

	Base Data for MTI							Full MTI (e.g. as used on Ethernet)	CAN MTI	CAN Data		Previous Ethernet MTI	Previous CAN MTI	Previous CAN Data
	Has Destination ID	Has Event ID	Simple node message	Priority (0 highest)	Type	Simple / Priority / Type	Extended flags	Flag & Expansion Nibble	MTI + flags	Top 17 bits of CAN header, ddd refers to destination address.	Goes at start of CAN data, if present			
Bits	1	1	1	2	5	8 hex	2	4 hex	16 bits hex	17 bits hex	8 hex	16 bits hex	17 bits hex	8 hex
Base Messages														
Node number Allocate				0	0	00		7	F000		Not available on CAN	3000		
No Filtering				0	1	01		7	0017	18017	(Still under discussion)	3010	19017	
Initialization Complete				0	8	08		7	0087	18087	Full Source Node ID	3080	19087	
Verify Node ID Number	Y			0	10	0A			10A0	1Eddd	0A	10A4	1Eddd	0A
Verify Node ID Number		Y		0	10	8A		7	08A7	188A7		10A0	180A7	
Verified Node ID Number		Y		0	11	8B		7	08B7	188B7	Full Source Node ID	10B0	180B7	
Optional Interaction Rejected	Y			0	12	0C			10C0	1Eddd	0C MTI, error, optional information	10C4	1Eddd	0C
Terminate Due to Error	Y			0	13	0D			10D0	1Eddd	0D MTI, error, optional information	10D4	1Eddd	0D
Protocol Support Messages														
Protocol Support Inquiry	Y			1	14	2E			12E0	1Eddd	2E	12E4	1Eddd	2E
Protocol Support Reply	Y			1	15	2F			12F0	1Eddd	2F Protocol flags	12F4	1Eddd	2F
Event Exchange Messages														
Identify Consumer		Y	Y	1	4	A4		F	0A4F	18A4F	EventID	1242	1824F	
Consumer Identify Range		Y		1	5	25		F	025F	1825F	EventID w mask	3252	1925F	
Consumer Identified w validity unknown		Y		1	6	26	0	8	0268	18268	EventID	3263	19268	
Consumer Identified as currently valid		Y		1	6	26	3	B	026B	1826B	EventID	3263	1926B	
Consumer Identified as currently invalid		Y		1	6	26	2	A	026A	1826A	EventID	3263	1926B	
Consumer Identified (reserved)		Y		1	6	26	1	9	0269	18269	EventID	3263	1926B	
Identify Producer		Y	Y	1	8	A8		F	0A8F	18A8F	EventID	1282	1828F	
Producer Identify Range		Y		1	9	29		F	029F	1829F	EventID w mask	3292	1929F	
Producer Identified w validity unknown		Y		1	10	2A	0	8	02A8	182A8	EventID	32A3	192AB	
Producer Identified as currently valid		Y		1	10	2A	3	B	02AB	182AB	EventID	32A3	192AB	
Producer Identified as currently invalid		Y		1	10	2A	2	A	02AA	182AA	EventID	32A3	192AB	
Producer Identified (reserved)		Y		1	10	2A	1	9	02A9	182A9	EventID	32A3	192AB	
Identify Events	Y			1	11	2B			12B0	1Eddd	2B	12B4	1Eddd	2B
Identify Events			Y	1	11	AB		7	0AB7	18AB7		12B0	182B7	
Learn Event		Y	Y	1	12	AC		F	0ACF	18ACF	EventID	12C2	182CF	
Producer/Consumer Event Report		Y	Y	1	13	AD		F	0ADF	18ADF	EventID	12D2	182DF	
Other Messages														
Xpressnet				2	17	51		7	0517	18517	Xpressnet packet	3510	19517	
Simple Node Ident Info Request	Y			2	18	52			1520	1Eddd	52	1524	1Eddd	
Simple Node Ident Info Reply	Y			2	19	53			1530	1Eddd	53 data bytes	1534	1Eddd	
Datagram Protocol														
Datagram Content (one frame)	Y			2	0	40			1400	1Addd	Datagram protocol id, data			
Datagram Content (first frame)	Y			2	0	40				1Bddd	Datagram protocol id, data			
Datagram Content (middle frame)	Y			2	0	40				1Cddd	Data (0-8 bytes)			
Datagram Content (last frame)	Y			2	0	40				1Dddd	Data (0-8 bytes)			
Datagram Received OK	Y			2	12	4C			14C0	1Eddd	4C MTI byte	1404	1C/D ddd	4C
Datagram Rejected	Y			2	13	4D			14D0	1Eddd	4D MTI byte, error code	14C4	1Eddd	4C
Stream Messages														
Stream Initiate Request	Y			2	14	4E			14E0	1Eddd	4E MTI byte, buffer size (2 bytes), Source Stream ID (1 byte), reserved byte, flags (tagged=0x80)	14E4	1Eddd	4E
Stream Initiate Reply	Y			2	15	4F			14F0	1Eddd	4F MTI byte 0x4B, buffer size (2 bytes), Source Stream ID (1 byte), Dest Stream ID, flags (tagged=0x80; error info)	14F4	1Eddd	4F
Stream Data Send	Y			3	9	69			1690	1Fddd	(stream IDs inferred on CAN); 8 bytes data	1694	1Fddd	
Stream Data Proceed	Y			3	10	6A			16A0	1Eddd	6A MTI byte, Stream IDs (2 bytes)	16A4	1Eddd	6A
Stream Data Complete	Y			3	11	6B			16B0	1Eddd	6B MTI byte, Stream IDs (2 bytes); optional length (4 bytes)	16B4	1Eddd	6B

Places these appear in code:

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prototypes/C/libraries/OlcbTestCAN/obj/test
prototypes/C/libraries/OlcbCommonCAN/OpenLcbCan.h
prototypes/C/libraries/OpenLcb/Olcb_CAN_Buffer.cpp
prototypes/Arduino/libraries/OpenLcb/OpenLcbCan.h
prototypes/CBUS-PIC/canlib/frametypes.c
prototypes/ObjectiveC/OpenLcbLib/OlcbMtiDefinitions.h
prototypes/ObjectiveC/OpenLcbLib/OlcbTestDefinitions.h
prototypes/ObjectiveC/OpenLcbLib/MtiReformat.c
prototypes/java/src/org/openlcb/can/MessageBuilder.java

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