



AN2868 Application note – Oscillator design guide for STM32

AN4999 Application note – STSPIN32F0 overcurrent protection:

OC_TH_STBY2 (PF6) = 0
OC_TH_STBY1 (PF7) = 1
OC_SEL (PA11) = 1
OC threshold = 100 mV

$I_{max} = 14.6 \text{ A} \Rightarrow R_{10} = 46k4$

$C_8 = 1 \text{ nF} \Rightarrow f_{LP} = 220 \text{ kHz}$
which is about 5.5 times the switching frequency

15 A current through a sense resistor causes 2.25 W heat dissipation.
However, none of the three sense resistor conducts 100% of the time.

Tero Kapanen Helsinki Hacklab		
Sheet: / File: BLDC_controller.sch		
Title: BLDC CONTROLLER		
Size: A3	Date: 07.03.2017	Rev: 1.0
KiCad E.D.A. kicad 4.0.6-e0-634953ubuntu16.04.1		Id: 1/1