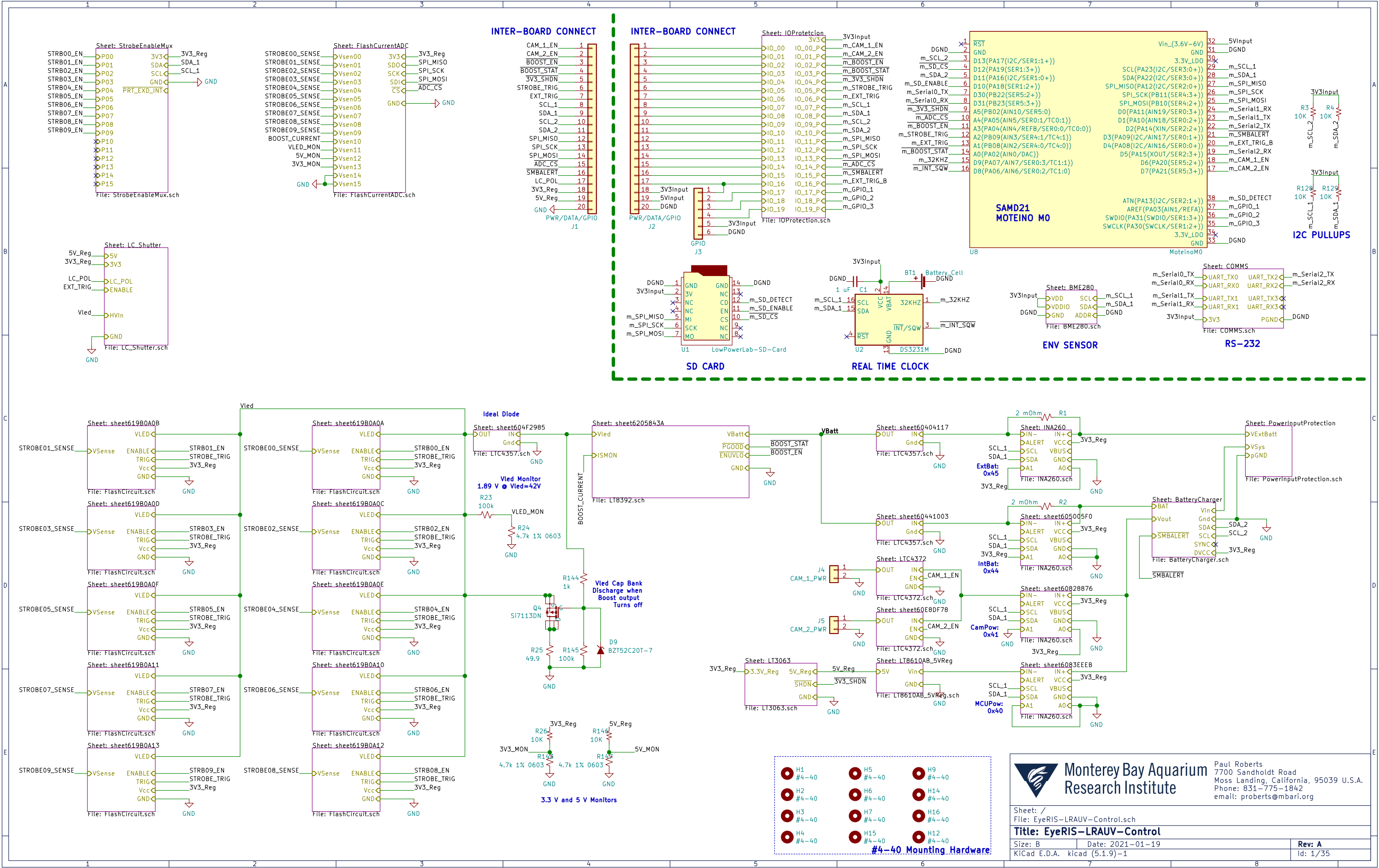
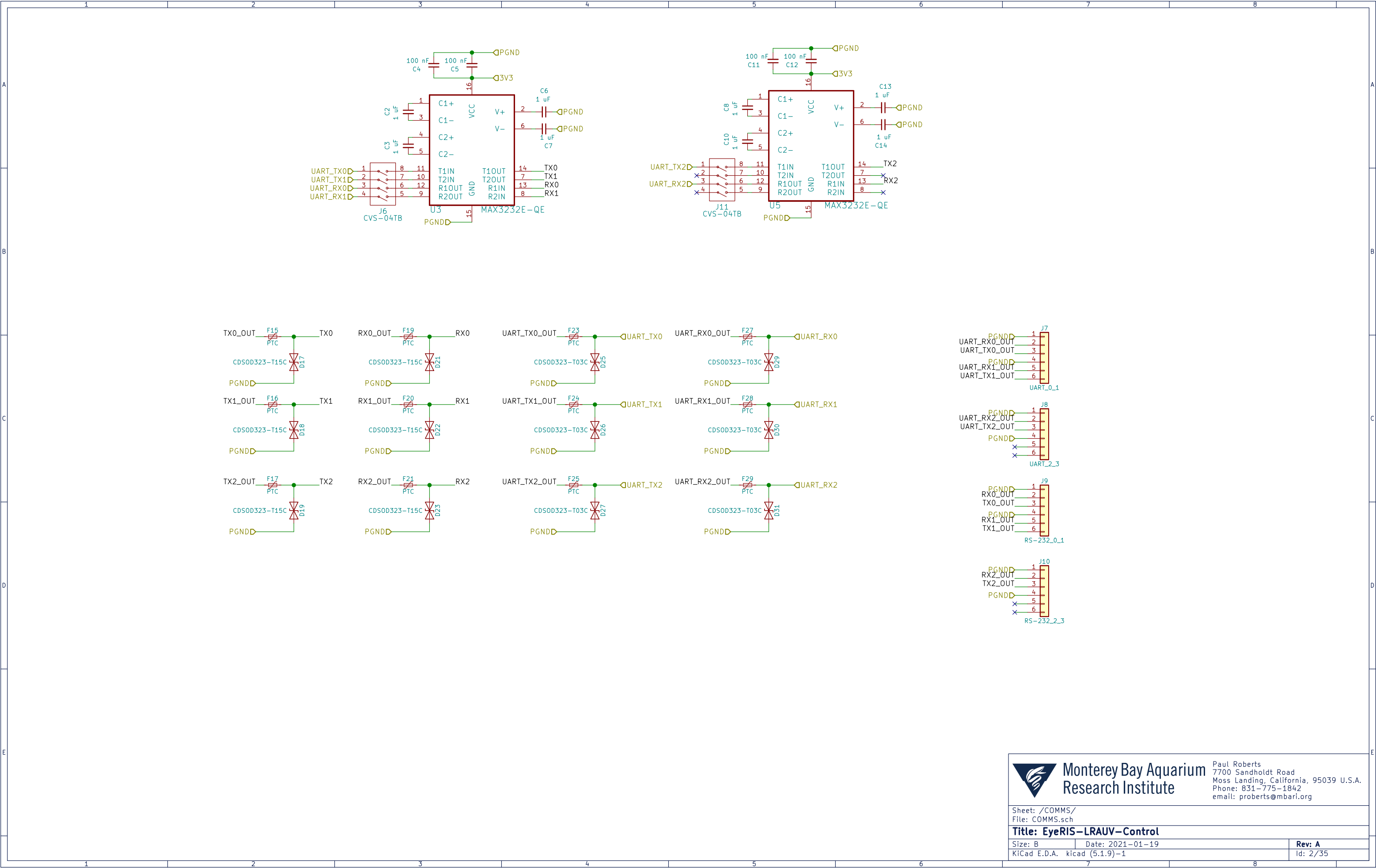
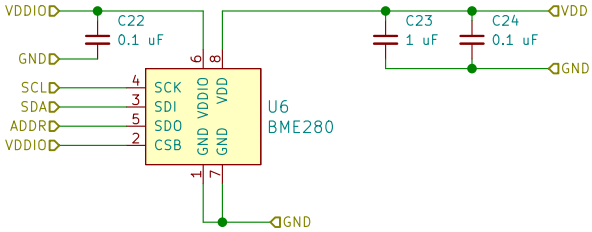
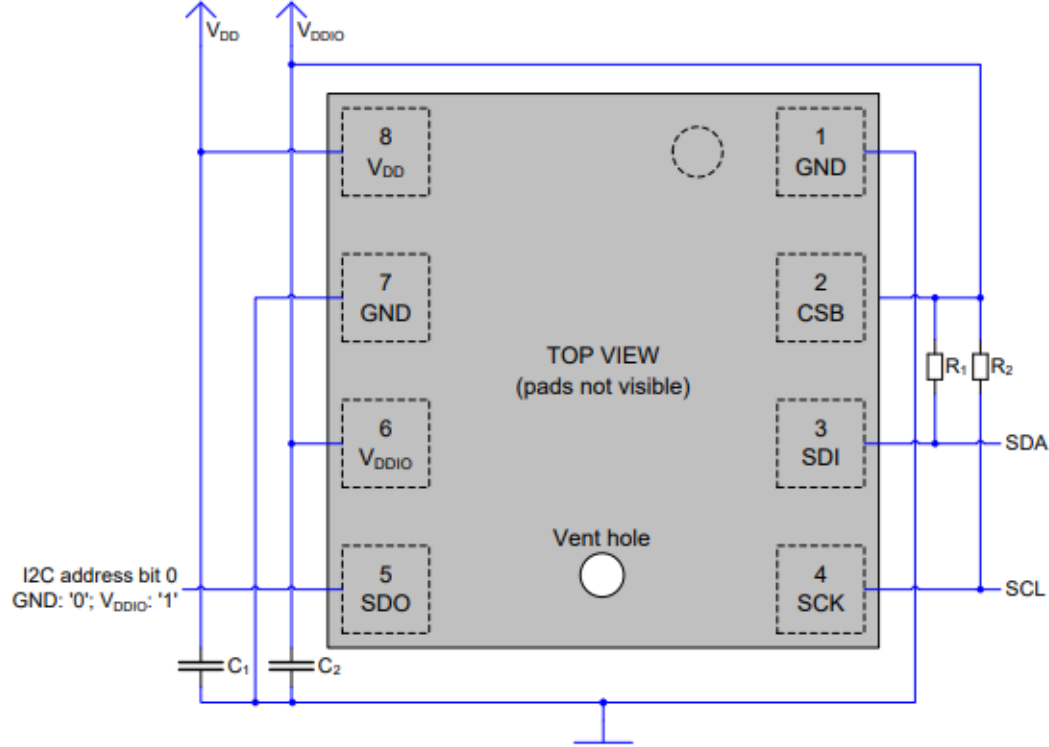






