power-module

File: power-module.kicad_sch

programmer-module

File: programmer-module.kicad_sch

ethernet-module

File: ethernet-module.kicad_sch

loadcell

File: loadcell.kicad_sch

RS485

File: RS485.kicad_sch

Atmega2560-core

File: Atmega2560-core.kicad_sch

Relay-module

File: Relay-module.kicad_sch

input-module

File: input-module.kicad_sch

stepper-motor-driver

File: stepper-motor-driver.kicad_sch

Encoders

File: Encoders.kicad_sch

Sheet: /
File: coconut-pairing-stage1.kicad_sch

Title:

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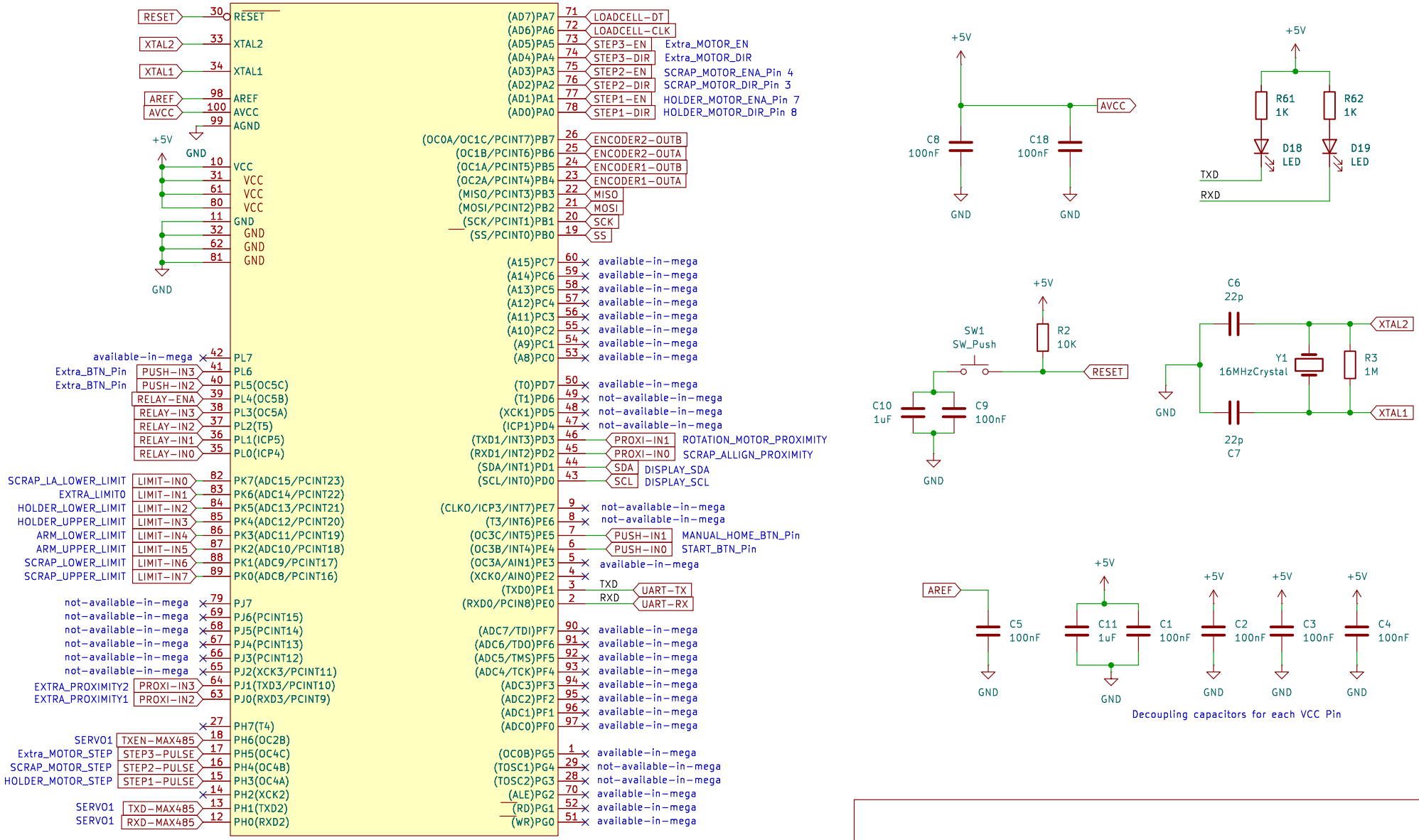
RESET
XTAL2
XTAL1
AREF
AVCC
AGND
+5V
GND
VCC
GND
U1
ATMEGA2560-16AU
LOADCELL-DT
LOADCELL-CLK
STEP3-EN
STEP3-DIR
STEP2-EN
STEP2-DIR
STEP1-EN
STEP1-DIR
Extra_MOTOR_EN
Extra_MOTOR_DIR
SCRAP_MOTOR_ENA_Pin 4
SCRAP_MOTOR_DIR_Pin 3
HOLDER_MOTOR_ENA_Pin 7
HOLDER_MOTOR_DIR_Pin 8
ENCODER2-OUTB
ENCODER2-OUTA
ENCODER1-OUTB
ENCODER1-OUTA
MISO
MOSI
SCK
SS
available-in-mega
not-available-in-mega
PUSH-IN3
PUSH-IN2
RELAY-ENA
RELAY-IN3
RELAY-IN2
