | 129 | Byte 1 | Byte 2 | Byte 3 | Byte 4 | LocoNet packet transport |
| 1 | 238 | X | X | X | X | DCC translation |
| | | | | | | |
| 2 | - | - | | | | Manufacturer-specific assignments |
| 2 | 1 | MFGID | X | X | X | Manufacturer space bank 1 (by NMRA Mfg ID byte) |
| | | | | | | |
| 2 | 1 | 13 | X | X | X | DIY (shared unmanaged space, not recommended for individual use) |
| 2 | 1 | 18 | X | X | X | JMRI (e.g. for use in software solutions) |
| 2 | 1 | 99 | X | X | X | Lenz |
| 2 | 1 | 129 | X | X | X | Digitrax |
| 2 | 1 | 165 | X | X | X | MERG |
| 2 | 1 | 238 | X | X | X | NMRA reserved |
| | | | | | | |
| 3 | - | X | X | X | X | Self-assigning groups space |
| 3 | 0 | Member# | Member# | Member# | X | NMRA |
| 3 | 4 | Member# | Member# | Member# | X | MERG |
| 3 | 8 | Layout Hi | Layout Lo | NN Hi | NN Lo | CBUS – for mapping existing modules, using the "Layout ID" etc defined by CBUS |
| 3 | | ?? | ?? | ?? | X | Fremo |
| 3 | | ?? | ?? | ?? | X | Ntrak |
| | | | | | | |
| 4 | IP | IP | IP | IP | X | Self-assigned via globally visible Ipv4 host number |
| | | | | | | |
| 5 | - | | | | | Specifically assigned ranges |
| | 1 | - | - | - | X | 8-bit assigned ranges |
| | | 1 | 1 | 1 | X | David P Harris |
| | | 1 | 1 | 2 | X | Alex Shepherd |
| | | | | | | |
| | 2 | - | - | X | X | 16-bit assigned ranges |
| | | | | | | |
| | 3 | - | X | X | X | 24-bit assigned ranges |
| | | | | | | |
| 6 | - | | | | | Locomotive control systems |
| | 0 | | | | | DC system |
| | 1 | | | | | DCC operated |
| | 2 | | | | | TMCC operated |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | | | | | | Marklin/Motorola system |
| 4 | | | | | | MTH DCS |
| 7 | 0 | 0 | X | X | X | (tentative) RFID messages as events, need 3 bytes in NID for 40 bit tag |
| 0xFF | X | X | X | X | X | Reserved, indicates an error e.g. reset non-volatile memory |