

*Probably Wont Be Used, Analog FPGA Has One Too

TITLE: Digital Section		REV: 1.0
	Company: Jacob Gaming Co.	Sheet: 3/10
	Date: 2021-01-15	Drawn By: Jacob Soucek

Digital

Analog

2.048V Reference (Vocm)

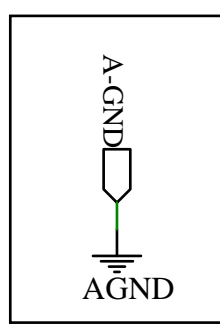
4.096 Reference (ADC)

No Filtering, Precision Low Noise Regulator
R38 precision Resistor

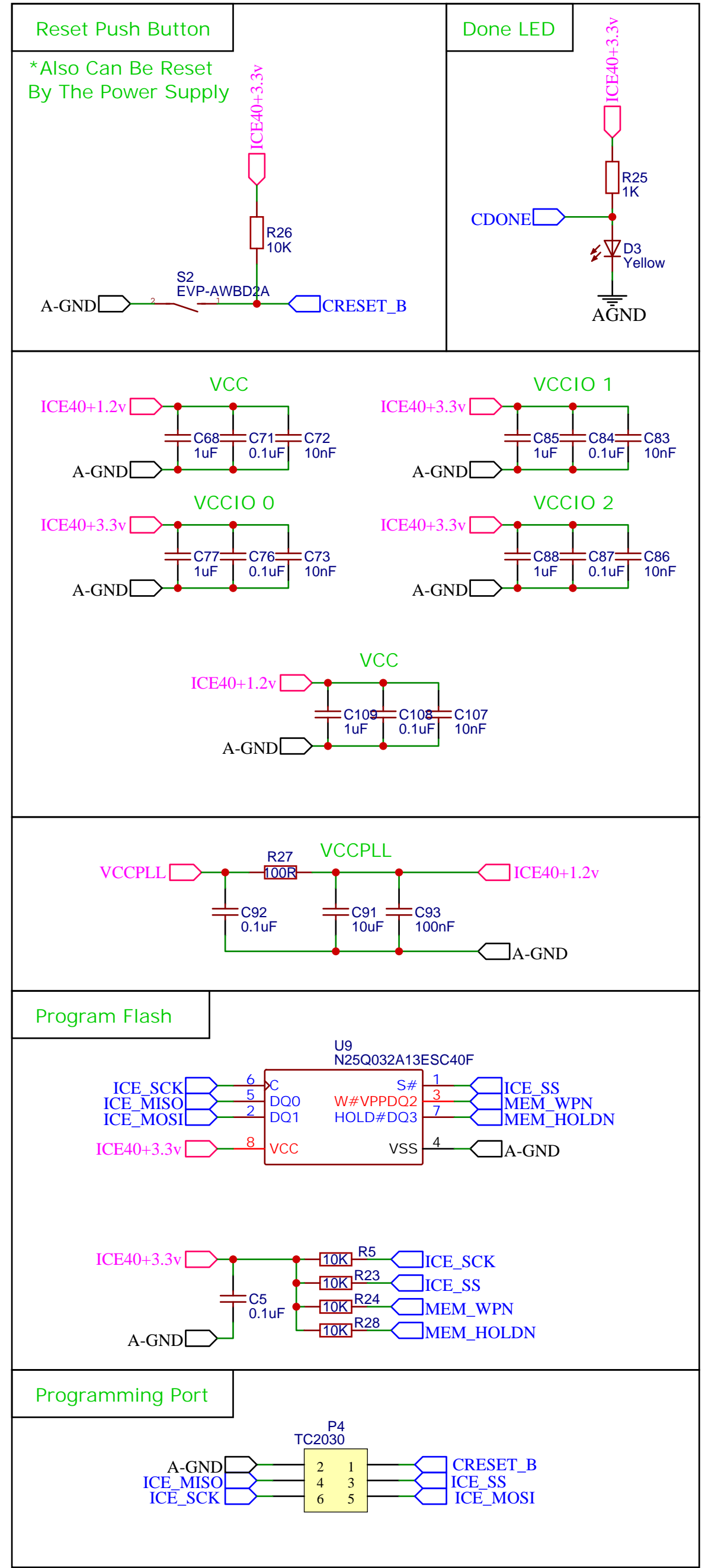
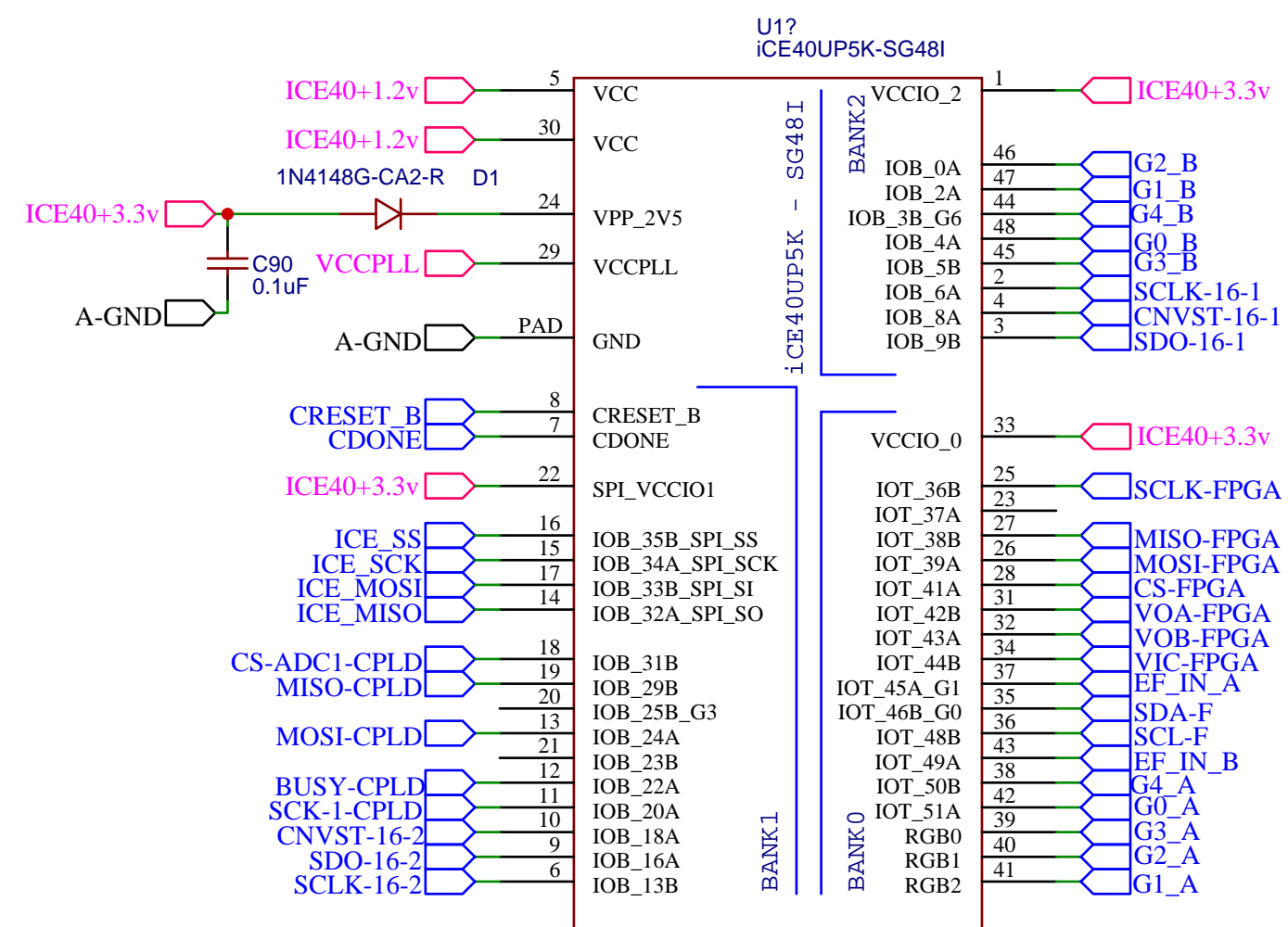
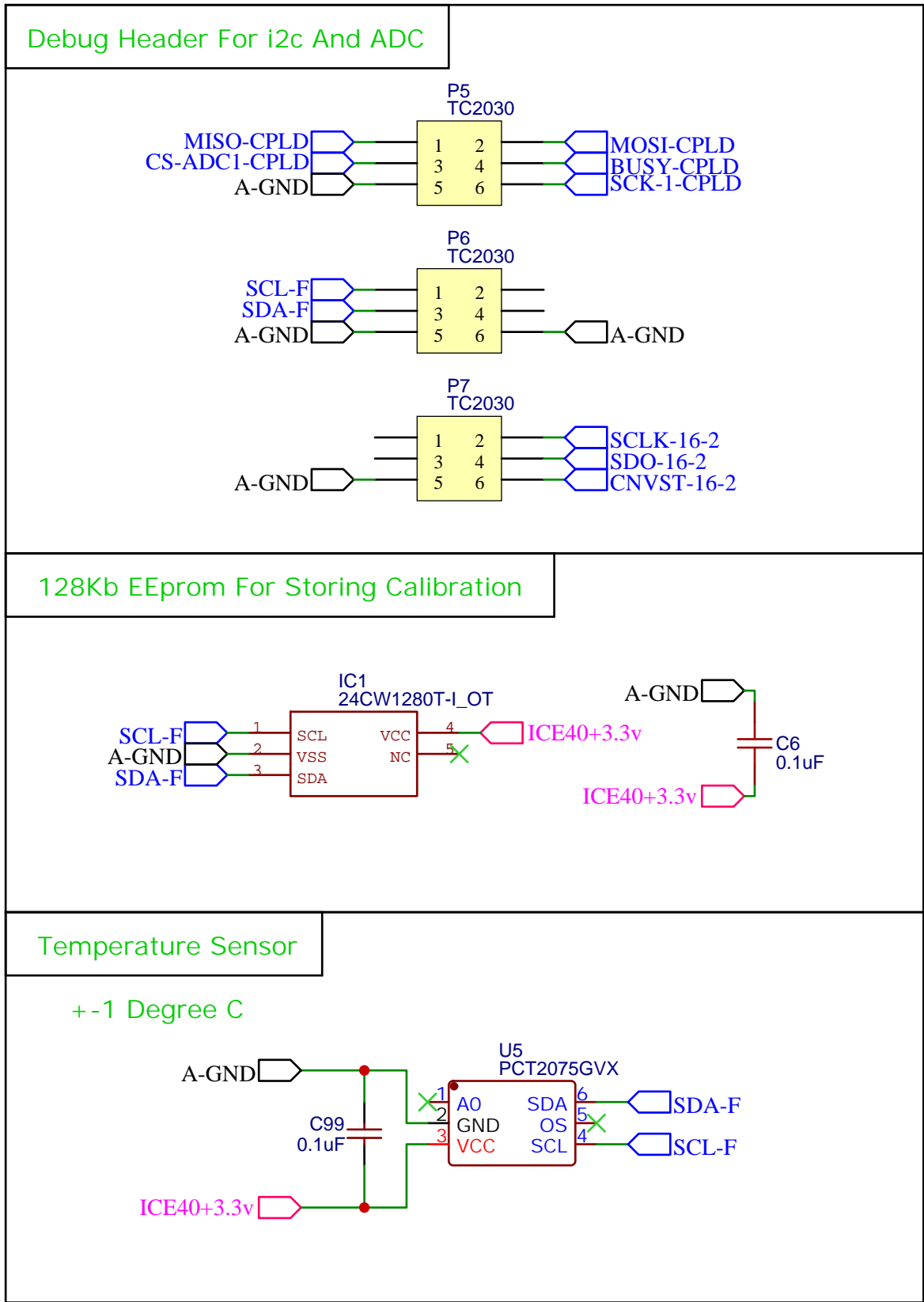
(Low ESR)

