

# BMC绝缘检测模块自检过程

## ➤ 绝缘检测电路介绍:

- (1)  $R_p/R_n$ : HV+以及HV-直流母线分别对车身地的绝缘电阻。
- (2)  $S3/R_{gs}$ : 绝缘电路绝缘电阻检测使能开关以及保护电阻
- (3)  $S1, S2, R_{su}, R_{sd}$ : 绝缘电阻采样计算切换开关以及并联电阻
- (4)  $R_{pu}, R_{pd}, R_s$ : 绝缘电阻计算用分压采样电路

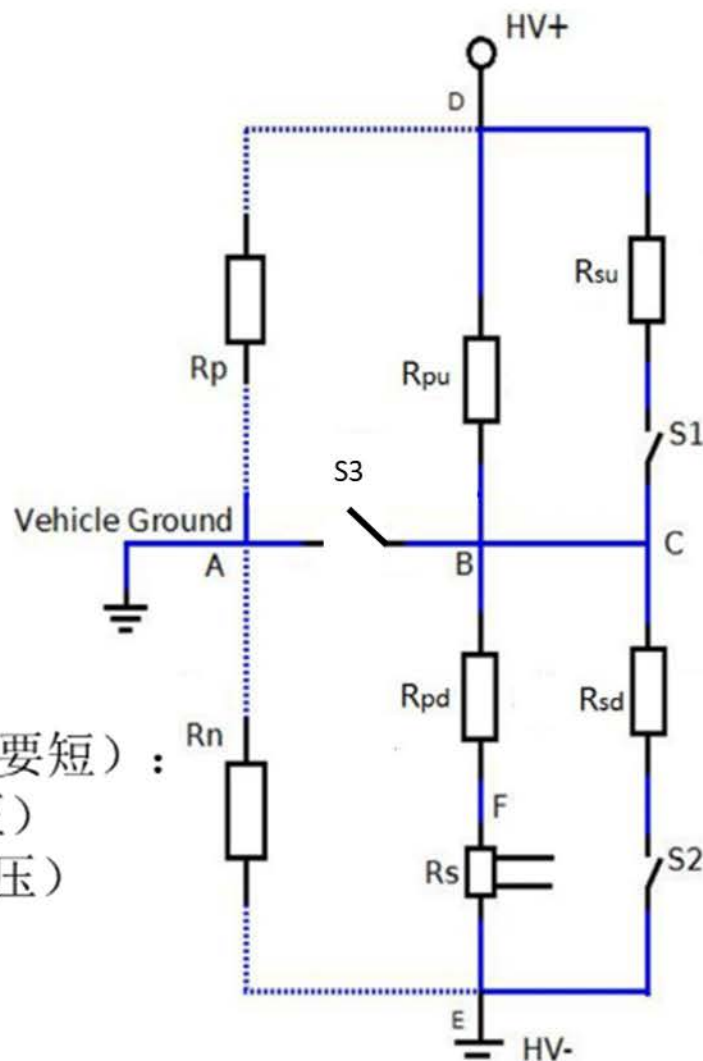
目前底层软件读并转换到两个电压（两次间隔要短）:

$I\_A\_HV\_Plus$  ( $V_{DE}$ , HV+参考HV-的电压)

$I\_A\_HV\_IsoDet$  ( $V_{BE}$ , B点参考HV-的电压)

