

AI60D  
Donald Becker

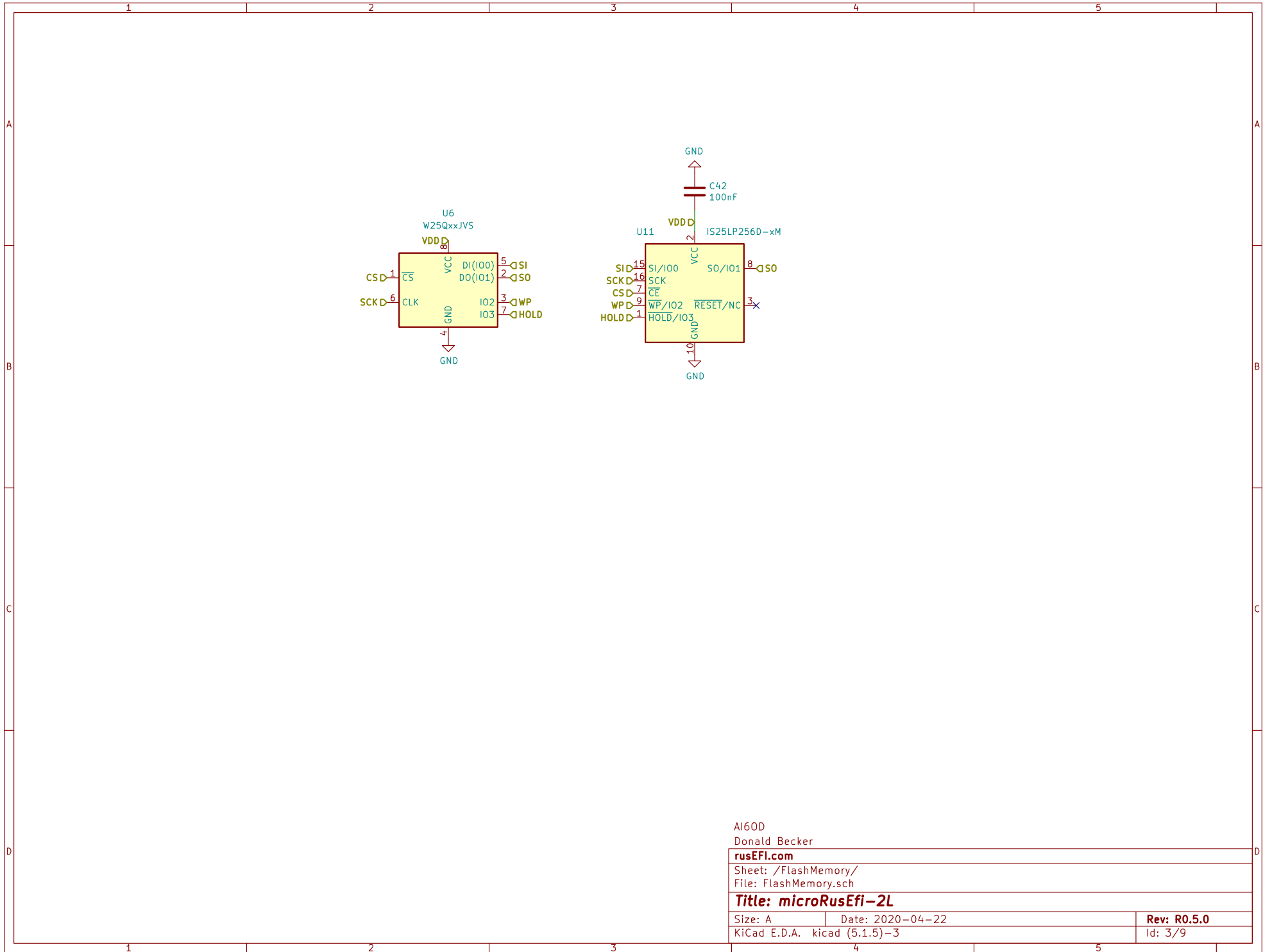
**rusEFI.com**

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**Title: microRusEfi-2L**

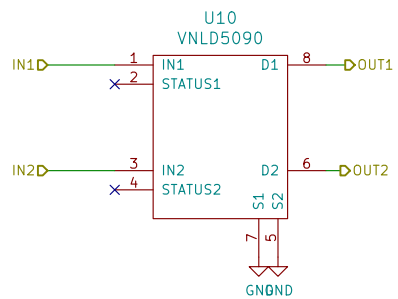
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**Rev: R0.5.0**  
Id: 2/9

