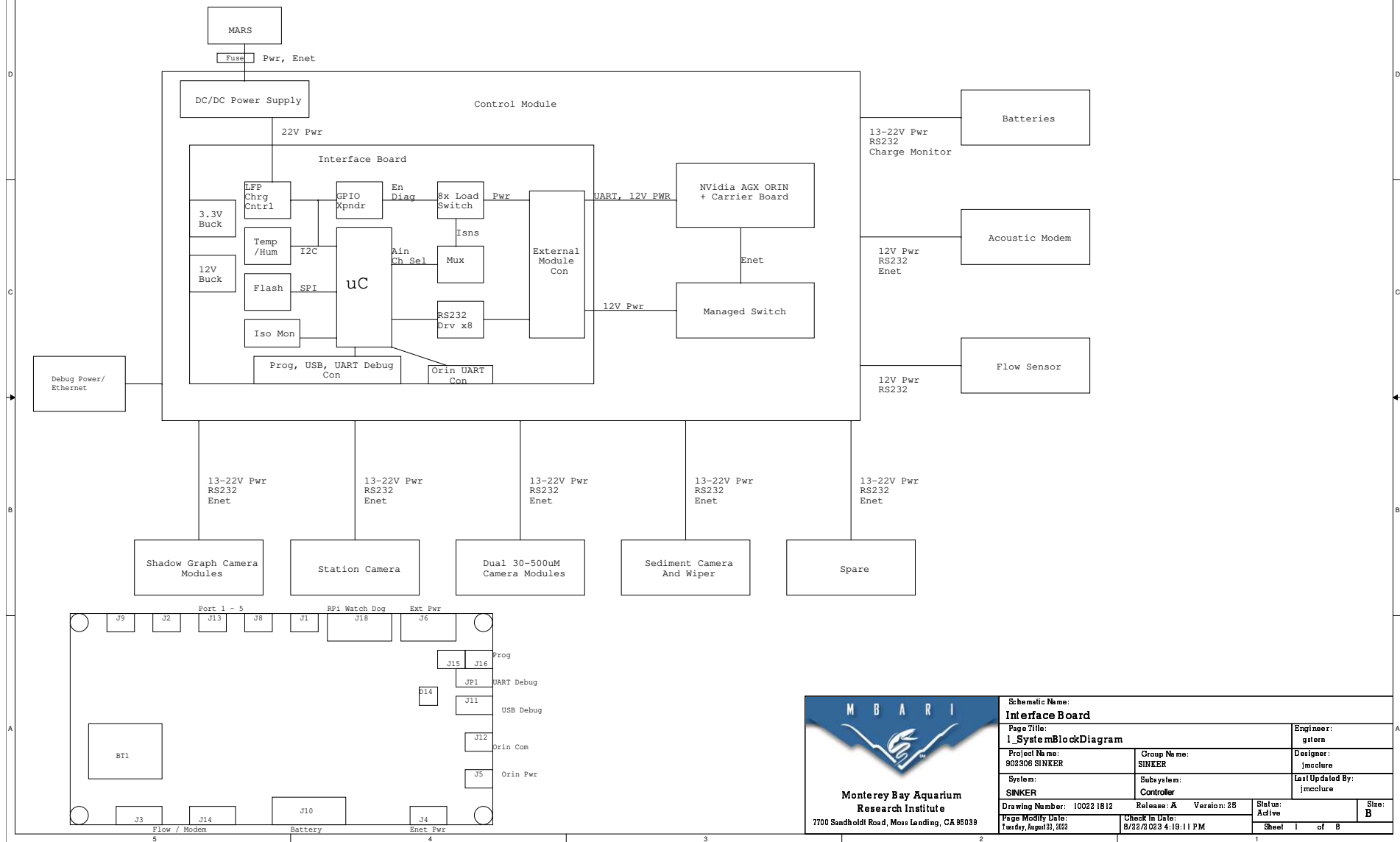


SINKER

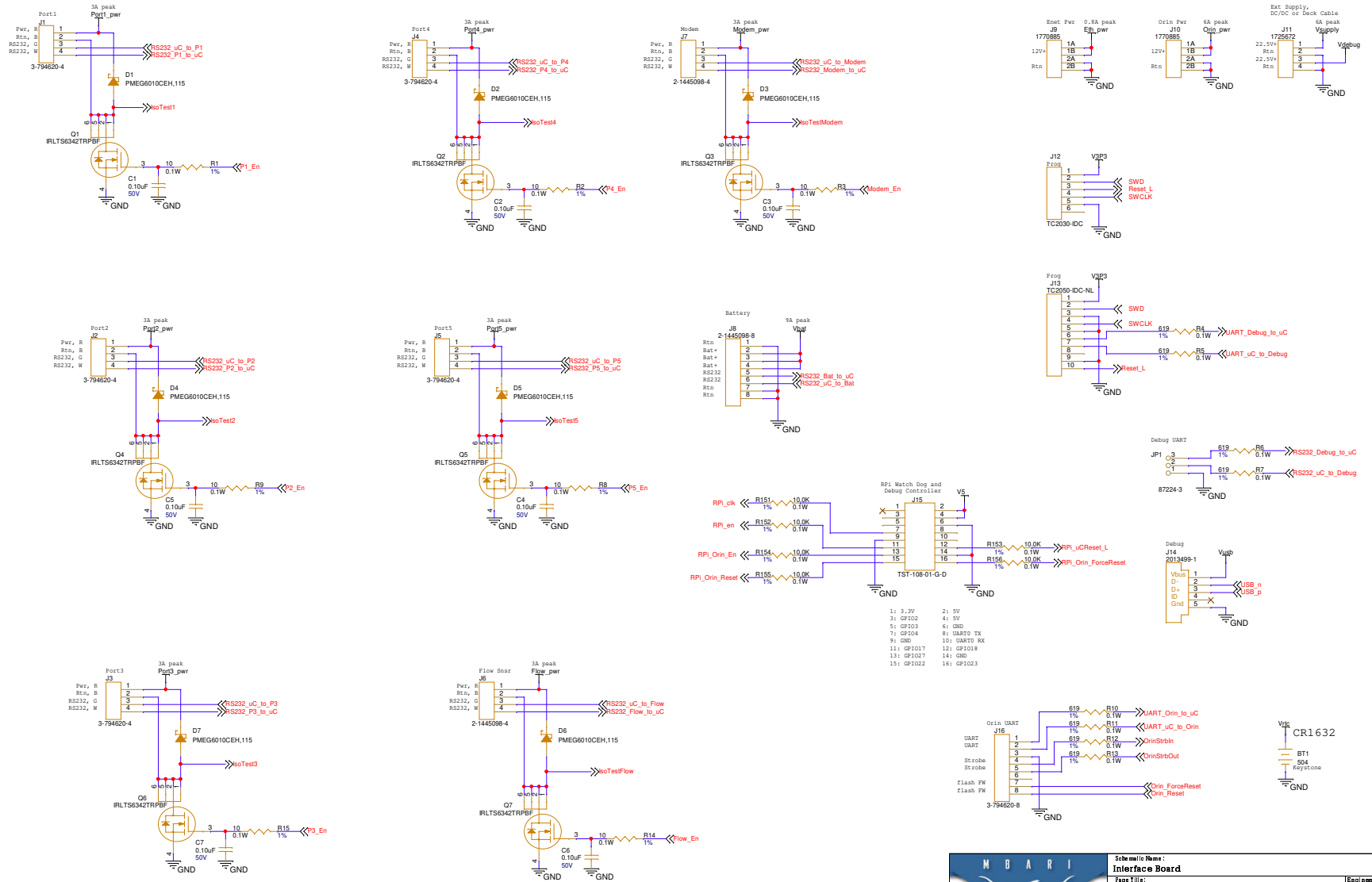




**Monterey Bay Aquarium
Research Institute**
7700 Sandholdt Road, Moss Landing, CA 95039

