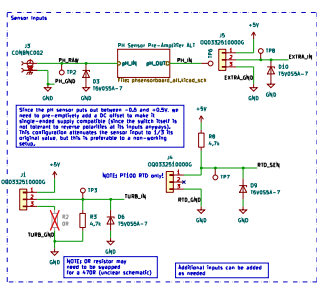
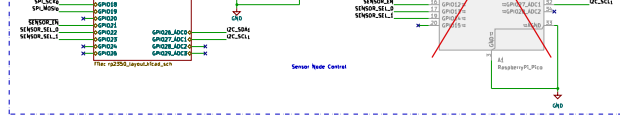
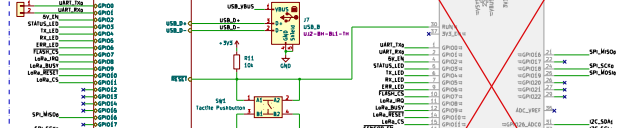
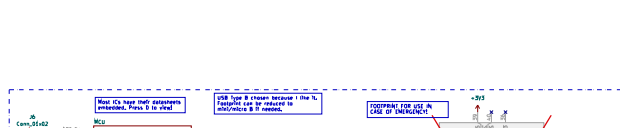
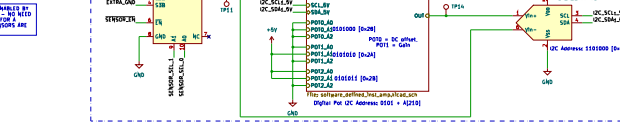
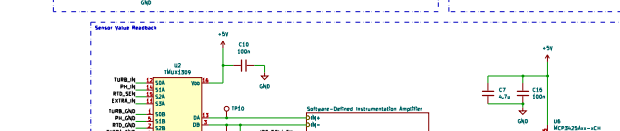
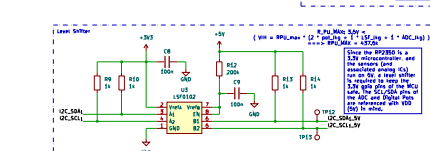
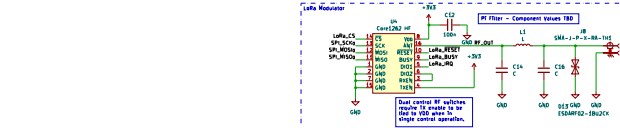
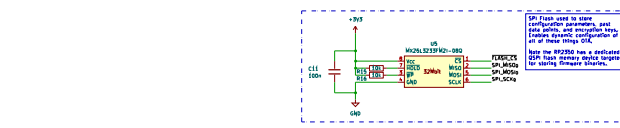


Back-Bias 3V Regulator - Head = 1.8V



SENSOR INPUTS/OUTPUTS ARE ALL ENABLED BY THE 5V IN PIN OF THE REGULATOR - NO NEED TO PUT OFF SUPPLY VOLTAGE TO THE SENSOR AND TURNED ON.

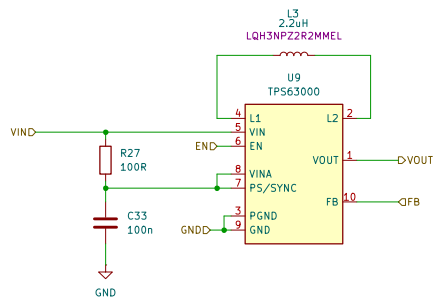


Maximum Current Throughput:

RP2350: -100mA max
sx1262: 118mA max In +22dBm TX Mode
+200mA headroom

Let's call it 500mA expected worst case input current. Most of the time we will be in sleep mode and never come close to this.

Energizer considers the useable life of their D-Cell batteries to be up to 0.8V, meaning a minimum expected input voltage of 2.4V is reasonable. To add some factor of safety, I'll do the calculations with 2V input:



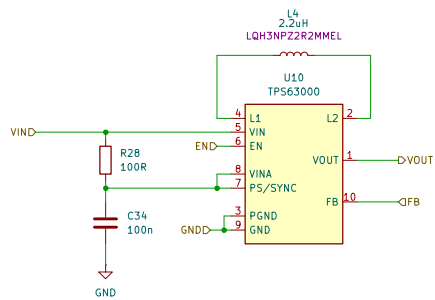
Power Supply

Maximum Current Throughput:

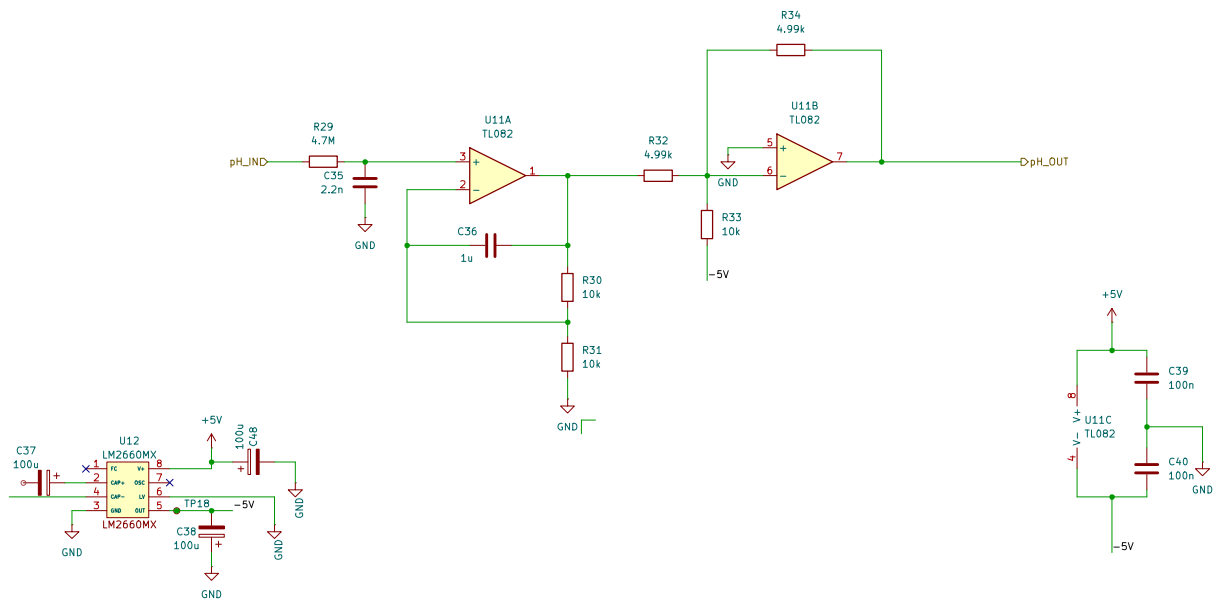
RP2350: -100mA max
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Power Supply



pH Sensor Pre-Amplifier