RELAY-IN1
RELAY-IN0
LIMIT-IN0
LIMIT-IN1
LIMIT-IN2
LIMIT-IN3
LIMIT-IN4
LIMIT-IN5
LIMIT-IN6
LIMIT-IN7
PROXI-IN3
PROXI-IN2
PROXI-IN1
PROXI-IN0
SDA
SCL
DISPLAY_SDA
DISPLAY_SCL
ROTATION_MOTOR_PROXIMITY
SCRAP_ALLIGN_PROXIMITY
MANUAL_HOME_BTN_Pin
START_BTN_Pin
UART-TX
UART-RX
TXD
RXD
TXEN-MAX485
STEP3-PULSE
STEP2-PULSE
STEP1-PULSE
TXD-MAX485
RXD-MAX485
SERVO1
Extra_MOTOR_STEP
SCRAP_MOTOR_STEP
HOLDER_MOTOR_STEP
EXTRA_PROXIMITY2
EXTRA_PROXIMITY1
Extra_BTN_Pin
HOLDER_LOWER_LIMIT
HOLDER_UPPER_LIMIT
ARM_LOWER_LIMIT
ARM_UPPER_LIMIT
SCRAP_LOWER_LIMIT
SCRAP_UPPER_LIMIT
EXTRA_LIMIT0
C8
100nF
C18
100nF
R61
1K
R62
1K
D18
LED
D19
LED
SW1
SW_Push
R2
10K
C10
1uF
C9
100nF
C6
22p
Y1
16MHzCrystal
R3
1M
C7
22p
C5
100nF
C11
1uF
C1
100nF
C2
100nF
C3
100nF
C4
100nF
Decoupling capacitors for each VCC Pin
Sheet: /Atmega2560-core/
File: Atmega2560-core.kicad_sch
Title:
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Date:
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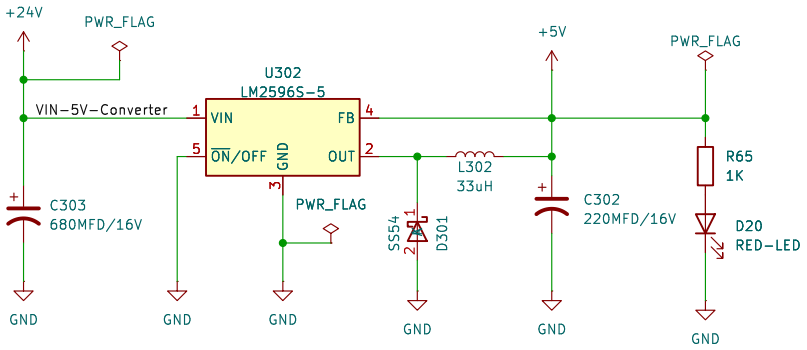
24V to 5V Converter



