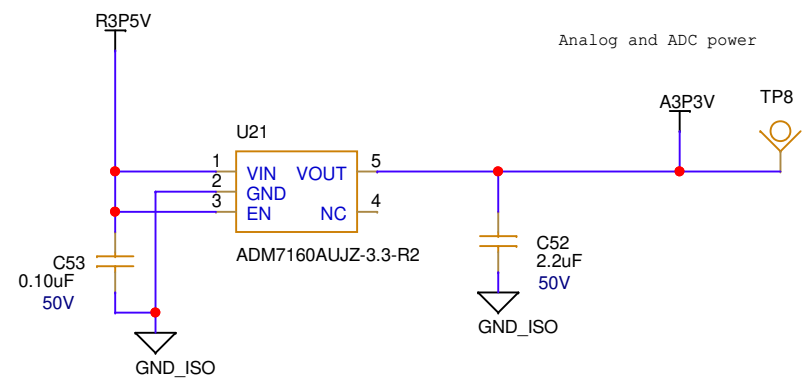
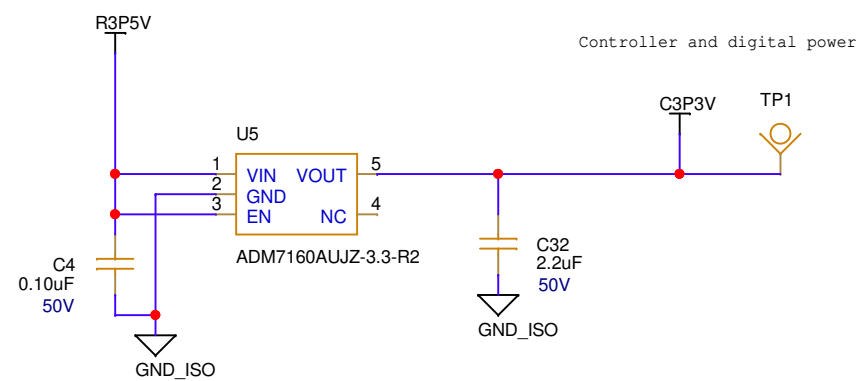
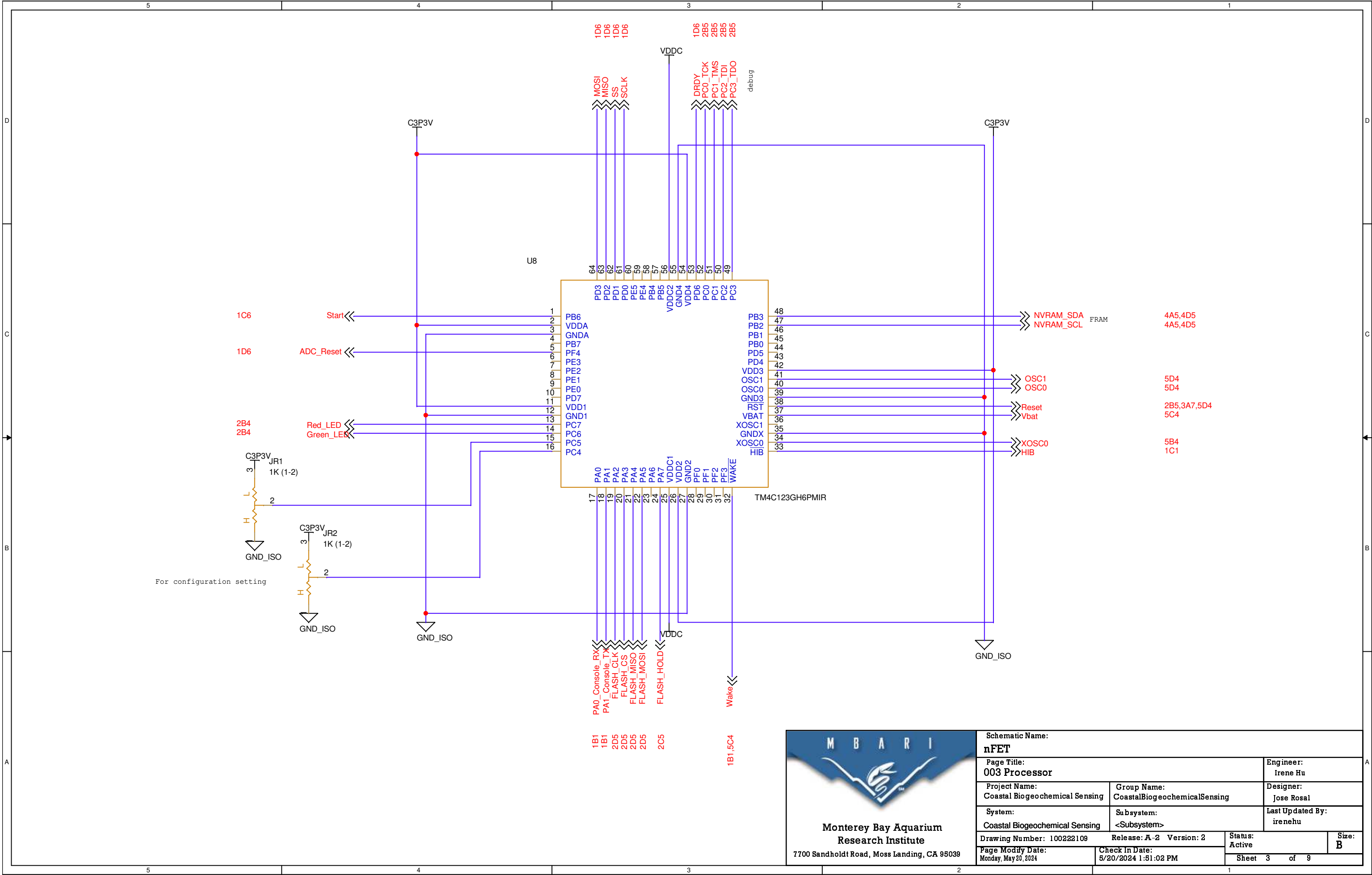






