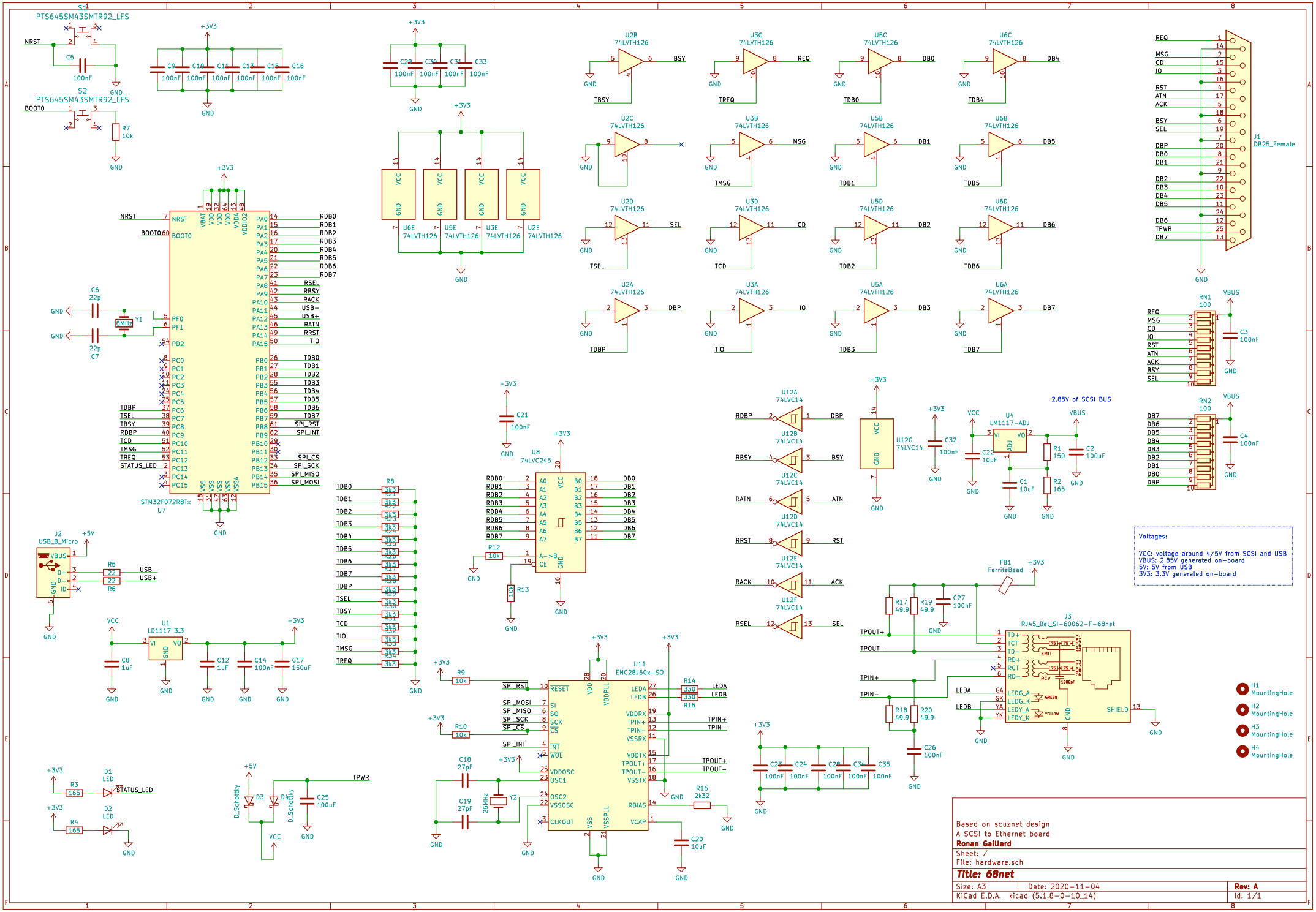
S1
PTS645SM43SMTR92_LFS
NRST
C5
100nF
GND
S2
PTS645SM43SMTR92_LFS
BOOT0
R7
10k
+3V3
C9 C10 C11 C12 C13 C16
100nF
C29 C30 C31 C33
U6E U5E U3E U2E
74LVTH126
VCC
GND
U2B U3C U5C U6C
U3B U5B U6B
U2C
U2D U3D U5D U6D
U2A U3A U5A U6A
BSY TBSY
REQ TREQ
DB0 TDB0
DB4 TDB4
MSG TMSG
DB1 TDB1
DB5 TDB5
SEL TSEL
CD TCD
DB2 TDB2
DB6 TDB6
DBP TDBP
IO TIO
DB3 TDB3
DB7 TDB7
J1
DB25_Female
REQ
MSG
CD
IO
RST
ATN
ACK
BSY
SEL
DBP
DB0
DB1
DB2
DB3
DB4
DB5
DB6
TPWR
DB7
RN1
100
VBUS
C3
100nF
RN2
100
C4
100nF
STM32F072R8Tx
U7
VBAT VDD VDD VDD VDDA VDDIO2
VSS VSS VSS VSS VSSA
PA0 PA1 PA2 PA3 PA4 PA5 PA6 PA7 PA8 PA9 PA10 PA11 PA12 PA13 PA14 PA15
PB0 PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13 PB14 PB15
PF0 PF1 PD2
PC0 PC1 PC2 PC3 PC4 PC5 PC6 PC7 PC8 PC9 PC10 PC11 PC12 PC13 PC14 PC15
RDB0 RDB1 RDB2 RDB3 RDB4 RDB5 RDB6 RDB7
RSEL RBSY RACK USB− USB+ RATN RRST TIO
TDB0 TDB1 TDB2 TDB3 TDB4 TDB5 TDB6 TDB7
SPI_RST SPI_INT
SPI_CS SPI_SCK SPI_MISO SPI_MOSI
C6 22p
C7 22p
Y1
8MHz
U8
74LVC245
A0 A1 A2 A3 A4 A5 A6 A7
B0 B1 B2 B3 B4 B5 B6 B7
A->B
CE
R12 10k
R13 10k
C21 100nF
U12A U12B U12C U12D U12E U12F
74LVC14
RDBP DBP
RBSY BSY
RATN ATN
RRST RST
RACK ACK
RSEL SEL
U12G
U4
LM1117-ADJ
VI VO ADJ
