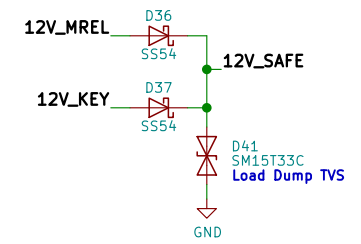
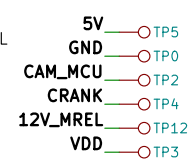
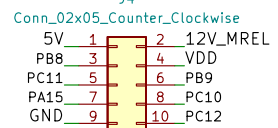


U3E
LIN1 LINBUS

U3A
molex_48pin_MRE

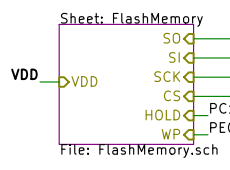
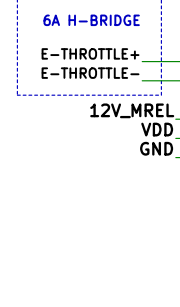
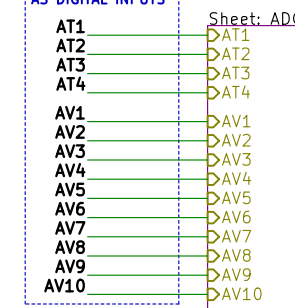
U3D
5V J801 J802 12V_MREL
PB8 J803 J804 VDD
PC11 J805 J806 PB9
PA15 J807 J808 PC10
GND J809 J810 PC12

Communication Header
J4
Conn_02x05_Counter_Clockwise

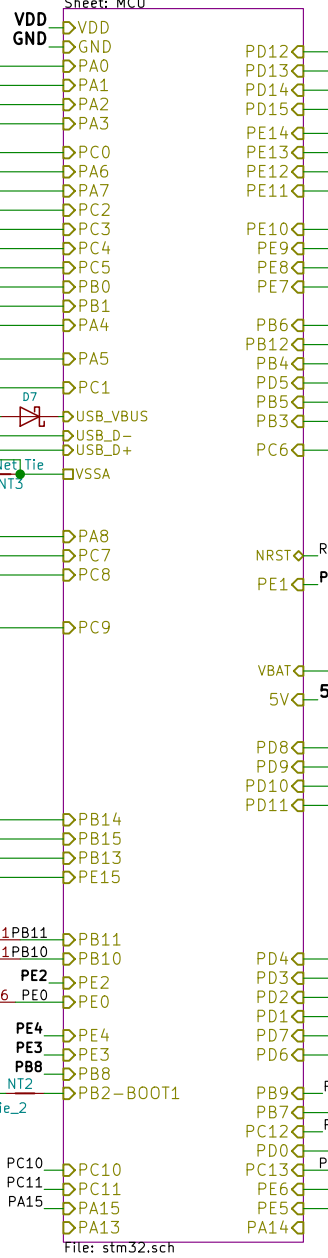


ANALOG INPUTS.
ADC 1-4 HAVE
BIAS RESISTORS
FOR TEMP SENSORS.