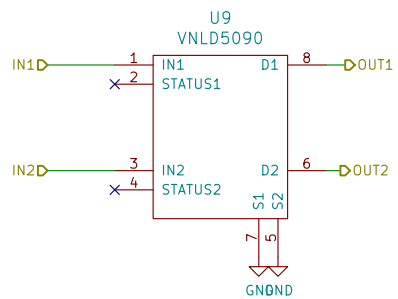


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Size: A	Date: 2020-04-22	Rev: R0.5.0
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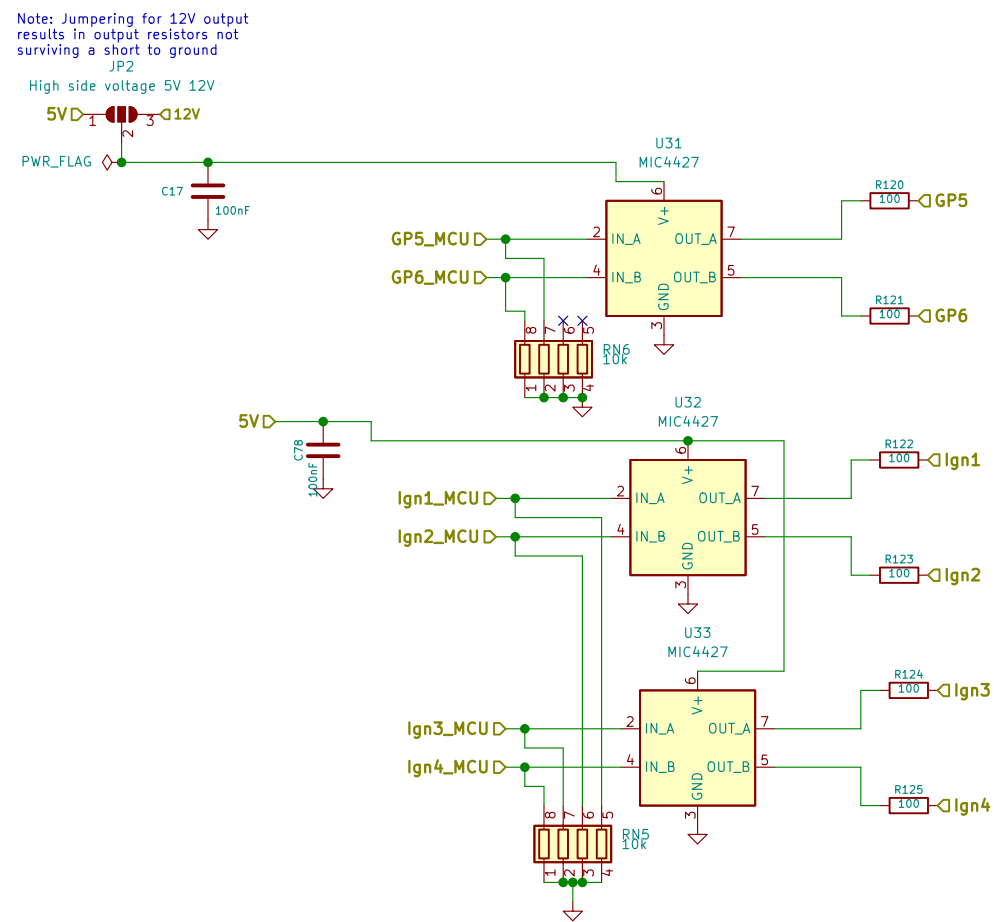


