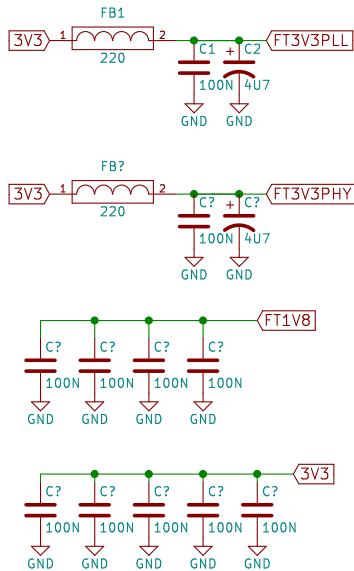
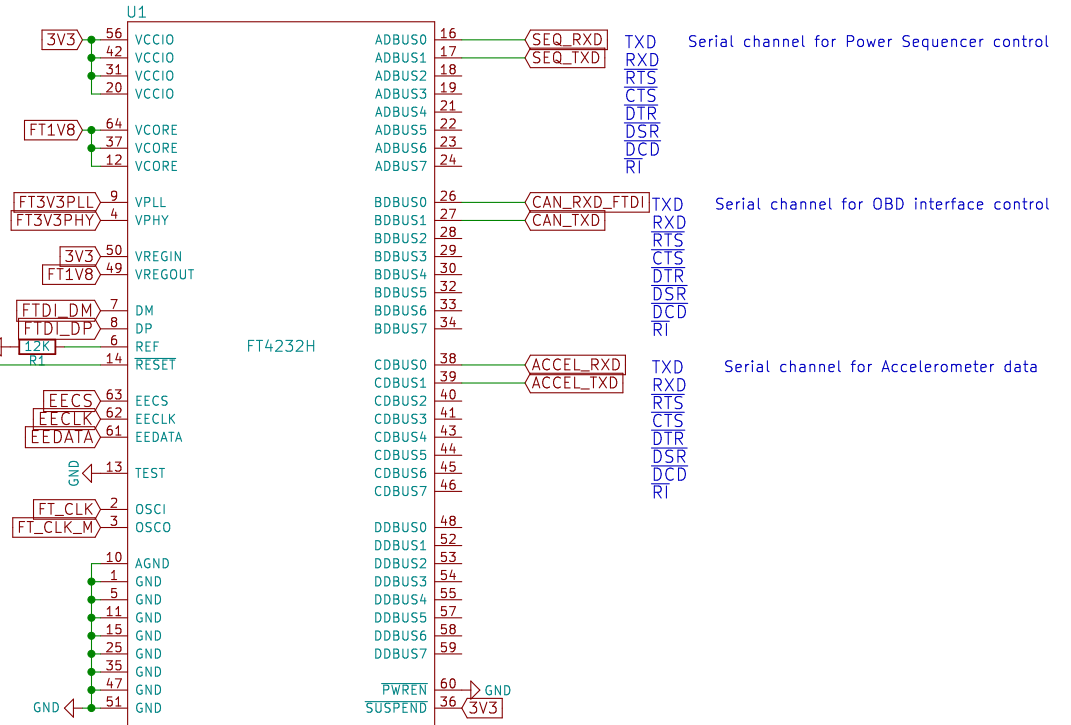


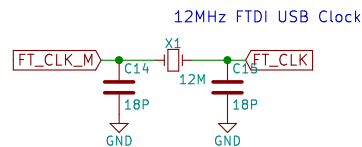
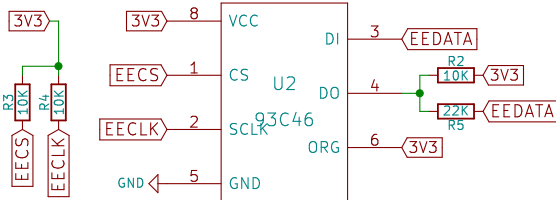
Power Filtering



Theory:
The hub will activate the FTDI
as the USB port becomes available
Alternately, PWRSEQ could control directly



