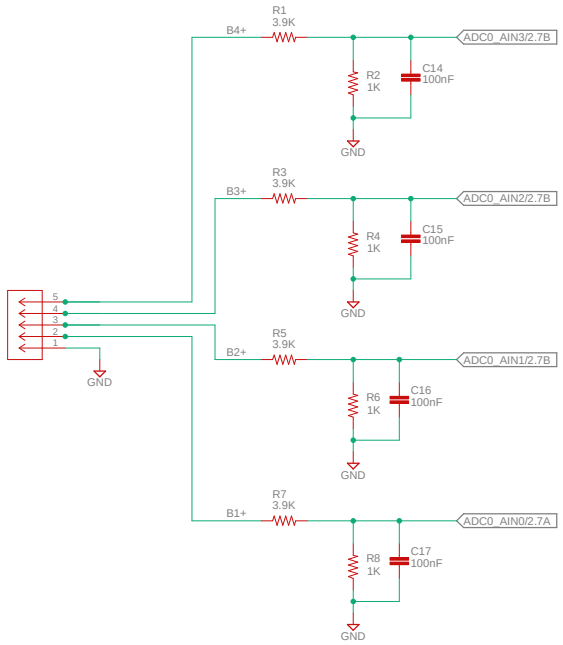
Terminal Block- battery voltages

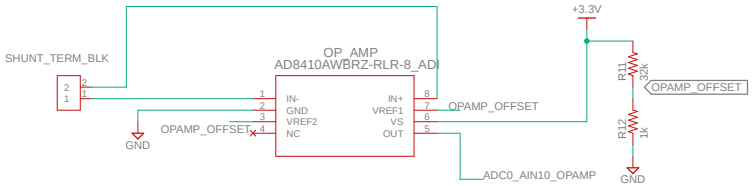
* Battery Cell inputs use divide by 5 voltage dividers and MCU maximum rating is 5V
* Input voltage cannot exceed +25V referenced to GND



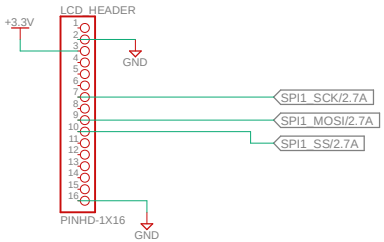
Battery Cell Input Terminal Blocks:

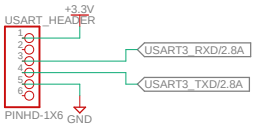
B4+ => RED
B3+ => YELLOW
B2+ => BLUE
B1+ => GREEN
B- => BLACK

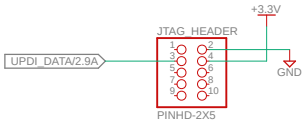
Shunt Terminal Block Inputs to
Current Sensing (low-side) Instrumentation Amplifier: with Gain of 20