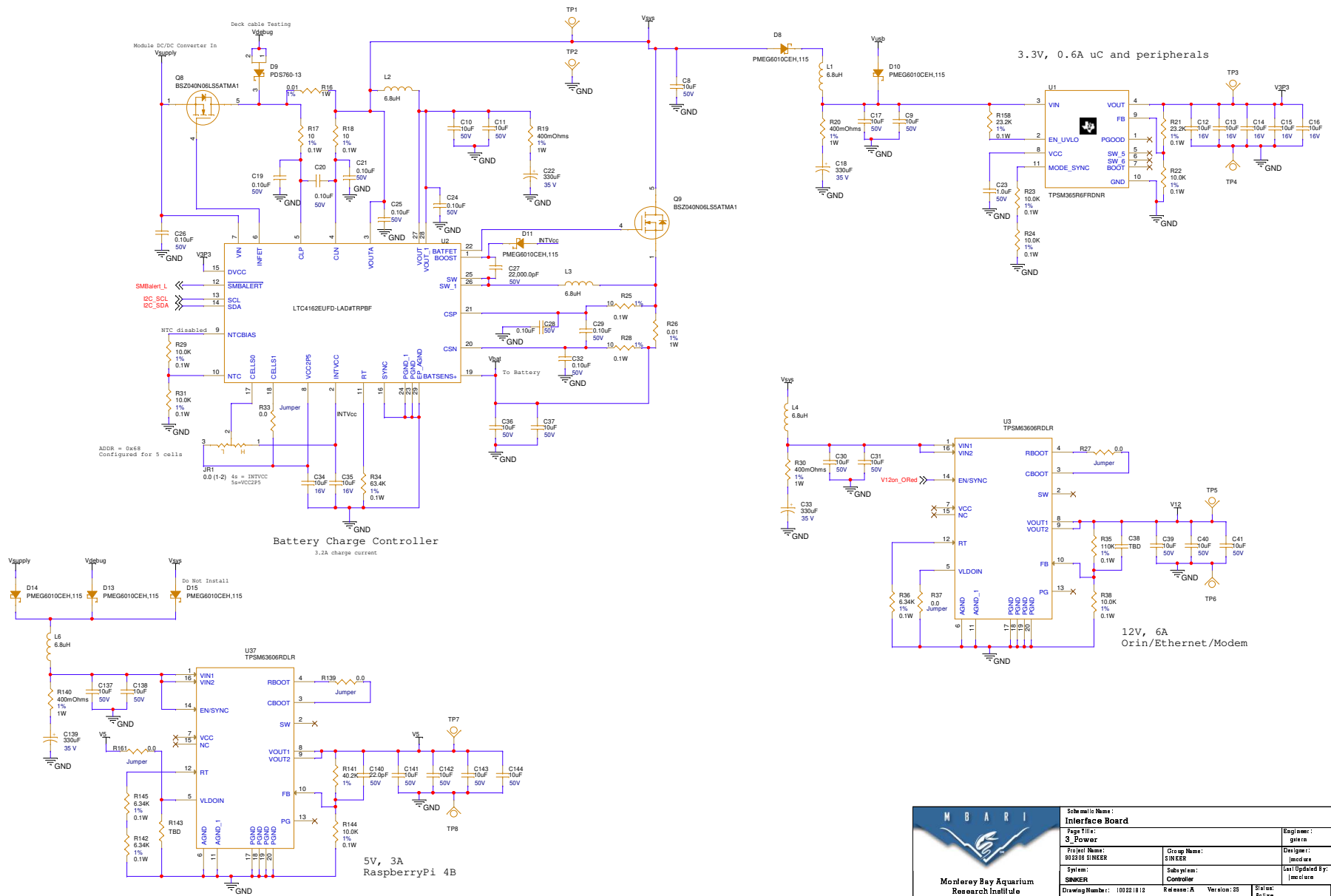
Schematic Name: Interface Board				
Page Title: i_SystemBlockDiagram		Engineer: gatern		
Project Name: 902306 SINKER		Group Name: SINKER		Designer: jmcclure
System: SINKER		Subsystem: Controller		Last Updated By: jmcclure
Drawing Number: 10022 1812	Release: A	Version: 25	Status: Active	Size: B
Page Modify Date: Tuesday, August 22, 2023		Check in Date: 8/22/2023 4:19:11 PM		Sheet 1 of 8

