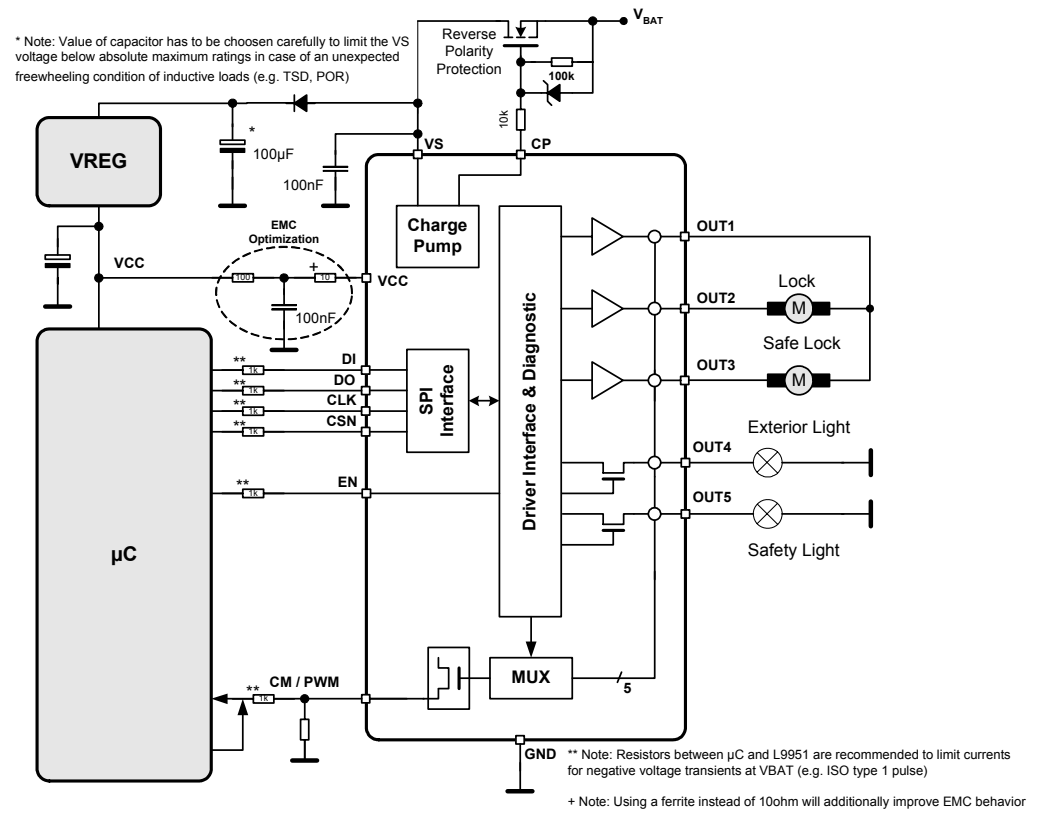
* Note: Value of capacitor has to be choosen carefully to limit the VS voltage below absolute maximum ratings in case of an unexpected freewheeling condition of inductive loads (e.g. TSD, POR)
Reverse Polarity Protection
V_{BAT}
100k
10k
VREG
*
100µF
100nF
VS
CP
Charge Pump
EMC Optimization
VCC
100
10
100nF
DI
DO
CLK
CSN
EN
SPI Interface
Driver Interface & Diagnostic
OUT1
OUT2
OUT3
OUT4
OUT5
Lock
Safe Lock
Exterior Light
Safety Light
µC
CM / PWM
MUX
5
GND
** Note: Resistors between µC and L9951 are recommended to limit currents for negative voltage transients at VBAT (e.g. ISO type 1 pulse)
+ Note: Using a ferrite instead of 10ohm will additionally improve EMC behavior