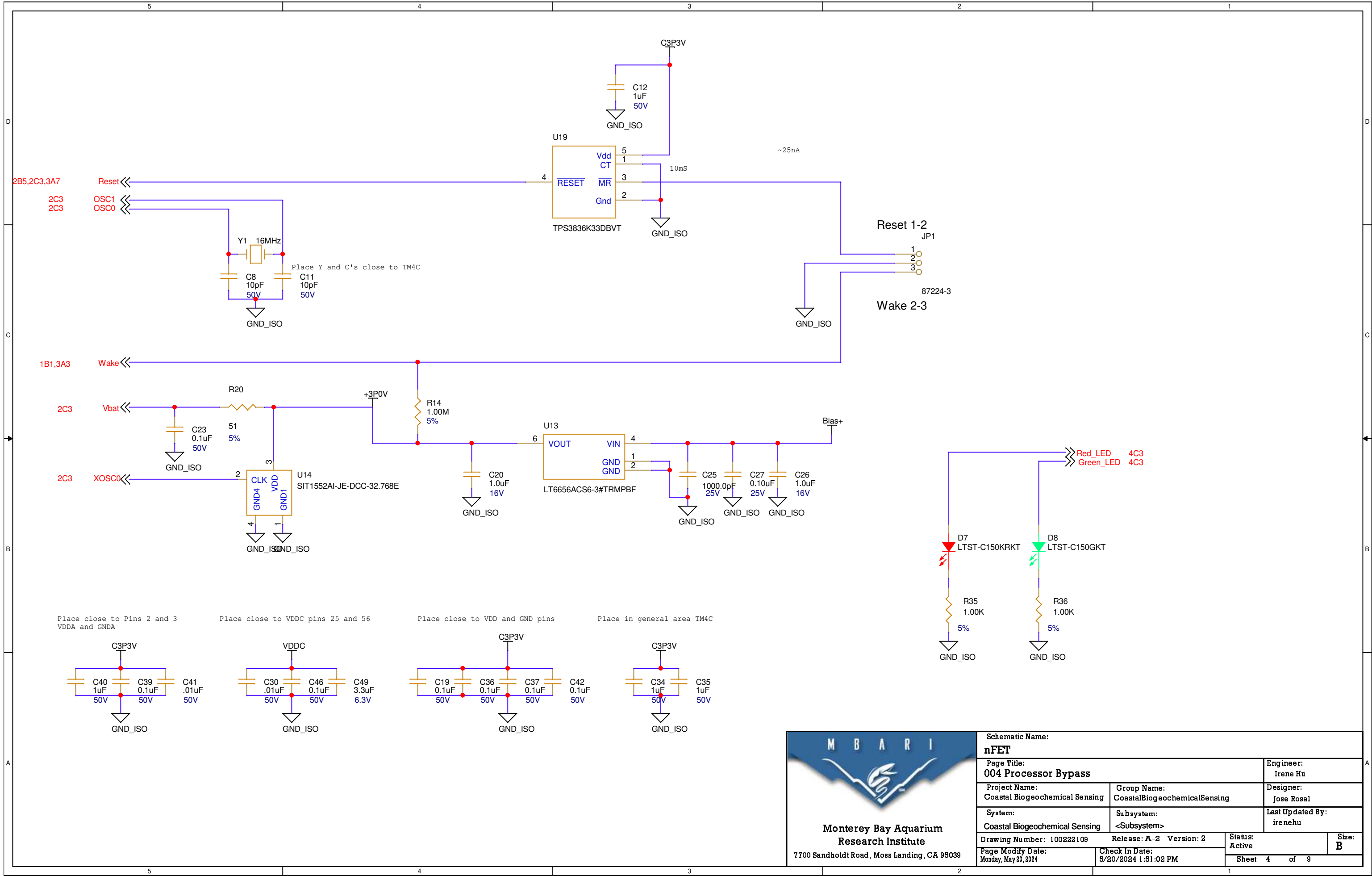
**Monterey Bay Aquarium
Research Institute**
7700 Sandholdt Road, Moss Landing, CA 95039