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Size: A4	Date:	**Rev:**
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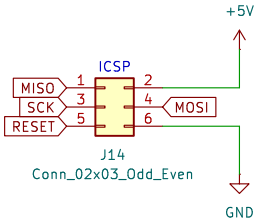
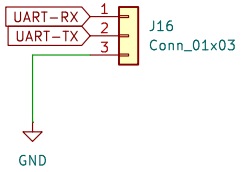


ICSP



SERIAL PROGRAMME PORT

Sheet: /programmer-module/ File: programmer-module.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
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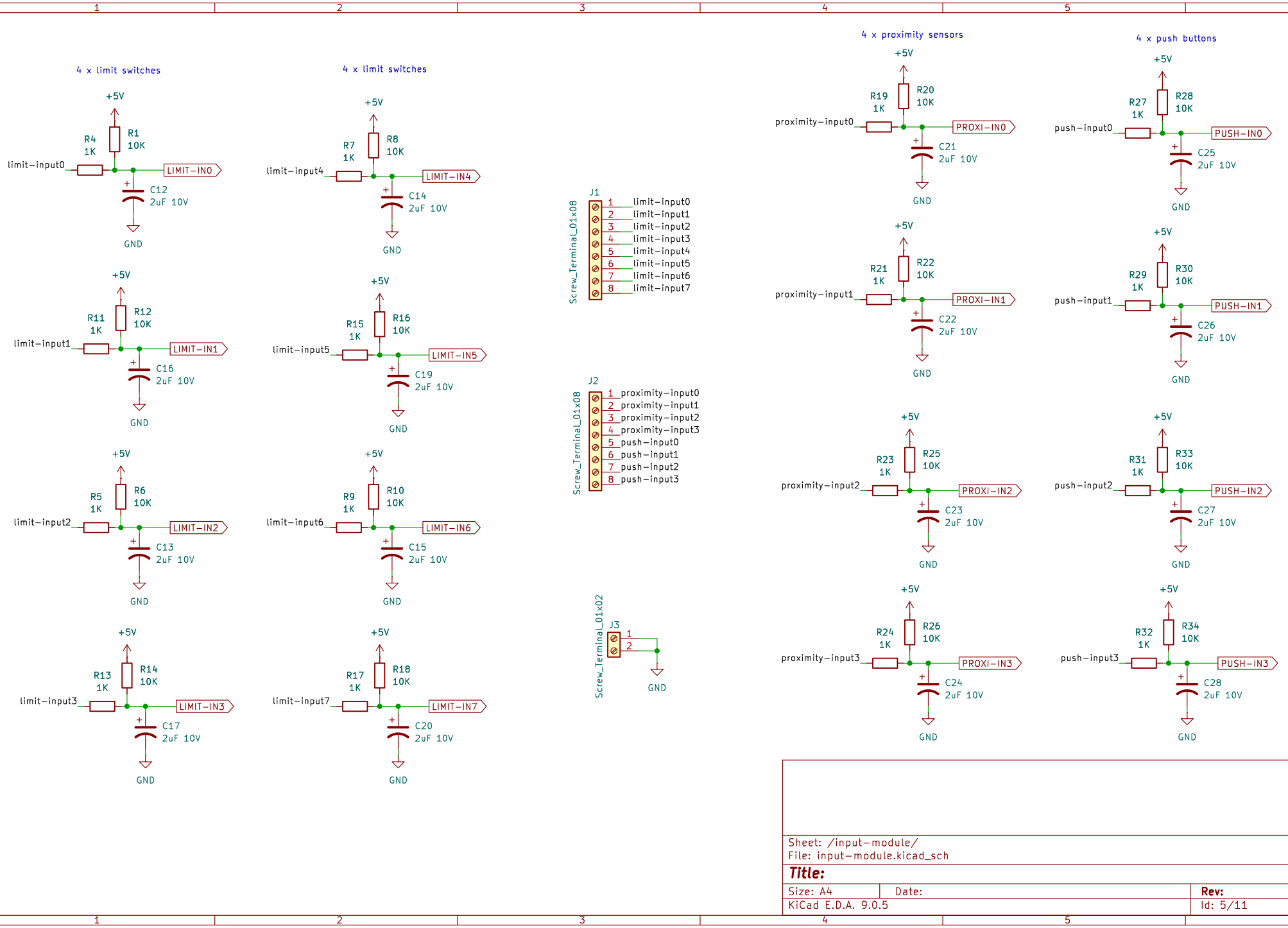
4 x limit switches
4 x limit switches
4 x proximity sensors
4 x push buttons
+5V
GND
R1 10K
R4 1K
limit-input0
LIMIT-IN0
C12 2uF 10V
R8 10K
R7 1K
limit-input4
LIMIT-IN4
C14 2uF 10V
R12 10K
R11 1K
limit-input1
LIMIT-IN1
C16 2uF 10V
R16 10K
R15 1K
limit-input5
LIMIT-IN5
C19 2uF 10V
R6 10K
R5 1K
limit-input2
LIMIT-IN2
C13 2uF 10V
R10 10K
R9 1K
limit-input6
LIMIT-IN6
C15 2uF 10V
R14 10K
R13 1K
limit-input3
LIMIT-IN3
C17 2uF 10V
R18 10K
R17 1K
limit-input7
LIMIT-IN7