7.2 Connection diagram I²C

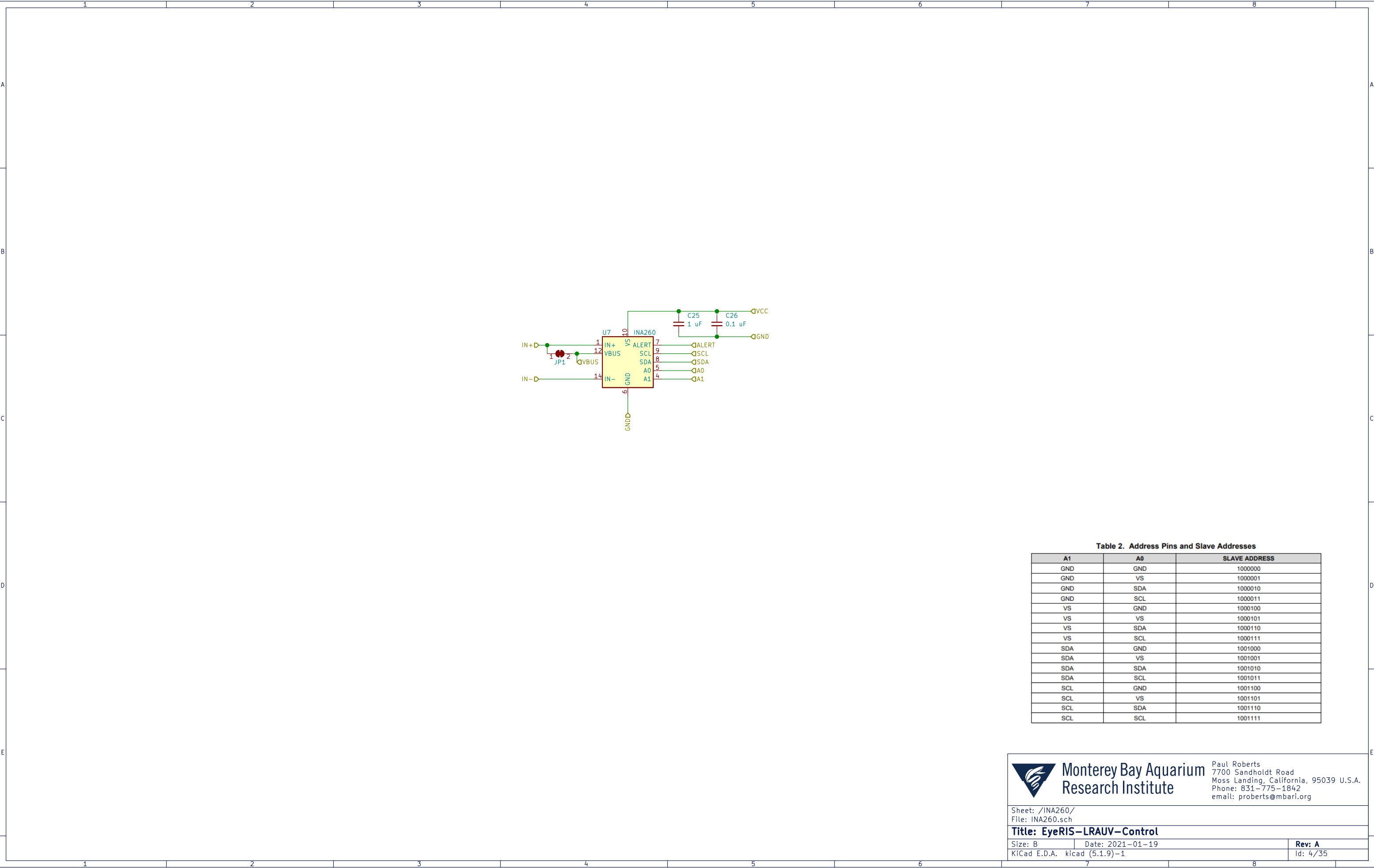


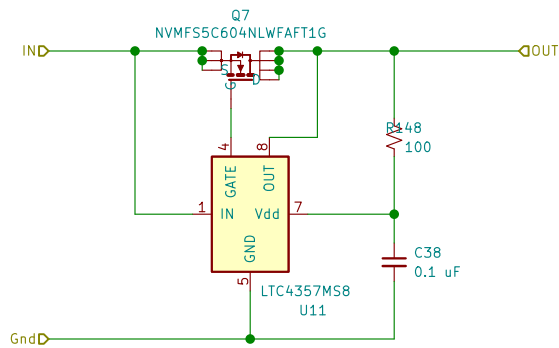
ADDR = GND -> 0x76
ADDR = VDDIO -> 0x77

Figure 17: I²C connection diagram

Notes:

- The recommended value for C₁, C₂ is 100 nF
- The value for the pull-up resistors R₁, R₂ should be based on the interface timing and the bus load; a normal value is 4.7 kΩ
- A direct connection between CSB and VDDIO is required





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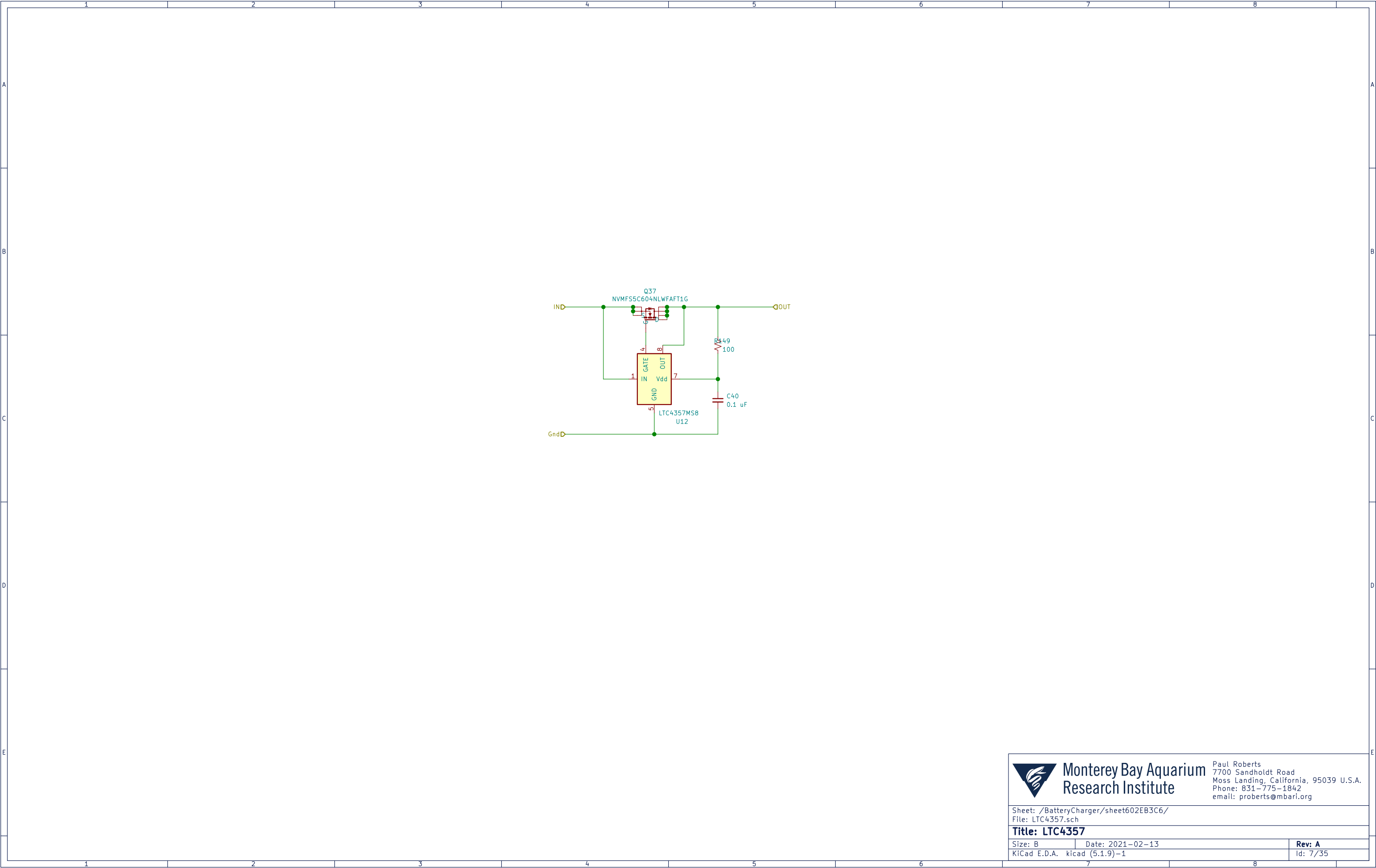
Paul Roberts
7700 Sandholdt Road
Moss Landing, California, 95039 U.S.A.
Phone: 831-775-1842
email: proberts@mbari.org

Sheet: /BatteryCharger/LTC4357/
File: LTC4357.sch

Title: LTC4357

Size: B Date: 2021-02-13
KiCad E.D.A. kicad (5.1.9)-1

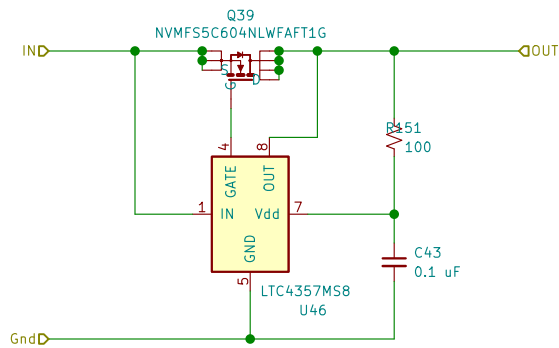
Rev: A
Id: 6/35





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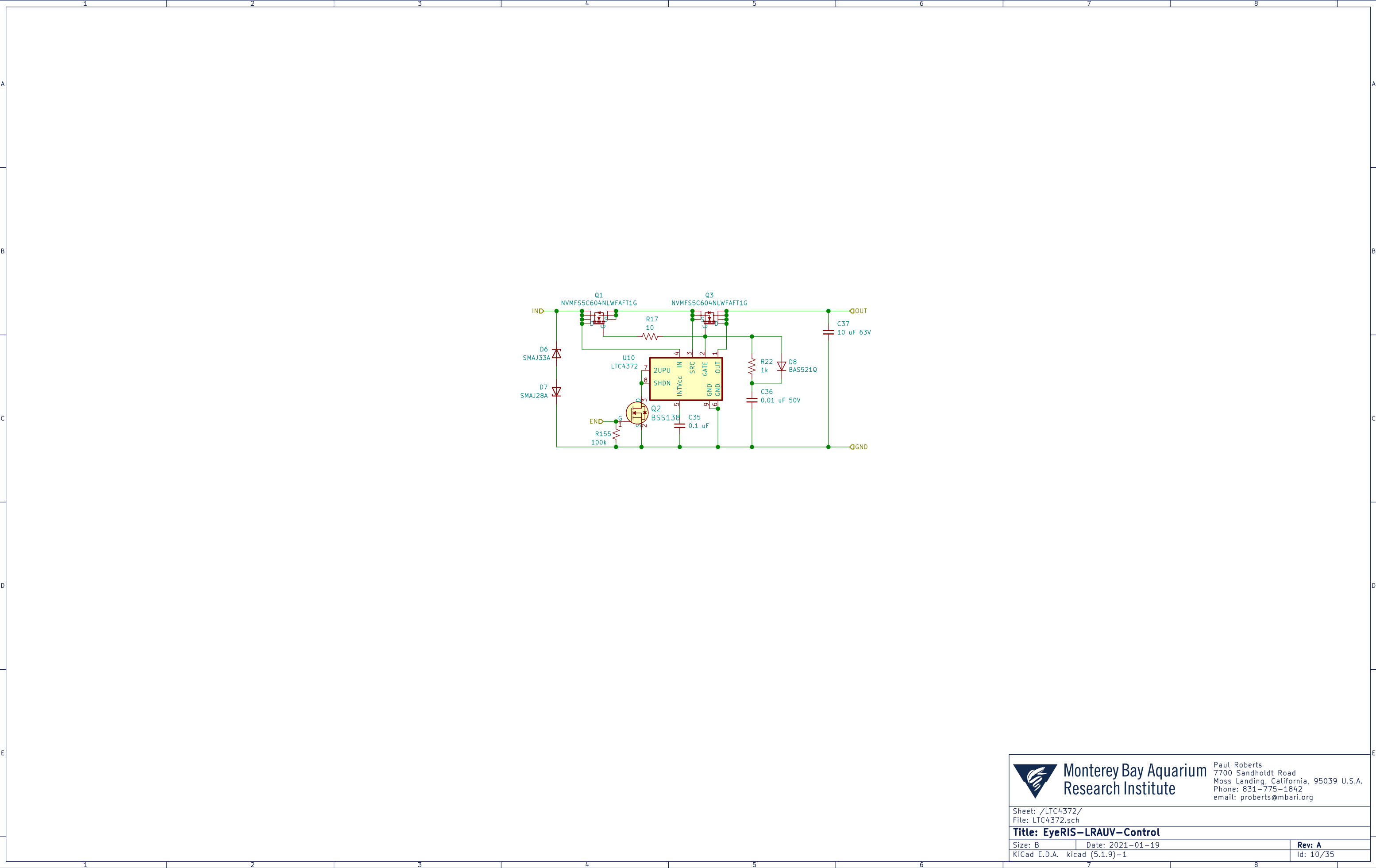
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email: proberts@mbari.org

Sheet: /BatteryCharger/sheet602F24F5/
File: LTC4357.sch

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Size: B	Date: 2021-02-13	Rev: A
KiCad E.D.A. kicad (5.1.9)-1		Id: 9/35



