

A

B

C

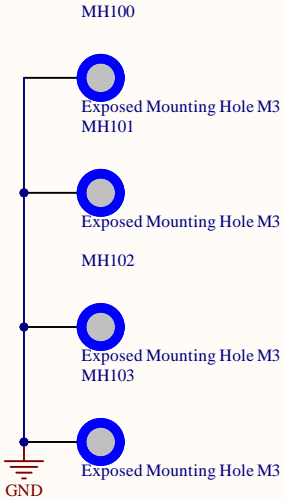
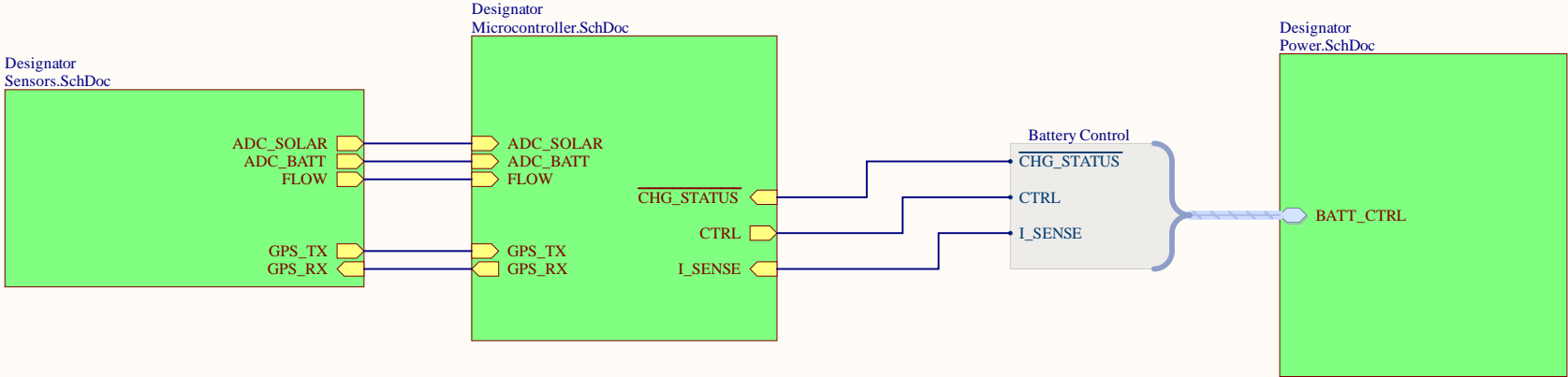
D

A

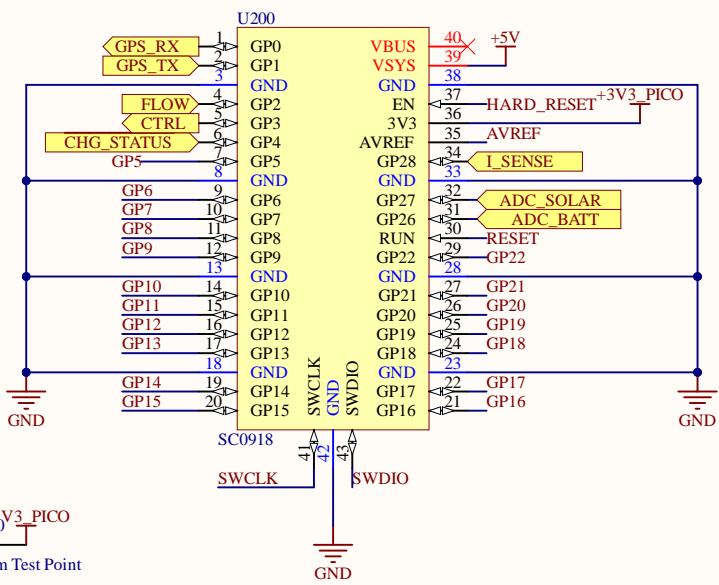
B

C

D



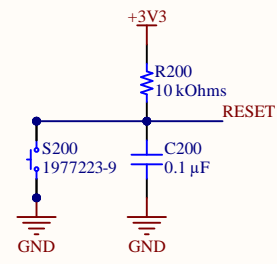
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Date:	10-28-2022	Sheet of
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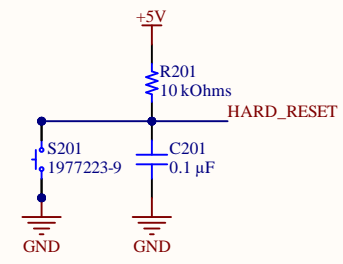
PICO has user LEDs for debugging