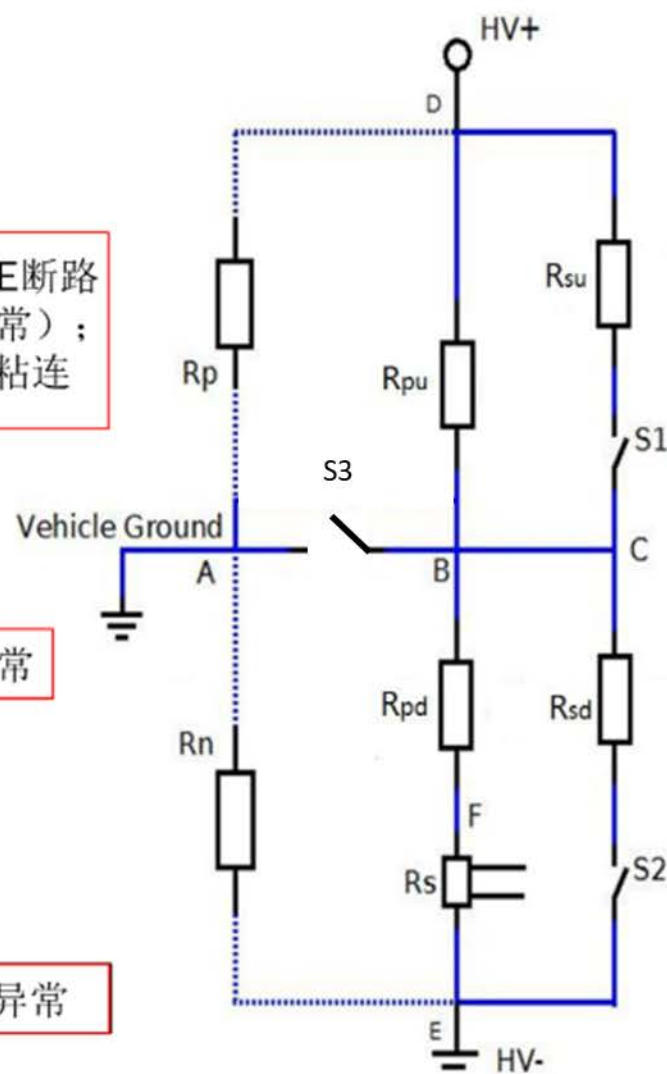
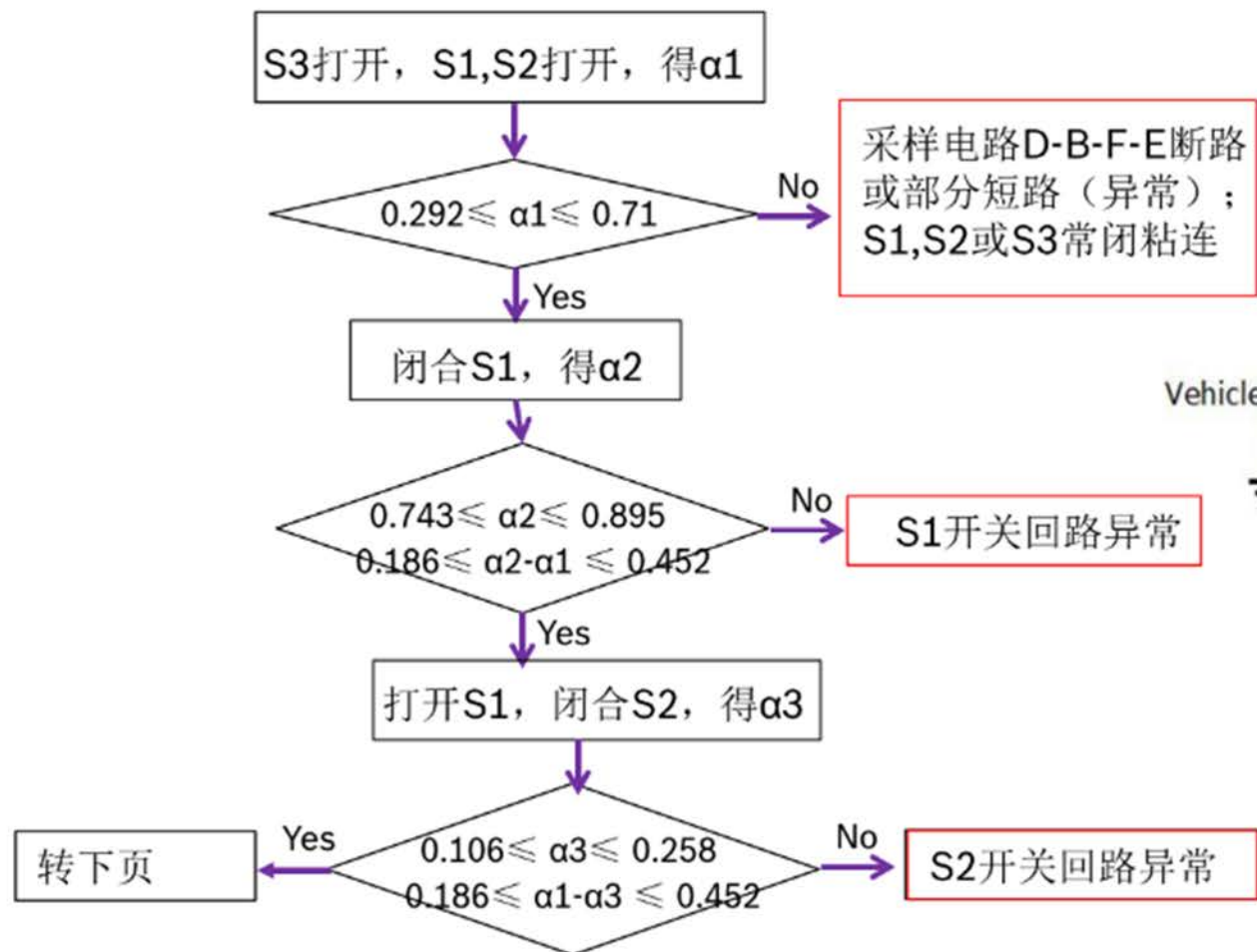
定义:

$$\alpha = V_{BE}/V_{DE} \quad (\leq 1)$$



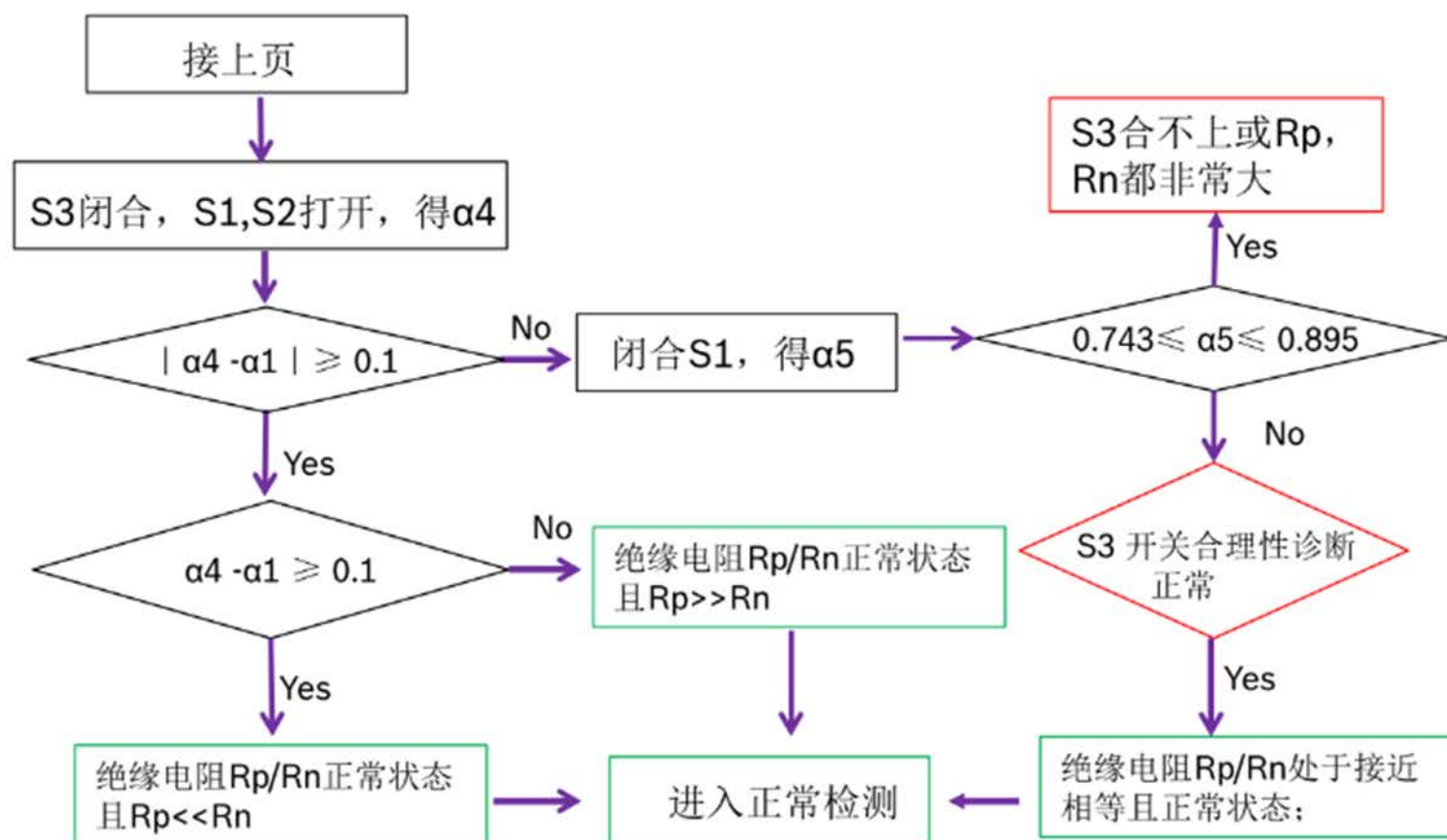
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## ➤ 上下电自检过程(1):



# BMC绝缘检测模块自检过程

## ➤ 上下电自检过程(2):





# THANKS

**UAES 联合汽车电子有限公司**

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