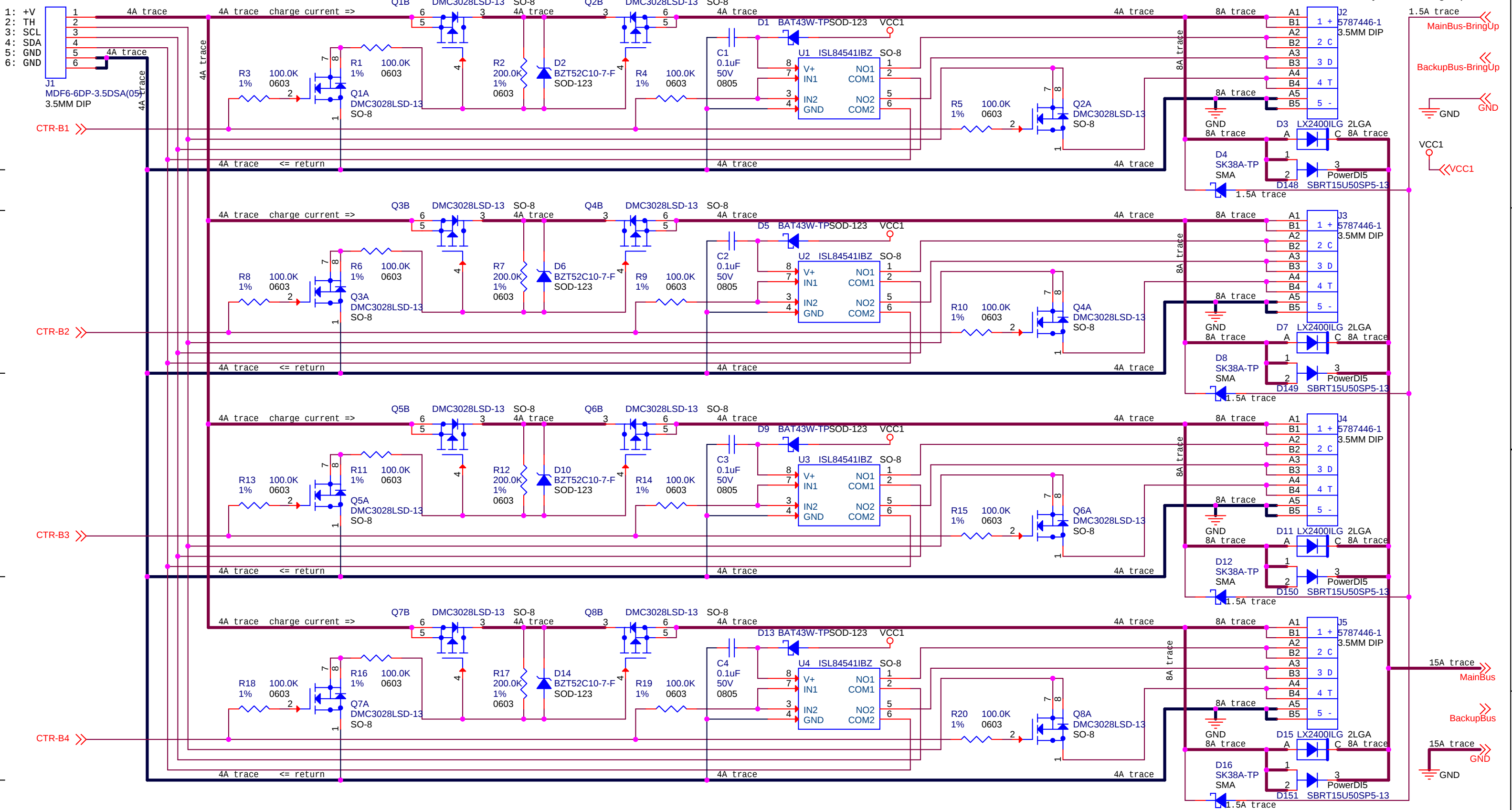


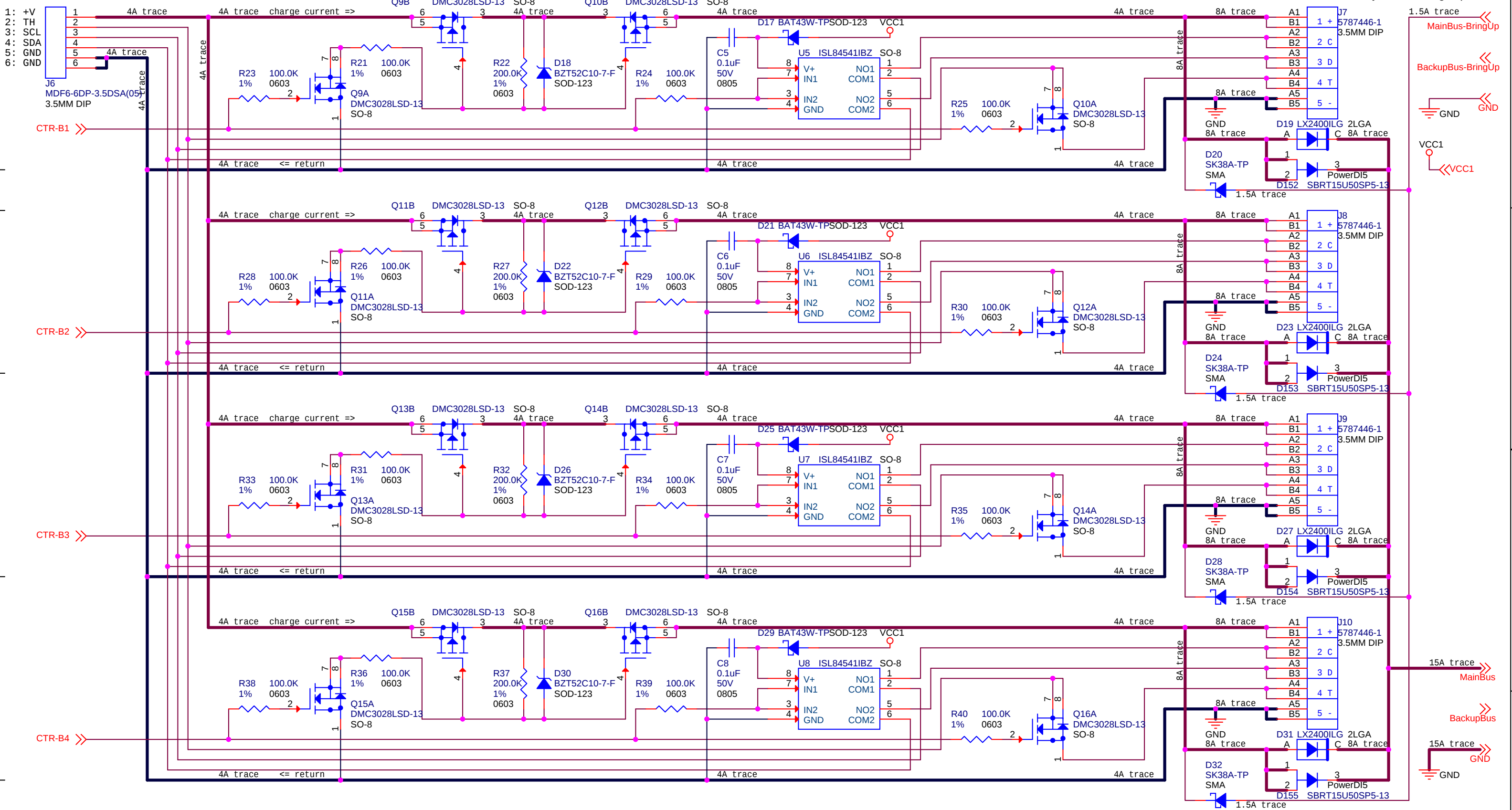
Charge Port
Ocean Server XP-08SR

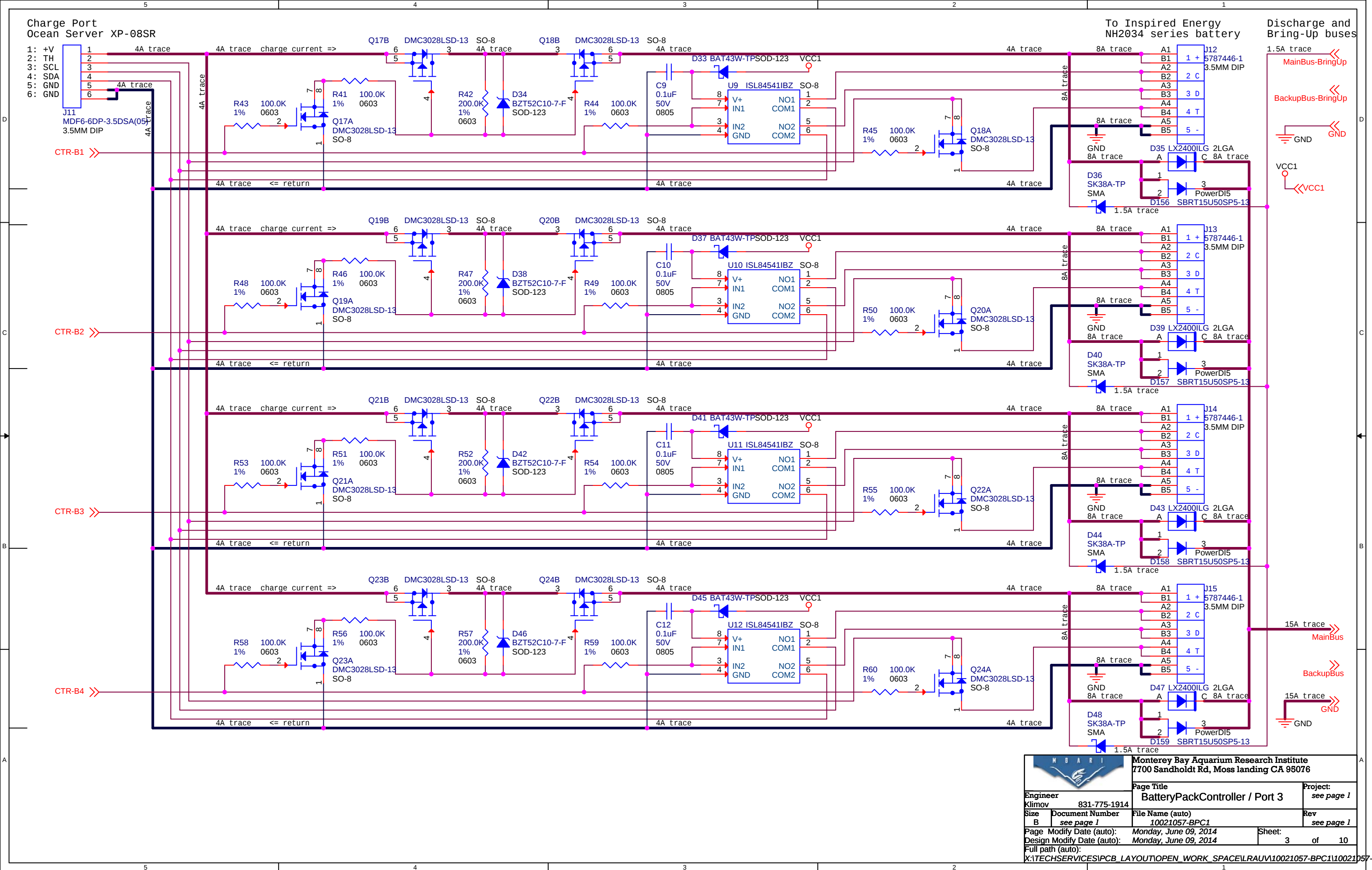


RevA(06/09/2014): Initial Release

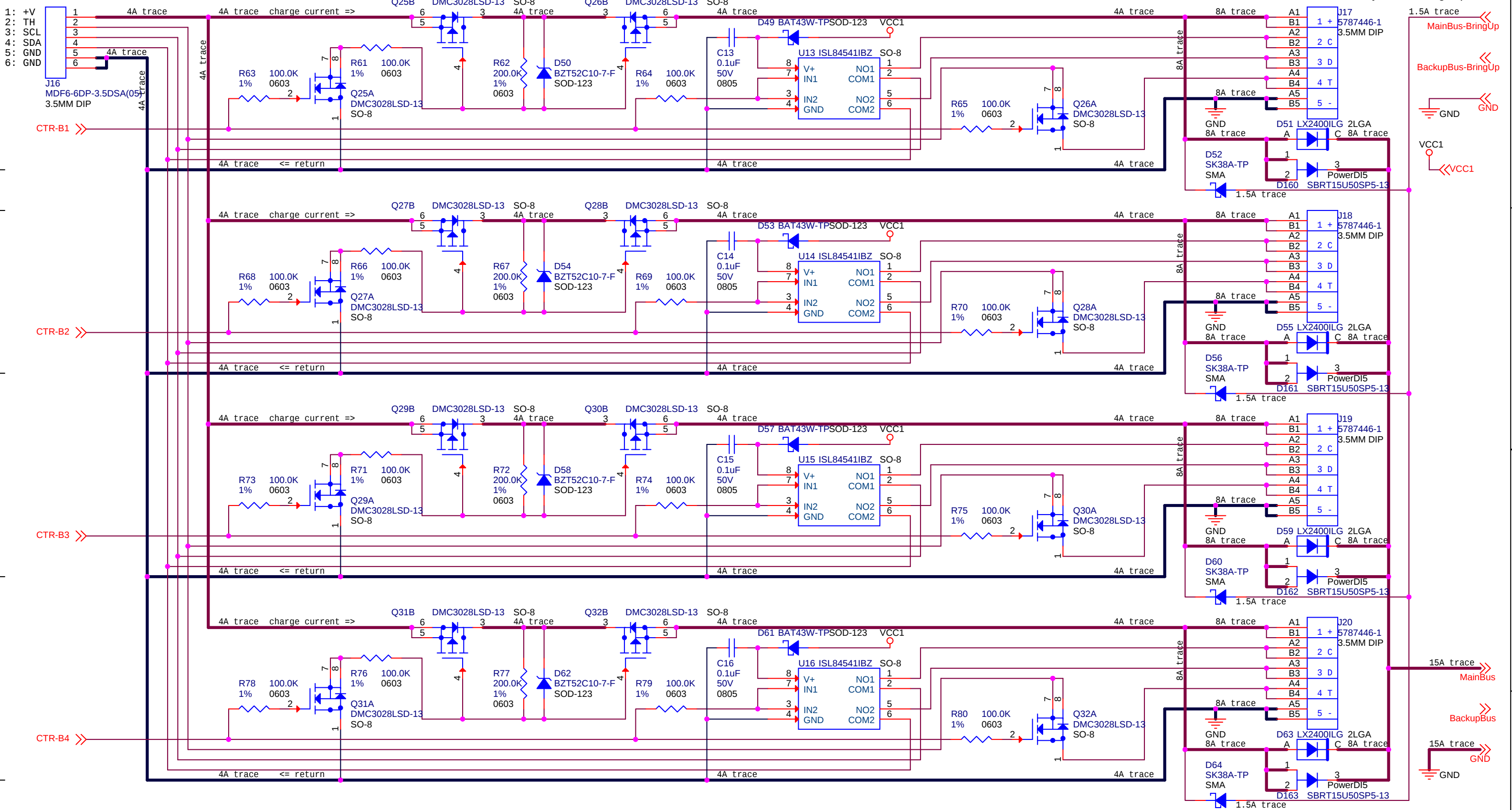
		Monterey Bay Aquarium Research Institute 7700 Sandholdt Rd, Moss landing CA 95076	
Engineer Klimov	831-775-1914	Page Title BatteryPackController / Port 1	Project: 901400
Size B	Doc. or Part Number <Doc>	File Name (auto) 10021057-BPC1	Rev A
Page Modify Date (auto): Design Modify Date (auto):		Monday, June 09, 2014 Monday, June 09, 2014	Sheet: 1 of 10
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Charge Port
Ocean Server XP-08SR