Connectors

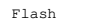
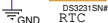
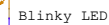
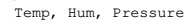
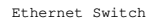


 Monterey Bay Aquarium Research Institute 7700 Sandhill Rd., Moss Landing, CA 95030	Interface Board Page Title: Project Name:		Engineer: gteira	
	System: Drawing Number:		Group Name: Subsystem: Controller:	
Release: A Version: 08 Status: Active Date: 08/08/2018 4:10:11 PM		Designer: gteira Date: 08/08/2018 4:10:11 PM		Sheet: 3 of 8 Date: 08/08/2018 4:10:11 PM

Power

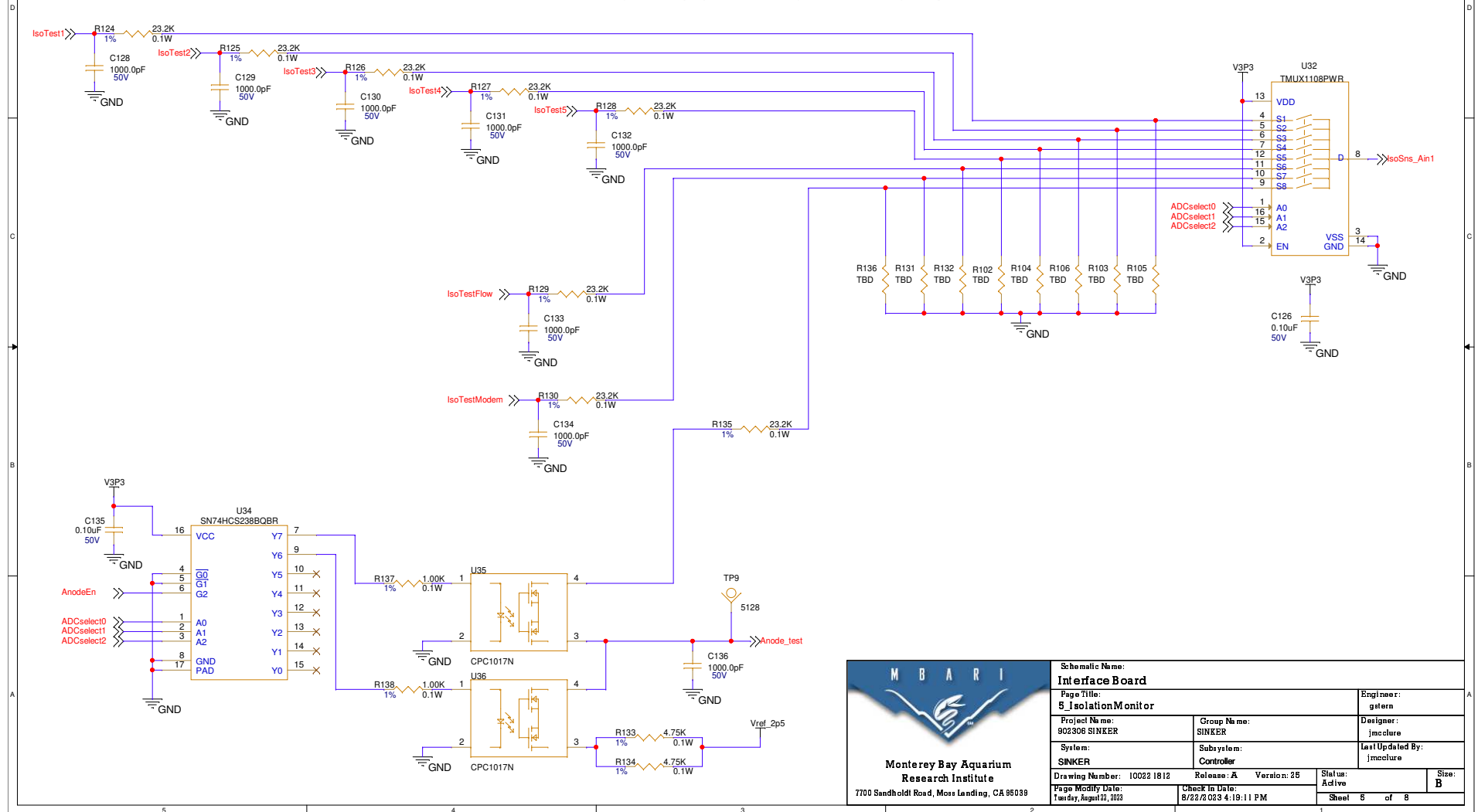