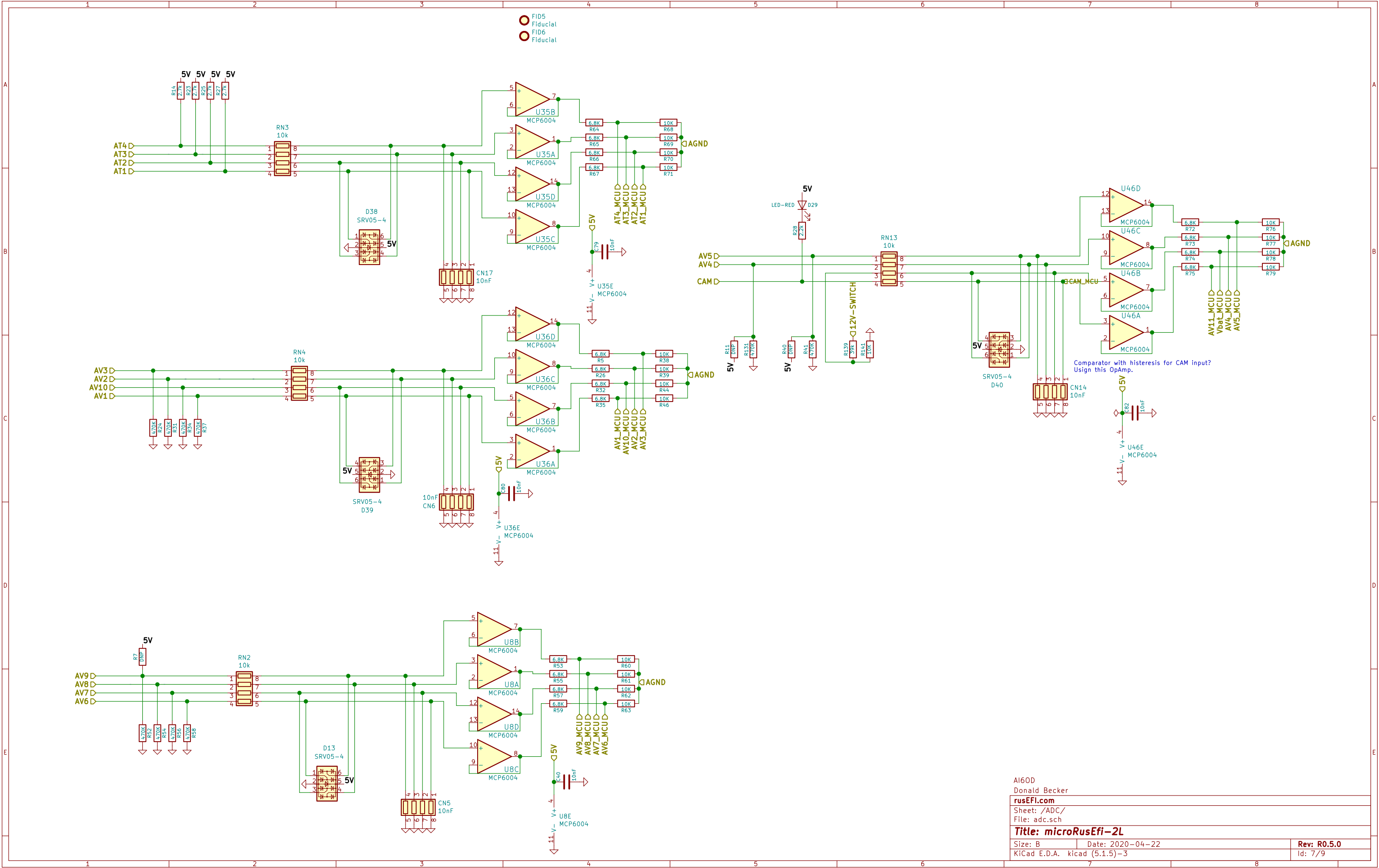
rusEfi.com		
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Size: A4	Date: 2020-04-22	Rev: R0.5.0
KiCad E.D.A. kicad (5.1.5)-3		Id: 4/9



