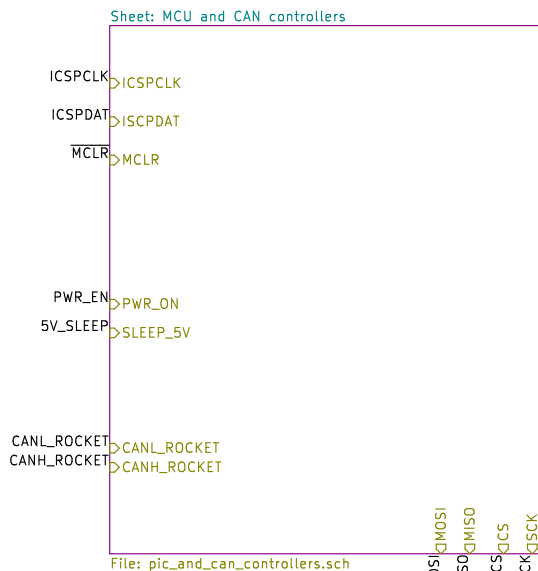
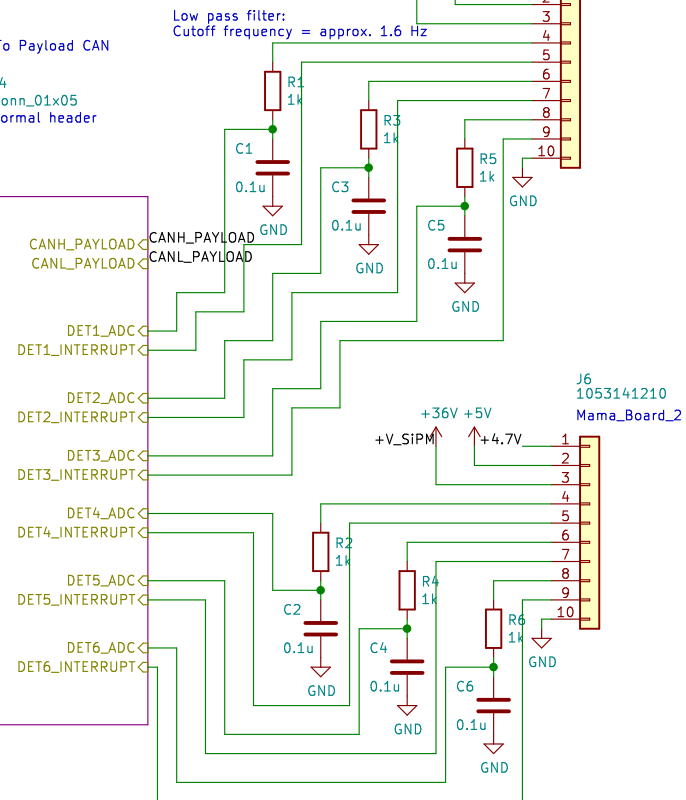
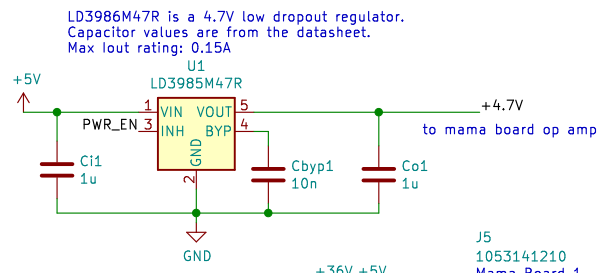
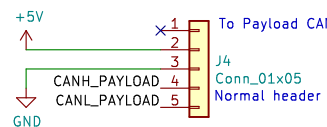
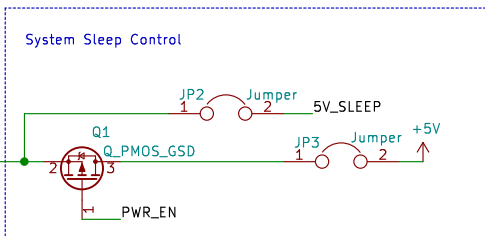
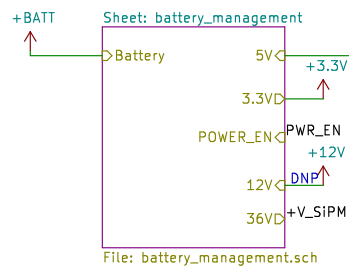


Not all pins support peripheral output, which is required for MOSI, SCK, and CANTX. RP20 and RP35-43 are the ones that support peripheral output



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File: payload2020_base_board.sch

Title:

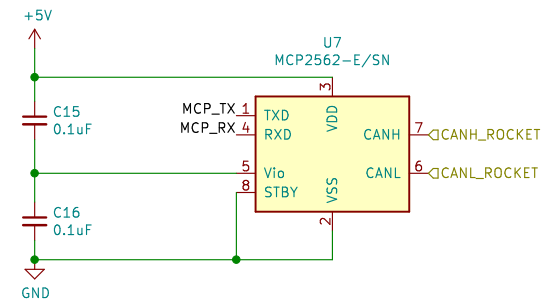
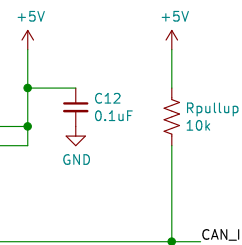
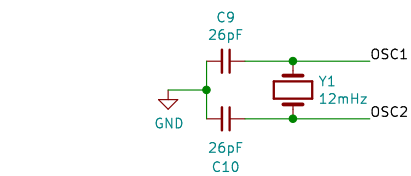
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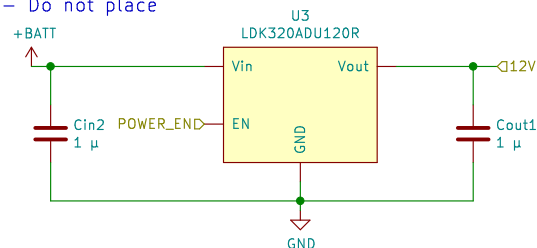


