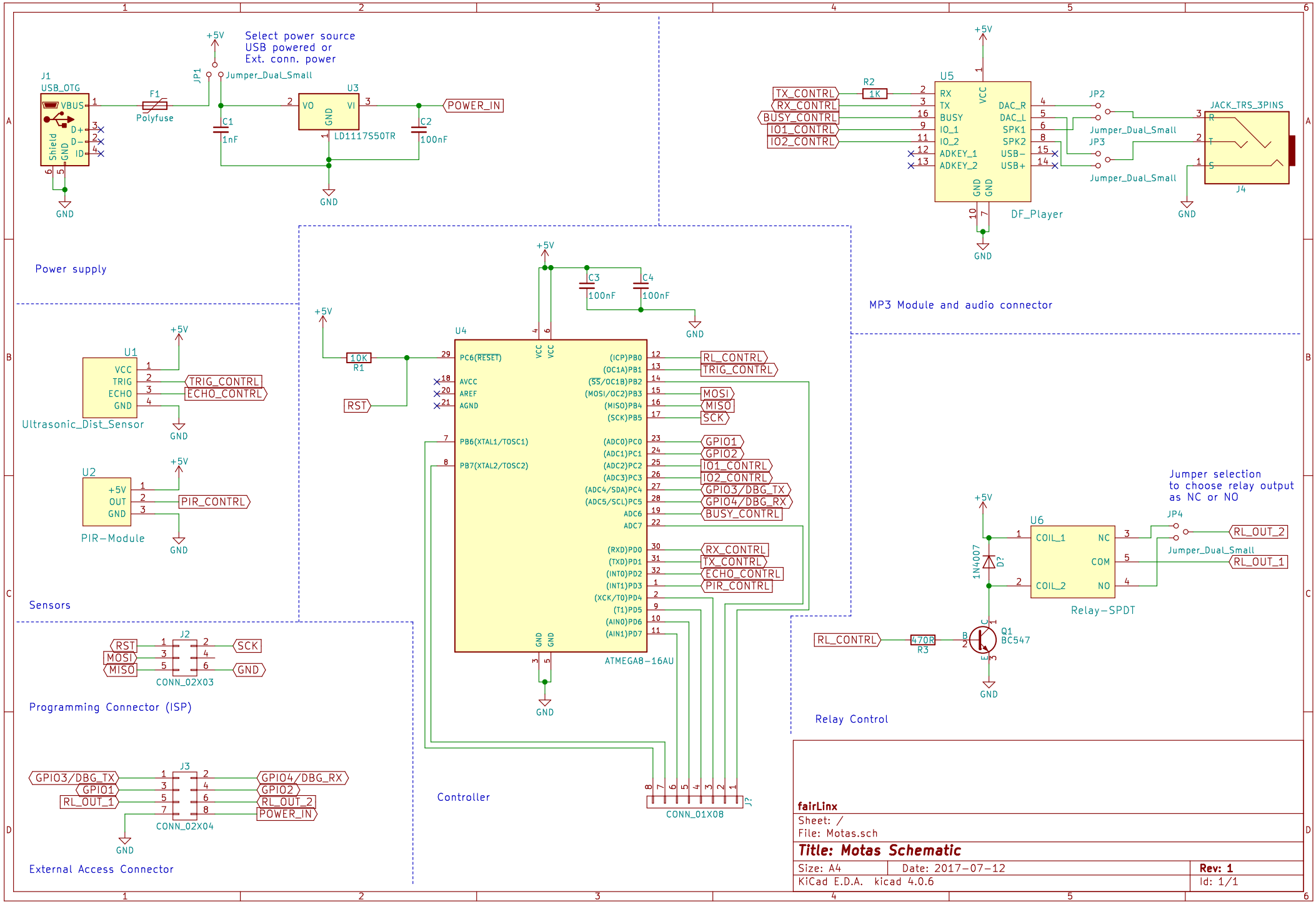
Select power source
USB powered or
Ext. conn. power
J1
USB_OTG
VBUS
D+
D-
ID
Shield
GND
F1
Polyfuse
JP1
Jumper_Dual_Small
+5V
C1
1nF
U3
VO
VI
GND
LD1117S50TR
C2
100nF
POWER_IN
Power supply
U1
VCC
TRIG
ECHO
GND
TRIG_CONTRL
ECHO_CONTRL
Ultrasonic_Dist_Sensor
U2
+5V
OUT
PIR_CONTRL
PIR-Module
Sensors
J2
RST
MOSI
MISO
SCK
CONN_02X03
Programming Connector (ISP)
J3
GPIO3/DBG_TX
GPIO1
RL_OUT_1
GPIO4/DBG_RX
GPIO2
RL_OUT_2
CONN_02X04
External Access Connector
U4
C3
100nF
C4
100nF
R1
10K
PC6(RESET)
AVCC
AREF
AGND
PB6(XTAL1/TOSC1)
PB7(XTAL2/TOSC2)
(ICP)PB0
(OC1A)PB1
(SS/OC1B)PB2
(MOSI/OC2)PB3
(MISO)PB4
(SCK)PB5
(ADC0)PC0
(ADC1)PC1
(ADC2)PC2
(ADC3)PC3
(ADC4/SDA)PC4
(ADC5/SCL)PC5
ADC6
ADC7
(RXD)PD0
(TXD)PD1
(INT0)PD2
(INT1)PD3
(XCK/T0)PD4
(T1)PD5
(AIN0)PD6
(AIN1)PD7
RL_CONTRL
TRIG_CONTRL
MOSI
MISO
SCK
GPIO1
GPIO2
IO1_CONTRL
IO2_CONTRL
GPIO3/DBG_TX
GPIO4/DBG_RX
BUSY_CONTRL
RX_CONTRL
TX_CONTRL
ECHO_CONTRL
PIR_CONTRL
ATMEGA8-16AU
J?
CONN_01X08
Controller
U5
R2
1K
RX
TX
BUSY
IO_1
IO_2
ADKEY_1
ADKEY_2
DAC_R
DAC_L
SPK1
SPK2
USB-
USB+
DF_Player
JP2
JP3
Jumper_Dual_Small
JACK_TRS_3PINS
J4
MP3 Module and audio connector
U6
COIL_1
COIL_2
NC
COM
NO
Relay-SPDT
D?
1N4007
Q1
BC547
470R
R3
Jumper selection
to choose relay output
as NC or NO
JP4
RL_OUT_2
RL_OUT_1
Relay Control
fairLinx
Sheet: /
File: Motas.sch
Title: Motas Schematic
Size: A4
Date: 2017-07-12
Rev: 1
KiCad E.D.A. kicad 4.0.6
Id: 1/1