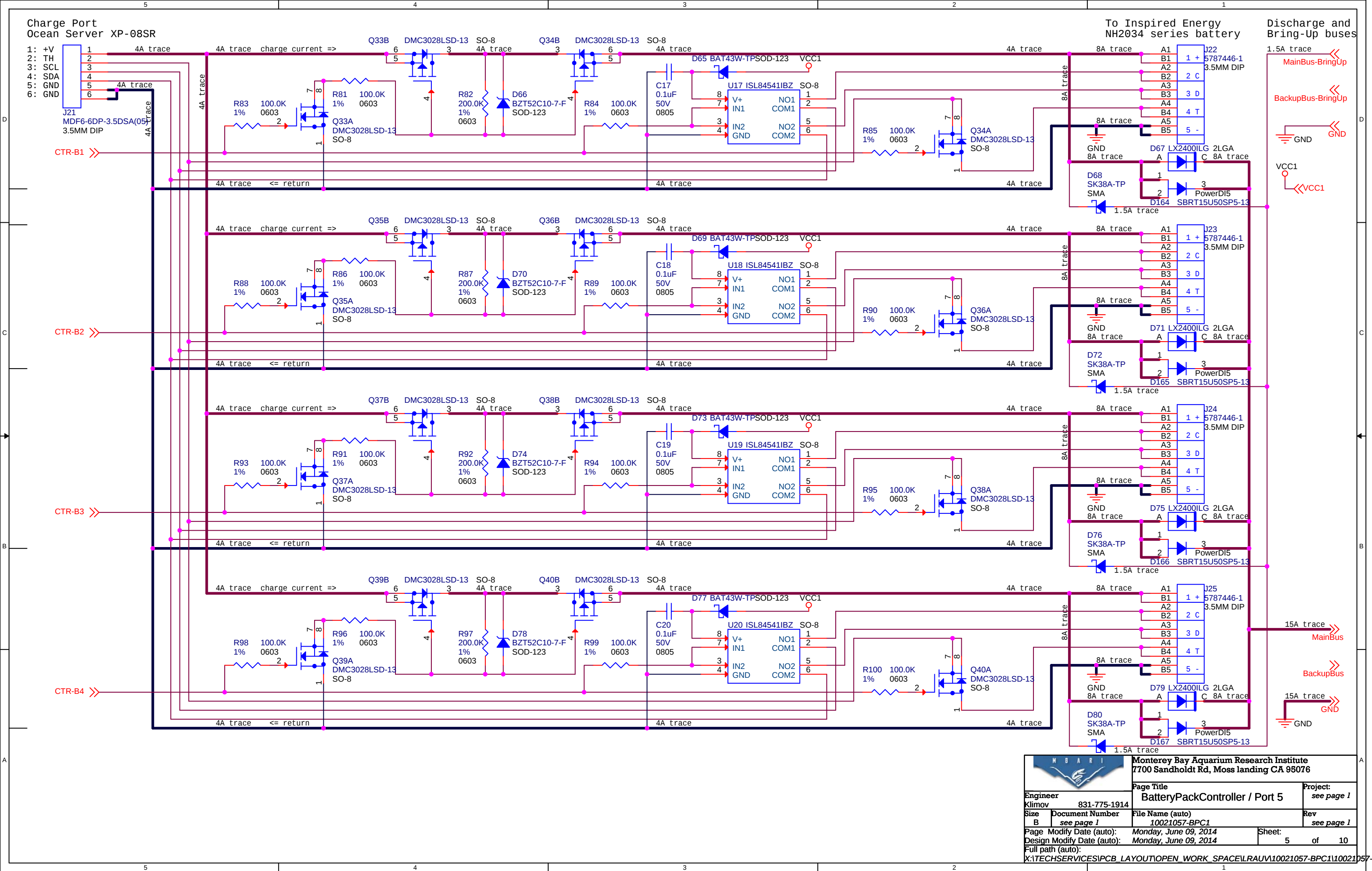




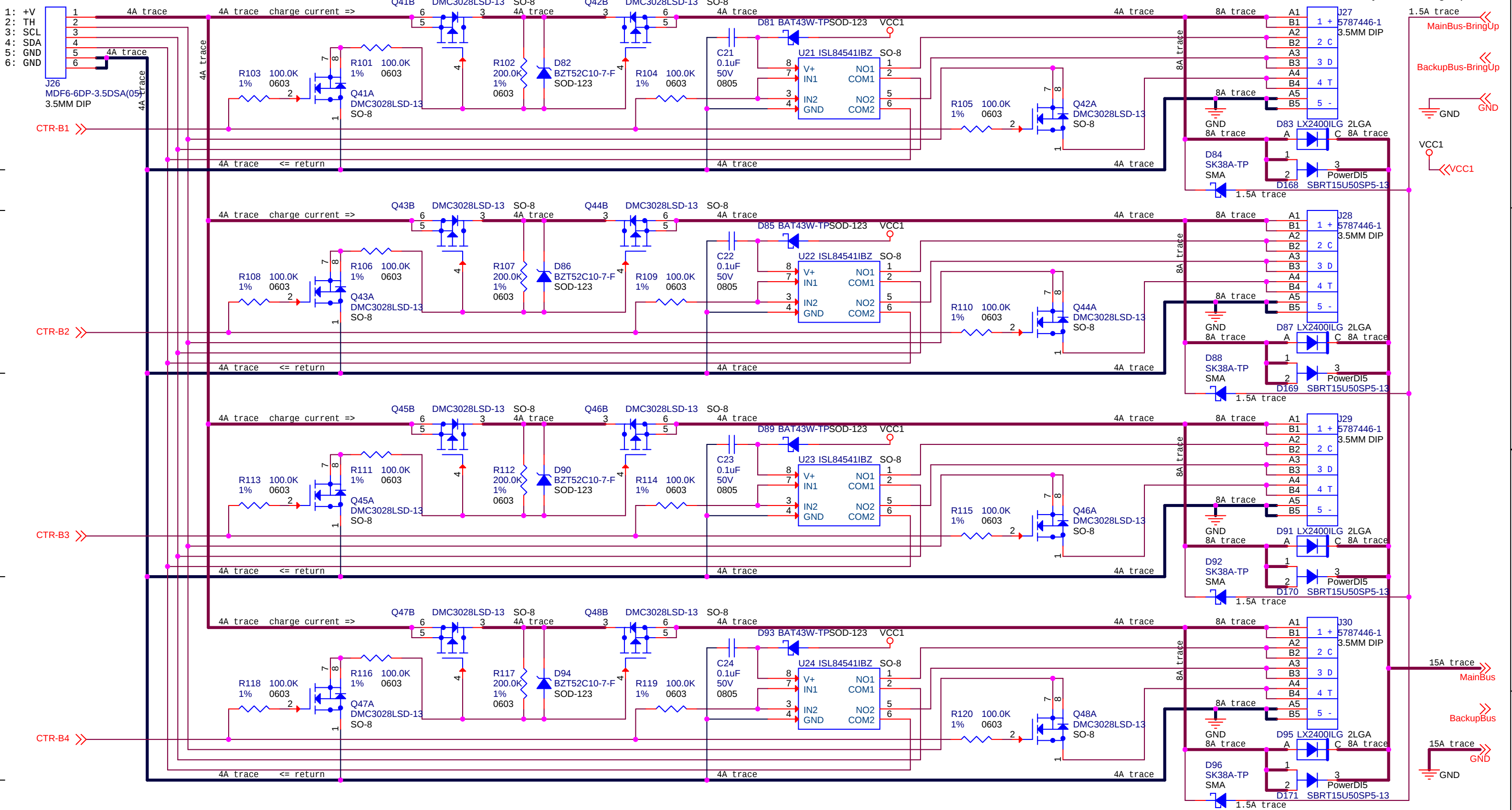
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Ocean Server XP-08SR