		Interface Board	
		3_Power	
Project Name: 3_Power	Group Name: SWEISS	Engineer: gtem	
System: SWIKER	Subsystem: Controller	Designer: jmolare	
Drawing Number: 100221812	Release: A	Version: 38	Status: Active
Project Manager: Tanya, Ray, J. J.	Release Date: 5/23/2022 4:10:11 PM	Sheet: 3 of 8	Page: C



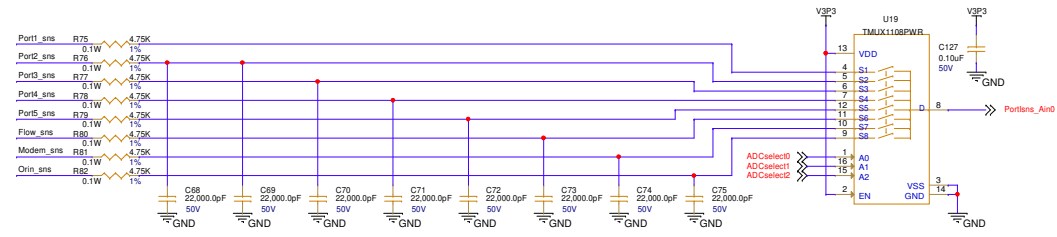
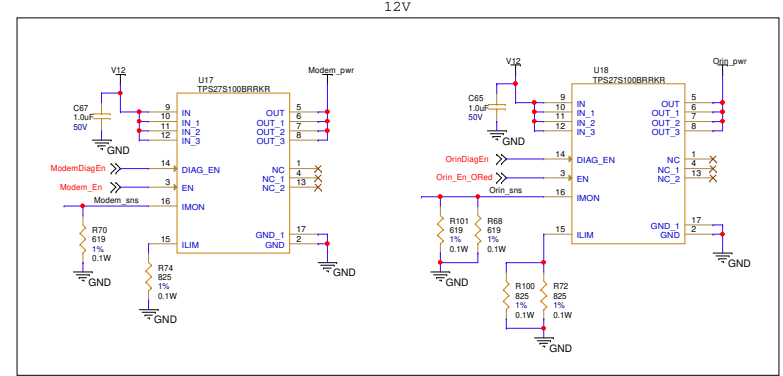
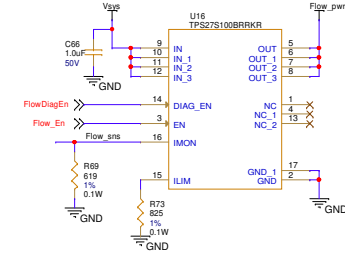
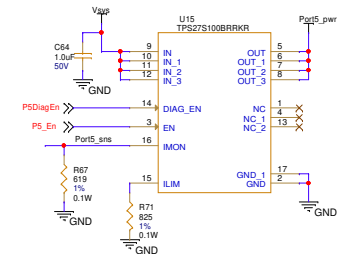
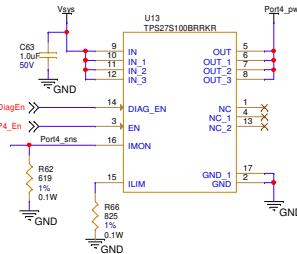
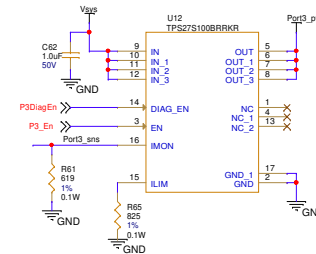
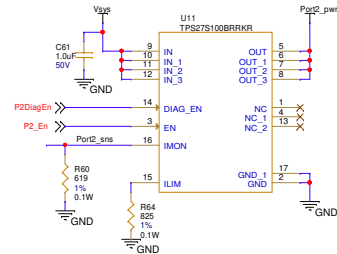
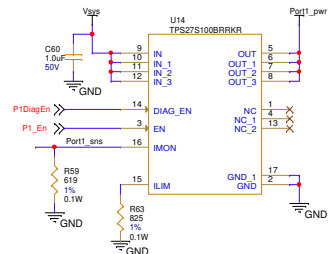
Isolation Monitor