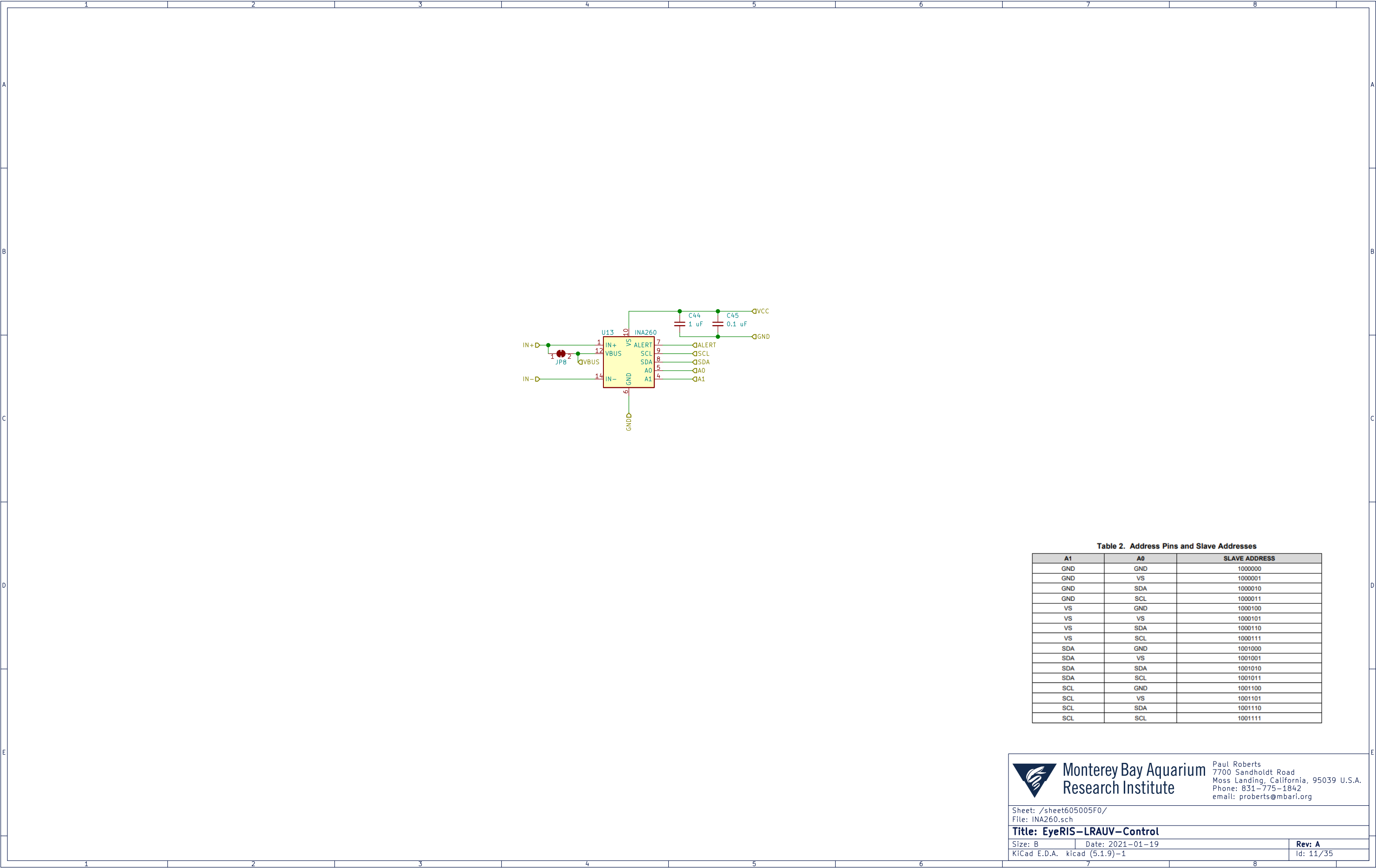


Table 2. Address Pins and Slave Addresses

A1	A0	SLAVE ADDRESS
GND	GND	1000000
GND	VS	1000001
GND	SDA	1000010
GND	SCL	1000011
VS	GND	1000100
VS	VS	1000101
VS	SDA	1000110
VS	SCL	1000111
SDA	GND	1001000
SDA	VS	1001001
SDA	SDA	1001010
SDA	SCL	1001011
SCL	GND	1001100
SCL	VS	1001101
SCL	SDA	1001110
SCL	SCL	1001111



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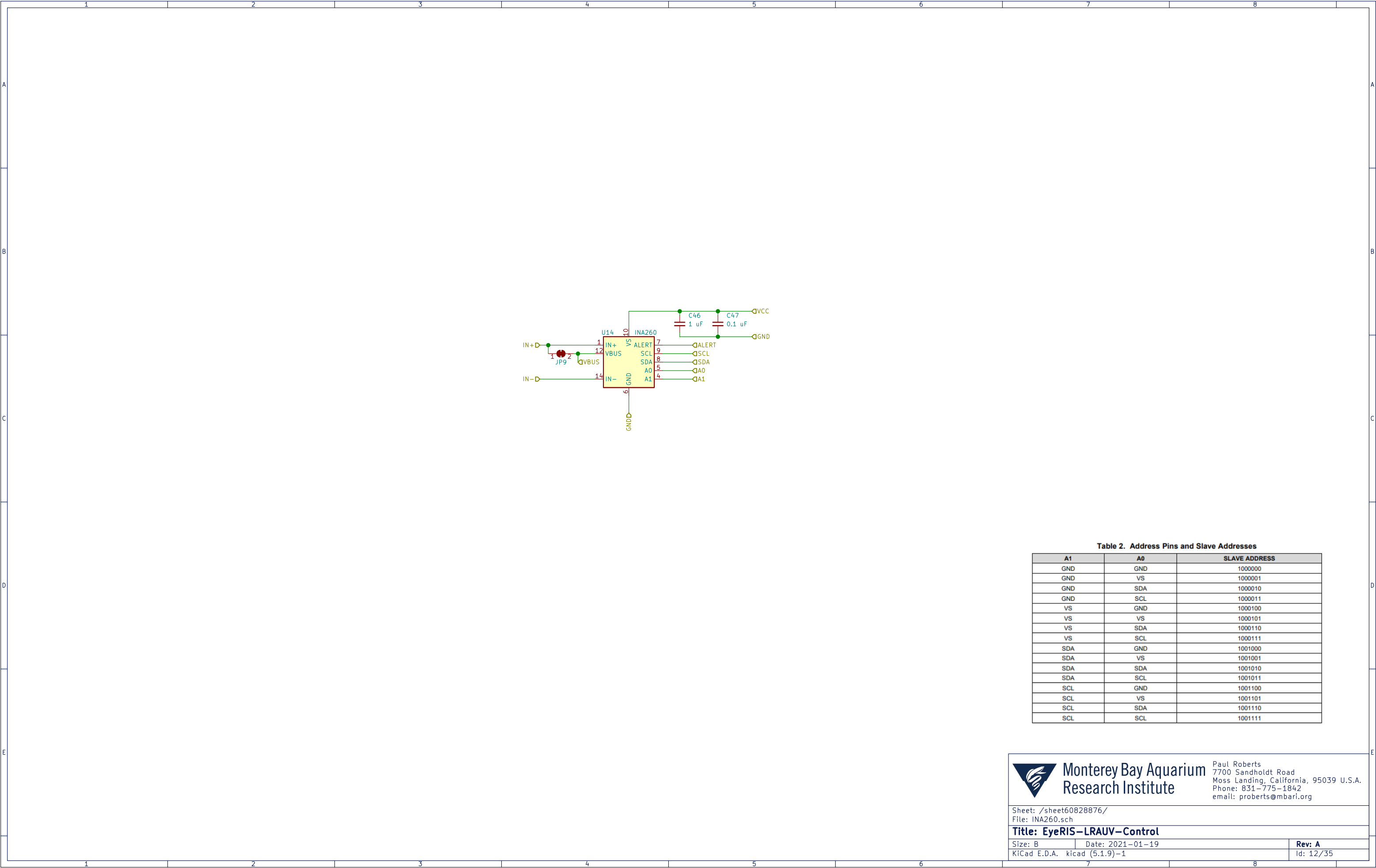
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

Sheet: /sheet605005F0/
File: INA260.sch

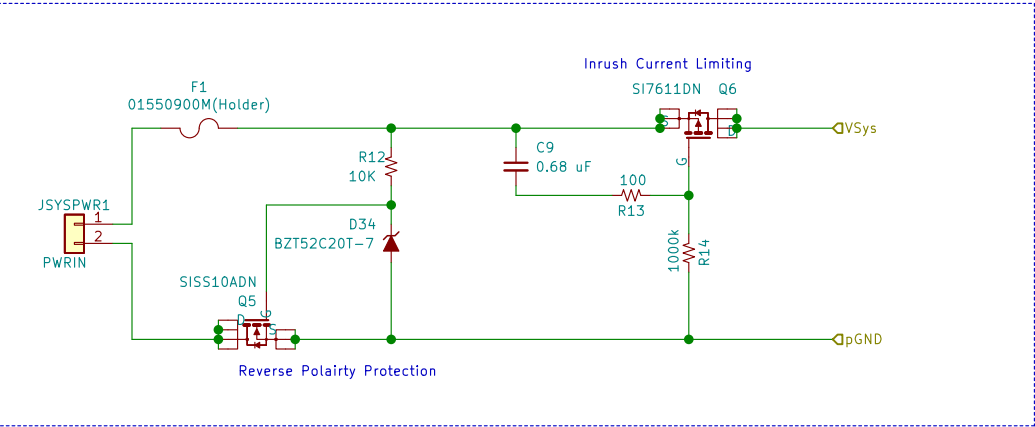
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Size: B Date: 2021-01-19
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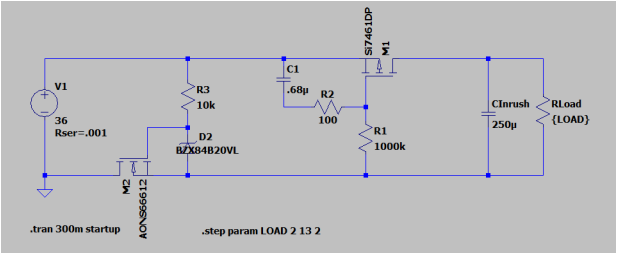
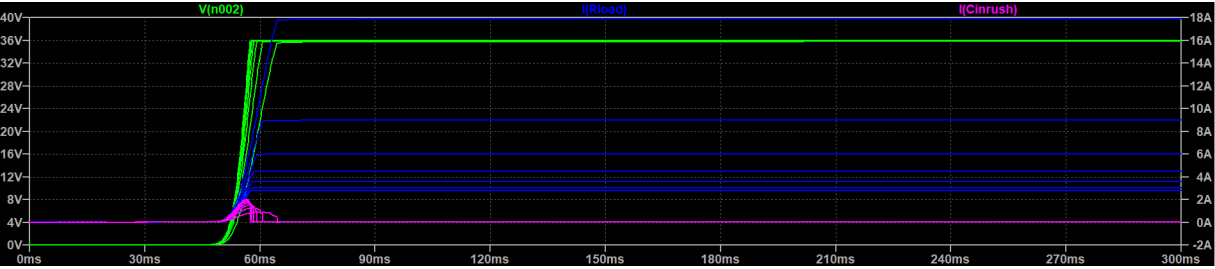
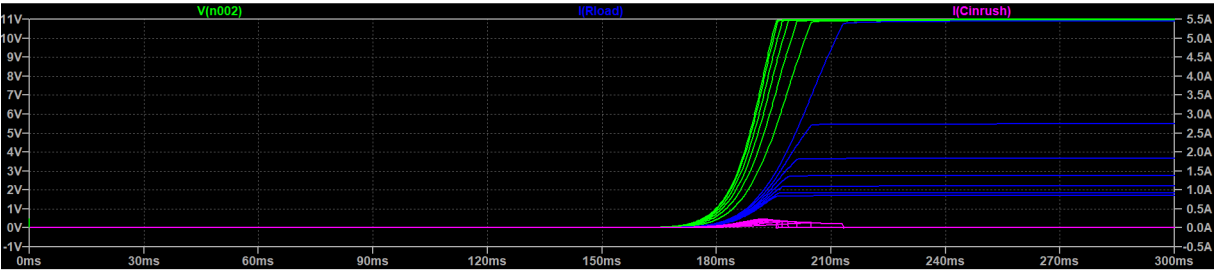
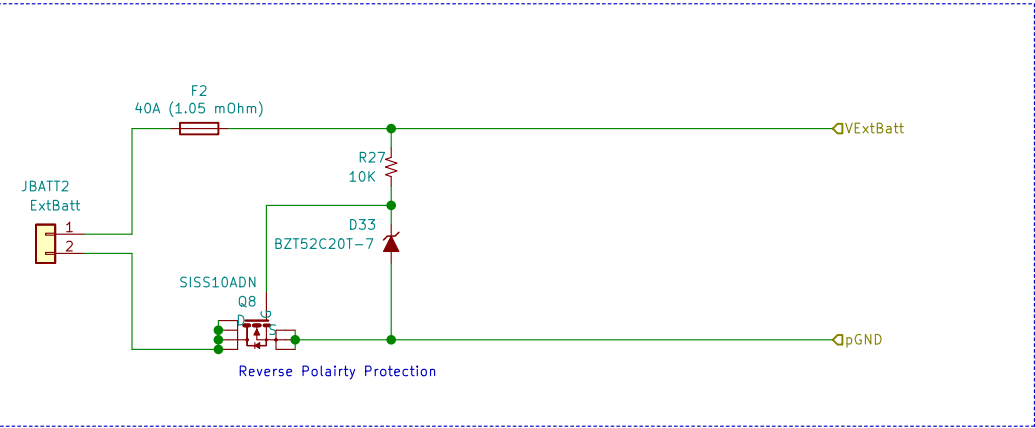
Rev: A
Id: 11/35