C20 2uF 10V
J1
Screw_Terminal_01x08
1 limit-input0
2 limit-input1
3 limit-input2
4 limit-input3
5 limit-input4
6 limit-input5
7 limit-input6
8 limit-input7
J2
Screw_Terminal_01x08
1 proximity-input0
2 proximity-input1
3 proximity-input2
4 proximity-input3
5 push-input0
6 push-input1
7 push-input2
8 push-input3
J3
Screw_Terminal_01x02
1
2
R20 10K
R19 1K
proximity-input0
PROXI-IN0
C21 2uF 10V
R22 10K
R21 1K
proximity-input1
PROXI-IN1
C22 2uF 10V
R25 10K
R23 1K
proximity-input2
PROXI-IN2
C23 2uF 10V
R26 10K
R24 1K
proximity-input3
PROXI-IN3
C24 2uF 10V
R28 10K
R27 1K
push-input0
PUSH-IN0
C25 2uF 10V
R30 10K
R29 1K
push-input1
PUSH-IN1
C26 2uF 10V
R33 10K
R31 1K
push-input2
PUSH-IN2
C27 2uF 10V
R34 10K
R32 1K
push-input3
PUSH-IN3
C28 2uF 10V
Sheet: /input-module/
File: input-module.kicad_sch
Title:
Size: A4
Date:
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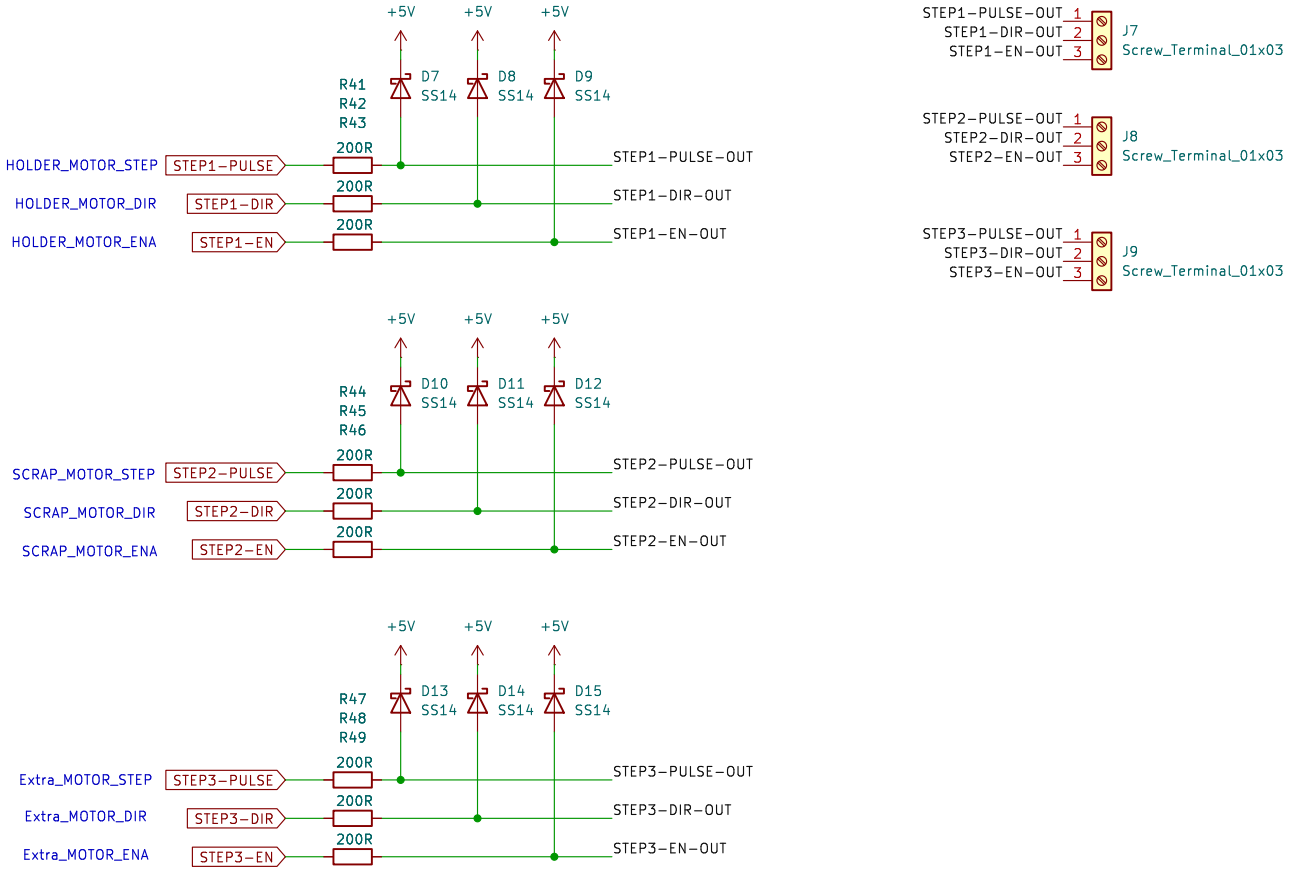

