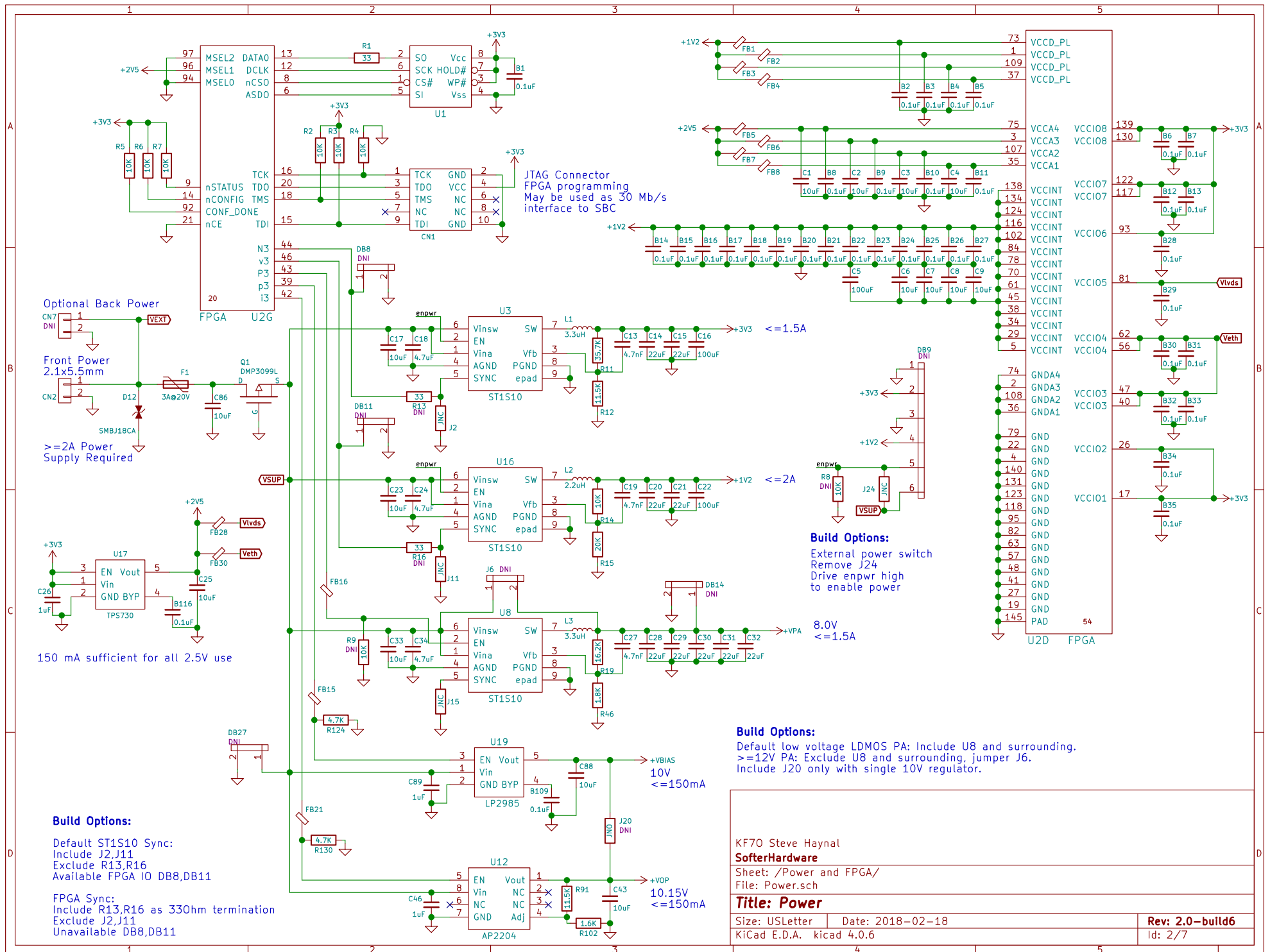


KF70 Steve Haynal		
SofterHardware		
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File: hermeslite.sch		
Title: Hermes-Lite		
Size: USLetter	Date: 2018-02-18	Rev: 2.0-build6
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Build Options

Any or all components may be excluded if PA is unused.