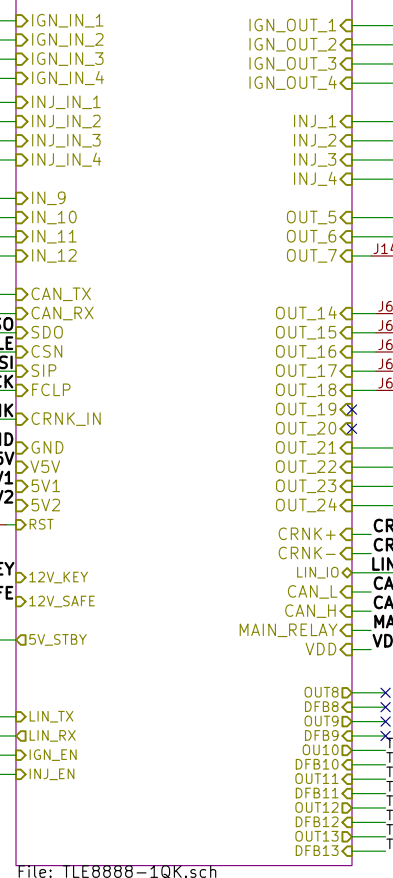
CAN ALSO BE USED
AS DIGITAL INPUTS



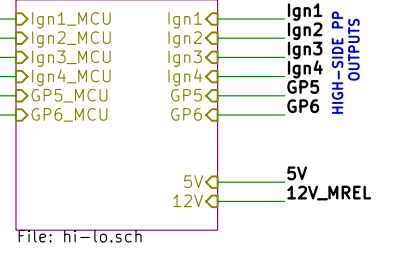
GP OUT 5 AND 6 ARE HIGH SIDE DRIVEN



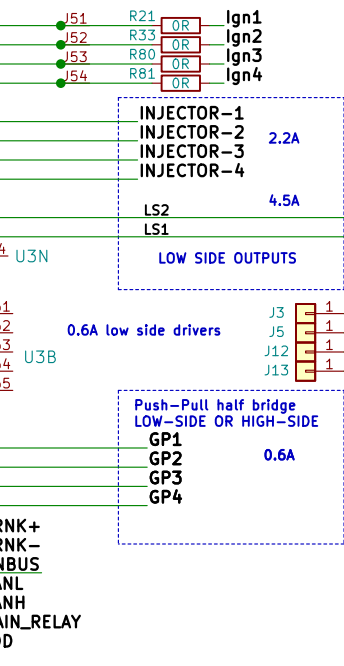
Sheet: TLE8888-1QK



Sheet: hi-lo



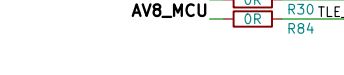
Sheet: U3F



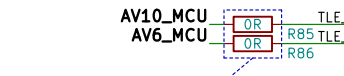
Sheet: U3B



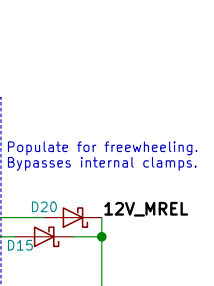
Sheet: LowSides_3-4



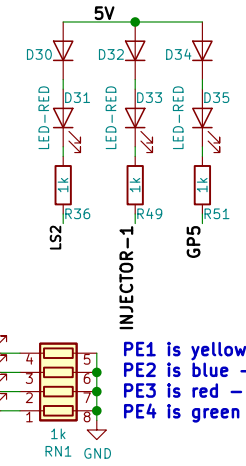
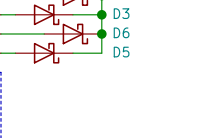
Sheet: LowSides_1-2



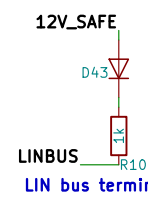
NOT OEM POPULATED
OEM IS
AV6 AND AV10 ARE ANALOG
AV8 AND AV9 ARE DIGITAL OUTPUTS



Populate for freewheeling.
Bypasses internal clamps.



PE1 is yellow - warning
PE2 is blue - communication
PE3 is red - fatal
PE4 is green - running



FOR OFF ROAD PURPOSES ONLY
This is not for applications with
emissions or safety regulations
(AKA not for street use). This is
for closed stages, track
and equipment.

