

# FORD LDM Localization - 功能 #2520

功能 # 2519 (已关闭): Ford\_SYSR: System Requirement

## Ford\_SYSR: FS\_REQ0001\_V2 LDM Input

2024-10-24 16:03 - 斌徐

状态:	已关闭	开始日期:	2024-10-25
优先级:	普通	计划完成日期:	2024-11-07
指派给:	玉洁金	% 完成:	100%
类别:		预期时间:	0.00 小时
目标版本:	H003_SW0007169.A001.8	耗时:	1.00 小时

### 描述

The LDM will use Channel2 as main power input as HS REQ005, and rest channels input to be used as an input signal to activate LB/TI/DRL, but the LDM shall be also capable of switching to the failsafe power supply when the main power supply is not available as below Failsafe modes.

Each of these inputs are unregulated battery inputs, the LDM shall be fully operational over following voltage range:

A	B
Requirement	Voltage level at source
V1: Low voltage of guaranteed function:	7V and 6V for 150ms max (for start/ stop cycle only)
V2: High voltage of guaranteed function:	18V
V3: Low voltage of guaranteed performance:	9V
V4: High voltage of guaranteed performance:	16V
V5: Nominal operating voltage:	12.8 +/- 0.2V

Table 4: LDM input voltage range

Derating functions for battery voltages below 9V shall be used to reduce input current. This requirement refer to steady state input voltage (constant voltage applied for > 500ms 250ms ( requirement from DV test ), they do not apply to input transients applied, such as EMC pulses and stop/start). Channels may derate functional output current by 30% of nominal operating current when the module input is below 9V.

### 子任务:

功能 # 2615: Ford_SWER_0001_0003 : 电源电压降功率波形	已关闭
功能 # 2616: Ford_SWER_0001_0004 : 电源电压降功率平滑过渡	已关闭
功能 # 2618: Ford_SWER_0001_0005 : 电源电压采样过滤时间	已关闭
功能 # 2682: Ford_SWER_0001_0001 : 正常工况下, CH2通道为功率输入线, 其他通道为逻辑输入线	已关闭
功能 # 2696: Ford_SWER_0001_0002 : 因CH2不可用进入Failsafe工况后, 其他通道也可以作为相...	已关闭
功能 # 2896: Ford_SWER_0001_0006 : 电源电压迟滞	已关闭

### 历史记录

#1 - 2024-10-25 09:23 - 涛陆

完成

#2 - 2024-10-25 12:32 - 盛炜朱

- 文件 clipboard-202410251232-5unp0.png 已添加

11|FS\_REQ0001\_7V-9V的输入电压, LDM会降功率输出, 是采用怎样的算法?(7V-20%, 9V-100%)的直线斜率来计算吗? | -2024.5.6 No special strategy, derate to target ouput smoothly is ok

#3 - 2024-11-01 13:13 - 玉洁金

- 描述 已更新。

#4 - 2024-11-28 10:29 - 斌徐

- 状态从 进行中 变更为 已关闭

#5 - 2025-04-15 08:58 - 玉洁金

- 主题从 Ford\_SYSR: FS\_REQ0001\_V1 LDM Input 变更为 Ford\_SYSR: FS\_REQ0001\_V2 LDM Input

#6 - 2025-04-15 15:29 - 涛陆

- 描述已更新。

根据硬件提供的DV test mode 更新滤波时间到250ms

## 文件

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clipboard-202410251232-5unp0.png	20.9 KB	2024-10-25	盛炜朱
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