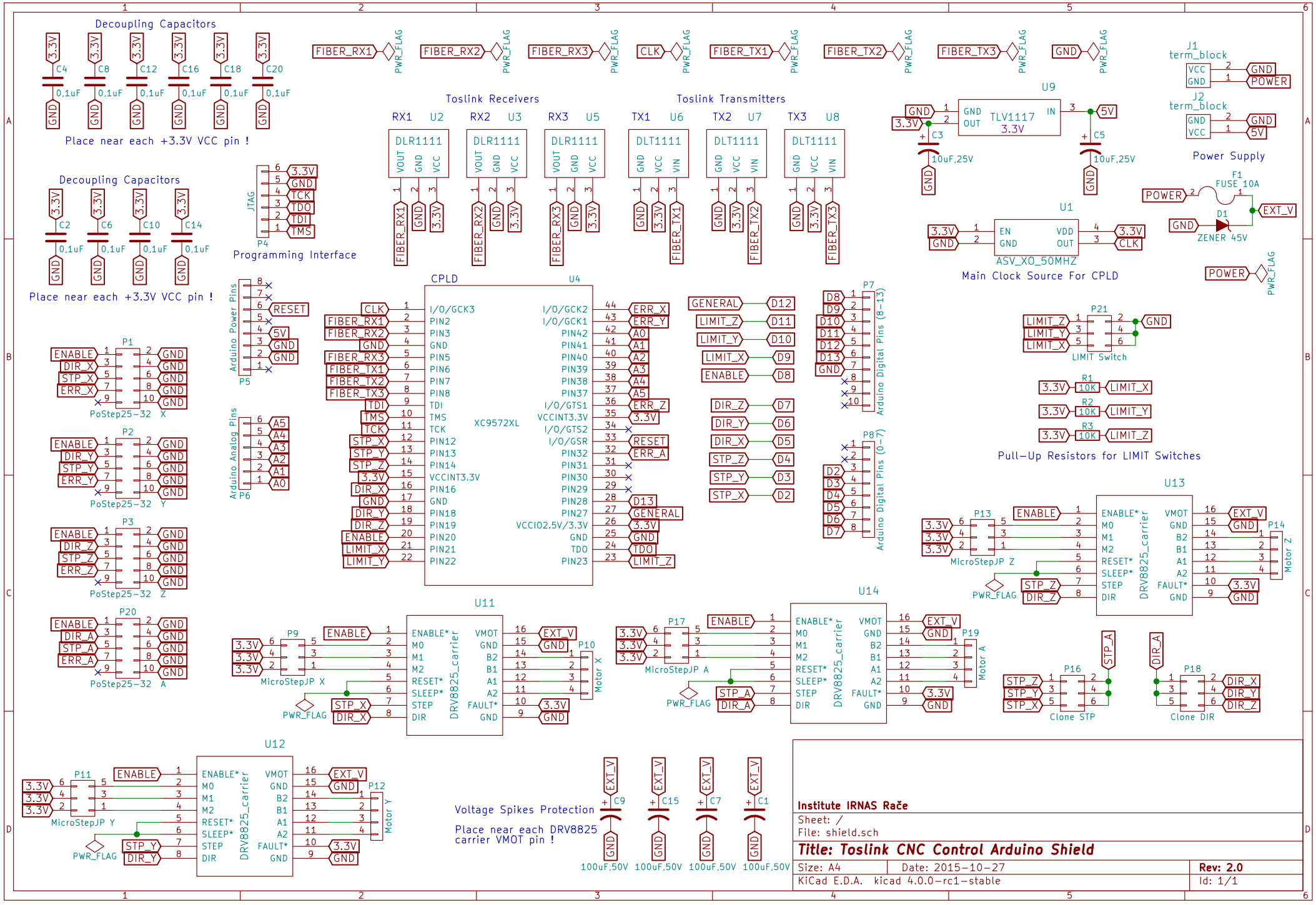
Decoupling Capacitors
C4 C8 C12 C16 C18 C20
0,1uF
Place near each +3.3V VCC pin !
Decoupling Capacitors
C2 C6 C10 C14
Place near each +3.3V VCC pin !
JTAG
P4
Programming Interface
FIBER_RX1 FIBER_RX2 FIBER_RX3 CLK FIBER_TX1 FIBER_TX2 FIBER_TX3 GND
PWR_FLAG
Toslink Receivers
RX1 U2 RX2 U3 RX3 U5
DLR1111
Toslink Transmitters
TX1 U6 TX2 U7 TX3 U8
DLT1111
U9
TLV1117 3.3V
C3 10uF,25V
C5 10uF,25V
J1 term_block
J2 term_block
Power Supply
F1 FUSE 10A
D1 ZENER 45V
U1
ASV_XO_50MHZ
Main Clock Source For CPLD
Arduino Power Pins
P5
Arduino Analog Pins
P6
CPLD
U4
XC9572XL
Arduino Digital Pins (8-13)
P7
Arduino Digital Pins (0-7)
P8
P21
LIMIT Switch
R1 R2 R3 10K
Pull-Up Resistors for LIMIT Switches
P1 PoStep25-32 X
P2 PoStep25-32 Y
P3 PoStep25-32 Z
P20 PoStep25-32 A
U11
U12
U13
U14
DRV8825_carrier
MicroStepJP X
MicroStepJP Y
MicroStepJP Z
MicroStepJP A
Motor X
Motor Y
Motor Z
Clone STP
Clone DIR
Voltage Spikes Protection
Place near each DRV8825 carrier VMOT pin !
C9 C15 C7 C1
100uF,50V
Institute IRNAS Rače
Sheet: /
File: shield.sch
Title: Toslink CNC Control Arduino Shield
Size: A4
Date: 2015-10-27
Rev: 2.0
KiCad E.D.A. kicad 4.0.0-rc1-stable
Id: 1/1