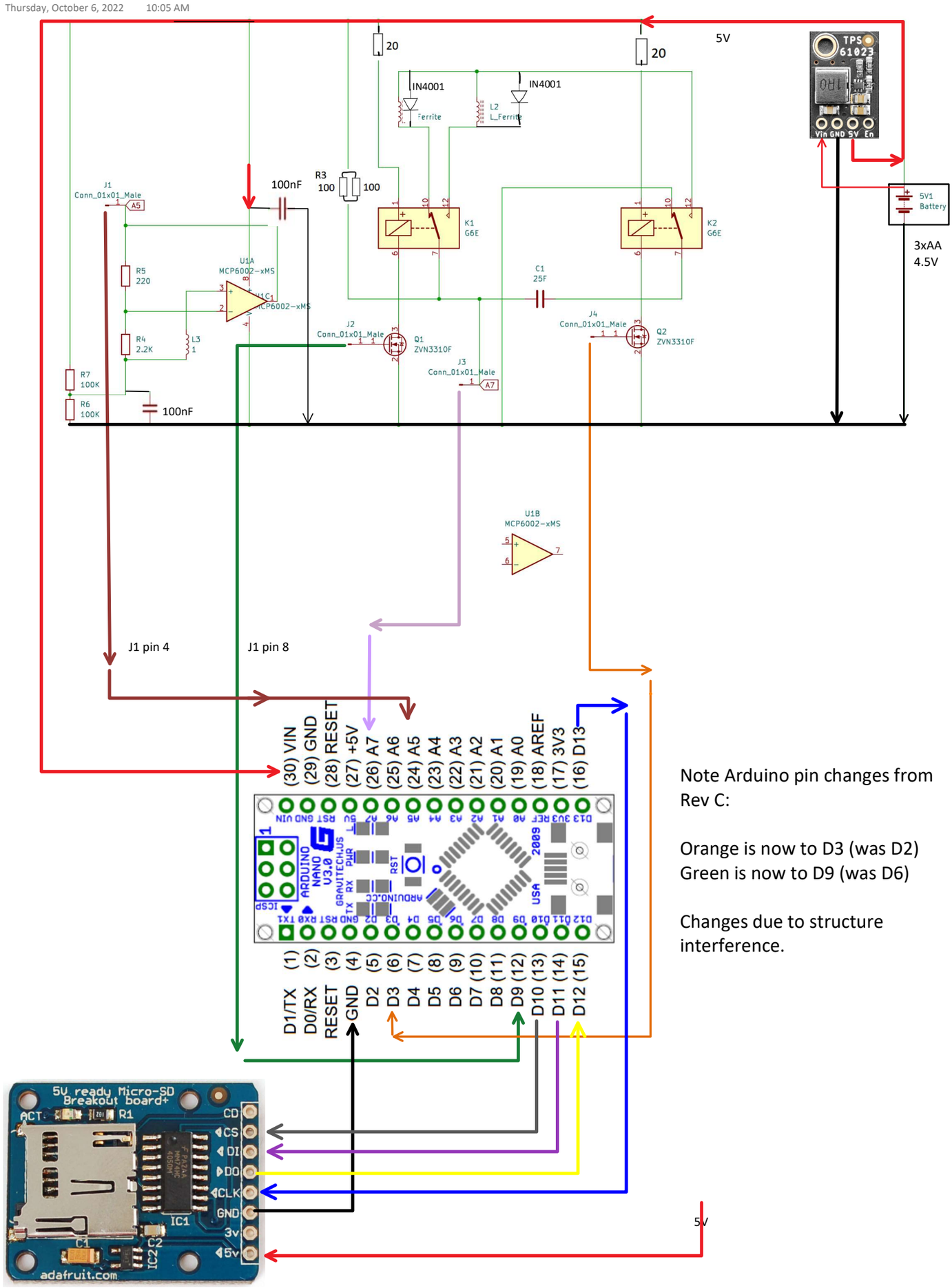
Ferrofluid Dan C Circuit - Rev D

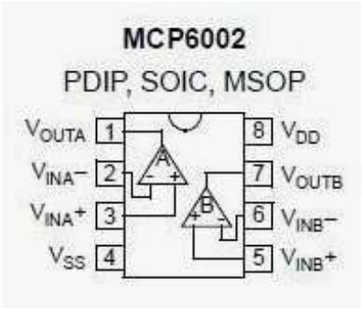
Thursday, October 6, 2022 10:05 AM



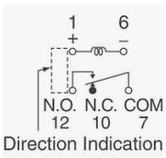
Note Arduino pin changes from Rev C:

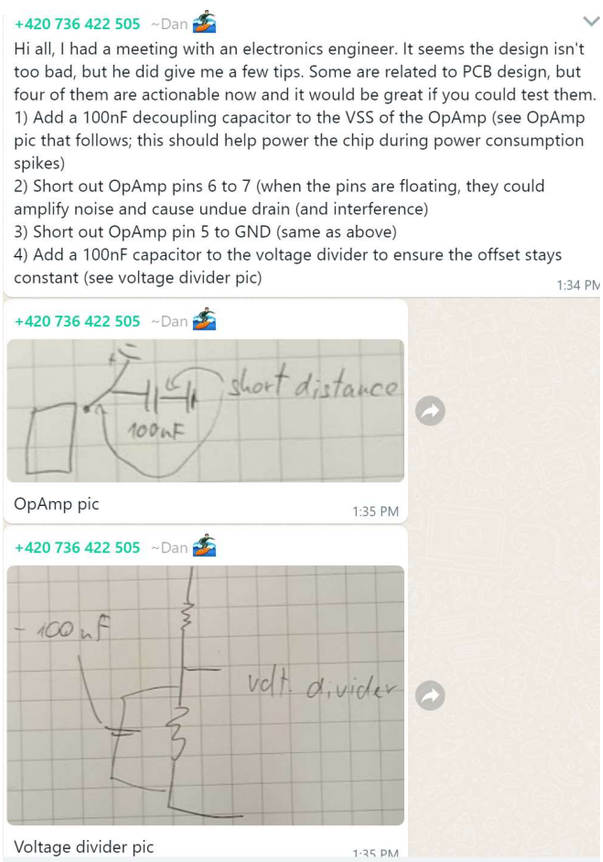
Orange is now to D3 (was D2)
Green is now to D9 (was D6)

Changes due to structure interference.



You can find the new SW at https://github.com/dcervenkov/ferrofluid It should be easier to understand and modify, and the messages that it prints to the serial interface should be clearer. It operates the two relays, charging for 10s, measuring the cap voltage (while discharging for 10 ms). When it reaches the target voltage (3V) it discharges for 1s taking 30 measurements of the sensing coil voltage with the delay and intervals from Mike. There is a provision to skip the charging (for testing). Every 10s pin 9 is read and if it is HIGH, the charging is aborted and measuring starts. To NOT use it, just connect it to ground. To use it connect it to a switch (I left some in the lab). Use a 10kΩ pull-down resistor. It doesn't write anything to SD. I'll add that…



DS1E-S-DC3V Panasonic Electric ...
digikey.com

Panasonic Signal DS1E Relays D...
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