FORD LDM Localization - 功能 #2599

功能 # 2519 (已关闭): Ford_SYSR: System Requirement

Ford_SYSR：FS_REQ0078_V1 LIN Part Number Reporting

2024-10-24 20:09 - 玉洁 金

状态:	已关闭	**开始日期:**	2024-10-29
优先级:	普通	**计划完成日期:**	2024-11-07
指派给:	槐 杨	**% 完成:**	100%
类别:		**预期时间:**	0.00 小时
目标版本:	H003_SW0007169.A001.8	**耗时:**	0.00 小时

描述

Since we are limited to only 7 bytes of data (besides the LIN Status Byte), transmitting a 23 character part number will take several packets. Like the configuration data, we use one byte to indicate an index and the rest of the bytes (6 others) are the data.

DLPL_LIN_20_001 – Part Number Sequencing
To allow the LIN Node manufacturer to reduce cycle time on their production line, the LIN Node is allowed to start with any PartNumIndex. They then cycle through the remaining indices. Once they repeat the very first PartNumIndex value, the LIN controller will consider the Part Number complete. All unused bytes must be set to 0 (NULL).
Notice that PartNumIndex is multiplied by 6 when placing the partial part number data in the correct location. Refer to the DLPL_LIN_20_003 – Node Part Number Mapping for more information.

DLPL_LIN_20_002 – Controller Part Number Retention
The LIN Controller will erase these part numbers when the ignition is cycled to avoid misreporting LIN Node part numbers due to replacing one in service.

DLPL_LIN_20_003 – Node Part Number Mapping

PartNumIndex Value	PartNumData Byte	LIN Controller PartNumber Data
0	Data0	PartNum[0]
0	Data1	PartNum[1]
0	Data2	PartNum[2]
0	Data3	PartNum[3]
0	Data4	PartNum[4]
0	Data5	PartNum[5]
1	Data0	PartNum[6]
1	Data1	PartNum[7]
1	Data2	PartNum[8]
1	Data3	PartNum[9]
1	Data4	PartNum[10]
1	Data5	PartNum[11]
2	Data0	PartNum[12]
2	Data1	PartNum[13]
2	Data2	PartNum[14]
2	Data3	PartNum[15]
2	Data4	PartNum[16]
2	Data5	PartNum[17]
3	Data0	PartNum[18]
3	Data1	PartNum[19]

3	Data2	PartNum[20]
3	Data3	PartNum[21]
3	Data4	PartNum[22]
3	Data5	PartNum[23]

Table 43: Multiplexed PartNumIndex/ParNumData Mapping to LIN Controller PartNumber Data

The part number for the LDM is LC5A-13B626-A* or ML3A-13B626-A*, where * is revision A, B, C etc. The revision shall be updated in software for each hardware and software release after the initial P-Release.

Signal Extra LDM / FCM (EX_EEL_)	0x0A
Signal LDM (LF_EEL_)	0x12
Signal LDM (RF_EEL_)	0x1A
Signal LDM (LR_EEL_)	0x22
Signal LDM (RR_EEL_)	0x2A

Slave PartNum (BCM LIN Bus)

M/S	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	ID	
M	P1	P0	ID5	ID4	ID3	ID2	ID1	ID0	Table	Byte
S	ERR2	ERR1	ERR0	APINFO4	APINFO3	APINFO2	APINFO1	APINFO0	J2602 Status	Data 1
S	(xx_EEL_) PartNumIndex									Data 2
S	(xx_EEL_) Data0									Data 3
S	(xx_EEL_) Data1									Data 4
S	(xx_EEL_) Data2									Data 5
S	(xx_EEL_) Data3									Data 6
S	(xx_EEL_) Data4									Data 7
S	(xx_EEL_) Data5									Data 8

Table 45: LIN Part Number Reporting Frame

Data name	Data description	Min Value	Max Value	Unit	Resolution	Size
(xx_EEL_) PartNumIndex	Slave Part Number Indexing variable.	0	255	-	1	8
(xx_EEL_) Data0	Data0 = PartNum[PartNumIndex * 6 + 0]	0	255	-	1	8
(xx_EEL_) Data1	Data1 = PartNum[PartNumIndex * 6 + 1]	0	255	-	1	8
(xx_EEL_) Data2	Data2 = PartNum[PartNumIndex * 6 + 2]	0	255	-	1	8
(xx_EEL_) Data3	Data3 = PartNum[PartNumIndex * 6 + 3]	0	255	-	1	8
(xx_EEL_) Data4	Data4 = PartNum[PartNumIndex * 6 + 4]	0	255	-	1	8
(xx_EEL_) Data5	Data5 = PartNum[PartNumIndex * 6 + 5]	0	255	-	1	8

Table 46: LIN Part Number Reporting Frame Definition

子任务:

功能 # 2885: Ford_SWER_0078_0002： Unused bytes handling **已关闭**

功能 # 2889: Ford_SWER_0078_0001：Part Number Report **已关闭**

功能 # 3011: Ford_SWER_0078_0003： Part Number Value **已关闭**

历史记录

#1 - 2024-10-25 10:50 - 涛 陆

完成

#2 - 2024-11-01 17:43 - 涛 陆

- 描述 已更新。

delete example

#3 - 2024-11-22 09:47 - 斌 徐

- 状态 从 新建 变更为 已关闭

文件

clipboard-202410242009-dm1cu.png	21.5 KB	2024-10-24	玉洁 金
clipboard-202410242009-9owhq.png	20.4 KB	2024-10-24	玉洁 金