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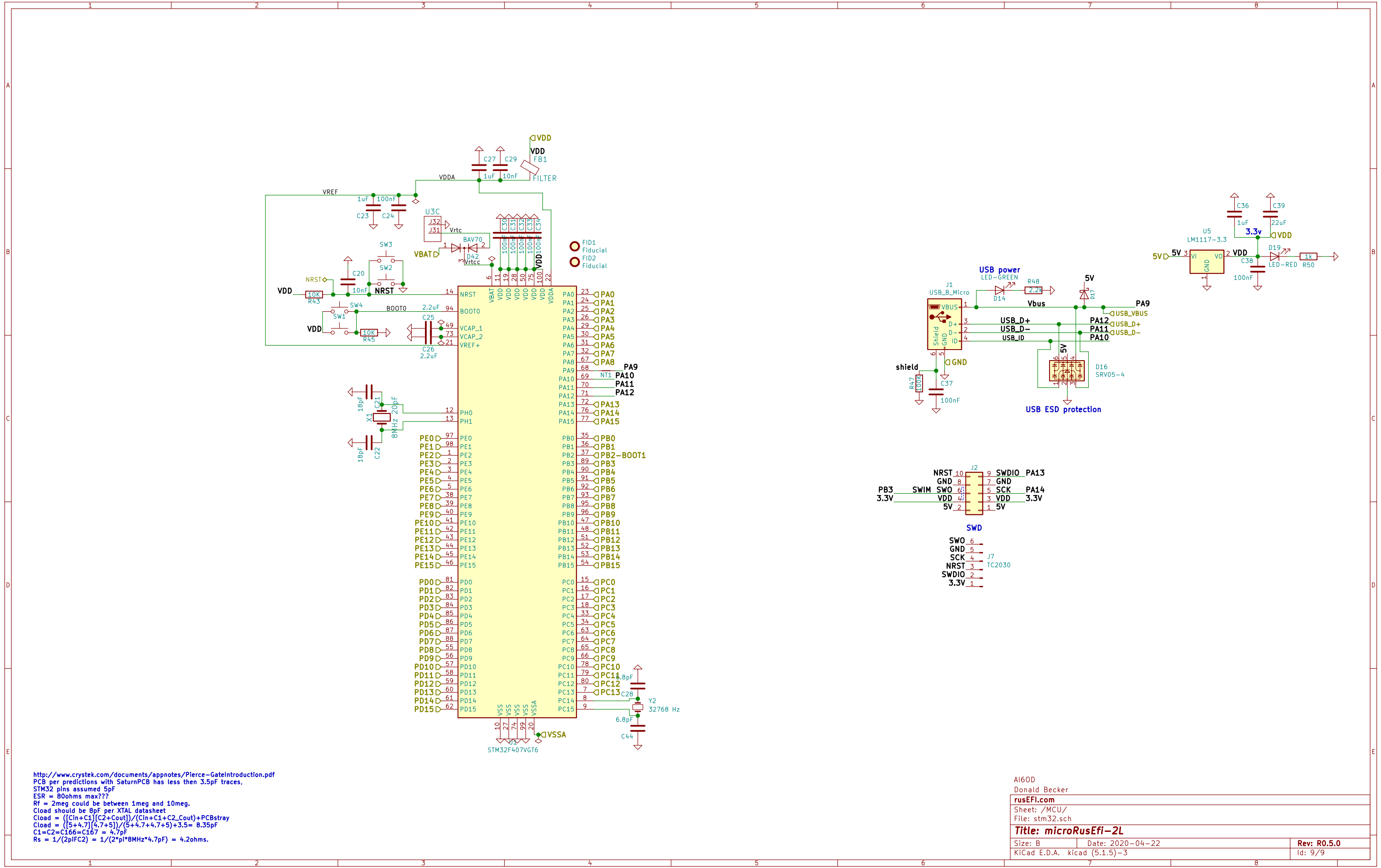
6 channel high / low side driver











<http://www.crystek.com/documents/appnotes/Pierce-GateIntroduction.pdf>  
PCB per predictions with SaturnPCB has less then 3.5pF traces.  
STM32 pins assumed 5pF  
ESR = 80ohms max???  
Rf = 2meg could be between 1meg and 10meg.  
Cload should be 8pF per XTAL datasheet  
Cload = ((Cin+C1)[C2+Cout])/(Cin+C1+C2\_Cout)+PCBstray  
Cload = ((5+4.7)[4.7+5])/(5+4.7+4.7+5)+3.5= 8.35pF  
C1=C2=C166=C167 = 4.7pF  
Rs = 1/(2piFC2) = 1/(2\*pi\*8MHz\*4.7pF) = 4.2ohms.