AI60D
Donald Becker

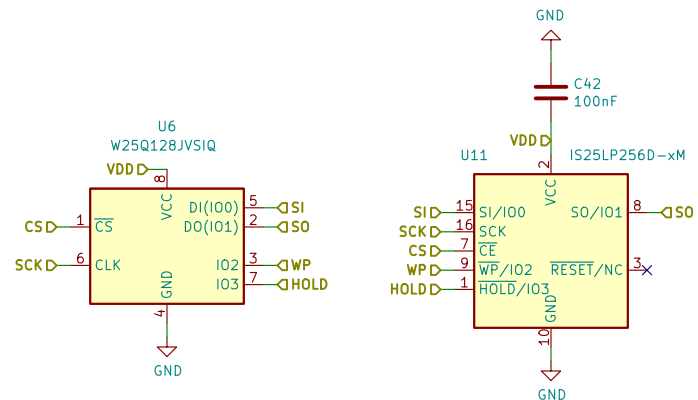
rusEFI.com
Sheet: /
File: micro_rusEFI.sch

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Size: B Date: 2020-05-24
KiCad E.D.A. kicad (5.1.5)-3

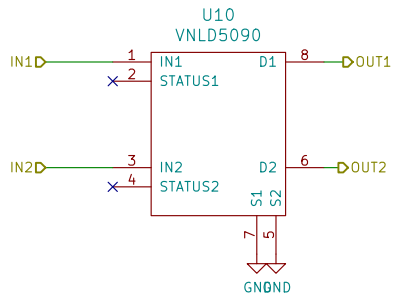
Rev: R0.5.2
Id: 1/9



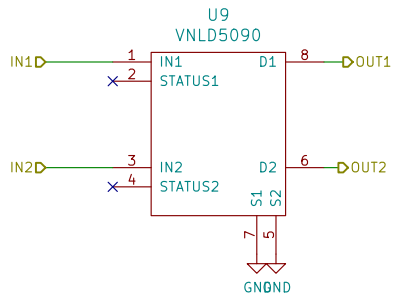


AI60D
 Donald Becker

| | |
|---|------------------------|
| rusEFI.com | |
| Sheet: /FlashMemory/ File: FlashMemory.sch | |
| Title: microRusEfi-2L | |
| Size: A | Date: 2020-05-24 |
| KiCad E.D.A. kicad (5.1.5)-3 | Rev: R0.5.1 Id: 3/9 |