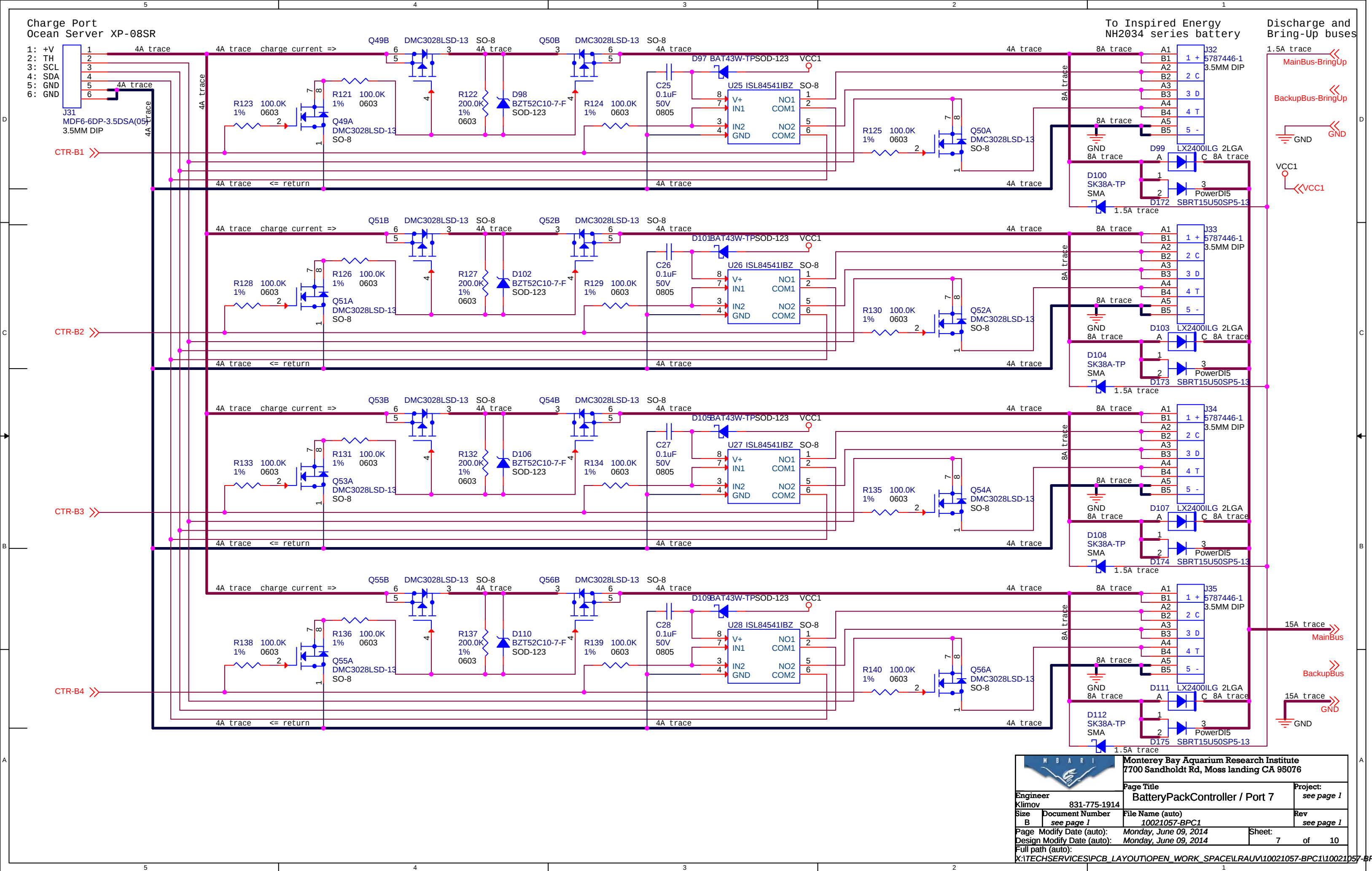


		Monterey Bay Aquarium Research Institute 7700 Sandholdt Rd, Moss landing CA 95076	
Engineer Klimov	831-775-1914	Page Title BatteryPackController / Port 4	Project: see page 1
Size B	Document Number see page 1	File Name (auto) 10021057-BPC1	Rev see page 1
Page Modify Date (auto): Design Modify Date (auto):		Monday, June 09, 2014 Monday, June 09, 2014	Sheet: 4 of 10
Full path (auto): X:\TECHSERVICES\PCB_LAYOUT\OPEN_WORK_SPACE\ILRAUV\10021057-BPC1\10021057-E			