Schematic Name: nFET			
Page Title: 002 Voltage Regulators		Engineer: Irene Hu	
Project Name: Coastal Biogeochemical Sensing	Group Name: CoastalBiogeochemicalSensing		Designer: Jose Rosal
System: Coastal Biogeochemical Sensing	Subsystem: <Subsystem>		Last Updated By: irenehu
Drawing Number: 100222109		Release: A-2	Status: Active
Page Modify Date: Monday, May 20, 2024		Check In Date: 5/20/2024 1:51:02 PM	Size: B
		Sheet 2	of 9



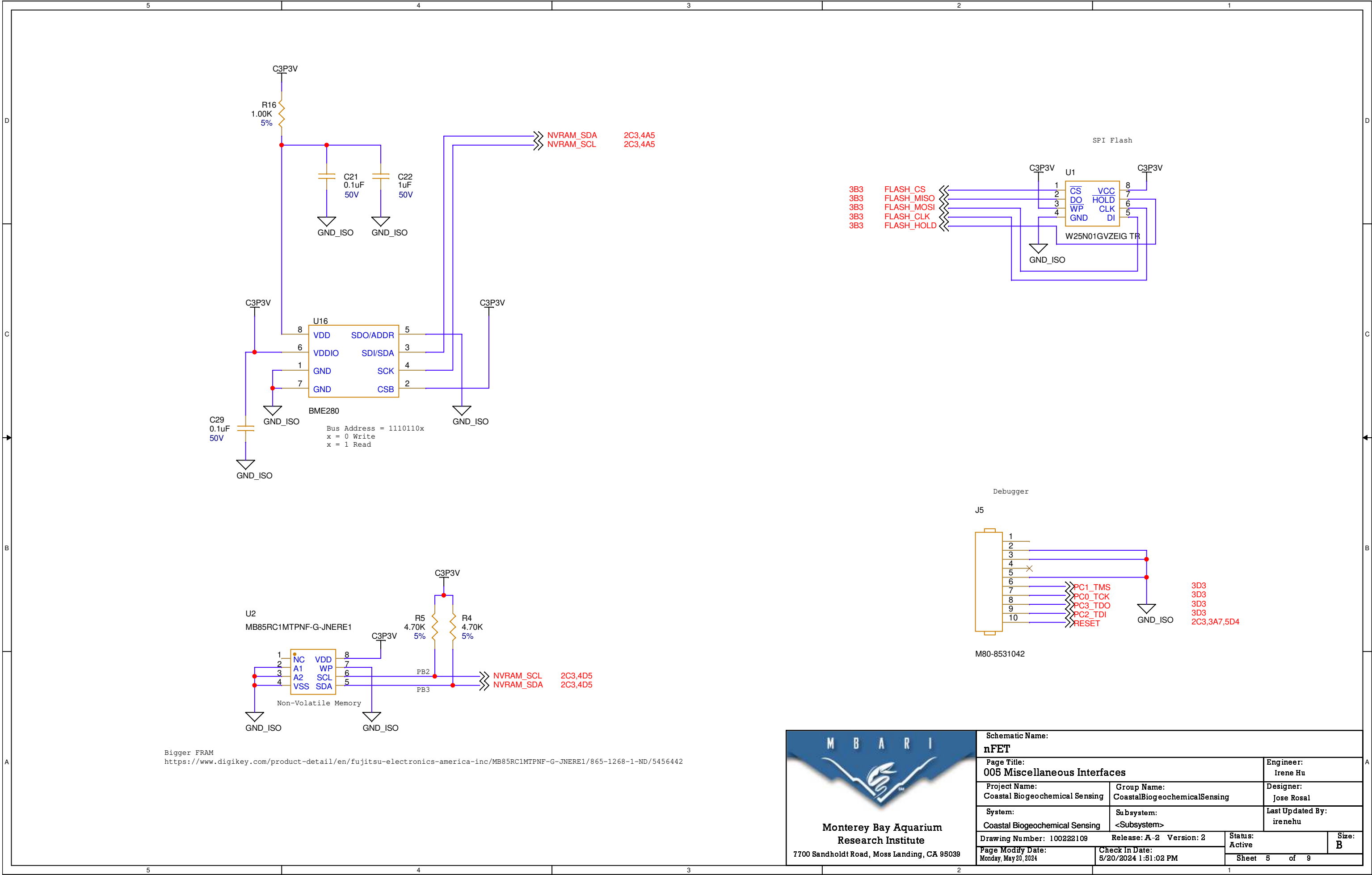
Monterey Bay Aquarium
Research Institute
7700 Sandholdt Road, Moss Landing, CA 95039