C32 100nF
C22 10uF
C1 10uF
R1 150
R2 165
C2 100uF
2.85V of SCSI BUS
J2
USB_B_Micro
VBUS D+ D− ID GND
R5 22
R6 22
U1
LD1117 3.3
C8 1uF
C12 1uF
C14 100nF
C17 150uF
R8
3k3
R21 R22 R23 R24 R25 R26 R27 R28 R29 R30 R31 R32 R33 R34
R9 10k
R10 10k
U11
ENC28J60x-SO
RESET SI SO SCK CS INT WOL
VDD VDDPLL VDDOSC OSC1 OSC2 VSSOSC CLKOUT VSS VSSPLL
LEDA LEDB
VDDRX TPIN+ TPIN− VSSRX VDDTX TPOUT+ TPOUT− VSSTX RBIAS VCAP
R14 330
R15 330
R16 2k32
C18 27pF
C19 27pF
Y2
25MHz
C20 10uF
FB1
FerriteBead
R17 49.9
R19 49.9
C27 100nF
R18 49.9
R20 49.9
C26 100nF
J3
RJ45_Bel_SI-60062-F-68net
TD+ TCT TD− RD+ RCT RD−
XMIT
RCV
75 1000pF
LEDG_A LEDG_K LEDY_A LEDY_K
GREEN
YELLOW
SHIELD
TPOUT+ TPOUT−
TPIN+ TPIN−
LEDA LEDB
C23 C24 C28 C34 C35
100nF
R3 165
R4 165
D1 LED
D2 LED
STATUS_LED
D3 D4
D_Schottky
C25 100uF
TPWR
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole
Voltages:
VCC: voltage around 4/5V from SCSI and USB
VBUS: 2.85V generated on-board
5V: 5V from USB
3V3: 3.3V generated on-board
Based on scuznet design
A SCSI to Ethernet board
Ronan Gaillard
Sheet: /
File: hardware.sch
Title: 68net
Size: A3
Date: 2020-11-04
Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)
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