

KF70 Steve Haynal

SofterHardware

Sheet: /Ethernet/

File: Ethernet.sch

Title: Ethernet

Size: USLetter Date: 2016-11-13

KiCad E.D.A. kicad 201610051318+727855ubuntu14.04.1-

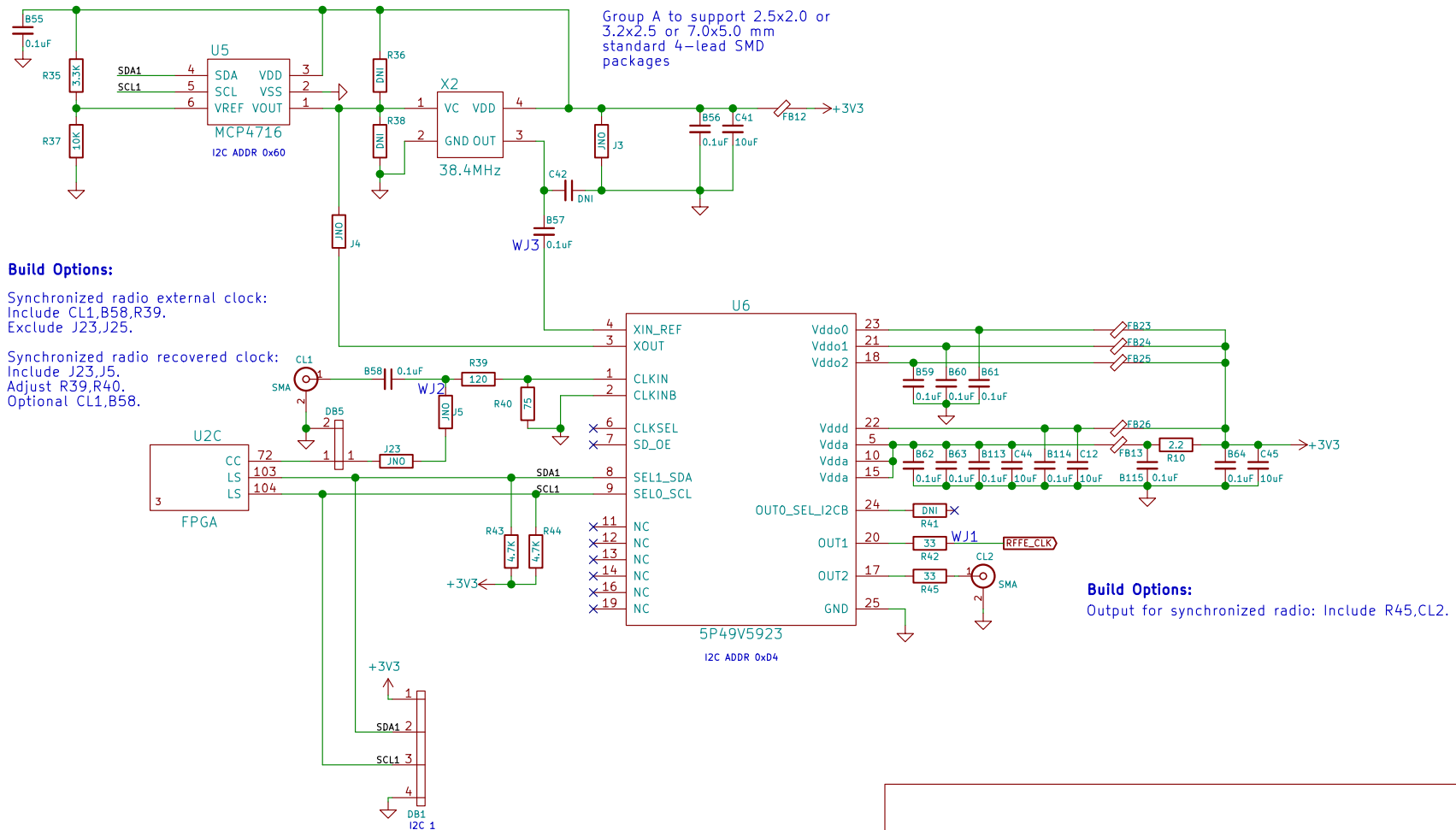
Rev: 2.0-beta2

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Build Options:

Default Versa with oscillator: Include FB12,C41,B56,B57,X2. Include R36,R38 if required by oscillator. Exclude B55,R35,R37,U5,J3,J4,C42.
Versa with VC0: Include FB12,C41,B56,B57,X2,U5,R35,R37,B55. Exclude R36,R38,J4,J3,C42.
Versa with crystal: Include X2 as crystal, B57 as jumper, J4,J3,C42, R38 as 15pF. Exclude FB12,C41,B56,U5,R35,R36,R37,B55.

No Versa but oscillator to AD9866: Exclude all Versa components, build for oscillator, connect WJ3 to WJ1.
No Versa but external clock to AD9866: Exclude all Versa components and oscillator components. Wire from WJ2 to WJ1.
See RF Frontend sheet for additional AD9866 clock options



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Sheet: /Clock/

File: Clock.sch

Title: Clock

Size: USLetter Date: 2016-11-13

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Rev: 2.0-beta2

Id: 4/7

All values are first-cut place holders. To be refined with simulation and experimentation.

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.

Default 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 Test 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.