PICO is programmed through the USB connection, no buttons necessary

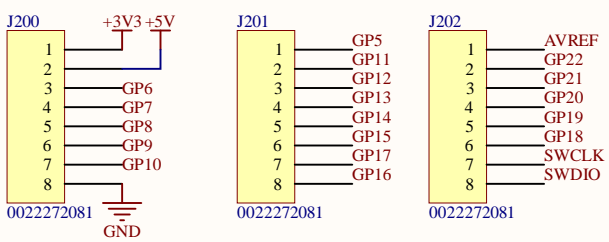
PICO regulates 5 to 3V3 on the board



MCU reset circuit

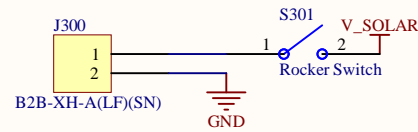


MCU hard reset circuit



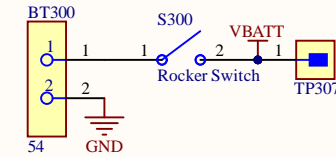
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Solar Panel Input 5V/0.5A



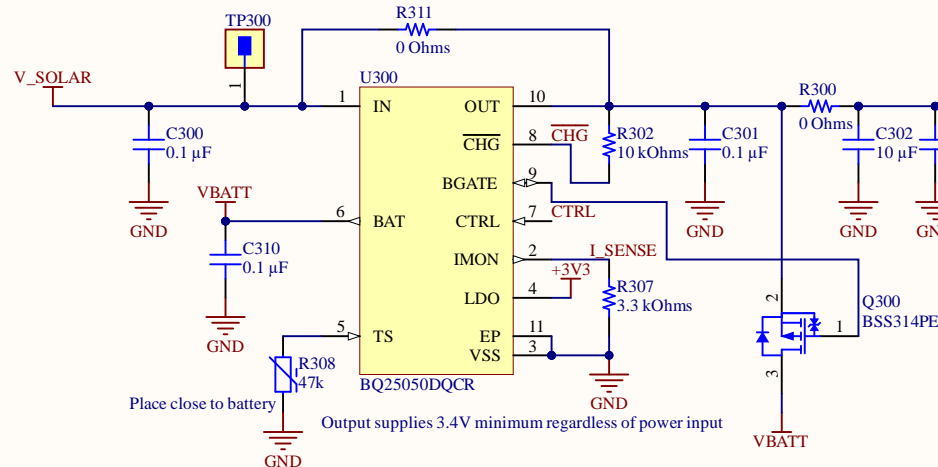
https://www.amazon.ca/gp/product/B074TYH68Z/ref=ox_sc_act_title_2?smid=A18M12GR6V2Z8F&psc=1

