1) Power Supply

Q	Current Solution	Problems
How to deal with current spike?	Directly from regulated battery source, with capacitor to prevent voltage spike	- Current spike causes dev board to reset if through the board, but under load (sensors) it is also unreliable, occasional resets
Is the above a good solution in terms of overall power efficiency? Would the SIM's built-in power save mode be sufficient?	Enter sleep: **AT+CSCLK=1**	
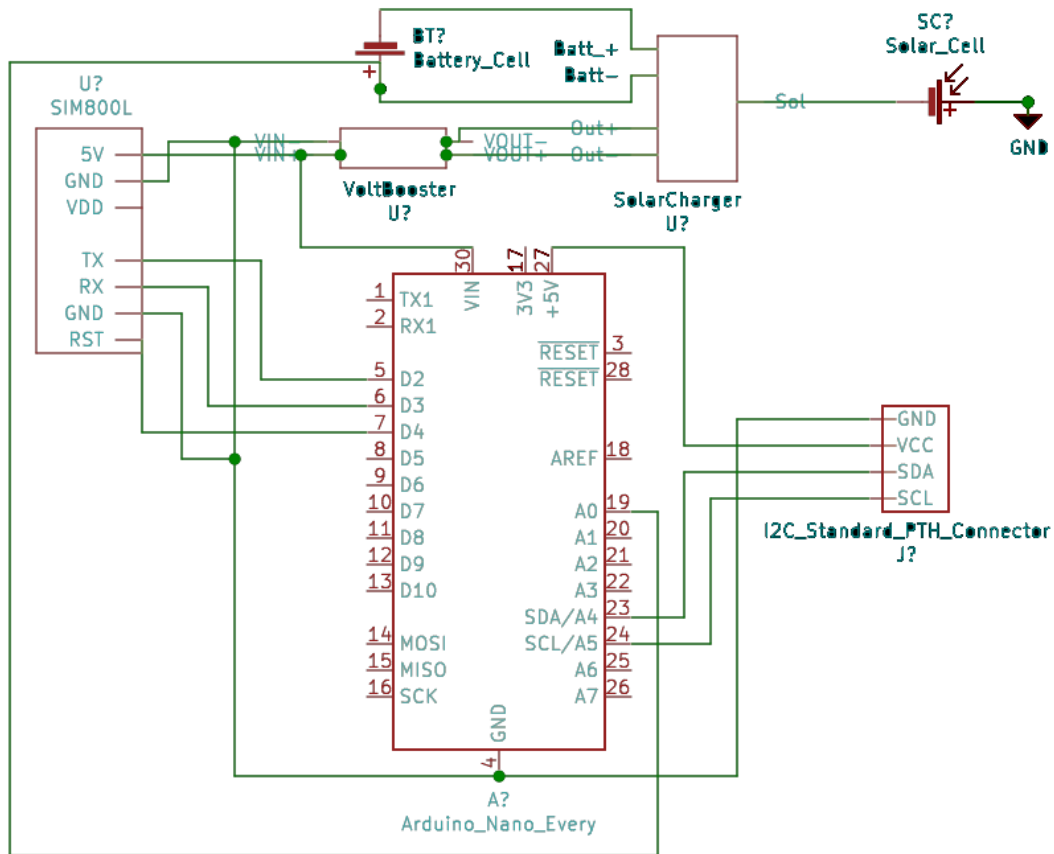
2) AT Communication

Q	Current Solution	Problems

Q	Current Solution	Problems
How is one supposed to read module responses?	read buffer	buffer is ussually empty after the first few at-command executions
USB Serial sometimes interferes with the module operation on SIM800C: has occassional delays between messages up to 20 min.	Remove USB serial after debugging, coded in SIM reset function	Seems to work, but is this the appropriate solution? Sometimes the module stops working and only resumes expected functionality when USBSerial is established again.
What is a robust initiation sequence of AT-Commands?	Minimal implementations found on the web, See textfile below	Works, but is not always reliable. i.e getting empty echo's and no responses. On the SIM800C: has a low "hit rate" for successfull database updates.
Is there any other ways to debug SIM communication?	Coding solution to capture SIM800 serial responses	No responses after a few executions and the Arduino Nano gets powered then via USB instead of battery.

📄 AT-seq 1.txt