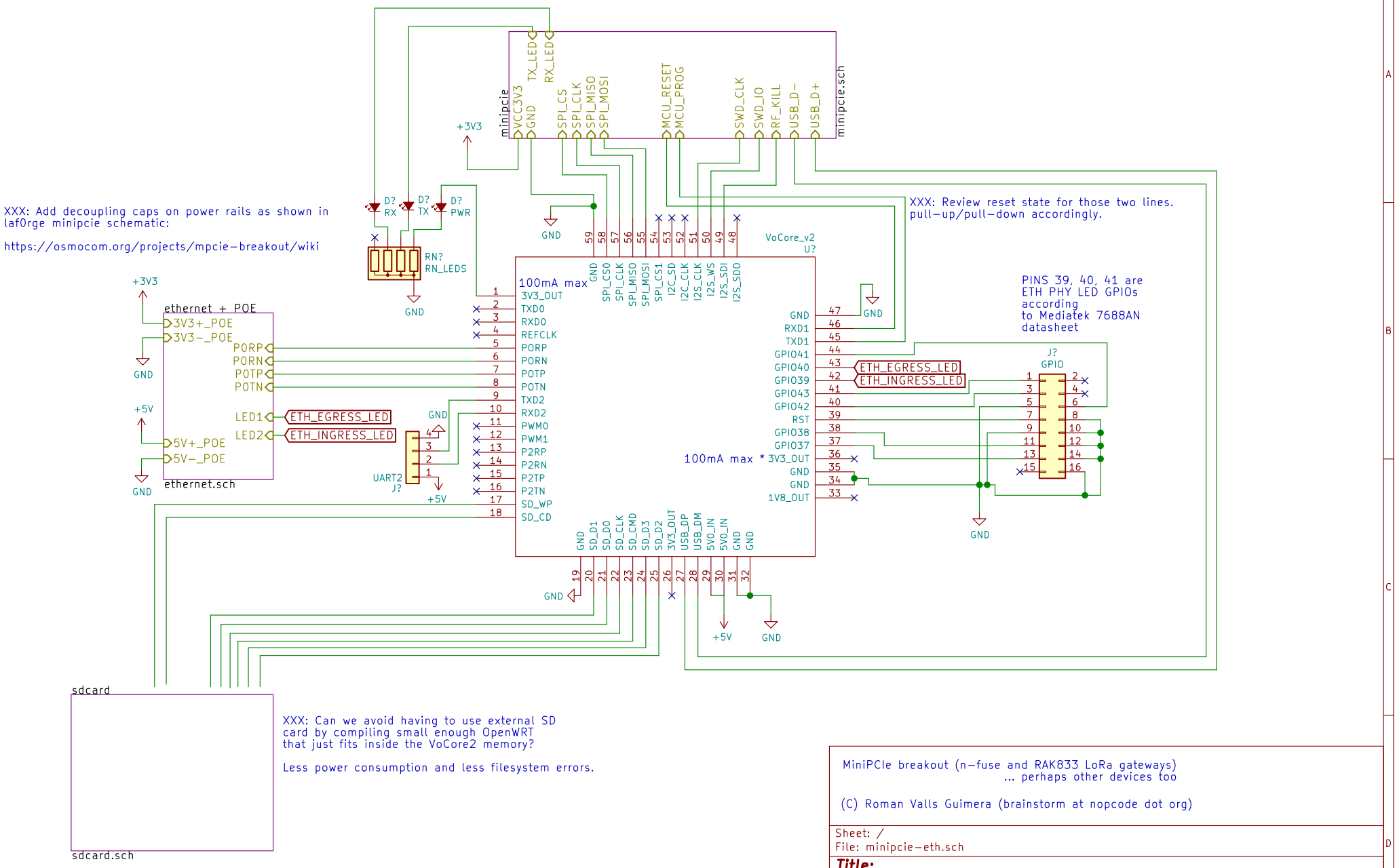
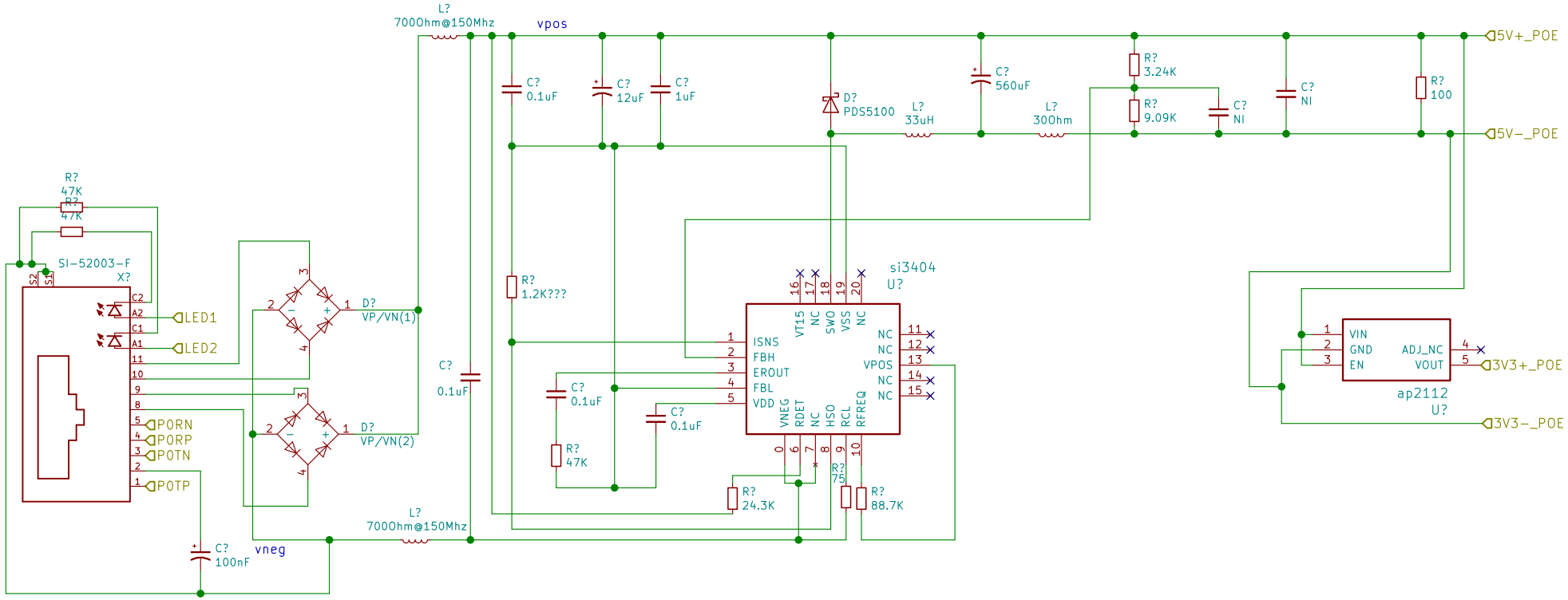
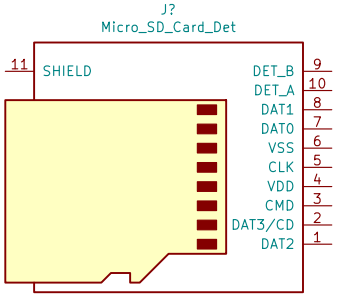

