AQUABOT V1.0

Automatic River Sampling Device for the 2024 SEED project

FlowMetrics Team Members:
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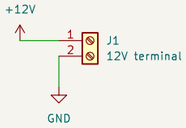

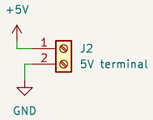

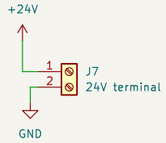

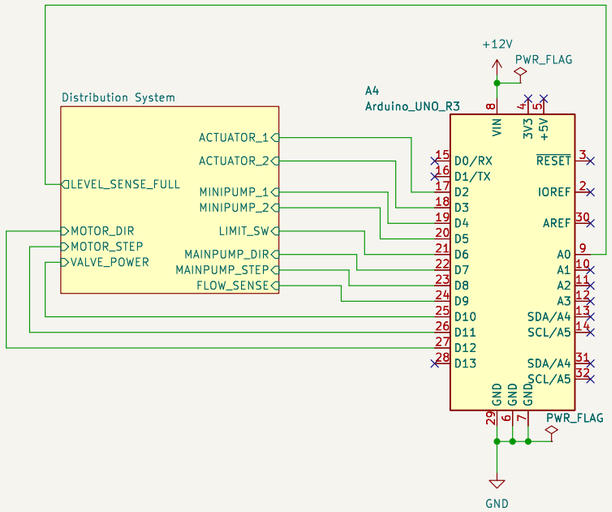

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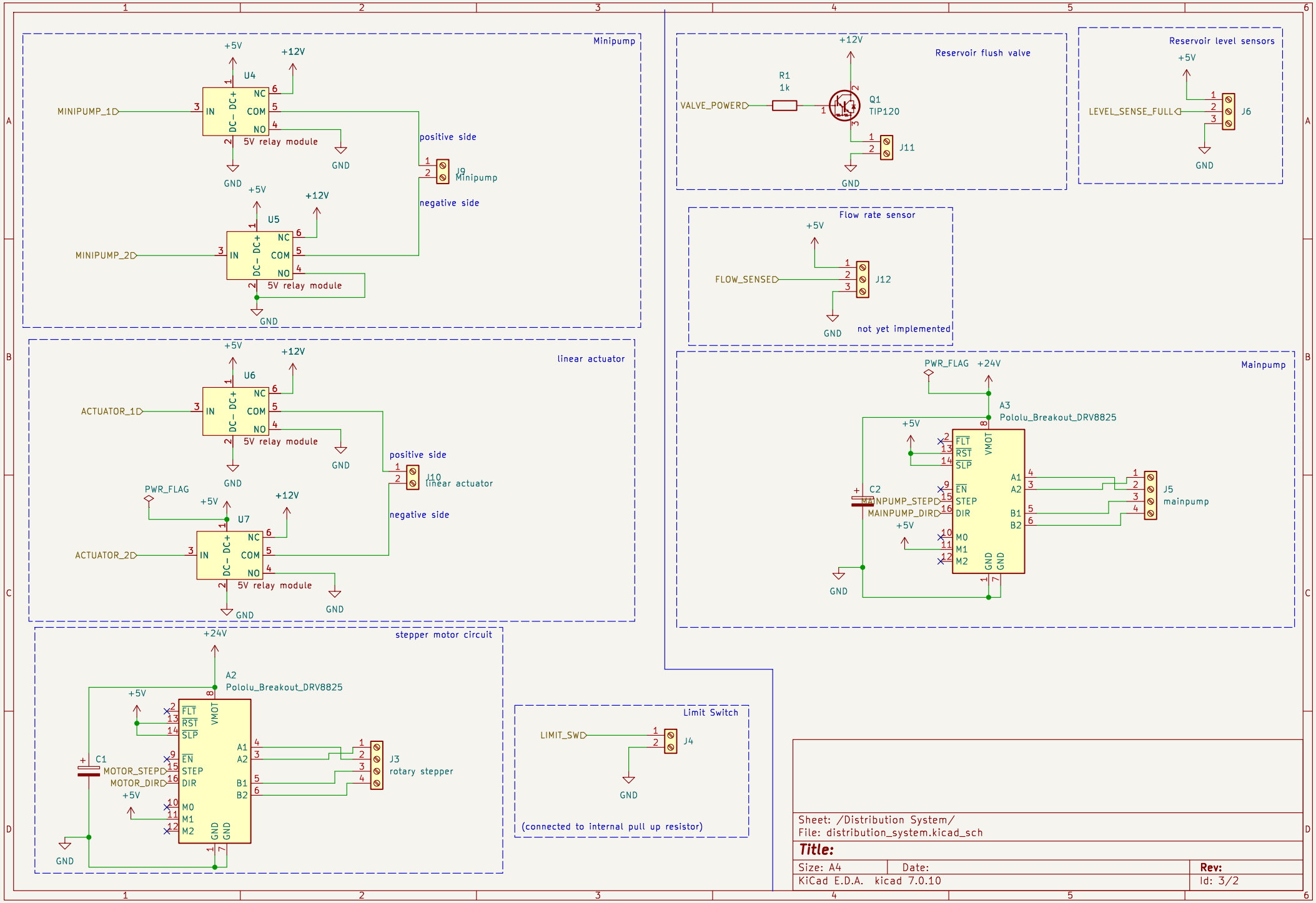
Minipump
+5V
+12V
U4
MINIPUMP_1
IN
DC- DC+
NC
COM
NO
5V relay module
GND
positive side
J9
Minipump
negative side
U5
MINIPUMP_2
linear actuator
U6
ACTUATOR_1
positive side
J10
linear actuator
PWR_FLAG
U7
ACTUATOR_2
negative side
stepper motor circuit
+24V
A2
Pololu_Breakout_DRV8825
VMOT
FLT
RST
SLP
EN
STEP
DIR
M0
M1
M2
GND
A1
A2
B1
B2
C1
MOTOR_STEP
MOTOR_DIR
J3
rotary stepper
Limit Switch
LIMIT_SW
J4
(connected to internal pull up resistor)
Reservoir flush valve
R1
1k
VALVE_POWER
Q1
TIP120
J11
Reservoir level sensors
LEVEL_SENSE_FULL
J6
Flow rate sensor
FLOW_SENSED
J12
not yet implemented
Mainpump
A3
C2
MAINPUMP_STEP
MAINPUMP_DIR
J5
mainpump
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