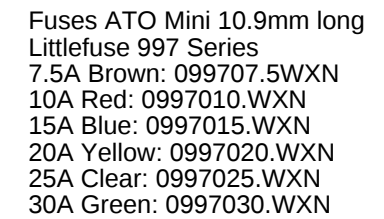


Charge Port
Ocean Server XP-08SR





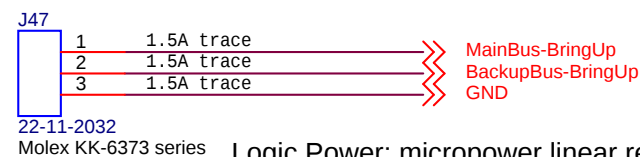
To Ocean Server XP-08SR



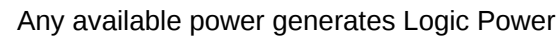
Littlefuse 997 Series time-current specs:

% current		Opening Time min/ max
110%		360000s / INF
135%		0.75s / 600sec
200%		0.15 s/ 5s
350%		0.080s / 0.250s
600%		0.030s / 0.100s

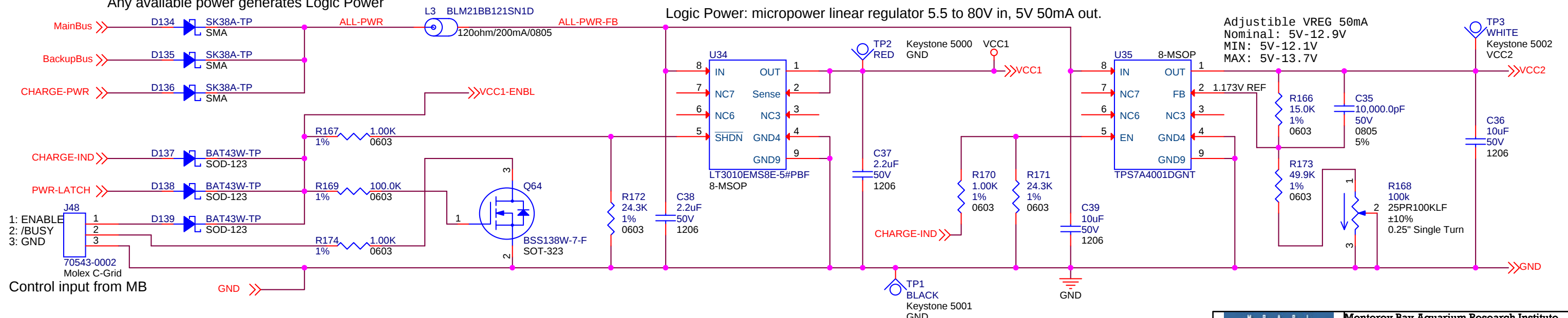
RS-232 to Ocean Server



Logic Power: micropower linear regulator 5.5 to 80V in, 5V 50mA out.