Notes :
*SS14 5V Schottky for ESD Protection
*220R for Limit Current

Sheet: /stepper-motor-driver/
File: stepper-motor-driver.kicad_sch

Title:

Size: A4	Date:	**Rev:**
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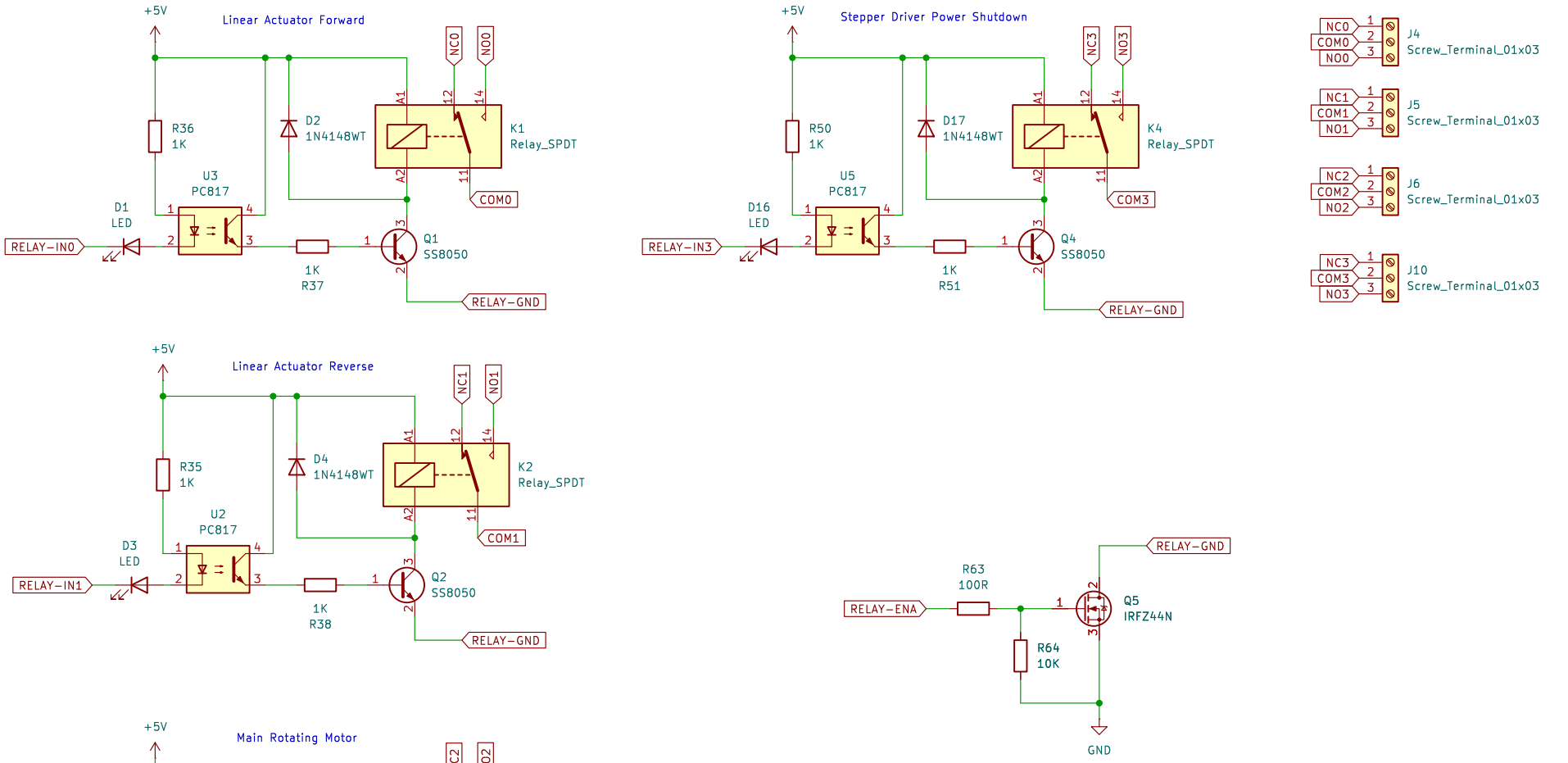