18650 Battery 3.6V 2500maH

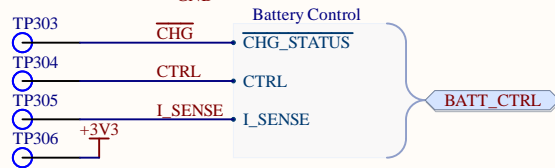


Note that BT1 requires 2 x 54 CNs

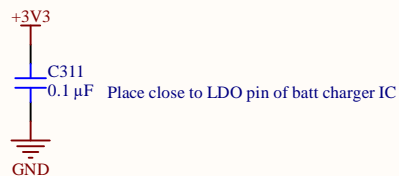
Battery Charger IC



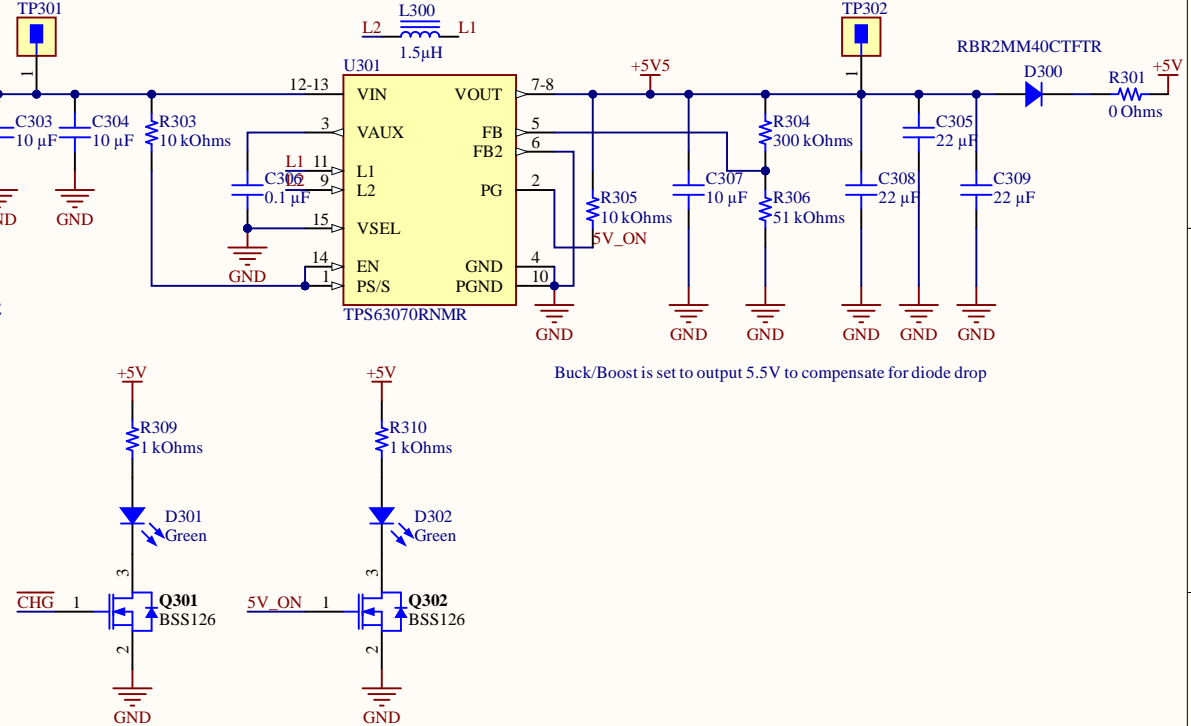
Output supplies 3.4V minimum regardless of power input



I_SENSE is an output voltage of 0-3V3 as current goes from 0-1A

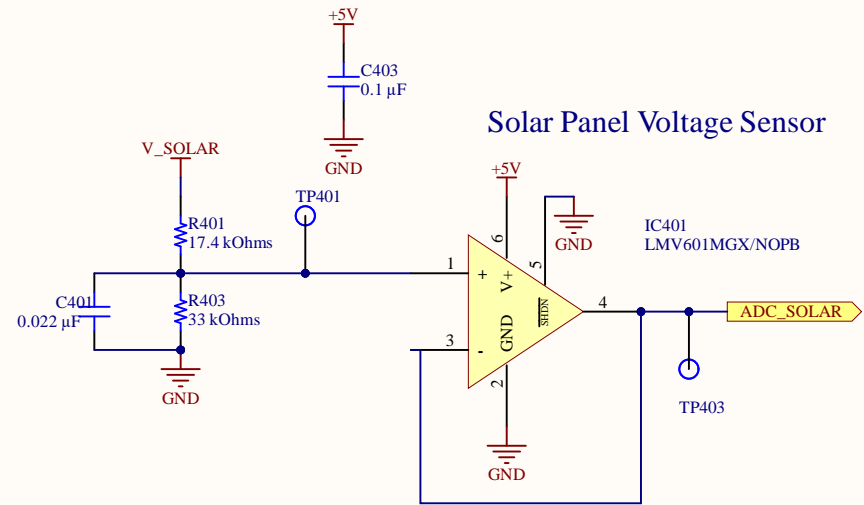
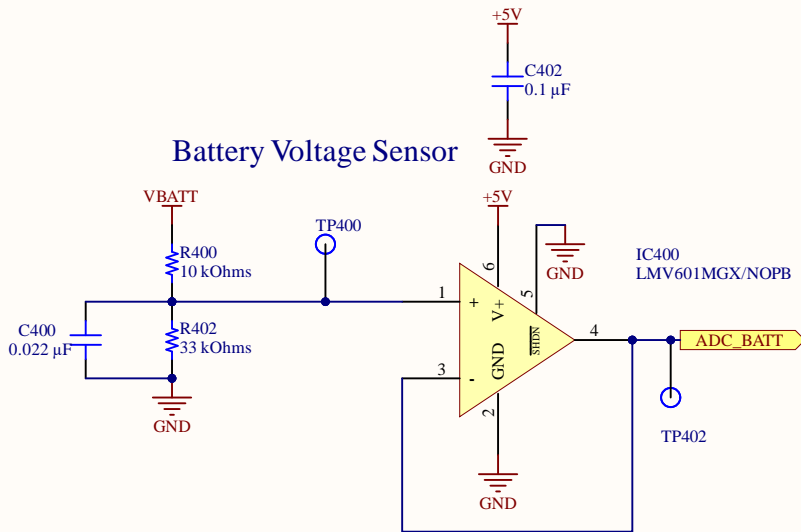


