Equation: C [capacitor] = A [area] x z [dielectric] / d [distance between plates]
JCL dielectric for ordinary PCB product: z = 4.5 Farad/meter
Distance between layers in JCL ordinary PBC product: d = 0.127 millimeters
Optimized area for capacitor [length² = A]: length = 3 centimeters
Final capacitor value: (0.003)² x 4.5 / 0.127 x (10)⁻³ -= 32 centifarad

Apply system analysis of main robotic body through ADC moderation, communication moderation, water sensor data, and temperature sensor data intake

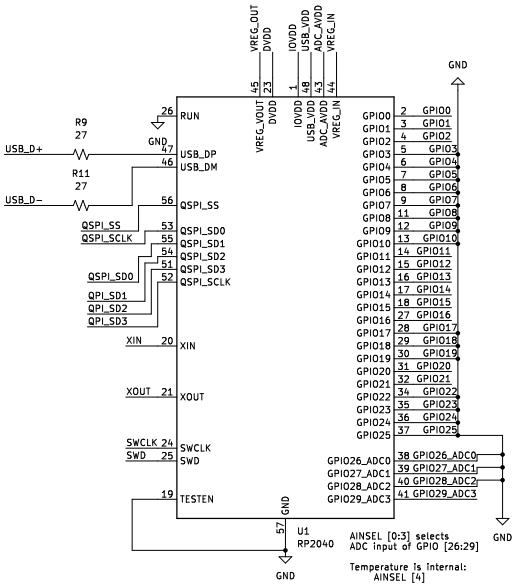
Temperature sensor to be utilized
From ADC channel 5 (AINSEL = 4)
From software portion of system

Resistors:
450mR (1)
27R (2)
120R (1)
330R (3)
1kR (2)
2.4kR (1)
10kR (1)
56kR (2)

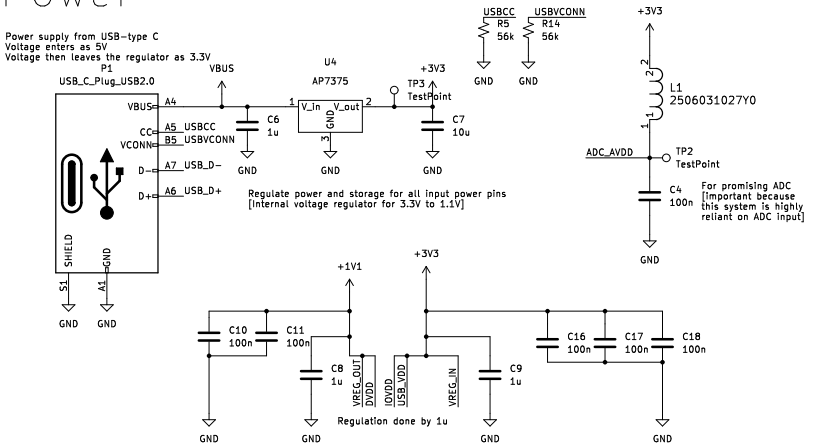
Have two CAN inputs and outputs to be able
to communicate with two devices (one channel and the other for emergencies)
then have input for status of system and idk something

Capacitors:
15pF (2)
100nF (10)
1uF (5)
10uF (1)

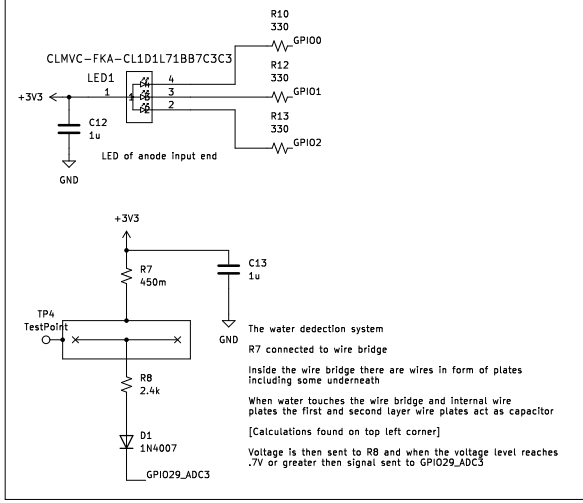
# RP2040 Microprocessor




# Power




# Embedded I/O systems




# RP2040 Enhancements