FTDI Device Configuration EEPROM

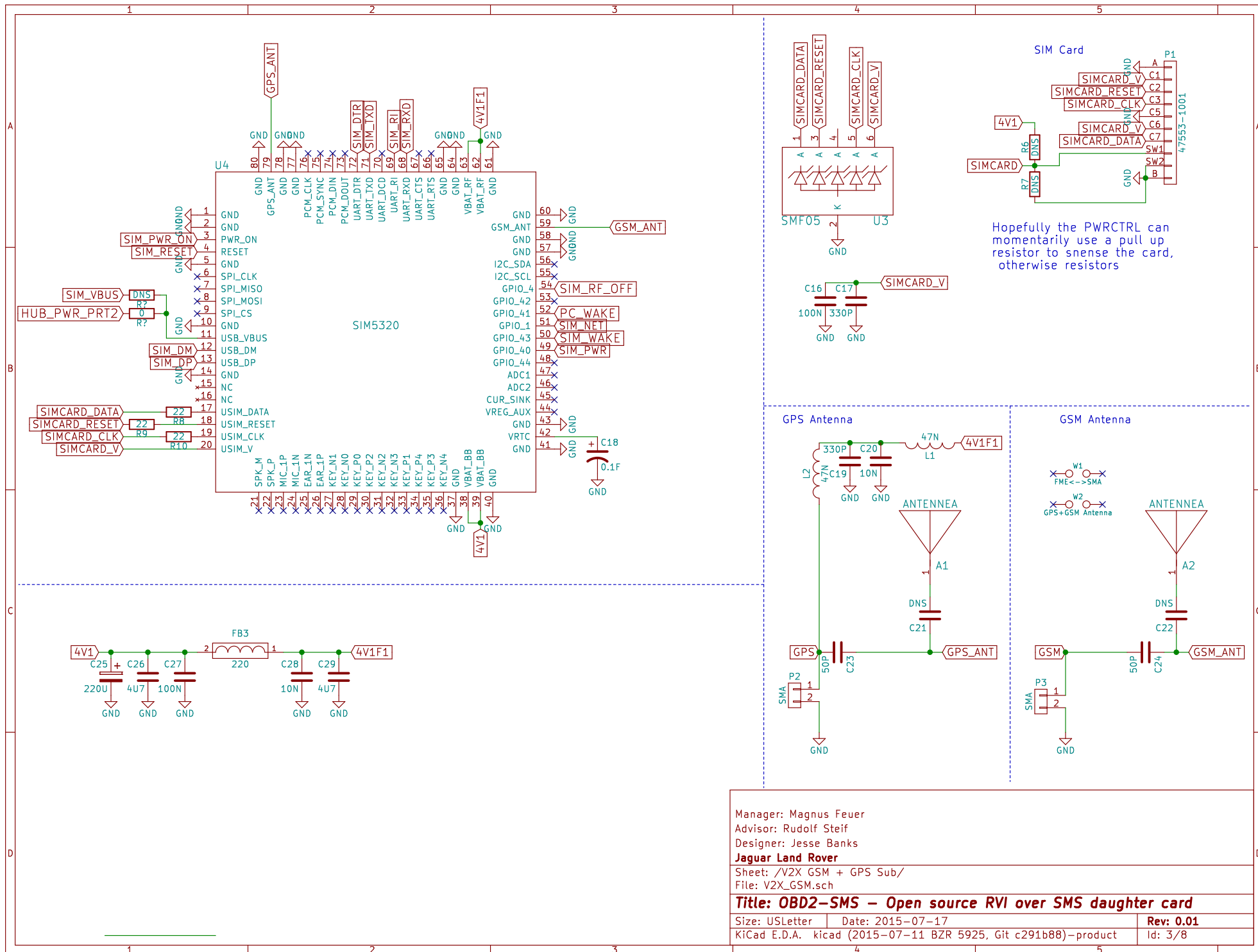


Manager: Magnus Feuer
Advisor: Rudolf Steif
Designer: Jesse Banks
Jaguar Land Rover

Sheet: /V2X FTDI Sub/
File: V2X_FTDI.sch

Title: OBD2-SMS – Open source RVI over SMS daughter card

Size: A4 Date: 2015-07-17 Rev: 0.01
KiCad E.D.A. kicad (2015-07-11 BZR 5925, Git c291b88)-product Id: 2/8