SOT-89 or TO-220 LDMOS supported on main circuit board
TO-220 mounts to side of enclosure
SOT-89 dissipates heat to PCB and side of enclosure

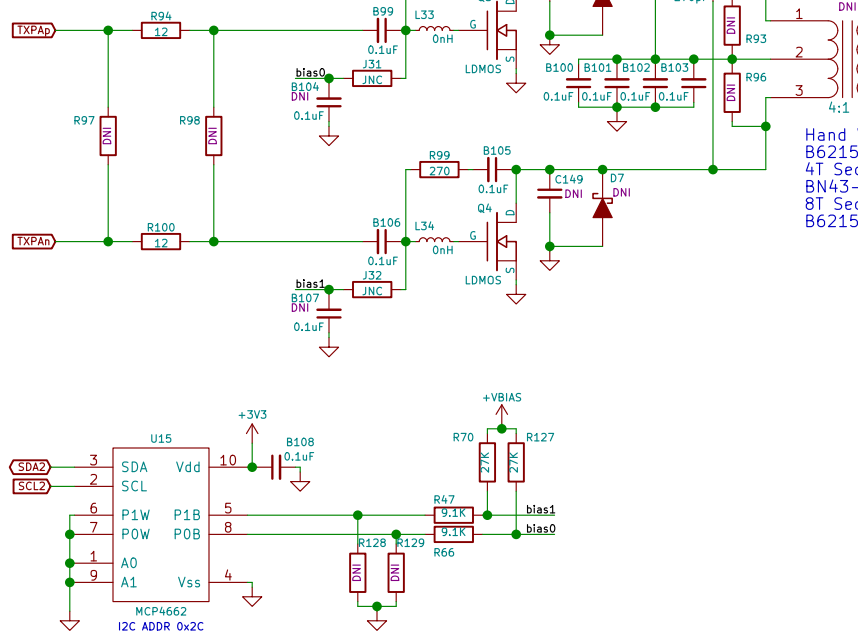
Deafult build uses 2 AFT05MS003 mounted on main board, 110mA bias

PLD-1.5 and alternate SOT-89 supported by adapter board
Adapter board dissipates heat to side of enclosure

RD15HVf1 Build Option

L33,L34 = 4.7 Ohm
R92,R99 = 500 Ohm
T3 = BN61-202 4T Pri, 2+2T Sec
200 mA bias

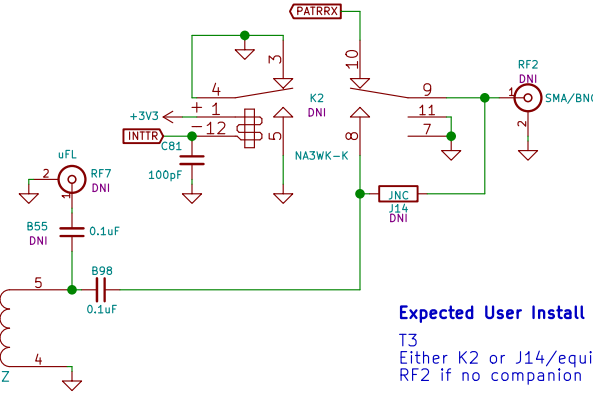
Add attenuation with R97,R98,R94,R100
if PA is overdriven



R127,R70,R47,R66 set for AFT05MS003. Bias voltage ranges from 2.5 to 3.5V
Set R127,R70 to 7.5K, R47,R66 to 3.3K for bias voltage range from 3.1 to 5.3V

Build Options

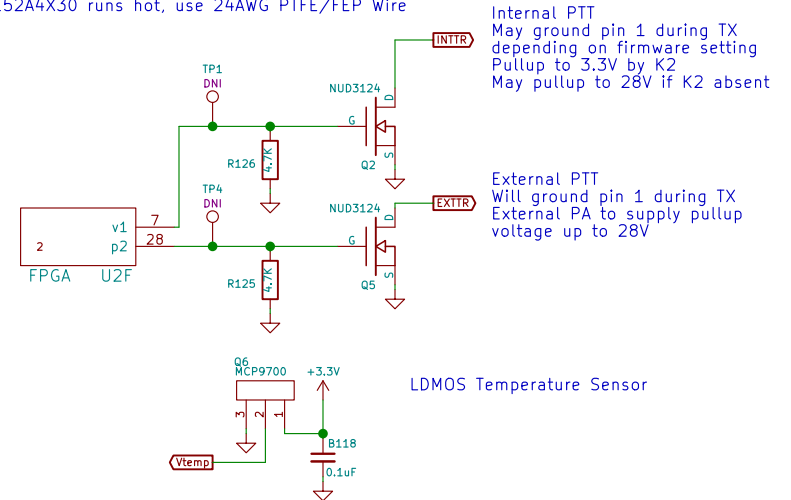
No onboard TR relay installed by assembly house
On board TR: Hand install K2
External TR: Install J14 or wire from K2 pin 8 to pin 9



Expected User Install for Standard Build

T3
Either K2 or J14/equivalent wire
RF2 if no companion card

Hand Wind
B62152A4X30 or BN43-202
4T Secondary, 1+1T Primary
BN43-1502
8T Secondary, 2+2T Primary
B62152A4X30 runs hot, use 24AWG PTFE/FEP Wire



Design based on work by Claudio IN30TD/DK1CG, John W9JSW, and other LDMOS/MOSFET QRP PA designs

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Sheet: /PA/

File: PA.sch

Title: Hermes-Lite V2 5W Power Amplifier

Size: USLetter Date: 2018-02-18

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