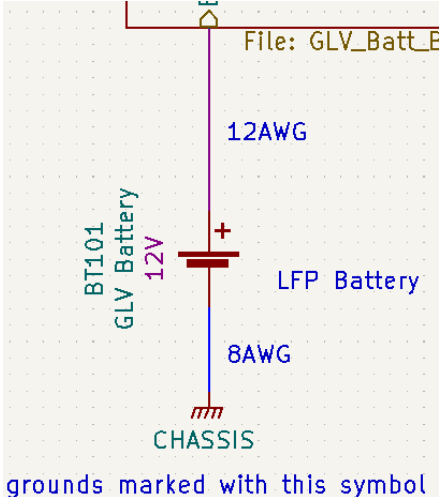


2023 Competition Schematic Review

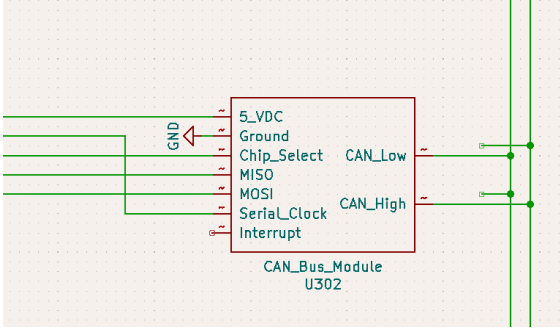
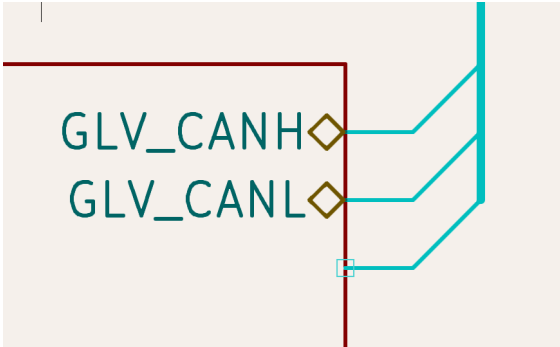
When:
Reviewers:

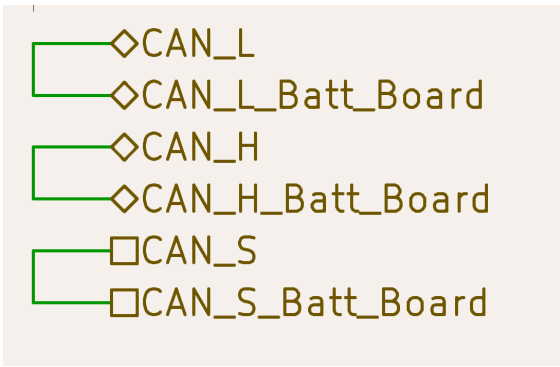
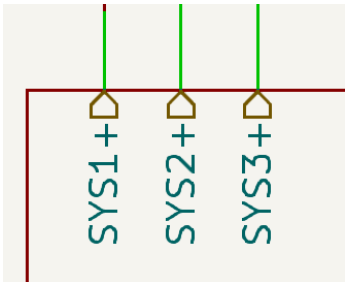
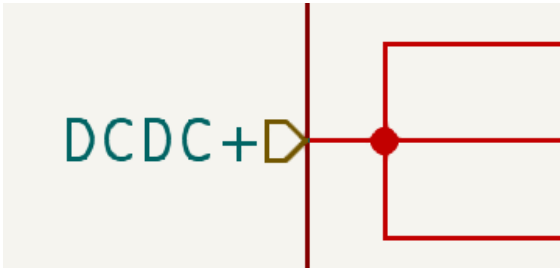
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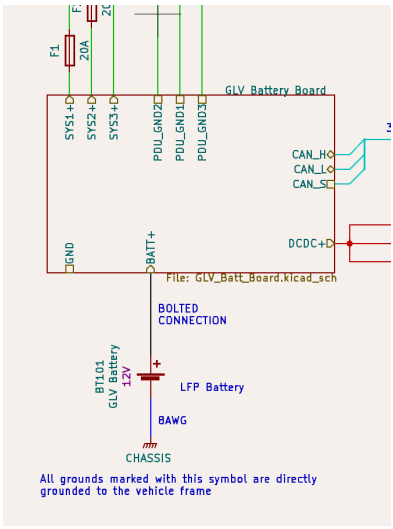
Schematic Questions:

Asker	Question	Answer
Walter Stado...	Is this actually 12AWG? 	No. Load switch directly is connected. We can just put like “Direct Connection” or “Bolted” Done
Walter Stado...	Are these wire sizes accurate?	I think so? Should double check but the stuff Zack did from LV Load switch is all 16AWG I left this all as 16 for now, even though technically it probably steps up to 14 at the fuses Yes I think listing the minimum is satisfactory

	Need to add a color for 16AWG, and update the corresponding wires. Any particular rhyme or reason to what color is assigned to each AWG?	No reason. Just whatever is visible 💡
	Should we add a note to explain the rework to the radiator fans? Not sure if that would even go in KiCAD	No I think we can gloss over it for now. Also that would be an Altium thing, not KiCAD 💡
	Where should we be officially recording updates to ATO fuse sizes?	We'll need to update ESF2 💡
	Technically CAN to the LV Load switch board is routed through the PDU. Do we care enough to accurately reflect that?	Yes we should do it properly Done
	Should we include PTT wiring, and/or the full comms harness?	Yes, but should be simply a lil Net label/port where we say "to Radio" Already done
	We're not actually using a separate CAN module for MPU or TPU, right?	Yeah they're built in now Fixed

		
	I added the dashboard TSAL light, but not sure where it's receiving power from	From battbox. TSAL PCB outputs a "sense" signal Might let you handle this to make sure it gets done properly
	Still need to add in-line fuses between load switch and DC-DC	There should not be in lines there. The V2 DCDC added fuses on each line I think there's still 3 fuses missing, but not 100% sure where they go
	Should the third wire be represented here if there isn't a shield connection? 	
	Is this stupid? Picture from inside the PDU schematic	Nah that's fine. Technically accurate although PDU page should have a big disclaimer to see Altium

	 Diagram showing CAN bus connections: - CAN_L - CAN_L_Batt_Board - CAN_H - CAN_H_Batt_Board - CAN_S - CAN_S_Batt_Board	
	Which of these connections is preferred?   Diagram showing connections for SYS1+, SYS2+, and SYS3+ to a common ground. Diagram showing a DCDC+ connection to a common ground.	? Oh does it have both? If both I believe we are just doing the 3x since that's how we have it coming out of the board and it shows fusing Oh nvm, still don't know what you're asking
	The grounding for the load switch board is definitely wrong, since it doesn't show a connection to the (-) battery terminal. I assume we should remove the chassis ground at the battery, hook that up to the board instead, and then have that disconnected GND pin go to chassis	

	 GLV Battery Board File: GLV_Batt_Board.kicad_sch BT101 GLV Battery 12V BOLTED CONNECTION LFP Battery BAWG CHASSIS All grounds marked with this symbol are directly grounded to the vehicle frame	
	Not thrilled with how close the new 18 AWG wire color is to the default green, but we're kinda running out of distinguishable colors	

Follow-up / Action Items:

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