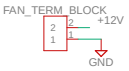


LCD header

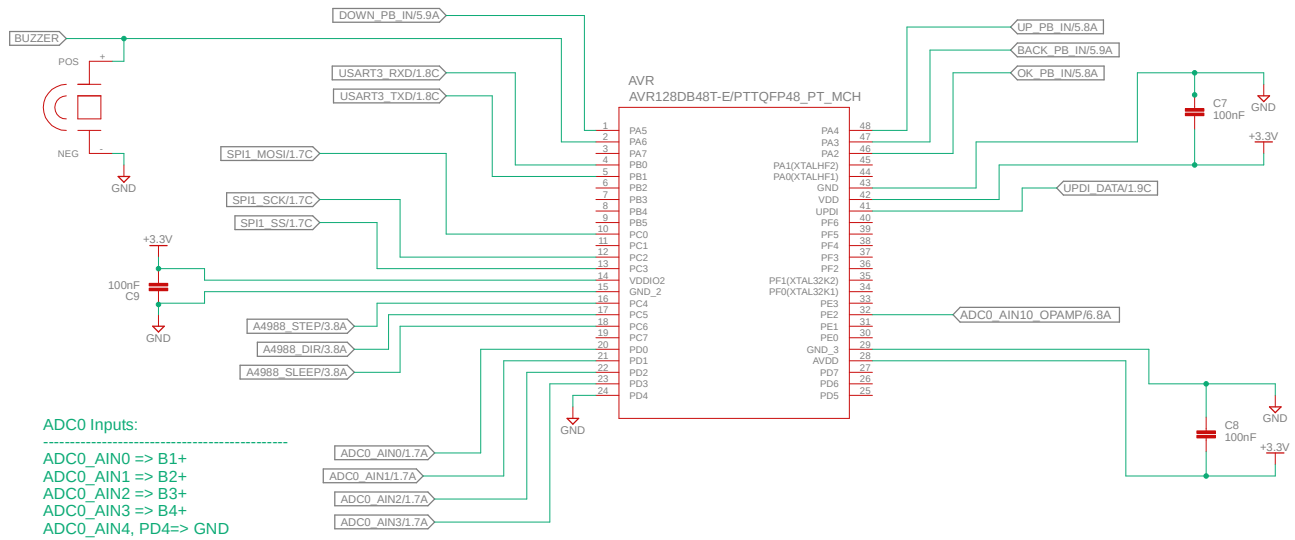








TITLE: Multicell Battery Load Analyzer pcb v90	
Document Number: Sense Wire Input Connections and Headers	REV:
Date: not saved!	Sheet: 1/6



TITLE:	Multicell Battery Load Analyzer pcb v90
Document Number: AVR128DB48 Microcontroller	REV:
Date: not saved!	Sheet: 2/6

JP4 Conncections to A4988 Carrier Board
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8 => ENABLE
7 => MS1
6 => MS2
5 => MS3
4 => RESET
3 => SLEEP
2 => STEP
1 => DIR

JP5 Conncections to A4988 Carrier Board
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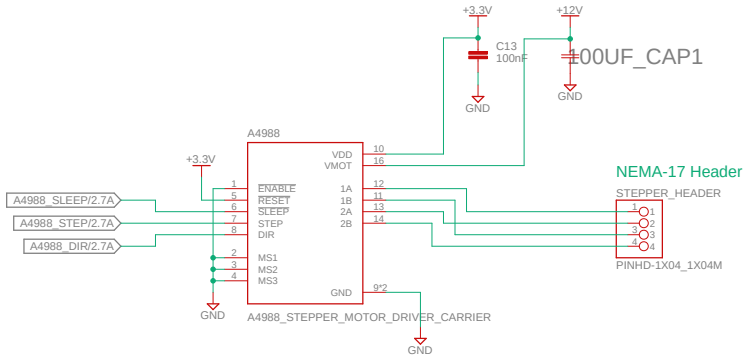
1 => VMOT
2 => GND
3 => 2B
4 => 2A
5 => 1A
6 => 1B
7 => VDD
8 => GND

Microstepping Resolution

MS1	MS2	MS3	=> Step Resolution
L	L	L	=> Full Step
H	L	L	=> 1/2 Step
L	H	L	=> 1/4 Step
H	H	L	=> 1/8 Step
H	H	H	=> 1/16 Step

SLEEP : LOW => SLEEP MODE, HIGH => NORMAL OPERATION
RESET : LOW => STEP IGNORED, HIGH => NORMAL OPERATION
ENABLE : LOW => NORMAL OPERATION, HIGH => FET OUTPUTS DISABLED