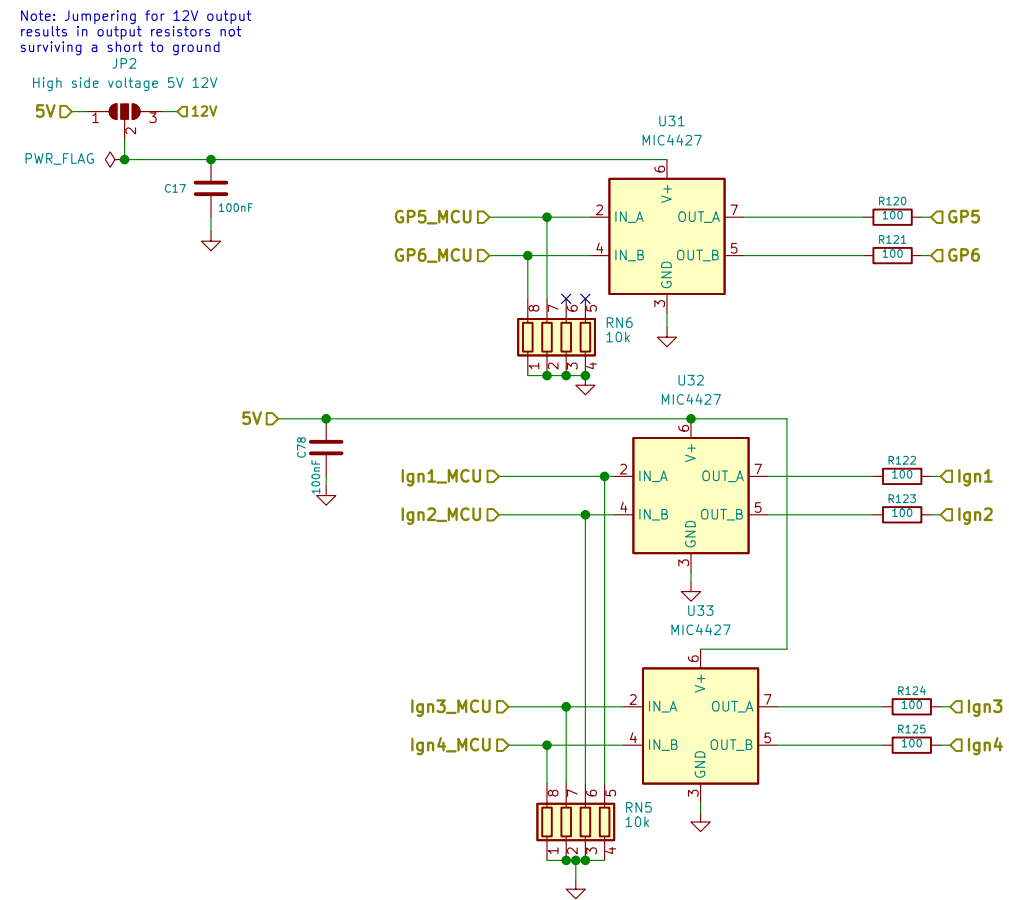


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| Size: A4 | Date: 2020-05-24 | Rev: R0.5.1 |
| KiCad E.D.A. kicad (5.1.5)-3 | | Id: 4/9 |



| | |
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| Size: A4 | Date: 2020-05-24 |
| KiCad E.D.A. kicad (5.1.5)-3 | Rev: R0.5.1 |
| | Id: 5/9 |