Schematic Name: nFET				
Page Title: 003 Processor			Engineer: Irene Hu	
Project Name: Coastal Biogeochemical Sensing	Group Name: CoastalBiogeochemicalSensing		Designer: Jose Rosal	
System: Coastal Biogeochemical Sensing	Subsystem: <Subsystem>		Last Updated By: irenehu	
Drawing Number: 100222109		Release: A-2		Version: 2
Page Modify Date: Monday, May 20, 2024		Check In Date: 5/20/2024 1:51:02 PM		Status: Active
		Sheet 3 of 9		Size: B



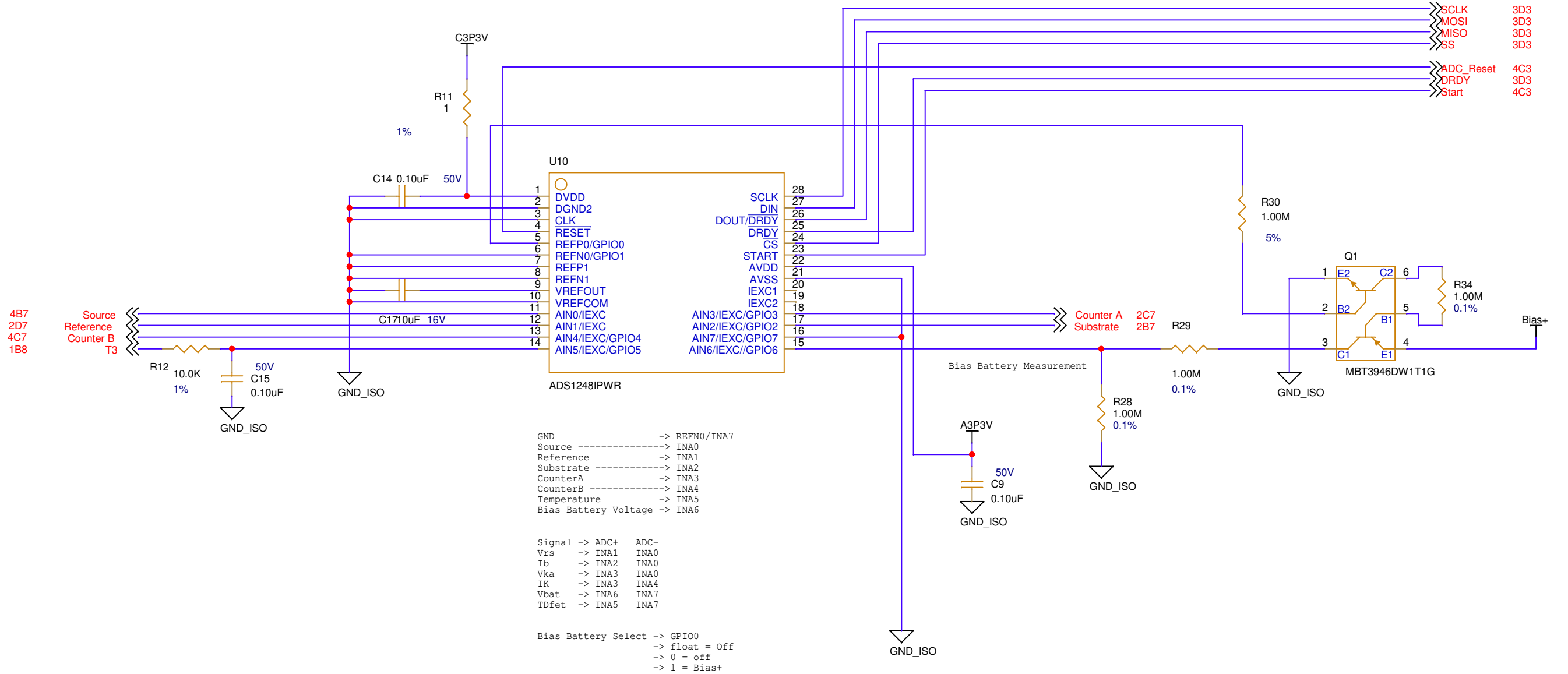
Monterey Bay Aquarium
Research Institute
7700 Sandholdt Road, Moss Landing, CA 95039