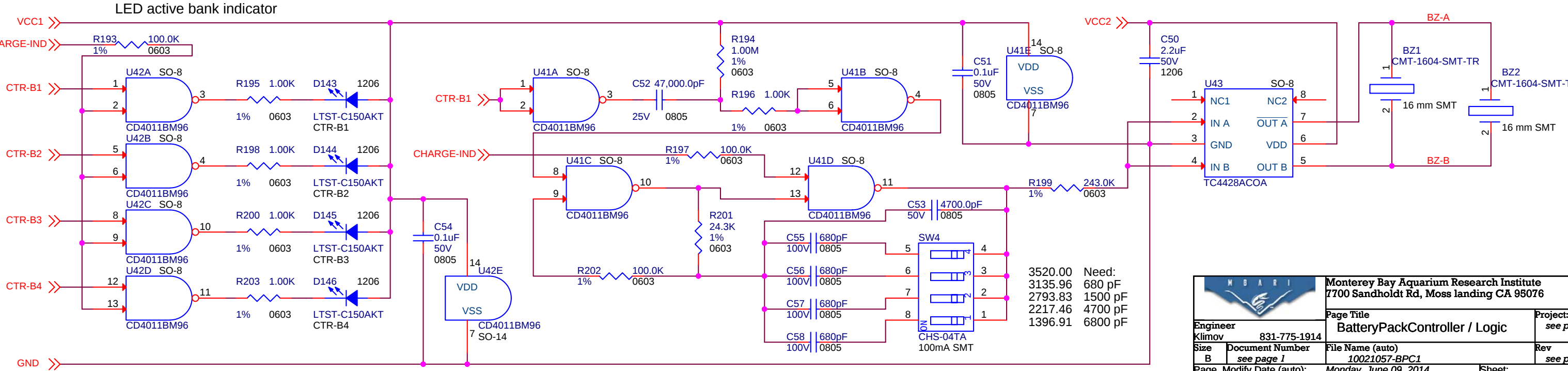
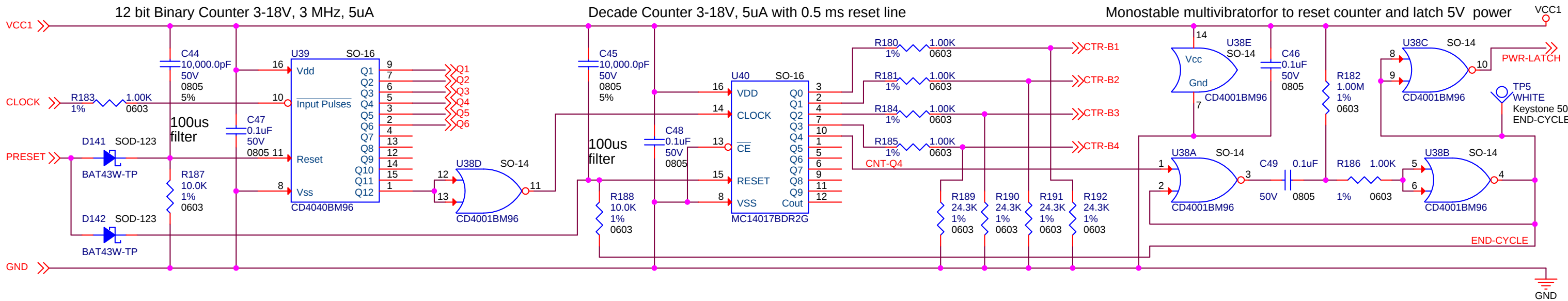
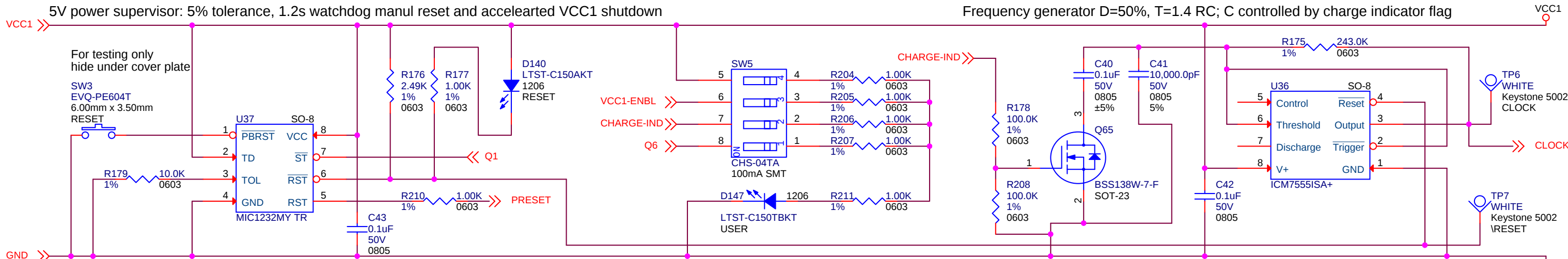
Logic Power: micropower linear regulator 5.5 to 80V in, 5V 50mA out.



Charging currents required per Half-Pack:
 18V: 8A initial, 12A final
 20V: 7.9A initial, 11.2A final
 22V: 7.2A initial, 10.2A final
 24V: 6.6A initial, 9.4A final

Charging time at 24V and full current with cycling loss and top-off:
 $(6.2 \text{ AH} \times 4 \times 2) / 3\text{A} \times 1.12 \times 1.04 = 19.3 \text{ hours}$

		Monterey Bay Aquarium Research Institute 7700 Sandholdt Rd, Moss landing CA 95076	
Engineer Klimov		Page Title BatteryPackController / Power	
831-775-1914		Project: <i>see page 1</i>	
Size B	Document Number <i>see page 1</i>	File Name (auto) 10021057-BPC1	Rev <i>see page 1</i>
Page Modify Date (auto):		Monday, June 09, 2014	Sheet:
Design Modify Date (auto):		Monday, June 09, 2014	9 of 10
Full path (auto):			
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3520.00	Need:
3135.96	680 pF
2793.83	1500 pF
2217.46	4700 pF
1396.91	6800 pF

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Engineer Klimov	831-775-1914	Page Title BatteryPackController / Logic	Project: see page 1
Size B	Document Number see page 1	File Name (auto) 10021057-BPC1	Rev see page 1
Page Modify Date (auto): Design Modify Date (auto): Full path (auto):		Monday, June 09, 2014 Monday, June 09, 2014 K:\TECHSERVICES\PCB_LAYOUT\OPEN_WORK_SPACE\LAUV\10021057-BPC1\10021057-BPC1	
Sheet:		10 of 10	