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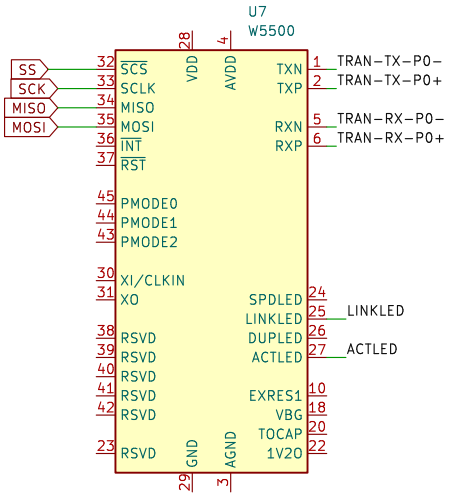
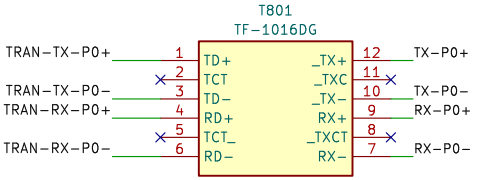
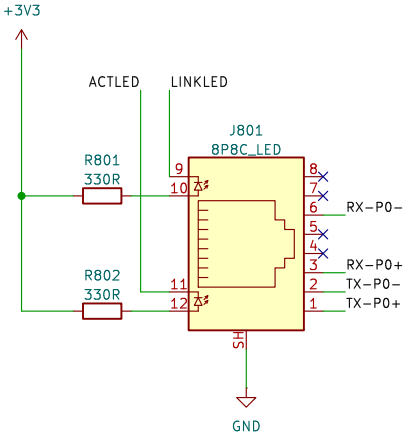
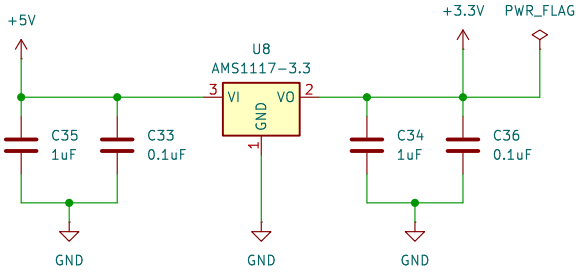
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.5		Id: 7/11