Schematic Name:				
nFET				
Page Title:			Engineer:	
004 Processor Bypass			Irene Hu	
Project Name:	Group Name:		Designer:	
Coastal Biogeochemical Sensing	CoastalBiogeochemicalSensing		Jose Rosal	
System:	Subsystem:		Last Updated By:	
Coastal Biogeochemical Sensing	<Subsystem>		irenehu	
Drawing Number: 100222109		Release: A-2	Version: 2	Status: Active
Page Modify Date:		Check In Date:		Size: B
Monday, May 20, 2024		5/20/2024 1:51:02 PM		Sheet 4 of 9



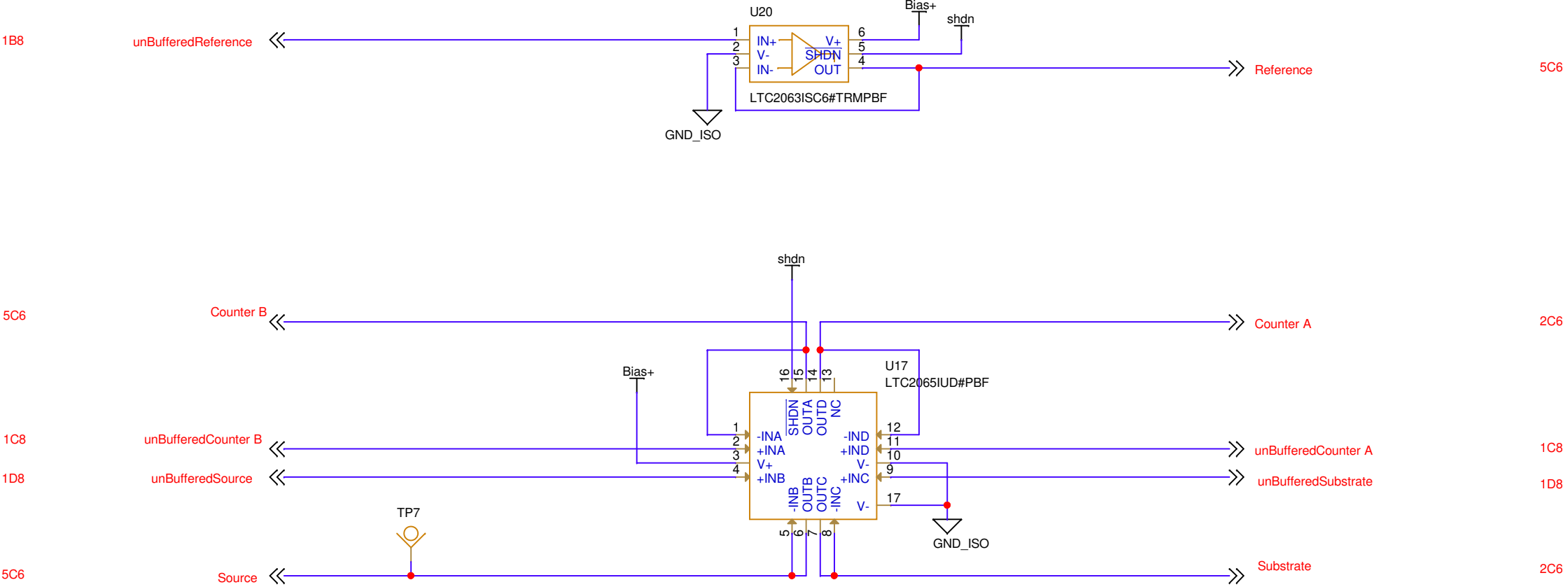
Bigger FRAM
<https://www.digikey.com/product-detail/en/fujitsu-electronics-america-inc/MB85RC1MTPNF-G-JNERE1/865-1268-1-ND/5456442>