LRAUV Load Controller Power Input with RP protetction and Inrush limit to 2A @ 36V



External Battery Input with RP protection and no Inrush limit



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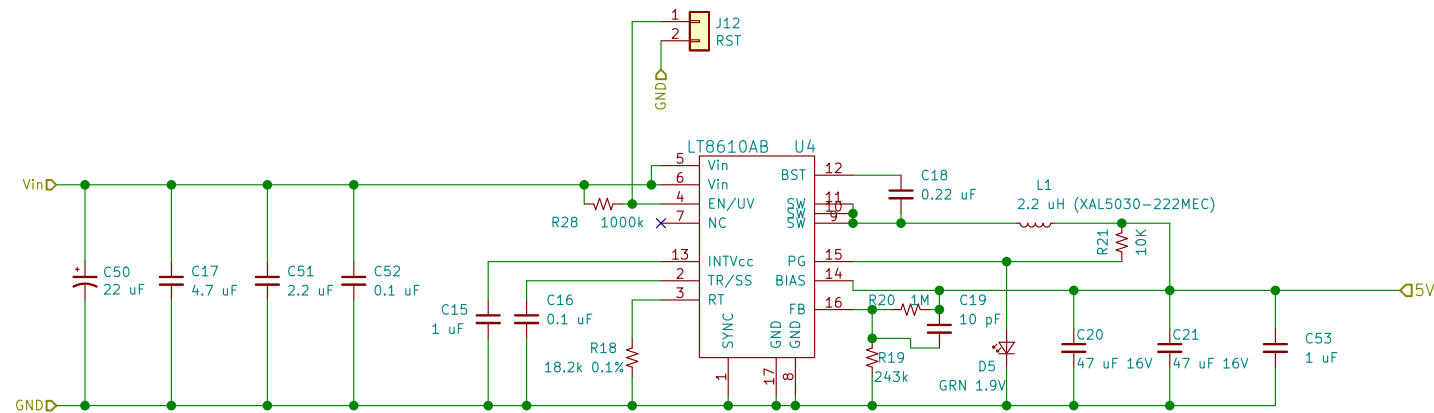
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

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File: PowerInputProtection.sch

Title: EyeRIS-LRAUV-Control

Size: B Date: 2021-01-19
KiCad E.D.A. kicad (5.1.9)-1

Rev: A
Id: 14/35



Notes:
Remove indicator LED (D5) if needed, power draw should be less than 1 mW at 5V out

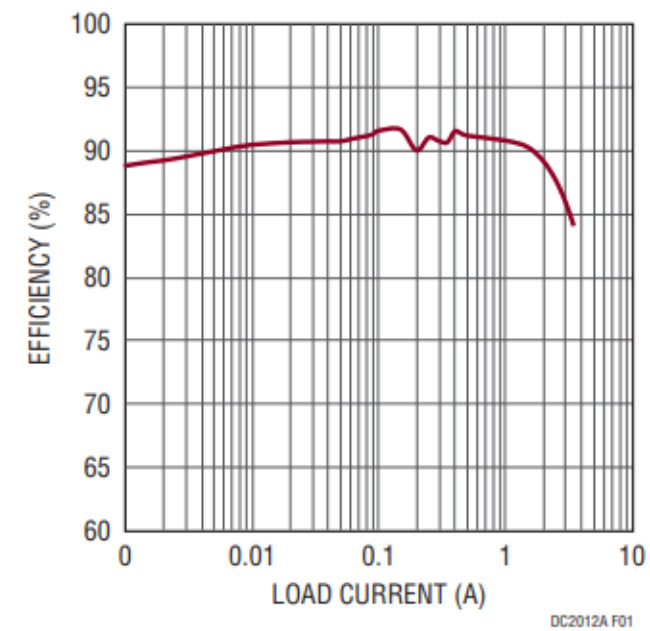
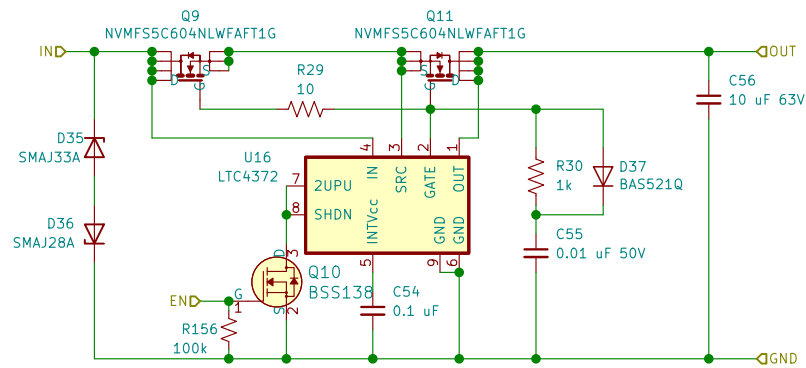


Figure 1. LT8610AB 12V_{IN} to 5V_{OUT} Efficiency at 2MHz Switching Frequency



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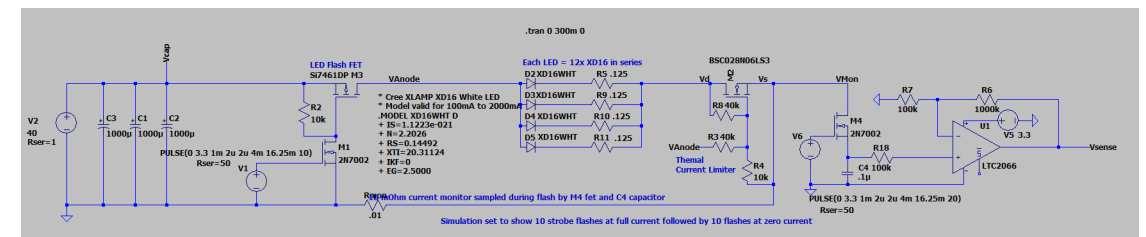
Paul Roberts
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email: proberts@mbari.org

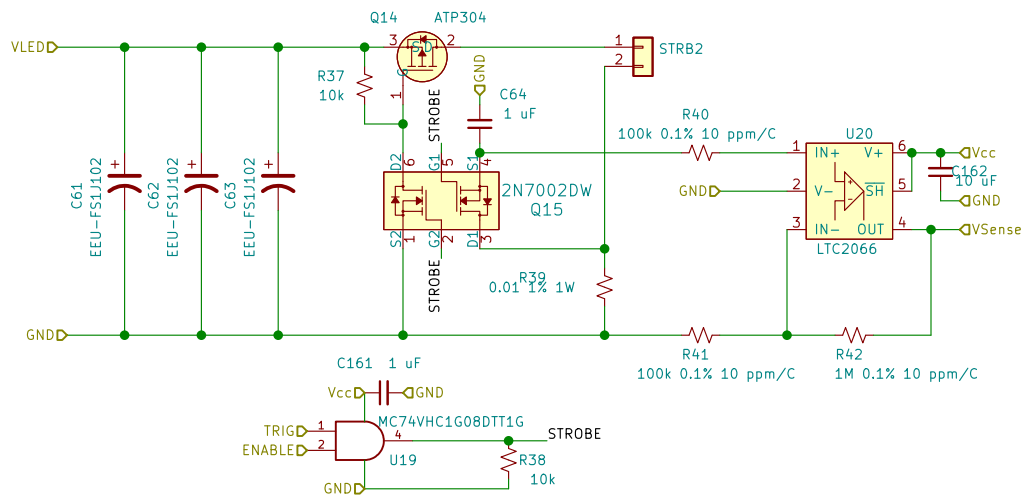
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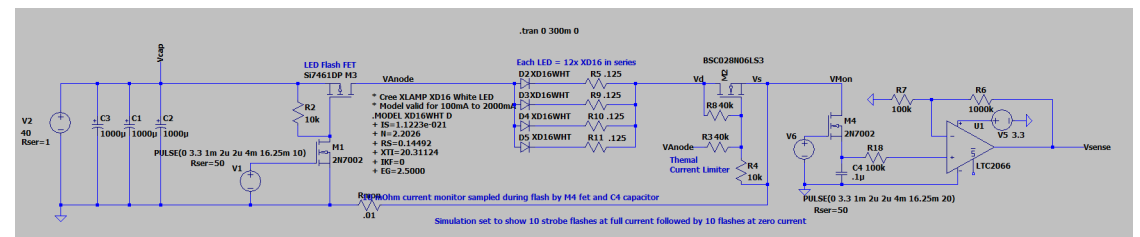
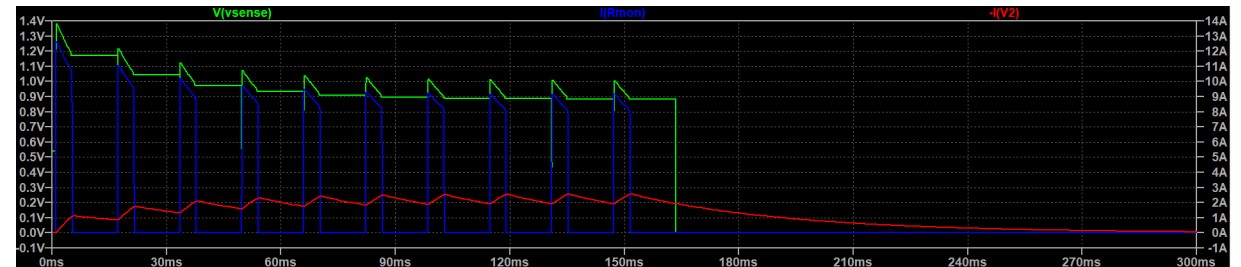
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Rev: A
Id: 16/35





LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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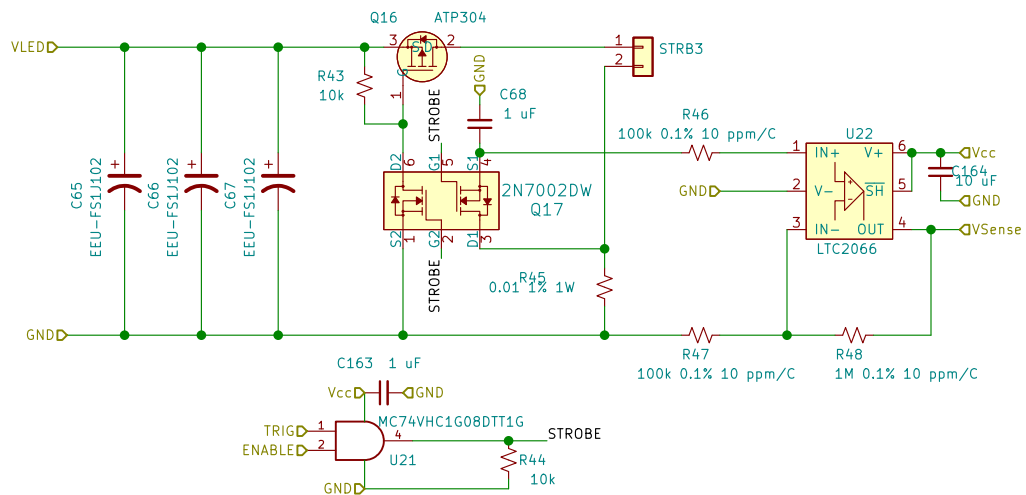
Paul Roberts
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Moss Landing, California, 95039 U.S.A.
Phone: 831-775-1842
email: proberts@mbari.org

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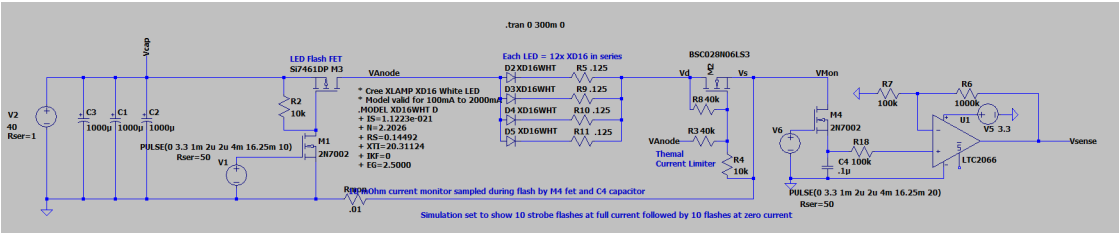
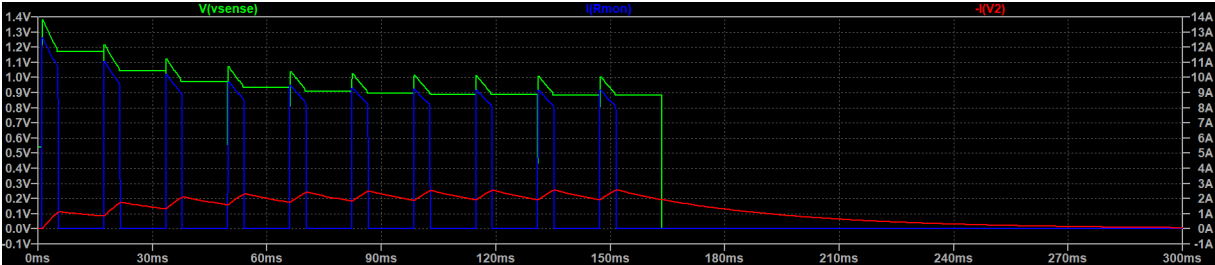
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Rev: A
Id: 18/35



LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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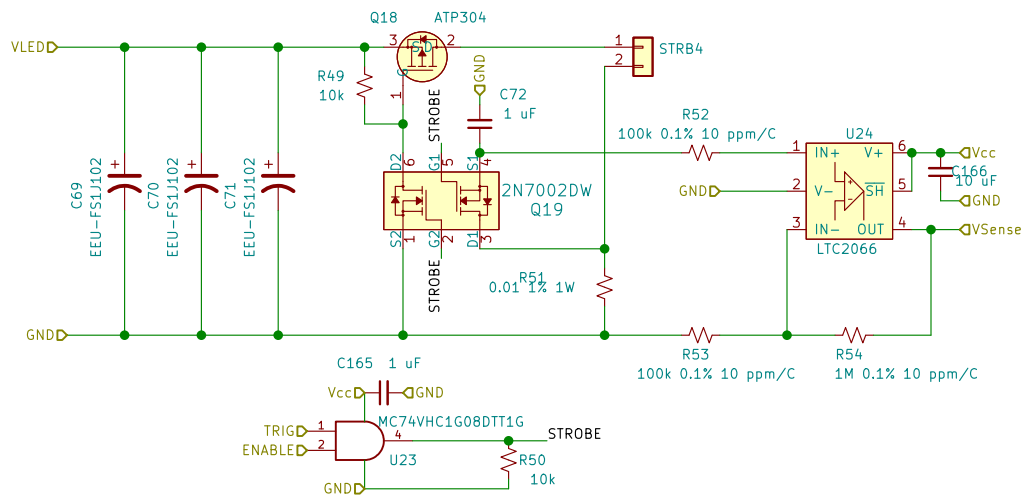
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

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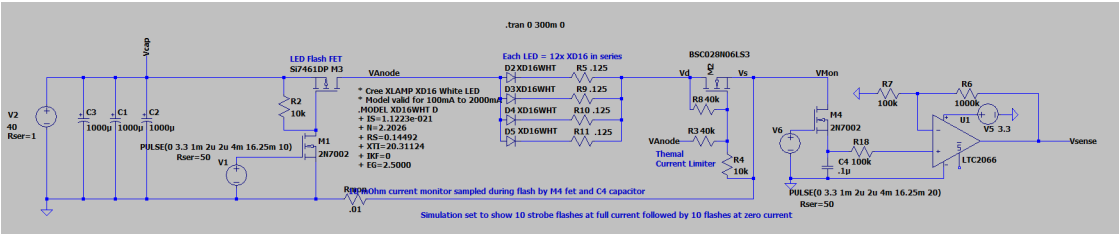
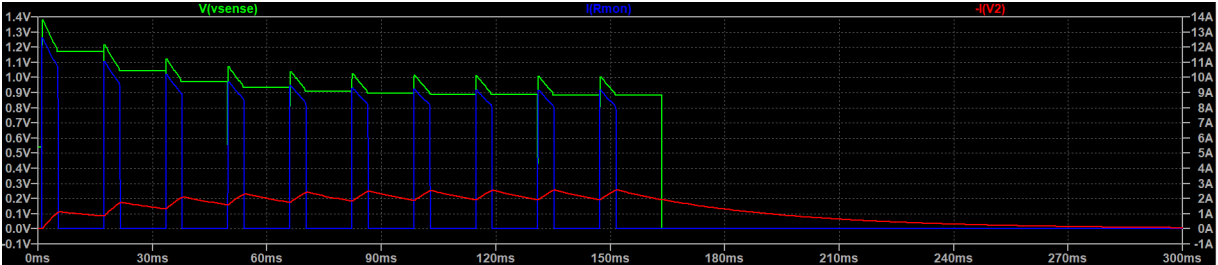
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Rev: A
Id: 19/35



LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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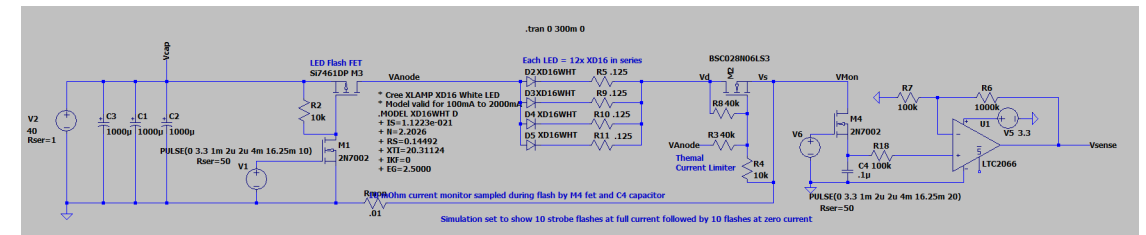
Paul Roberts
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email: proberts@mbari.org

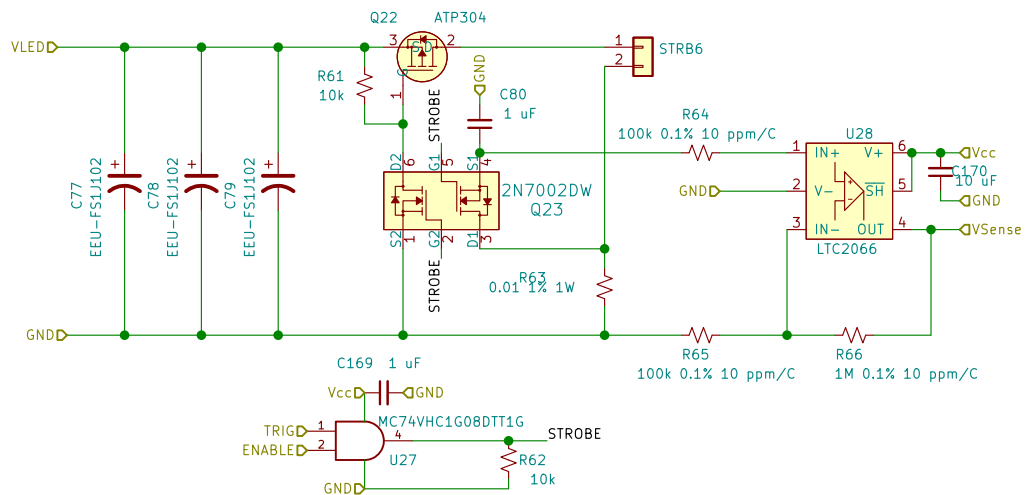
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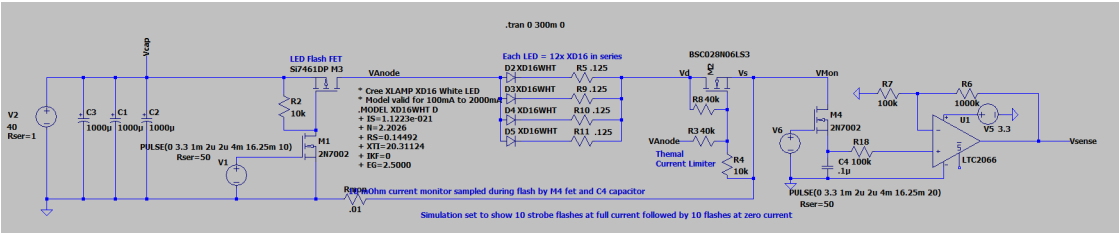
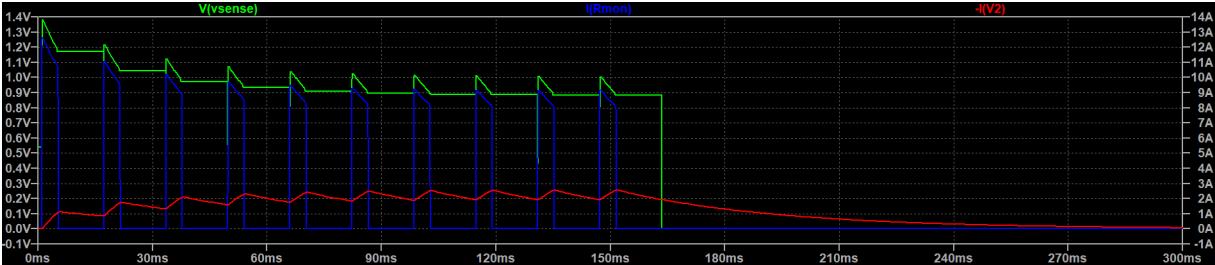
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Rev: A
Id: 20/35





LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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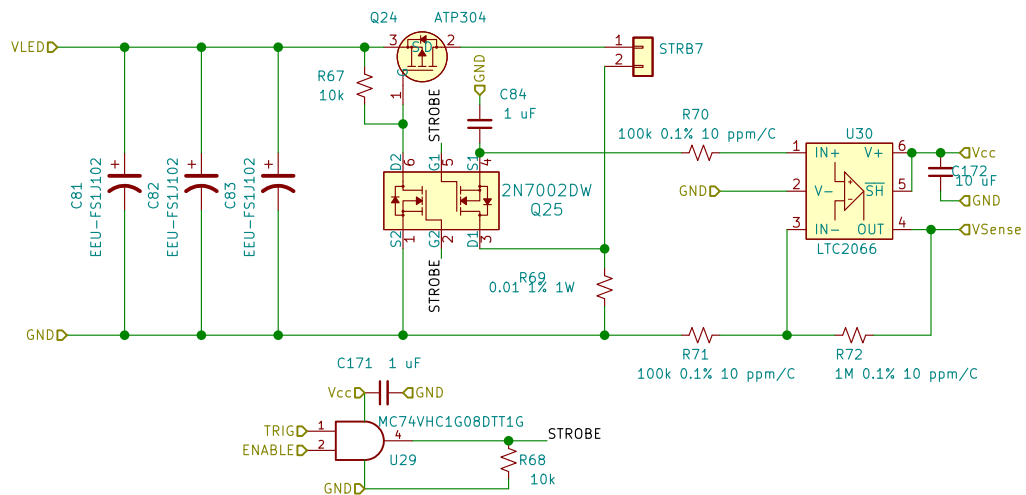
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