Buck-Boost 5V/3.6A Output

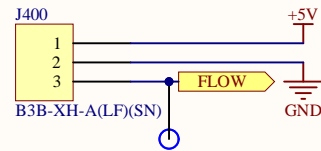


Buck/Boost is set to output 5.5V to compensate for diode drop

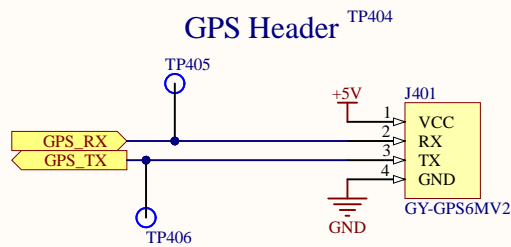
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Flow Sensor Input 5V/15mA



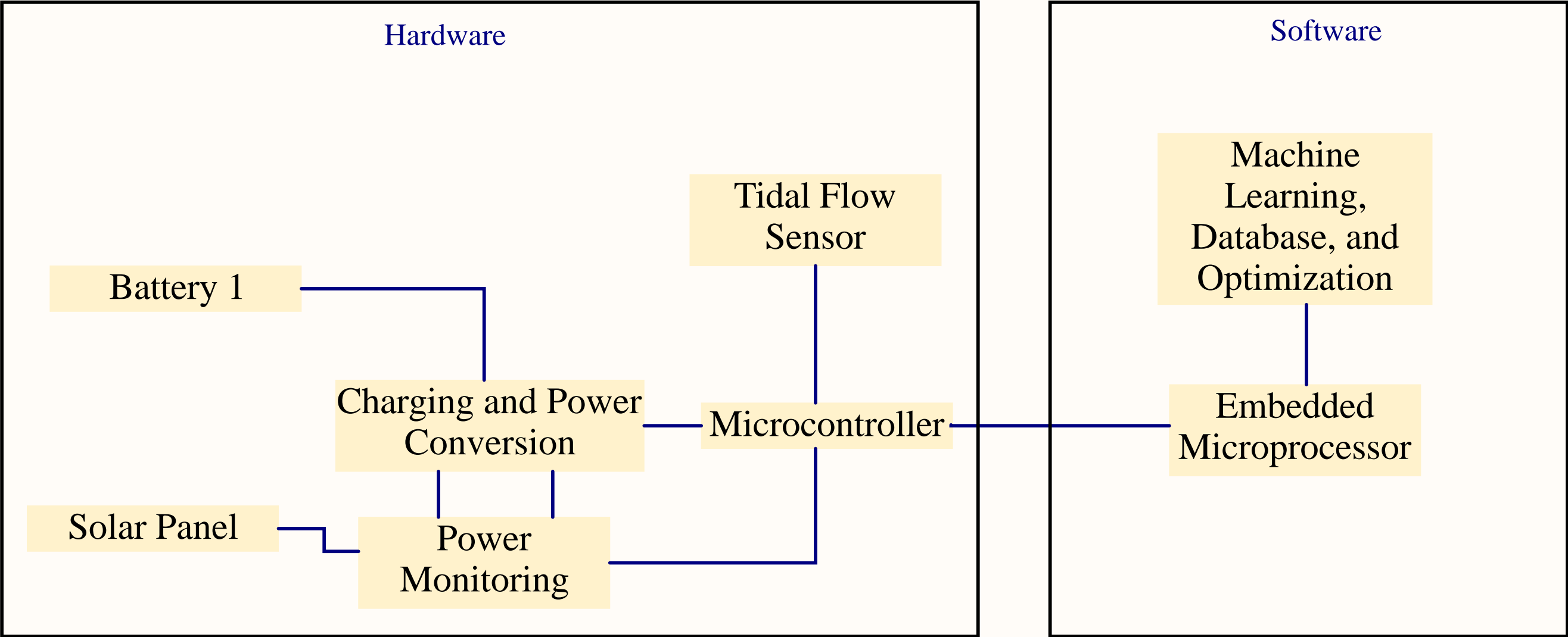
GPS Header



https://www.amazon.ca/gp/product/B07Y2PDVG8/ref=ox_sc_saved_title_7?smid=A2ZMOMMJWP6V1W&psc=1

Title		
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Date:	10-28-2022	Sheet of
File:	C:\Intelligent Tidal Energy Monitoring System\Intensors.SchDoc	

REVISION	DESCRIPTION	DATE	APPROVED



APPROVALS		DATE		PROJECT		Altium	
ENG: *						*	
DSN: *				PROJECT REVISION:		DOCUMENT REVISION:	
CHK: *				TITLE		DESIGN ITEM:	
REFERENCE DOCUMENTS				*		2b36dd9e32587bc61ec4bdde77878bc9	
BOM:				SIZE		CAGE CODE	
ASSY DWG:		A3		DWG NO.		REV	
FAB DWG:							
PCB DWG:				SCALE:		FILE NAME	
				Block Diagram.SchDoc		SHEET 5 OF 5	