 Monterey Bay Aquarium Research Institute 7700 Sandholdt Road, Moss Landing, CA 95039				Schematic Name: nFET			
Page Title: 005 Miscellaneous Interfaces			Engineer: Irene Hu				
Project Name: Coastal Biogeochemical Sensing		Group Name: CoastalBiogeochemicalSensing		Designer: Jose Rosal			
System: Coastal Biogeochemical Sensing		Subsystem: <Subsystem>		Last Updated By: irenehu			
Drawing Number: 100222109		Release: A-2 Version: 2		Status: Active		Size: B	
Page Modify Date: Monday, May 20, 2024		Check In Date: 5/20/2024 1:51:02 PM		Sheet 5 of 9			

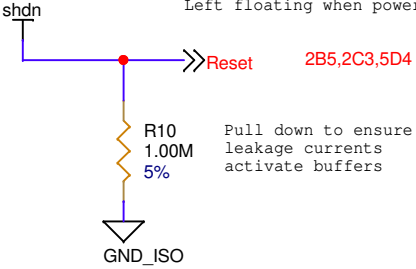


Schematic Name: nFET			
Page Title: 006 pH ADC		Engineer: Irene Hu	
Project Name: Coastal Biogeochemical Sensing	Group Name: CoastalBiogeochemicalSensing		Designer: Jose Rosal
System: Coastal Biogeochemical Sensing	Subsystem: <Subsystem>		Last Updated By: irenehu
Drawing Number: 100222109		Release: A-2 Version: 2	
Page Modify Date: Monday, May 20, 2024		Check In Date: 5/20/2024 1:51:02 PM	
		Status: Active	Size: B
Sheet 6 of 9			

These buffers serve two purposes
1)isolate leakage currents into Bias circuit
2)isolate bias circuit while analog power is off

