

FORD LDM Localization - 功能 #2591

Ford_SYSR : FS_REQ0070_V2 BCM EEL VO Load Sequencing

2024-10-24 19:37 - 玉洁 金

状态:	新建	开始日期:	2024-10-29
优先级:	普通	计划完成日期:	2025-03-31
指派给:	永琪 徐	% 完成:	0%
类别:		预期时间:	0.00 小时
目标版本:	H005_SW0007169.A003.2	耗时:	0.00 小时

描述

The following command message is used to actuate each load individually. The LDM shall only consider LF EEL and RF EEL depending on the mounting location detected.

For writing requirements (Service 2F) please refer to 6.5.3.70 0x427E- Enhanced Exterior Lighting Load Sequencing Request Status in BCM FS.

o Name: VO_Load_Seq

o Size: 8 Bytes

o Type: Command frame

o Identifier: 0x07

o Sampling: 80 ms

Master VO Load Sequencing (BCM LIN Bus)									
M/S	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	ID
M	P1	P0	ID5	ID4	ID3	ID2	ID1	ID0	0x07
M	EX_EEL_Rqst_Enbl	EX_EEL_Load_6_Rqst	EX_EEL_Load_5_Rqst	EX_EEL_Load_4_Rqst	EX_EEL_Load_3_Rqst	EX_EEL_Load_2_Rqst	EX_EEL_Load_1_Rqst	EX_EEL_Load_0_Rqst	
M	LF_EEL_Rqst_Enbl	LF_EEL_Load_6_Rqst	LF_EEL_Load_5_Rqst	LF_EEL_Load_4_Rqst	LF_EEL_Load_3_Rqst	LF_EEL_Load_2_Rqst	LF_EEL_Load_1_Rqst	LF_EEL_Load_0_Rqst	
M	RF_EEL_Rqst_Enbl	RF_EEL_Load_6_Rqst	RF_EEL_Load_5_Rqst	RF_EEL_Load_4_Rqst	RF_EEL_Load_3_Rqst	RF_EEL_Load_2_Rqst	RF_EEL_Load_1_Rqst	RF_EEL_Load_0_Rqst	
M	LR_EEL_Rqst_Enbl	LR_EEL_Load_6_Rqst	LR_EEL_Load_5_Rqst	LR_EEL_Load_4_Rqst	LR_EEL_Load_3_Rqst	LR_EEL_Load_2_Rqst	LR_EEL_Load_1_Rqst	LR_EEL_Load_0_Rqst	
M	RR_EEL_Rqst_Enbl	RR_EEL_Load_6_Rqst	RR_EEL_Load_5_Rqst	RR_EEL_Load_4_Rqst	RR_EEL_Load_3_Rqst	RR_EEL_Load_2_Rqst	RR_EEL_Load_1_Rqst	RR_EEL_Load_0_Rqst	
M	Unused	Unused	Unused	Unused	Unused	Unused	Unused	Unused	
M	Unused	Unused	Unused	Unused	Unused	Unused	Unused	Unused	
M	Unused	Unused	Unused	Unused	Unused	Unused	Unused	Unused	

Table 34: LIN VO Load Sequencing FRAME DEFINITION

The Vehicle Operation Load Sequencing command provides a methodology that allows individual lamp loads to be active via diagnostics command to the BCM. The tester will look for the change in load to verify operation and that all connections in the functional path are intact (nothing is left unplugged). The message consists of 5 bytes of data, 1 byte per Lighting Module. The high order bit will enable load switching for that Module. The lower order 7 bits will be tied to a single load each in software (Supplier Defined). All loads OFF will be 0x00. To turn an output ON, the high order bit is set to 1 along with the desired load bit. Because the intent is to operate one load at a time, when a Lighting Module is actively commanded to drive a load the other four Lighting Modules will be OFF (0x00). This message will be broadcast only upon a diagnostics command to the BCM; the BCM will execute a separately defined schedule table (With No Standard Functional messages) and will set the Modules into the Load Sequencing Test State. The Signal definition table in the next section illustrates the signals for one Lighting Module only (Extra LDM/FCM).

Data Name	Data Description	Min Value	Max Value	Unit	Resolution	Size	Comment
EX_LDM_Rqst_Enbl	0x0 = Disable 0x1 = Enable	0	1	-	1	1	Extra LDM / FQM Load Request Enable
EX_LDM_Load_6_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 6 Request
EX_LDM_Load_5_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 5 Request
EX_LDM_Load_4_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 4 Request
EX_LDM_Load_3_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 3 Request
EX_LDM_Load_2_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 2 Request
EX_LDM_Load_1_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 1 Request
EX_LDM_Load_0_Rqst	0x0 = LoadOff 0x1 = LoadOn	0	1	-	1	1	Extra LDM / FQM LDM Load 0 Request

Table 35: LIN VO Load Sequencing Signal Definition

The LDM shall consider the following loads:

Load 0: Static Bending Light (All applicable light sources)

Load 1: LB

Load 2: HB

Load 3: TI

Load 4: DRL

Load 5: POS

Load 6: PWMx(All applicable Light Sources)

子任务:

功能 # 2835: Ford_SWER_0070_0001 : VO_Load_Seq 0x07

功能 # 2845: Ford_SWER_0070_0002 : The Vehicle Operation Load Sequ...

功能 # 2848: Ford_SWER_0070_0003 : How the Vehicle Operation Load ...

反馈

进行中

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历史记录

#1 - 2024-10-25 10:31 - 涛 陆

部分完成，PWM信号未接入

#2 - 2024-11-01 14:27 - 斌 徐

- 目标版本 从 H003_SW0007169.A001.8 变更为 H004_SW0007169.A002.0

TBD

#3 - 2024-11-27 10:00 - 斌 徐

- 目标版本 从 H004_SW0007169.A002.0 变更为 H005_SW0007169.A003.0

- 父任务 已删除 (#2519)

#4 - 2025-02-25 09:19 - 涛 陆

- 目标版本 从 H005_SW0007169.A003.0 变更为 H005_SW0007169.A003.2

目标版本改为A003.2

#5 - 2025-04-08 10:47 - 槐 杨

- 指派给 从 槐 杨 变更为 永琪 徐

更新测试用例，完成测试

文件

clipboard-202410241936-24jw9.png	31.5 KB	2024-10-24	玉洁 金
clipboard-202410241936-pbefn.png	26.5 KB	2024-10-24	玉洁 金