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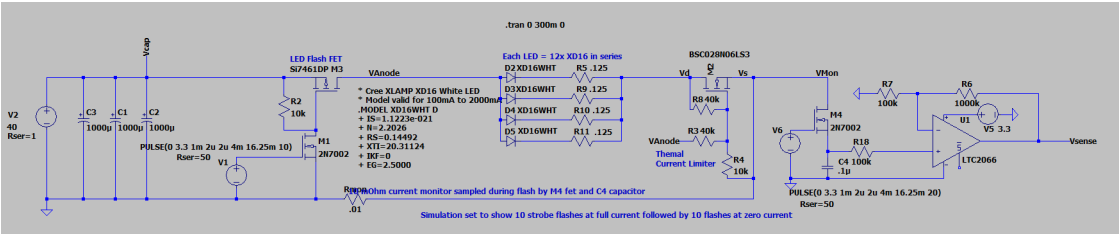
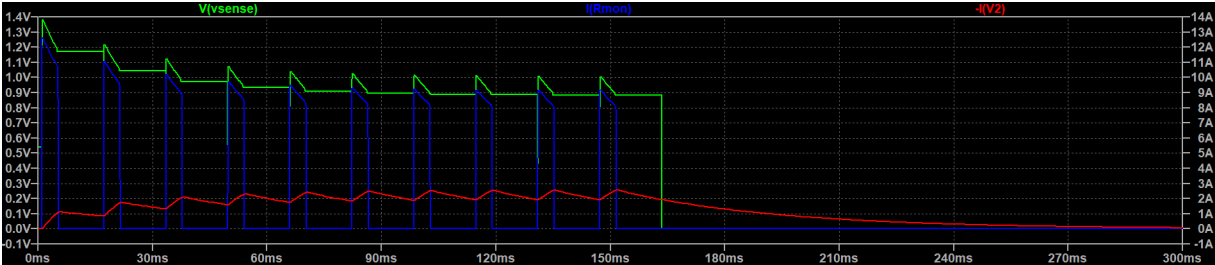
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Rev: A
Id: 22/35



LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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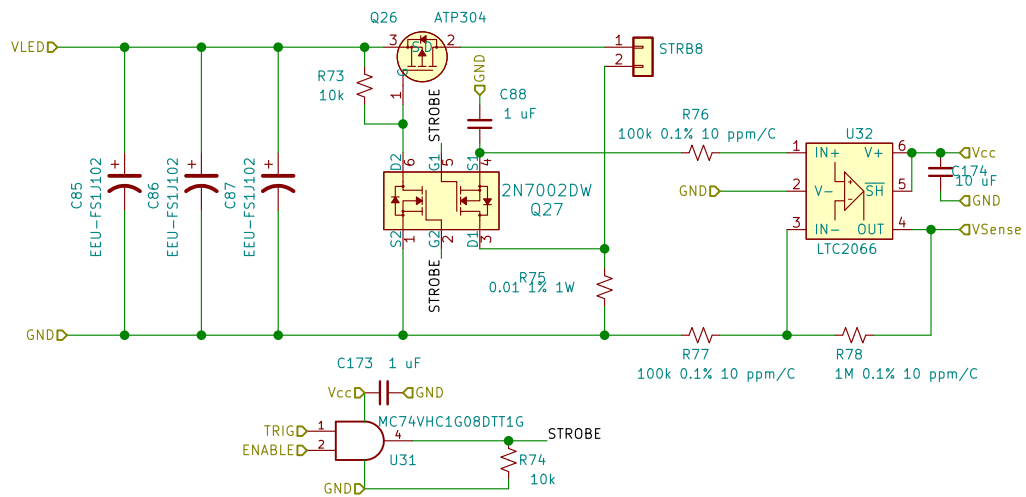
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

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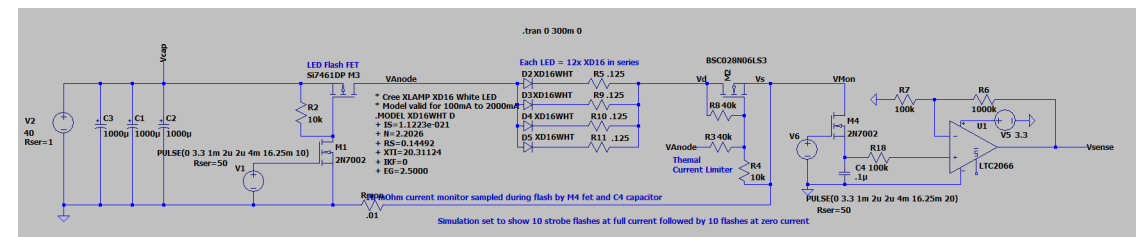
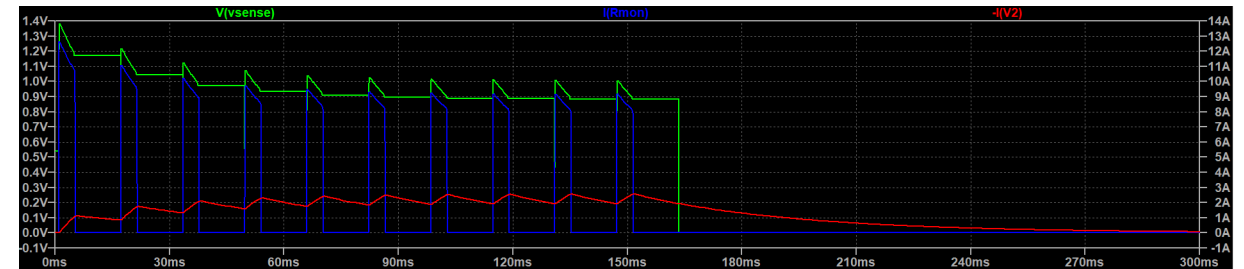
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Rev: A
Id: 23/35



LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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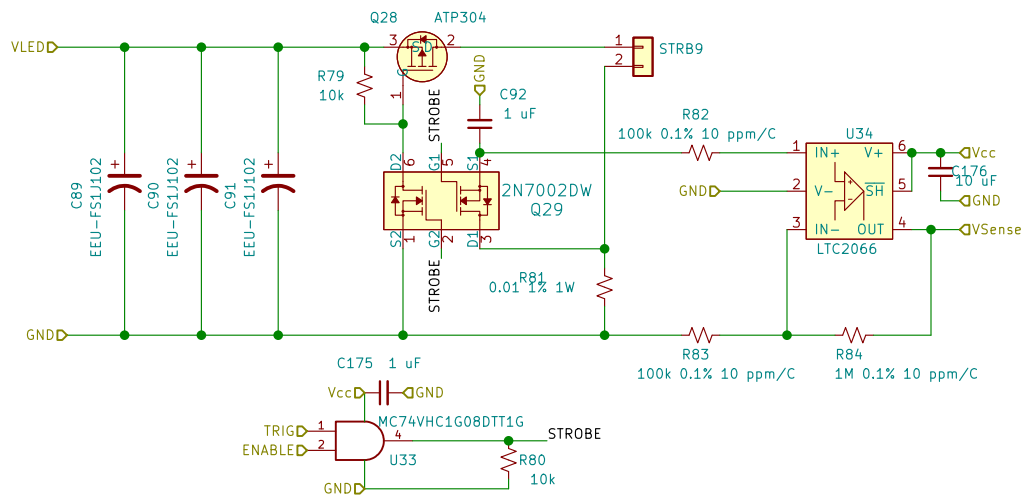
Paul Roberts
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Phone: 831-775-1842
email: proberts@mbari.org

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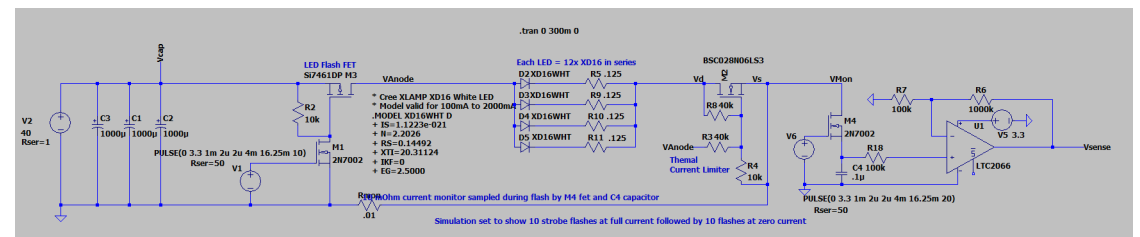
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Rev: A
Id: 24/35



LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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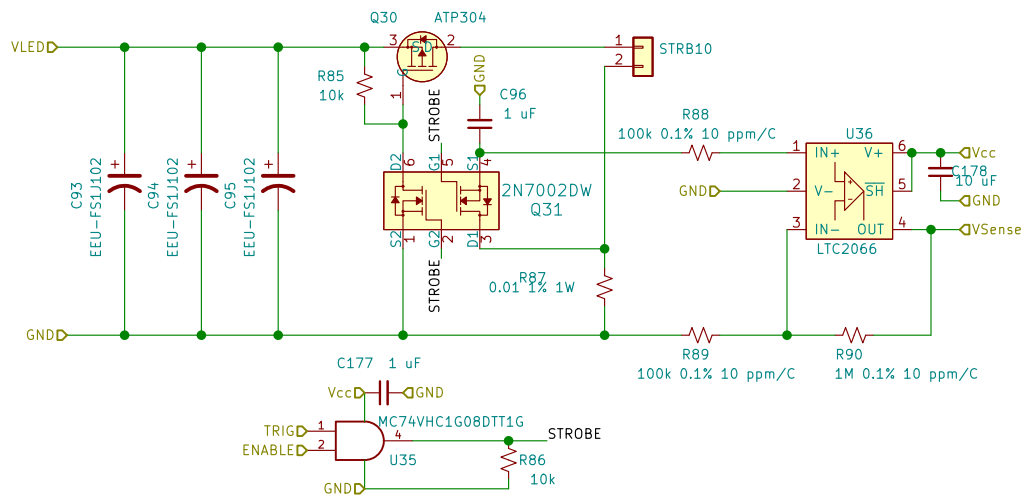
Paul Roberts
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Phone: 831-775-1842
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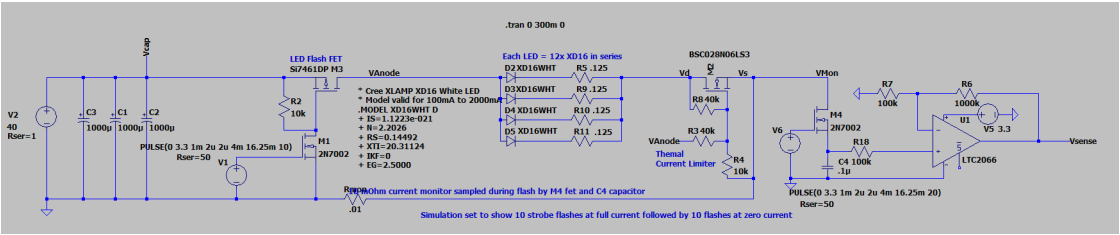
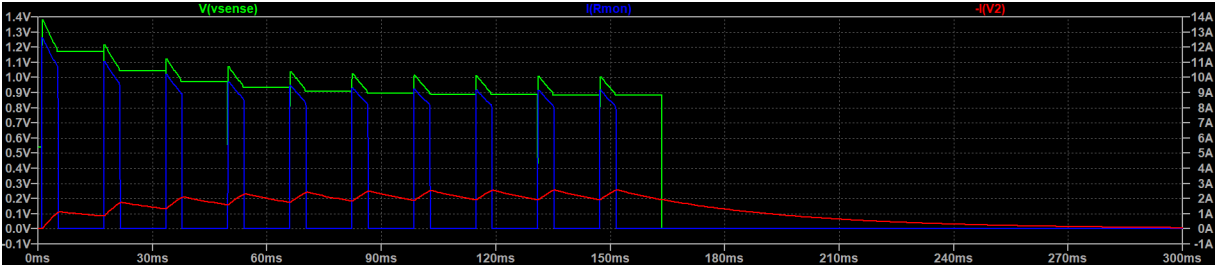
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LT spice simulation of 60 Hz, 4ms flashes with flash current, monitor voltage and capacitor ripple current