Manager: Magnus Feuer

Advisor: Rudolf Steif

Designer: Jesse Banks

Jaguar Land Rover

Sheet: /V2X GSM + GPS Sub/

File: V2X_GSM.sch

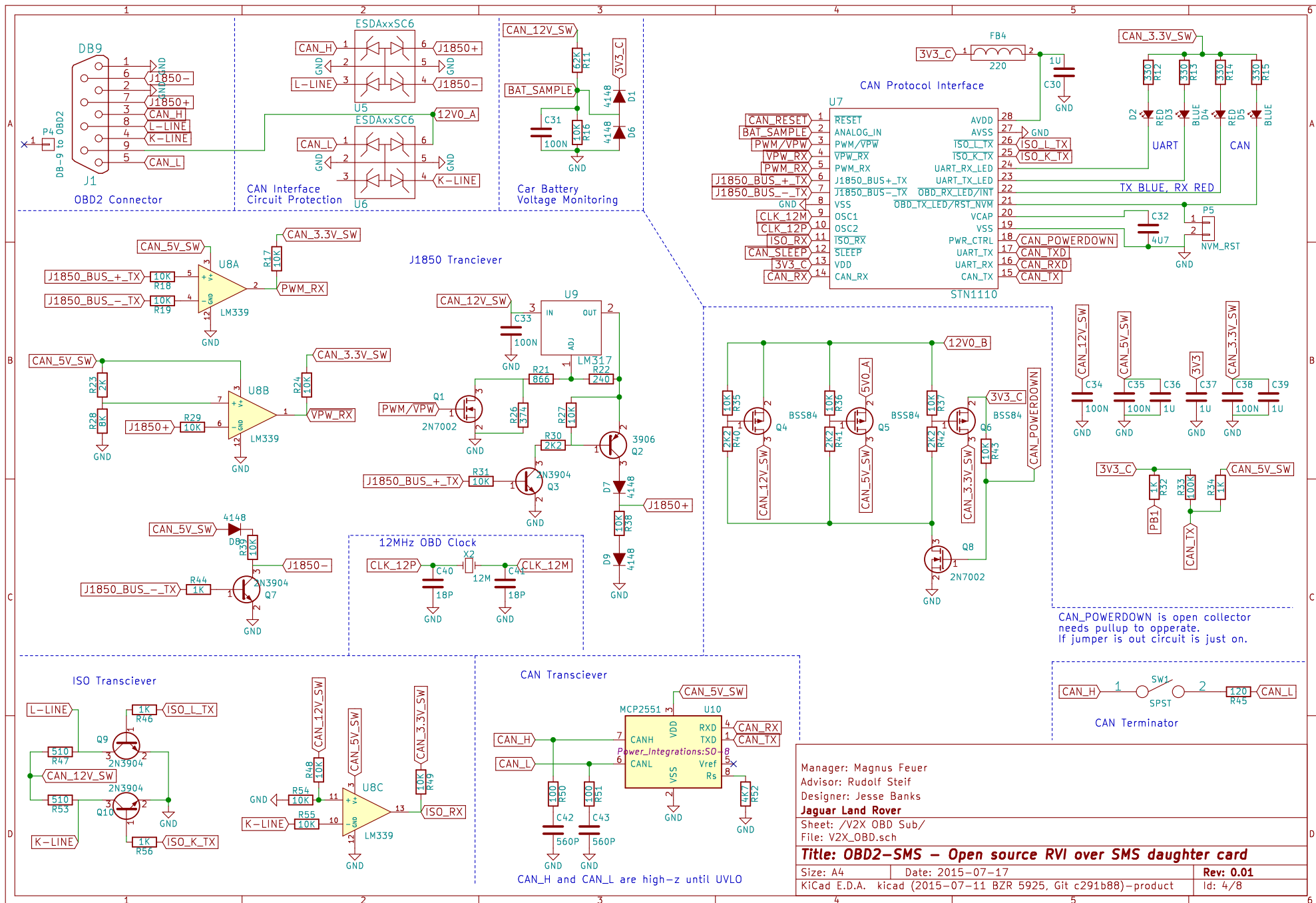
Title: OBD2-SMS – Open source RVI over SMS daughter card