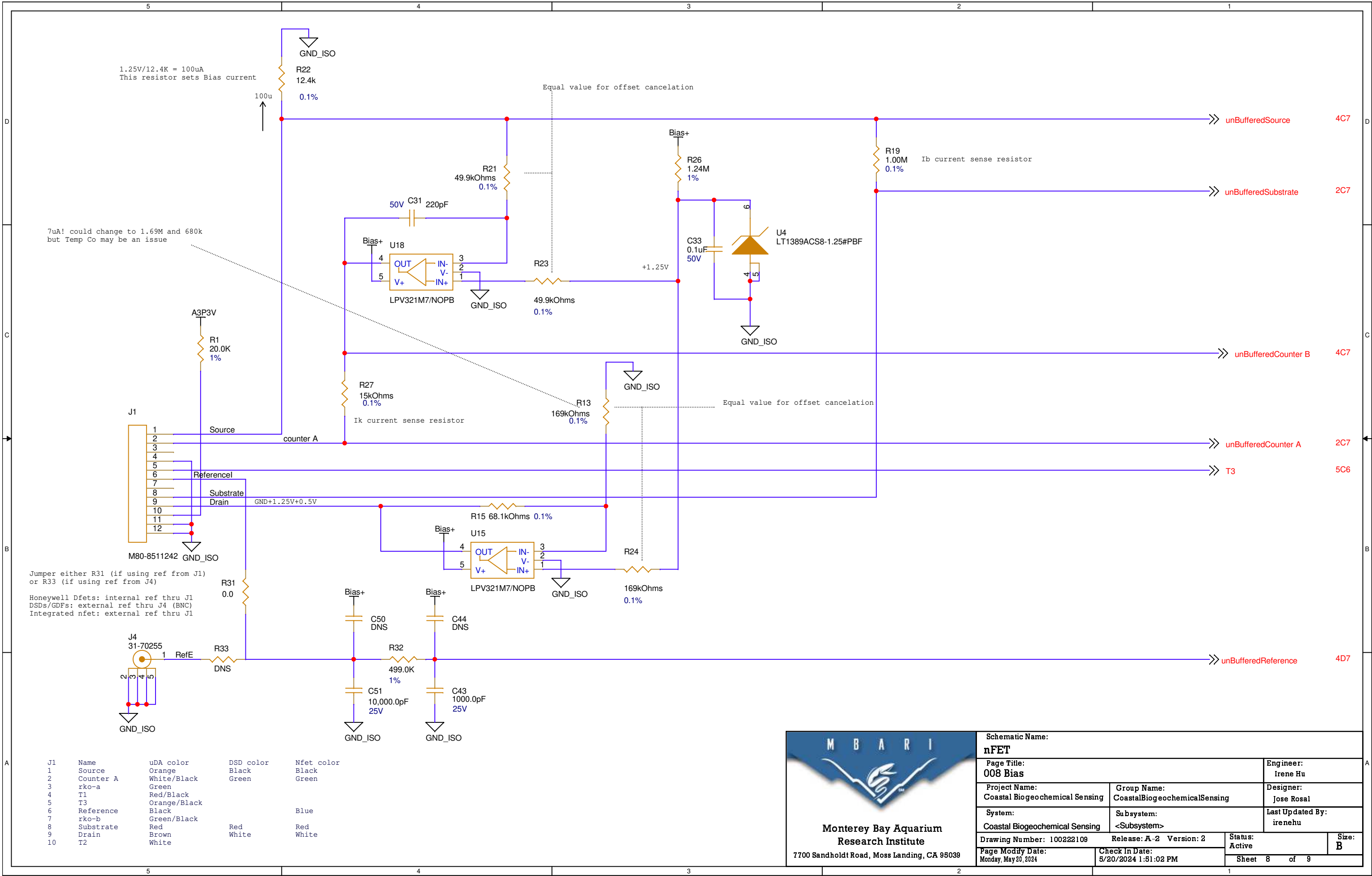


Reset (U19 output) is repurposed to control buffers, as it happens to pull low when power (C3P3V) is rising/falling, and pull high when p good
Left floating when power is gone, hence pulldown



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

Schematic Name: nFET			
Page Title: 007 Buffer		Engineer: Irene Hu	
Project Name: Coastal Biogeochemical Sensing	Group Name: CoastalBiogeochemicalSensing		Designer: Jose Rosal
System: Coastal Biogeochemical Sensing	Subsystem: <Subsystem>		Last Updated By: irenehu
Drawing Number: 100222109		Release: A-2 Version: 2	Status: Active
Page Modify Date: Monday, May 20, 2024		Check In Date: 5/20/2024 1:51:02 PM	Size: B
Sheet 7 of 9			



J1	Name	uDA color	DSD color	Nfet color
1	Source	Orange	Black	Black
2	Counter A	White/Black	Green	Green
3	rko-a	Green		
4	T1	Red/Black		
5	T3	Orange/Black		
6	Reference	Black		Blue
7	rko-b	Green/Black		
8	Substrate	Red	Red	Red
9	Drain	Brown	White	White
10	T2	White		



Schematic Name: nFET			
Page Title: 008 Bias		Engineer: Irene Hu	
Project Name: Coastal Biogeochemical Sensing	Group Name: CoastalBiogeochemicalSensing	Designer: Jose Rosal	
System: Coastal Biogeochemical Sensing	Subsystem: <Subsystem>	Last Updated By: irenehu	
Drawing Number: 100222109	Release: A-2	Version: 2	Status: Active
Page Modify Date: Monday, May 20, 2024	Check In Date: 5/20/2024 1:51:02 PM	Sheet 8 of 9	Size: B