XXX: Add decoupling caps on power rails as shown in laf0rge minipcie schematic:
https://osmocom.org/projects/mpcie-breakout/wiki
minipcie
VCC3V3
GND
TX_LED
RX_LED
SPI_CS
SPI_CLK
SPI_MISO
SPI_MOSI
MCU_RESET
MCU_PROG
SWD_CLK
SWD_IO
RF_KILL
USB_D-
USB_D+
minipcie.sch
+3V3
D? RX
D? TX
D? PWR
RN? RN_LEDS
GND
XXX: Review reset state for those two lines. pull-up/pull-down accordingly.
VoCore_v2 U?
100mA max
3V3_OUT
TXD0
RXD0
REFCLK
PORP
PORN
POTP
POTN
TXD2
RXD2
PWM0
PWM1
P2RP
P2RN
P2TP
P2TN
SD_WP
SD_CD
GND
SPI_CS0
SPI_CLK
SPI_MISO
SPI_MOSI
SPI_CS1
I2C_SD
I2C_CLK
I2S_WS
I2S_SDI
I2S_SDO
RXD1
TXD1
GPIO41
GPIO40
GPIO39
GPIO43
GPIO42
RST
GPIO38
GPIO37
100mA max * 3V3_OUT
1V8_OUT
SD_D1
SD_D0
SD_CLK
SD_CMD
SD_D3
SD_D2
3V3_OUT
USB_DP
USB_DM
5VO_IN
5VO_IN
PINS 39, 40, 41 are ETH PHY LED GPIOs according to Mediatek 7688AN datasheet
ETH_EGRESS_LED
ETH_INGRESS_LED
J? GPIO
ethernet + POE
3V3+_POE
3V3-_POE
PORP
PORN
POTP
POTN
LED1
LED2
5V+_POE
5V-_POE
ethernet.sch
UART2 J?
+5V
sdcard
sdcard.sch
XXX: Can we avoid having to use external SD card by compiling small enough OpenWRT that just fits inside the VoCore2 memory?
Less power consumption and less filesystem errors.
MiniPCIe breakout (n-fuse and RAK833 LoRa gateways)
... perhaps other devices too
(C) Roman Valls Guimera (brainstorm at nopcode dot org)
Sheet: /
File: minipcie-eth.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (2017-10-17 revision 537804b)-master
Id: 1/4