Size: USLetter Date: 2015-07-17

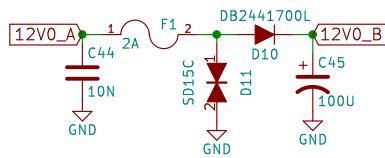
Rev: 0.01

KiCad E.D.A. kicad (2015-07-11 BZR 5925, Git c291b88)–product

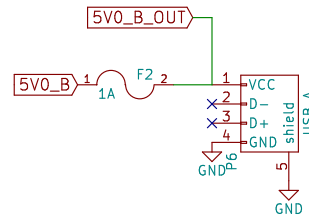
Id: 3/8



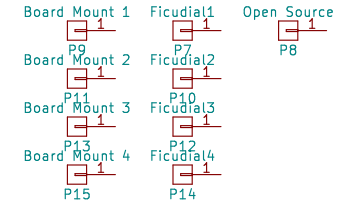
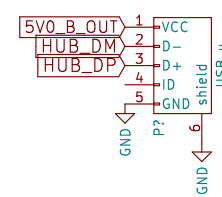
Vehicle Power Input Filtering and Spike Suppression



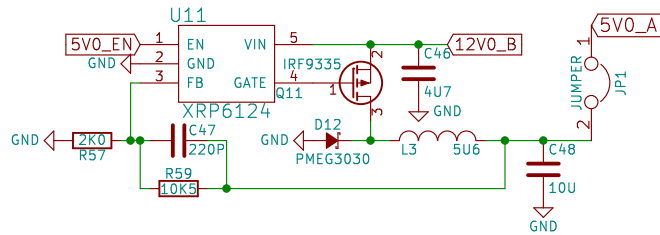
HOST Power Connection



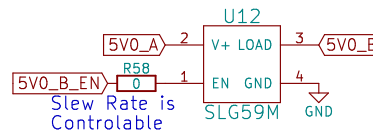
HUB Data, HOST Power



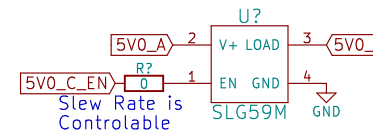
5V @ 1.25A DC-DC Power Supply



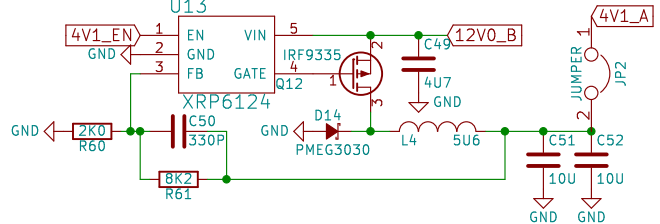
HOST 5V0 rail



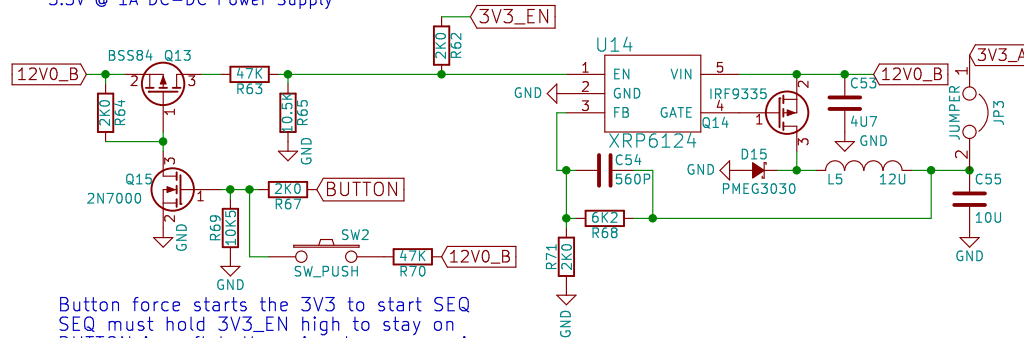
CAN 5V0 rail



4.1V @ 1.5A DC-DC Power Supply

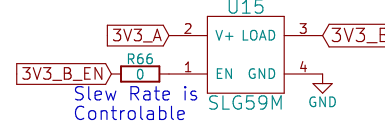


3.3V @ 1A DC-DC Power Supply

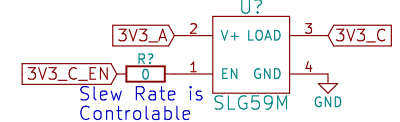


Button force starts the 3V3 to start SEQ
SEQ must hold 3V3_EN high to stay on
BUTTON is soft button signal once running
3V3_EN pulled low kills supply regardless if button pressed

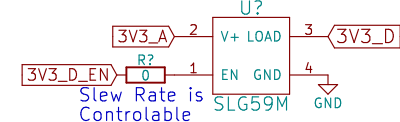
HUB & FTDI 3V3 rail