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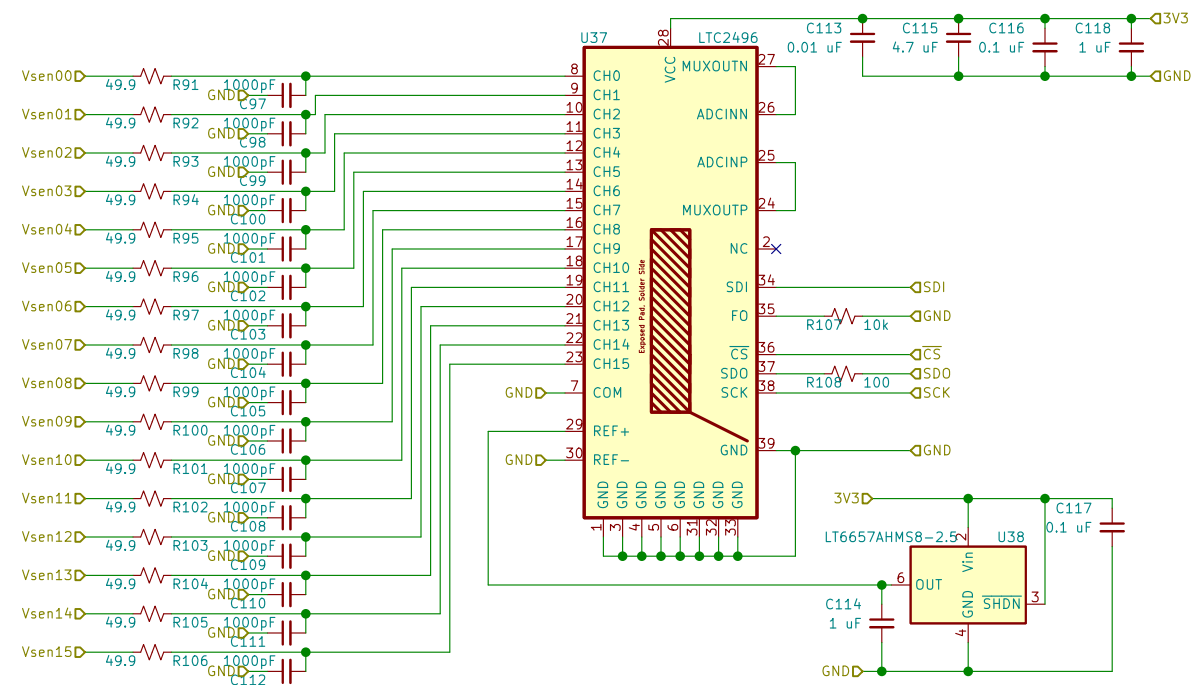
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Size: B Date: 2021-01-19
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16-channel, 16-bit, 2.5V reference single-ended ADC



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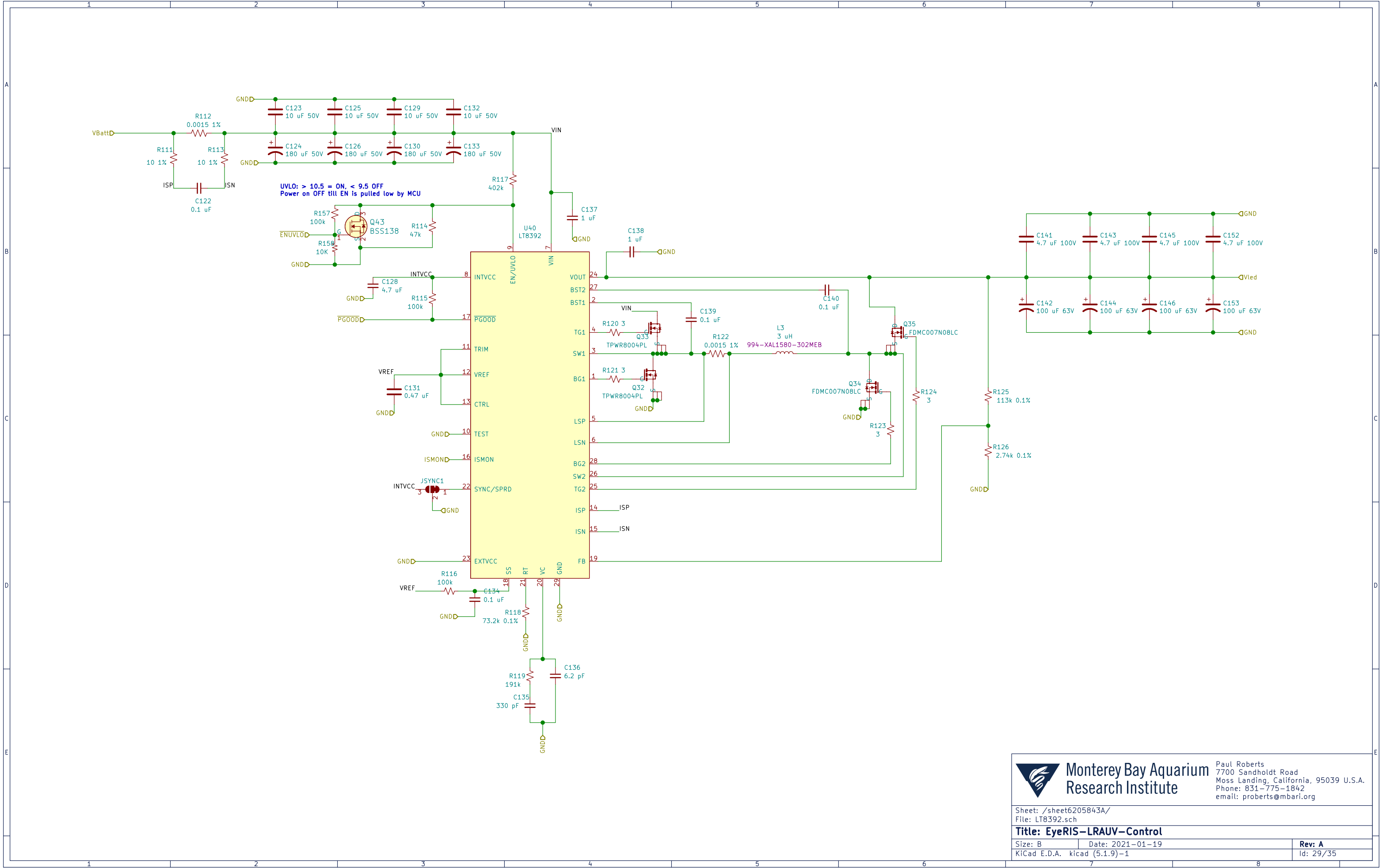
Date: 2021-01-19

Rev: A

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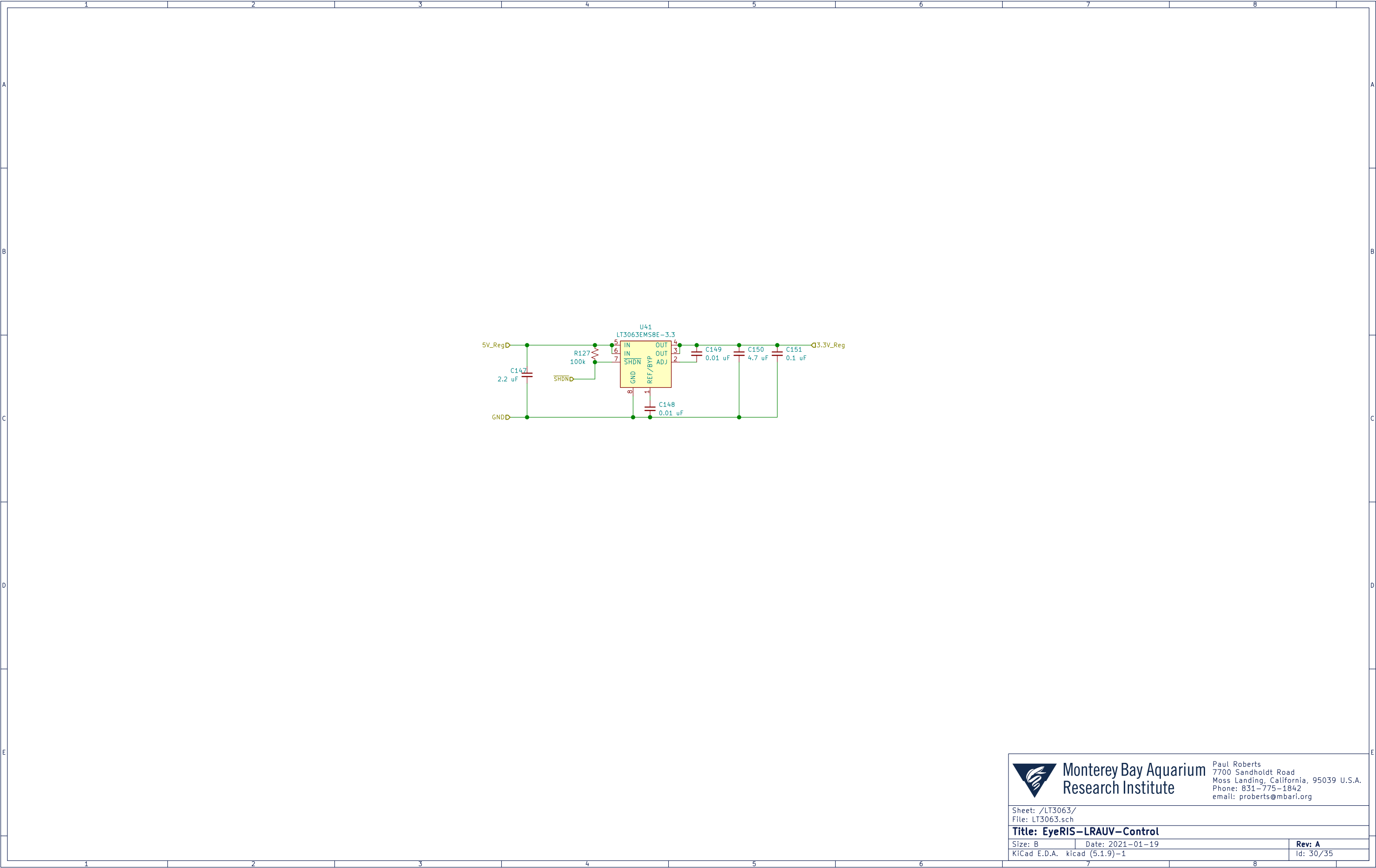
Paul Roberts
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Moss Landing, California, 95039 U.S.A.
Phone: 831-775-1842
email: proberts@mbari.org

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Size: B Date: 2021-01-19
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Phone: 831-775-1842
email: proberts@mbari.org