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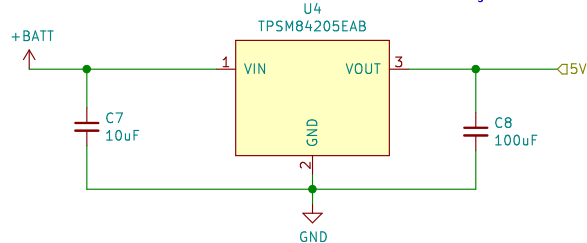
12V-16V
+BATT
BatteryD

DNP - Do not place

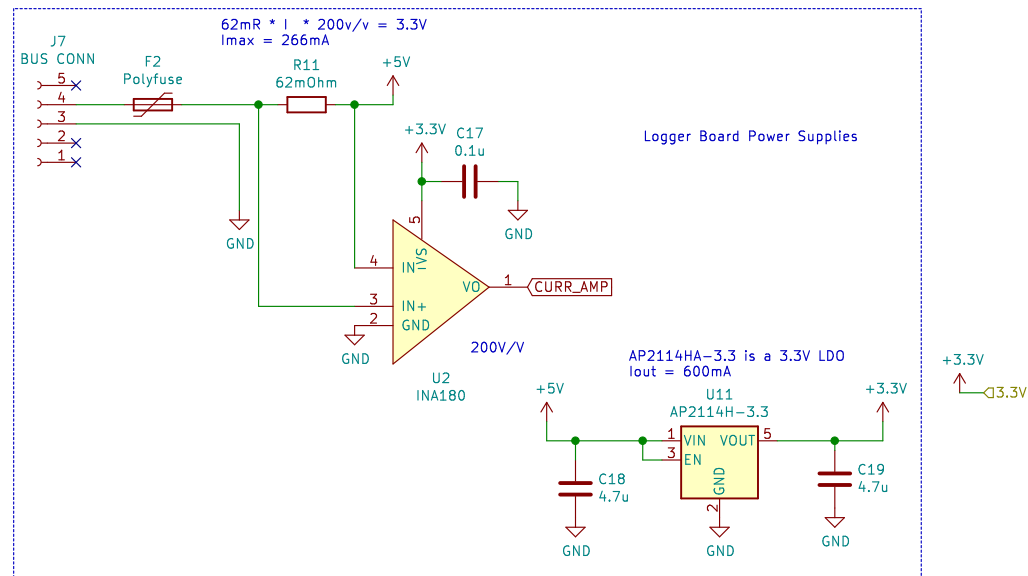
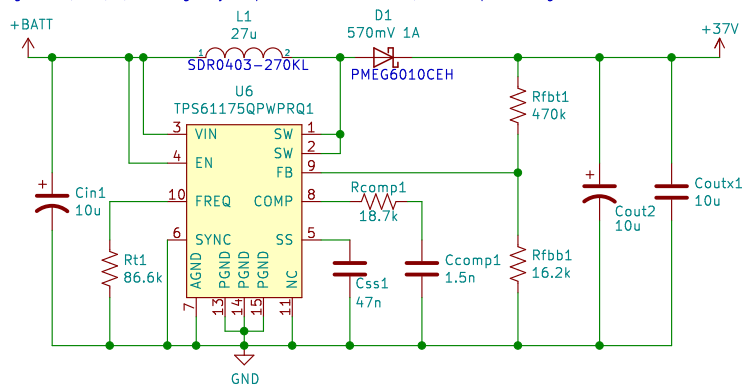
1uF capacitors as per datasheet directly (no calculations)
LDK320ADU120R is a 12V fixed-voltage regulator.
Max lout rating: 0.2A



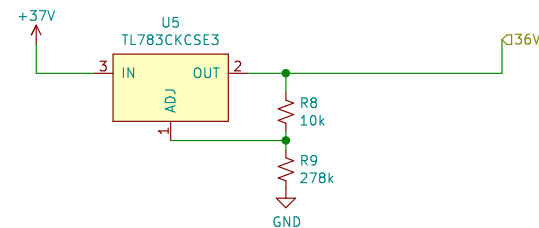
10uF and 100uF capacitors as per datasheet directly (no calculations)
TPSM84205 is a 5V fixed-voltage regulator.
Max lout rating: 1.5A



TPS61175 is a boost converter.
Max lout rating: 3A
Values are taken from WEBENCH power designer
<https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=72ECE7EF0AA4EE07>
PDF version:
<https://drive.google.com/file/d/1ktwurgH3BjmdXpc3J00zTu8Ilix18m34/view?usp=sharing>



TL783CKCSE3 is a low dropout regulator.
 $V_o = 1.25(1+R_2/R_1)$
lout = 0.7A



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