CAN 3V3 rail



Accelerometer 3V3 rail



PWRSEQ will siphon power from 4V1 and disable the 3V3 Supply while in Cell standby receive power state.

Manager: Magnus Feuer

Advisor: Rudolf Steif

Designer: Jesse Banks

Jaguar Land Rover

Sheet: /V2X Power Sub/

File: V2X_PWR.sch

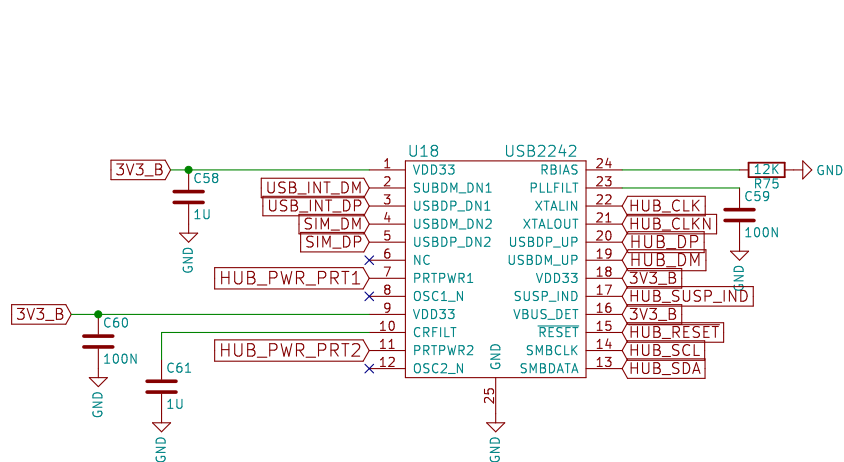
Title: OBD2-SMS - Open source RVI over SMS daughter card

Size: USLetter Date: 2015-07-17

Rev: 0.01

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Id: 5/8

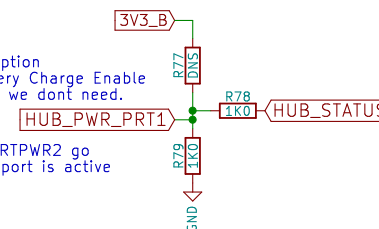
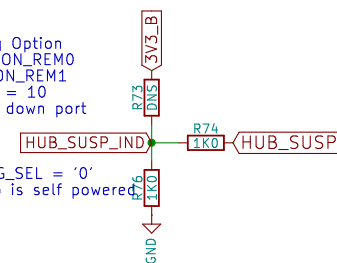
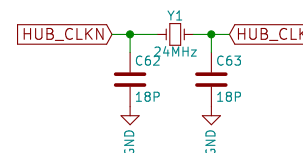


Boot Strapping Option
 SUSP_IND = NON_REM0
 SMBDATA = NON_REM1
 NON_REM[1:0] = 10
 means neither down port
 is removable

SMBCLK = CFG_SEL = '0'
 Means the hub is self powered

Boot Strapping Option
 PRT_PWR1 = Battery Charge Enable
 0 = feature off, we dont need.

PRT_PWR1 and PRT_PWR2 go
 high when the port is active



Sheet: /V2X Hub Sub/
 File: V2X_HUB.sch

Title:

Size: A4 Date:

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Rev:

Id: 7/8