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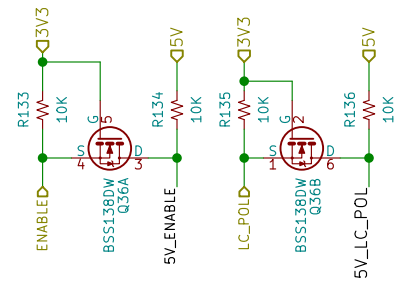
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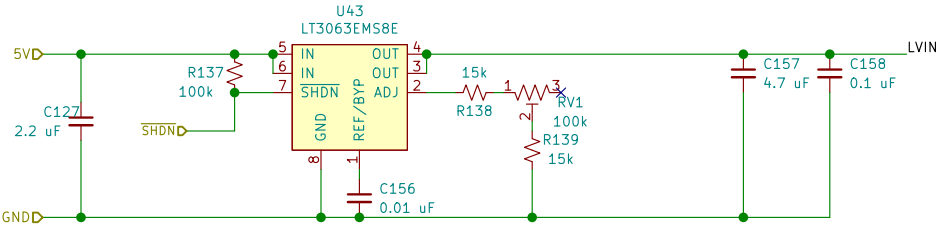
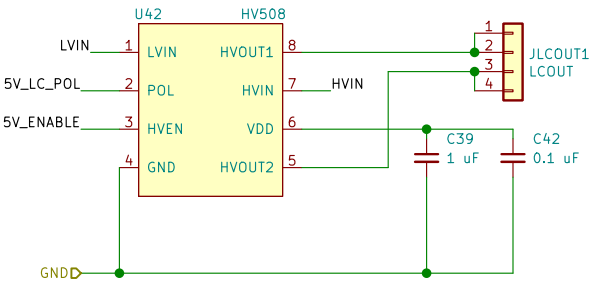
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Id: 30/35



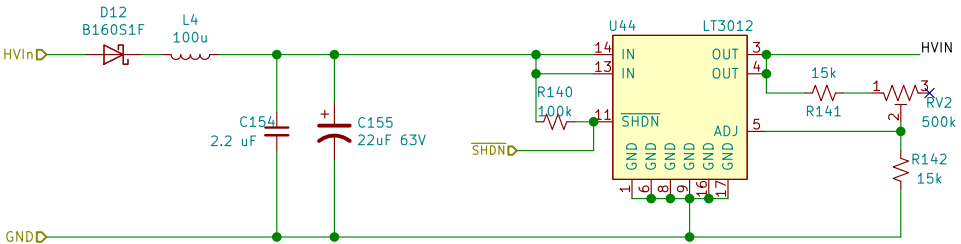
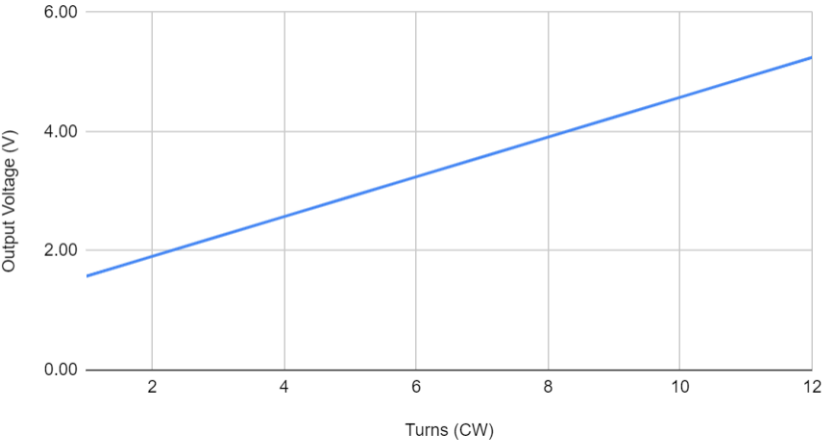
3.3 to 5V Level Shifter



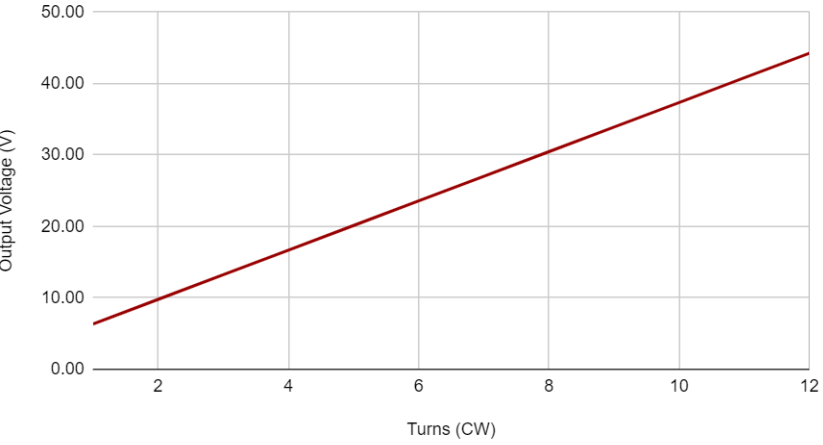
HV508 LC Shutter Driver (90V Max)



LVIN Voltage vs. Turns (CW)



HVIN Voltage vs. Turns (CW)



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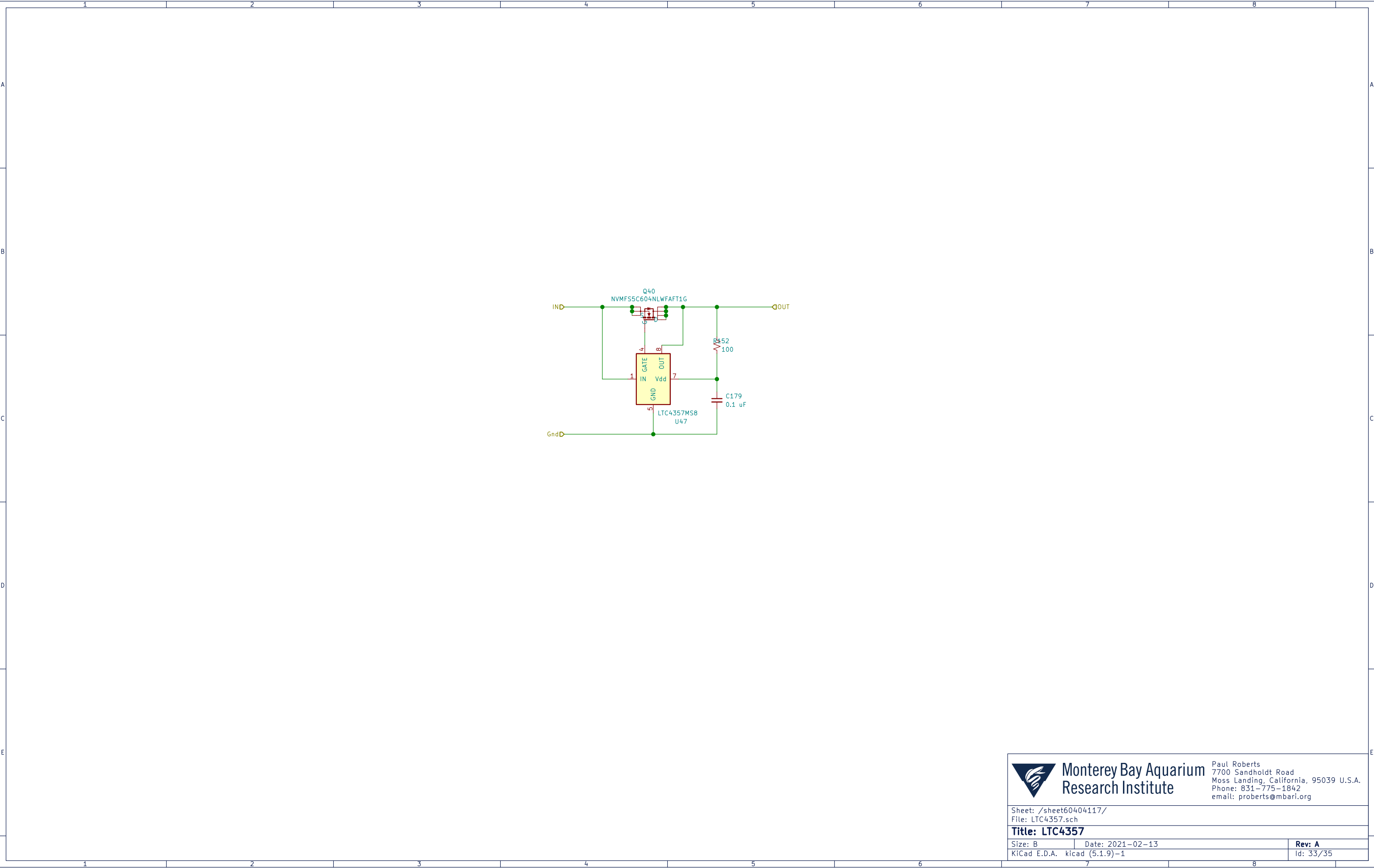
Paul Roberts
7700 Sandholdt Road
Moss Landing, California, 95039 U.S.A.
Phone: 831-775-1842
email: proberts@mbari.org

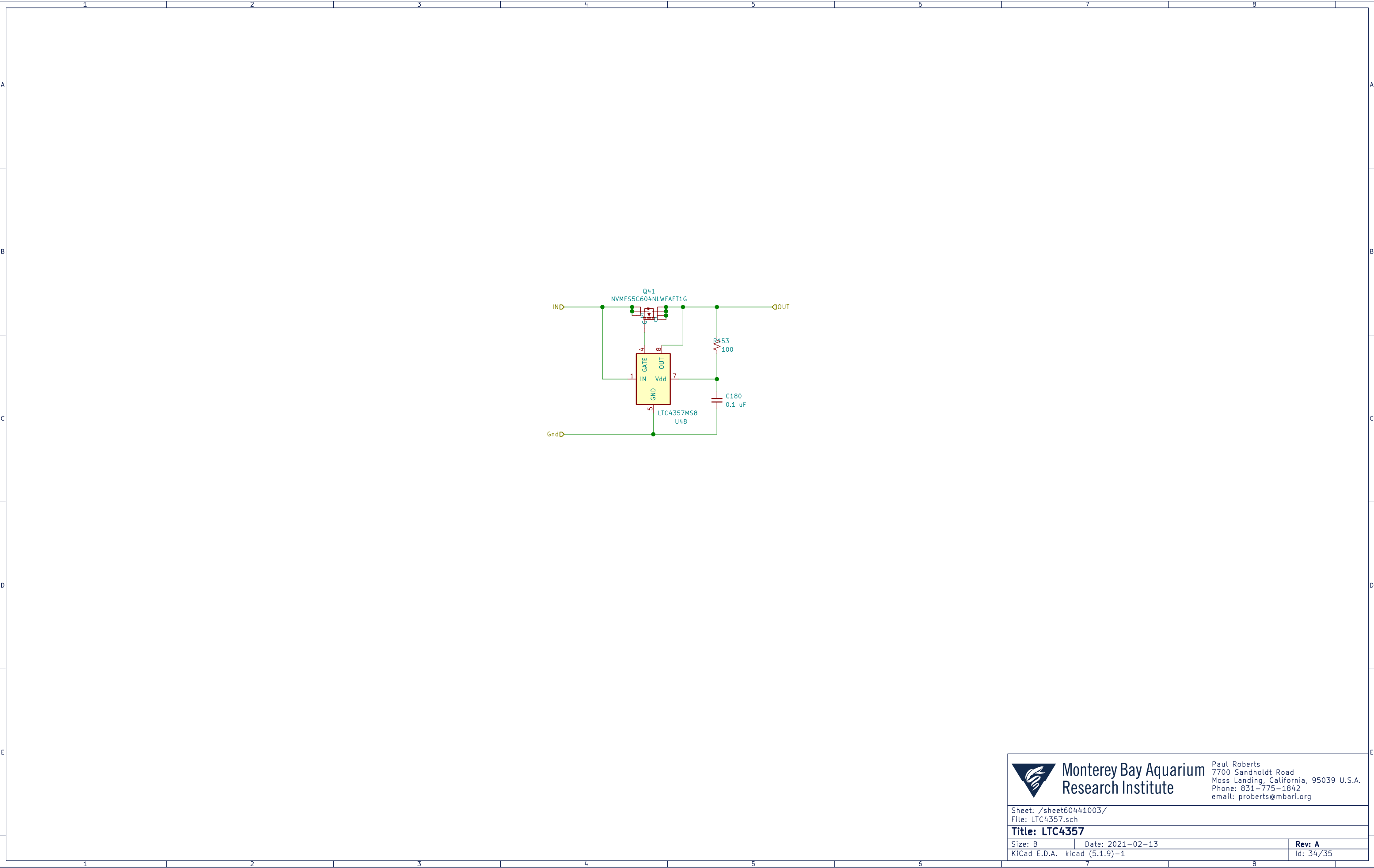
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Rev: A
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