Verifies power path isolation for selected external ports
To detect power path isolation
1) Set DiagEn high for ~100us when the port is off.
2) Monitor the node voltage is >2V 150us after setting DiagEn low.
3) Set Anode Enable high before sampling ch7,8 to test for ground isolation through the system.



Schematic Name: Interface Board			
Page Title: 5_IsolationMonitor		Engineer: gatem	
Project Name: 902306 SINKER		Group Name: SINKER	Designer: jmcure
System: SINKER		Subsystem: Controller	Last Updated By: jmcure
Drawing Number: 10022 1812	Release: A	Version: 25	Status: Active
Page Modify Date: Tuesday, August 22, 2023	Check in Date: 8/22/2023 4:19:11 PM		Size: B
		Sheet 6 of 8	

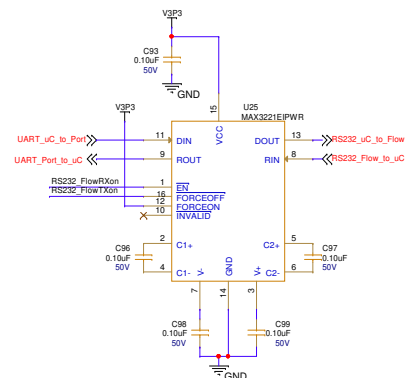
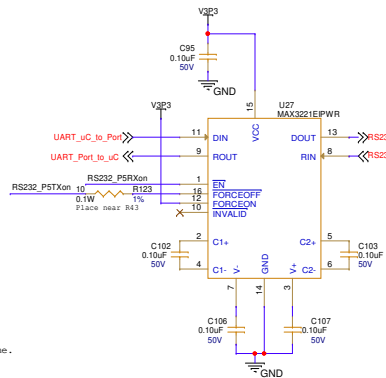
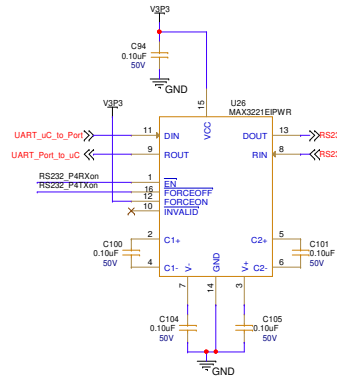
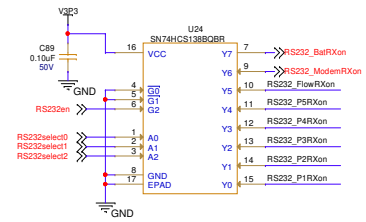
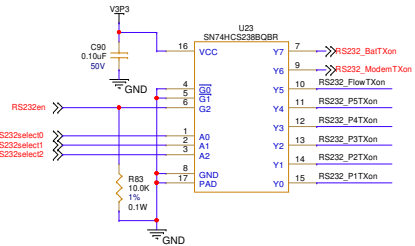
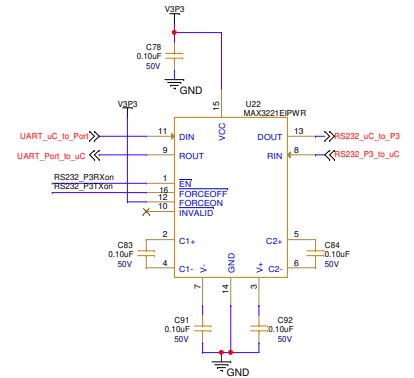
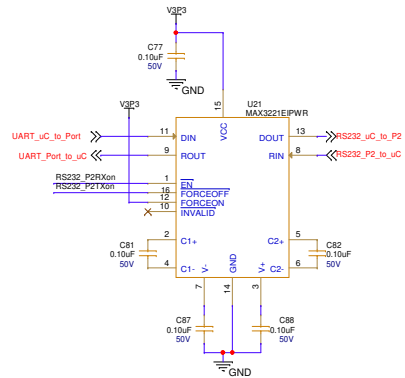
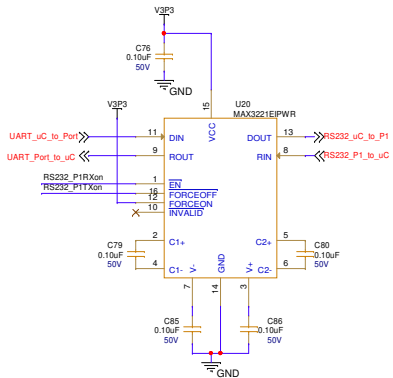