Sheet: /ethernet-module/
File: ethernet-module.kicad_sch

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Size: A4	Date:	**Rev:**
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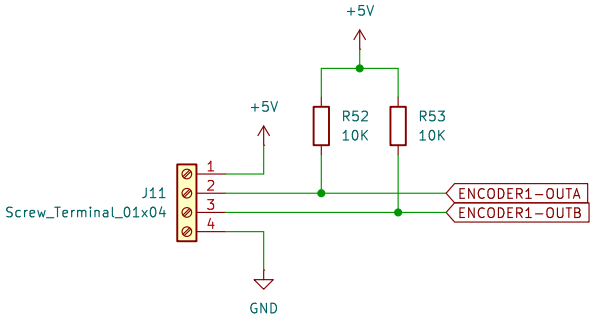

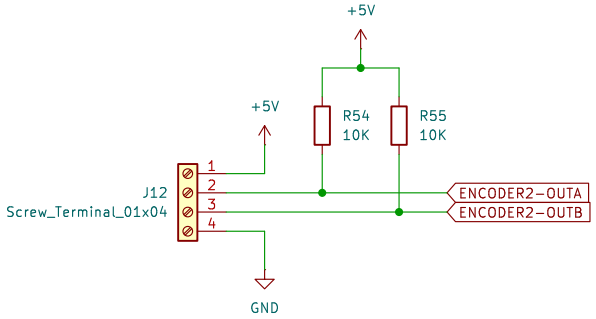

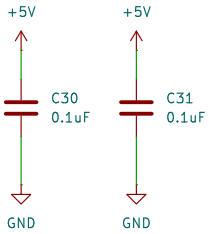

Sheet: /Encoders/		
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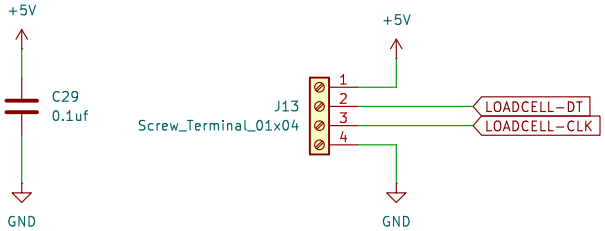
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.5		Id: 9/11



Sheet: /loadcell/
File: loadcell.kicad_sch

Title:

Size: A4	Date:	**Rev:**
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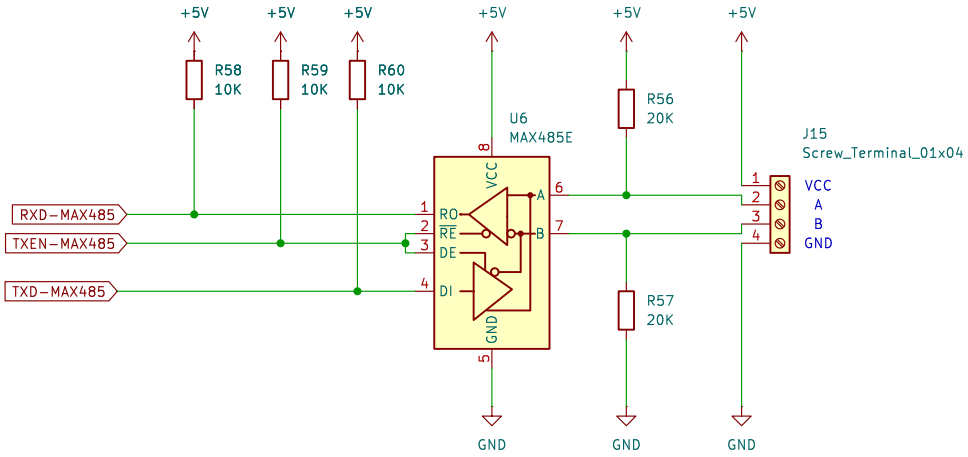

Sheet: /RS485/
File: RS485.kicad_sch

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Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.5		Id: 11/11