6 channel high / low side driver

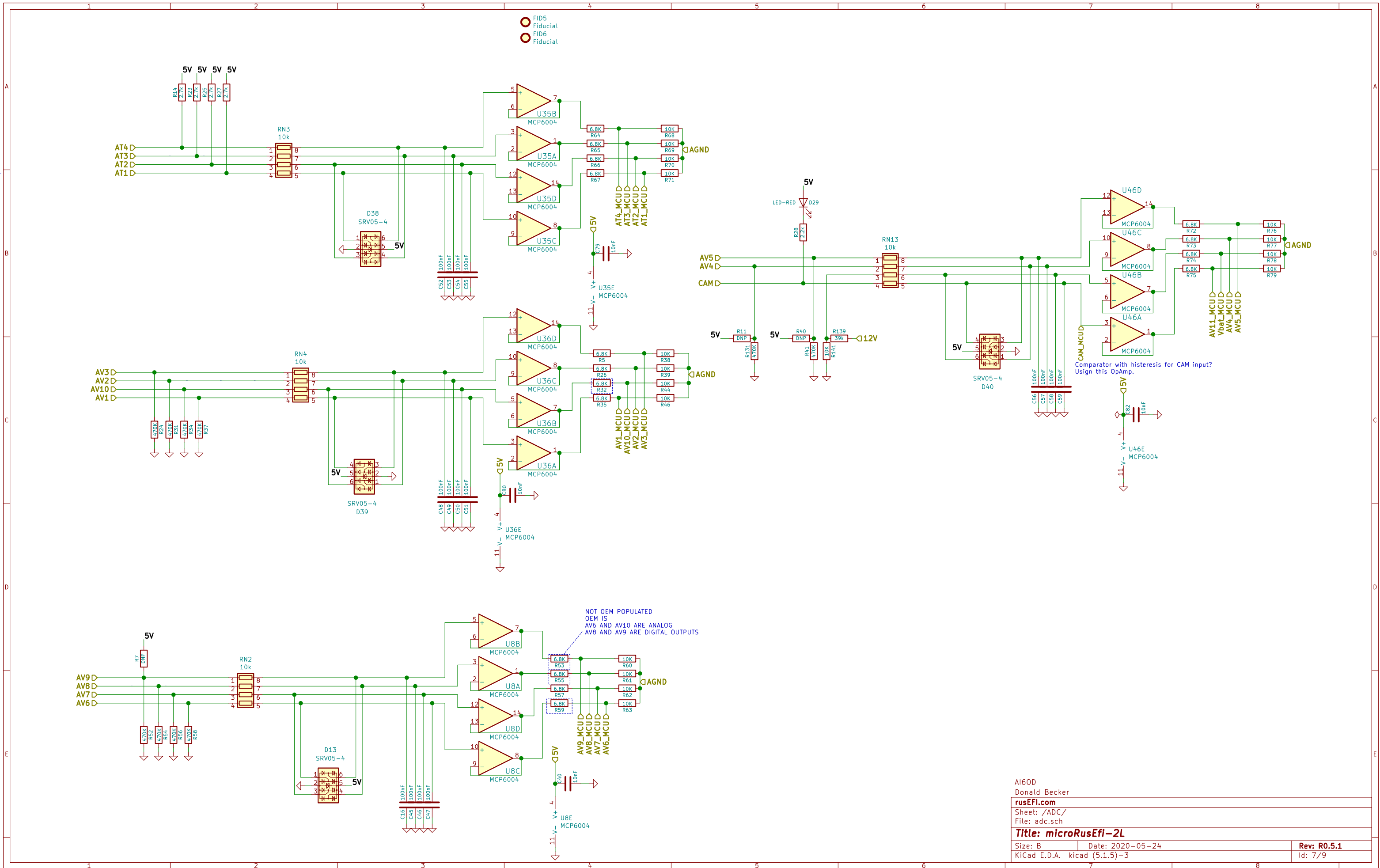


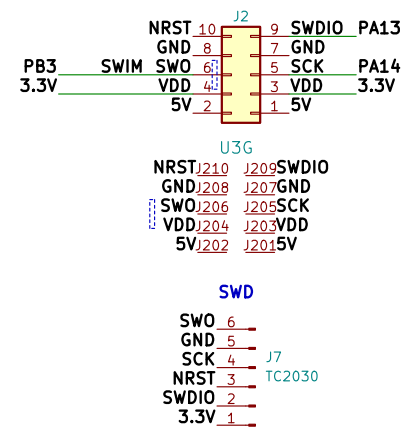
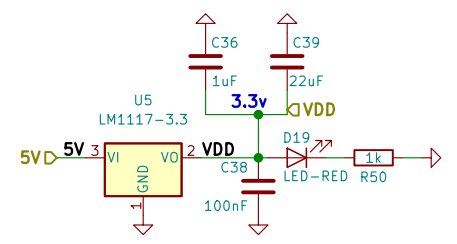
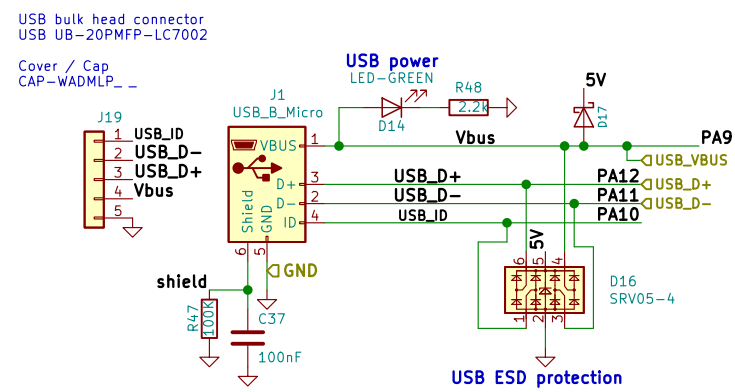
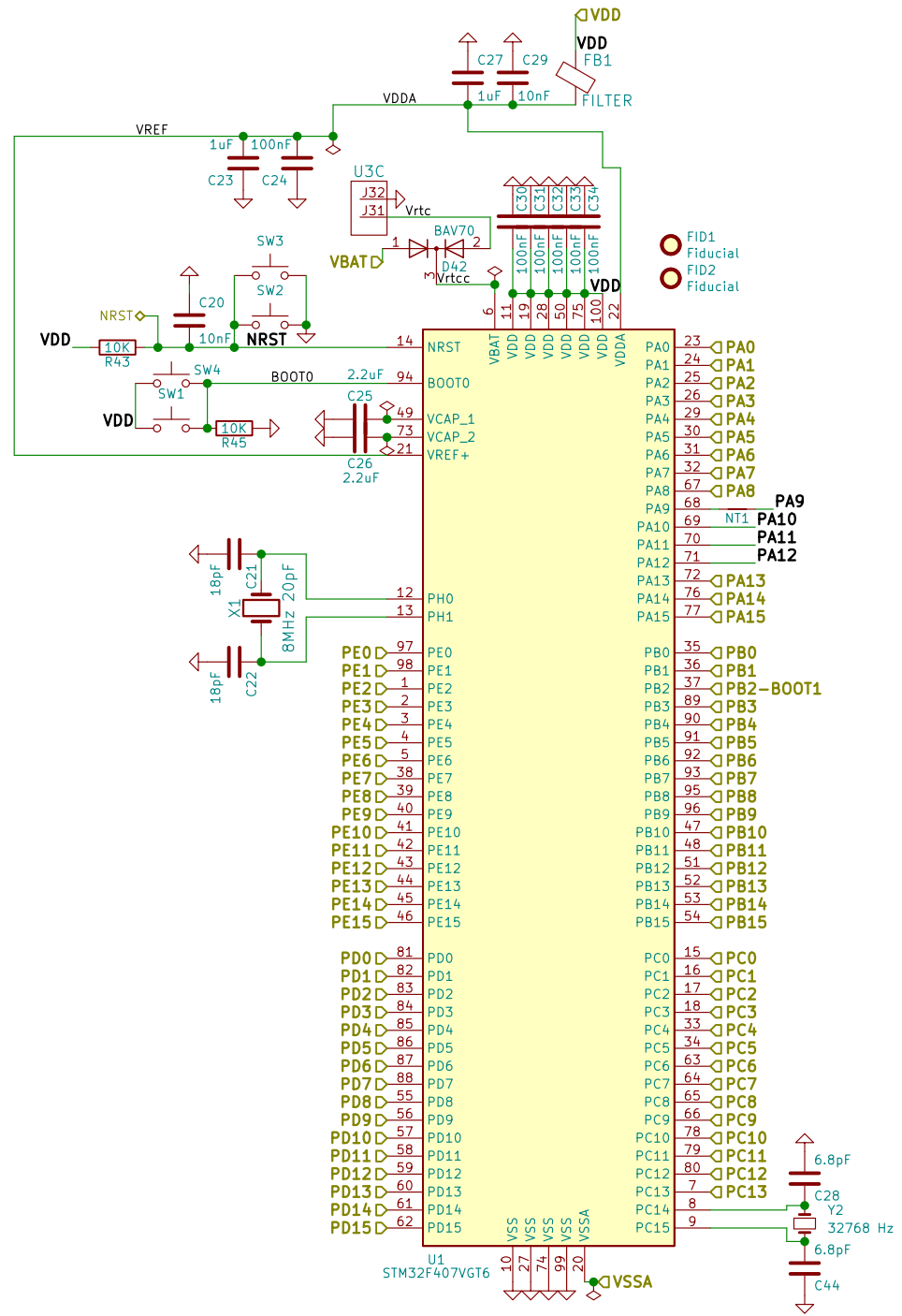
AI60D
Donald Becker
rusEFI.com
Sheet: /hi-lo/
File: hi-lo.sch

Title: microRusEfi-2L

Size: B Date: 2020-05-24
KiCad E.D.A. kicad (5.1.5)-3

Rev: R0.5.1
Id: 6/9





<http://www.crystek.com/documents/appnotes/Pierce-GateIntroduction.pdf>
 PCB per predictions with SaturnPCB has less than 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/(2pi*fC2) = 1/(2*pi*8MHz*4.7pF) = 4.2ohms.