Power Switches



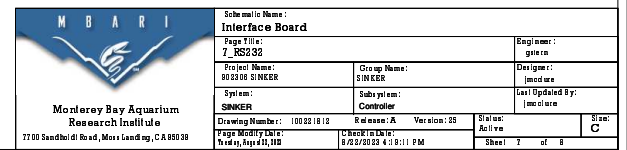
Vbatt = Iout * 619 / 500
 Ilim = 3A; Orin is 6A
 Vbatt = Battery cutoff (13V) and 22.5V

Monterey Bay Aquarium Research Institute 7700 Sandhold Rd, Moss Landing, CA 95030	Scheme Name: Interface Board	
	Page Title:	Engineer:
	Project Name:	gtem
	Project Name:	gtem
System: SWIKER	Group Name:	Designer:
	Subsystem:	Inspector:
	Controller:	Inspector:
	Inspector:	Inspector:
Drawing Number: 100201812 Title: Bay 15, 100	Release: A	Version: 03
	Release: A	Version: 03
	Release: A	Version: 03
	Release: A	Version: 03
Sheet 6 of 8	Sheet 6 of 8	
	Sheet 6 of 8	
	Sheet 6 of 8	
	Sheet 6 of 8	

RS232 Drivers



Only one port driver may be utilized at a time.
DIN/TX channel is on when ForceOFF is high.
ROUT/RX channel is on when EN is low.
Multiplexers have inverse outputs:
all high for SN74HCS138 or
all low for SN74HC238 except selected.



**Monterey Bay Aquarium
Research Institute**
7700 Sandholdt Road, Moss Landing, CA 95038