SiLabs 3404 non-isolated class 2 PD POE.
Optimizing for BOM price and size for now.

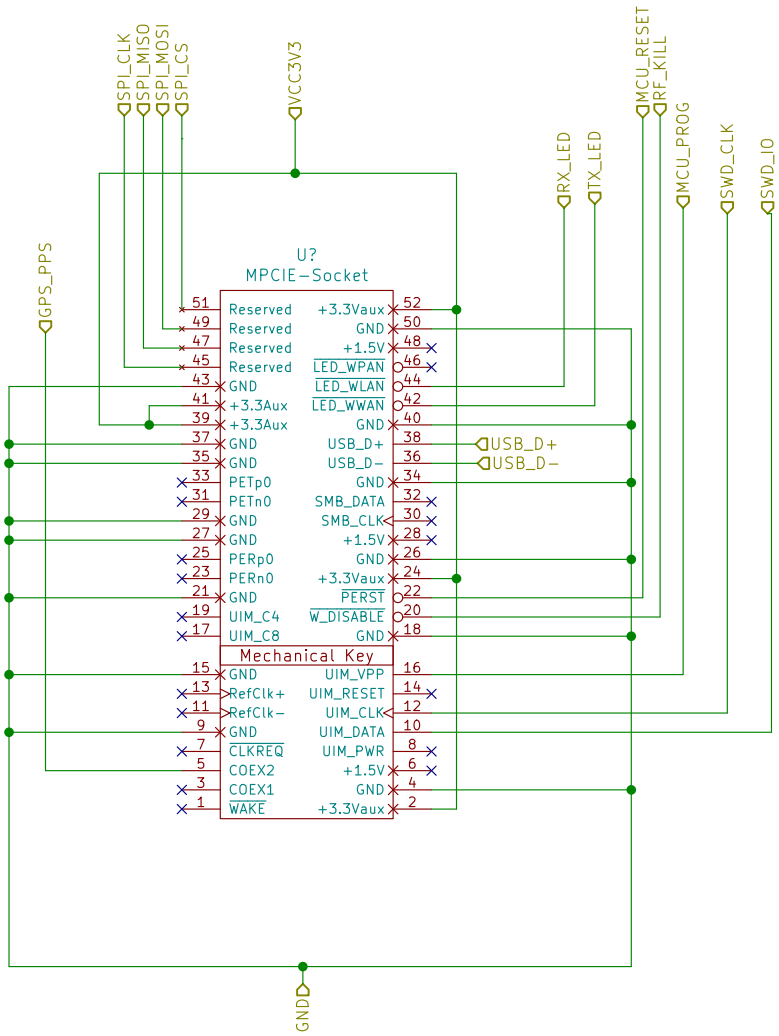
(C) Roman Valls Guimera (brainstorm at nopcode dot org)

Sheet: /ethernet + POE/ File: ethernet.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2017-10-17 revision 537804b)-master		Id: 2/4



Sheet: /sdcard/ File: sdcard.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2017-10-17 revision 537804b)-master		Id: 3/4

Those pins are reserved on the mpcie spec
RAK833 LoRa GW uses them for SPI, perhaps
others like n-fuse will use the same in the future?



Pins mapped according to n-fuse datasheet:
https://www.n-fuse.co/products/lrwccx/lrwccx-mpcie-datasheet.pdf

MiniPICe (reserved) SPI pins according to RAK833 datasheet.

Sheet: /minipcie/
File: minipcie.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2017-10-17 revision 537804b)-master		Id: 4/4