A4988 Stepper Driver Header



TITLE:	Multicell Battery Load Analyzer pcb v90
Document Number: A4988 Stepper Motor Driver	REV:
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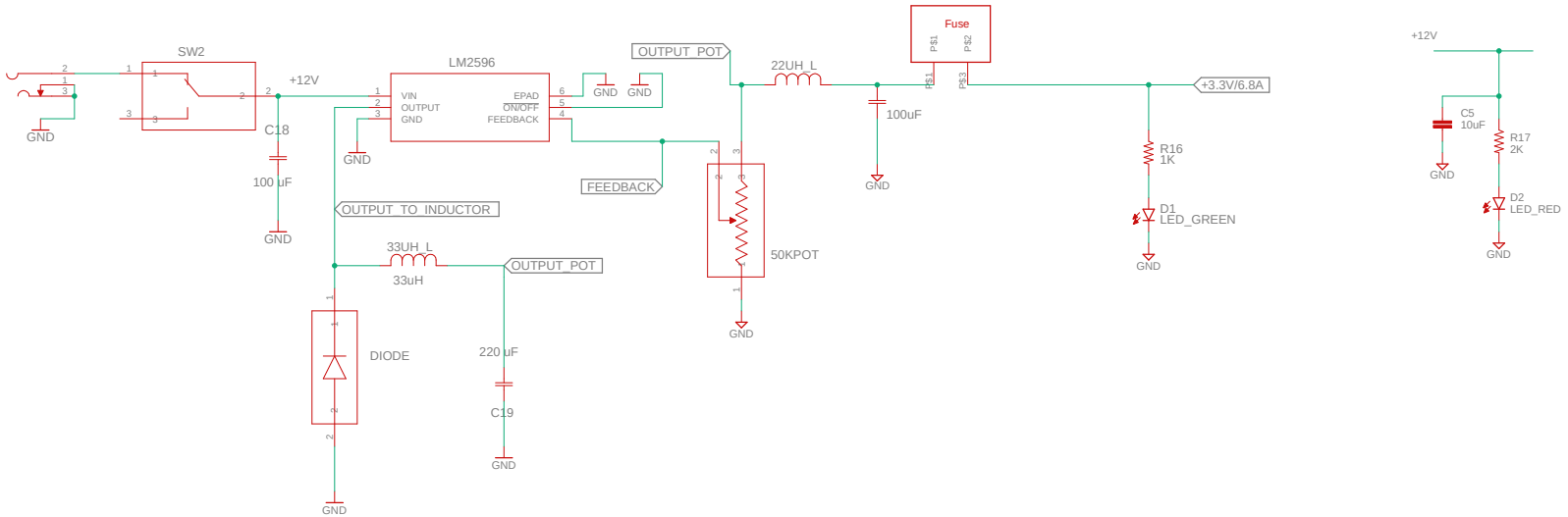
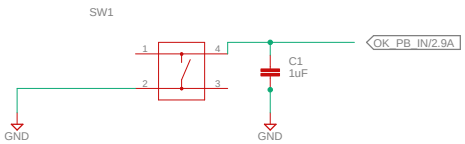
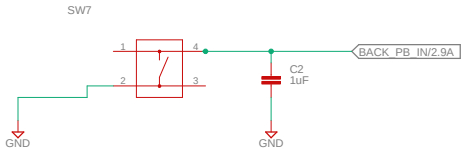


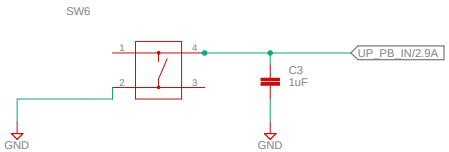
Power Supply Board Header

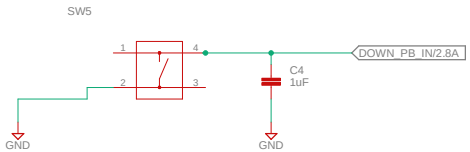
* +12V => Fan and Stepper Motor Power Supply: RED Status LED
* +3.3V => Microcontroller Power Supply: GREEN Status LED

TITLE:	Multicell Battery Load Analyzer pcb v90
Document Number: Power Supply Board	REV:
Date: not saved!	Sheet: 4/6









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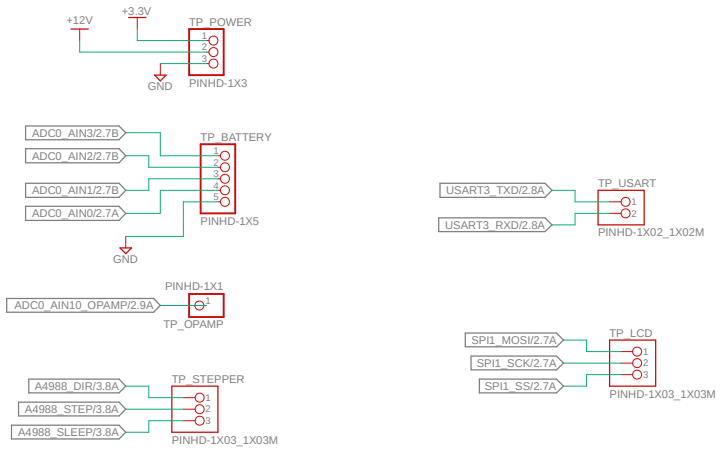

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