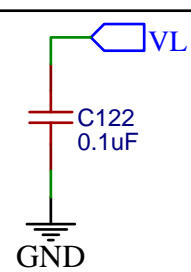
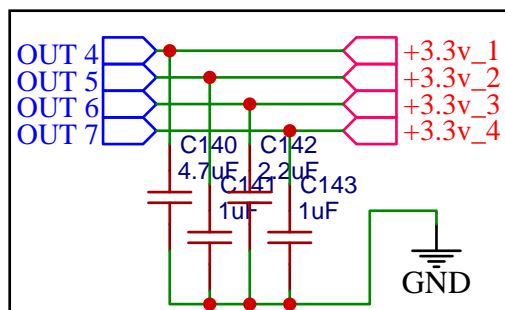
(Low ESR)

Optocoupled Relay Control
Helps Prevent Analog Noise



TITLE: Analog Power Supply / Isolation		REV: 1.0
	Company: Jacob Gaming Co.	Sheet: 4/10
	Date: 2021-01-21	Drawn By: Jacob Soucek

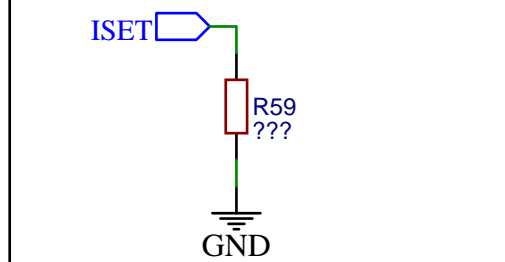
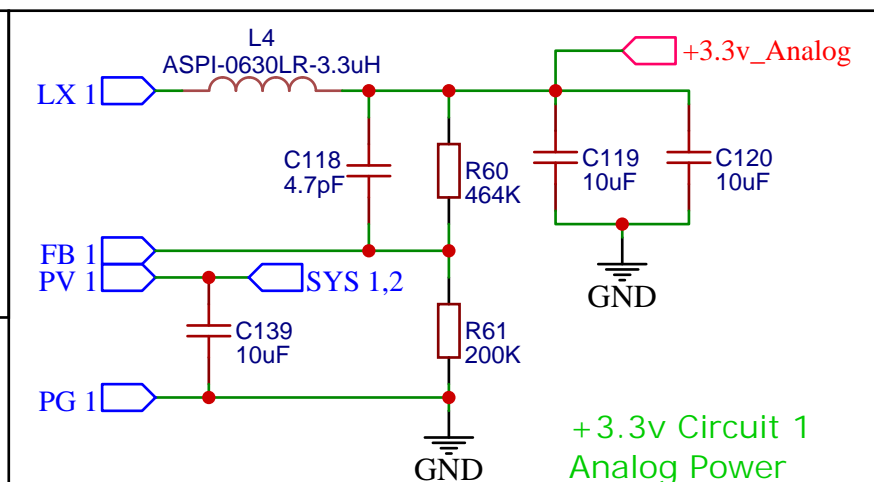
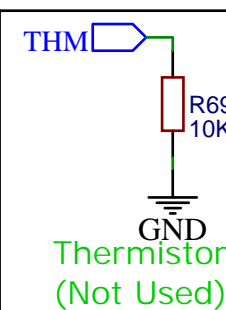
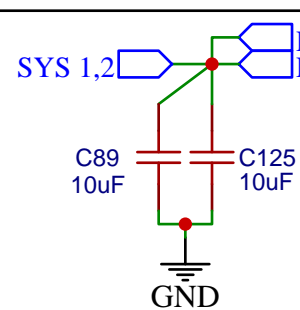




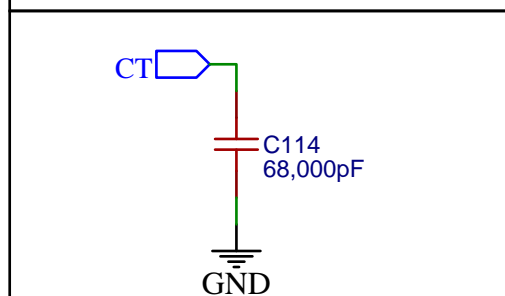
PWM Do Nothing??

POK Indicators

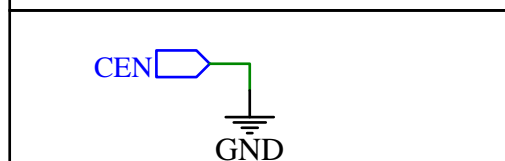
CHG Indicators



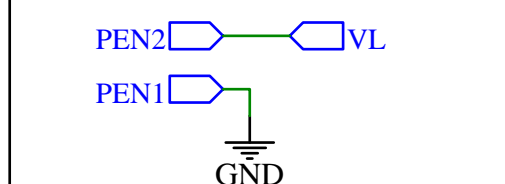
Charge Current Setting
Select When Battery Selected



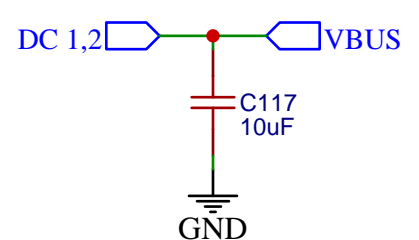
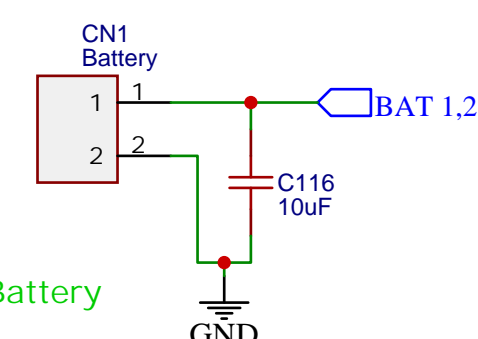
Charge Timer Control
Prequal = 30min
Fast Charge = 300min



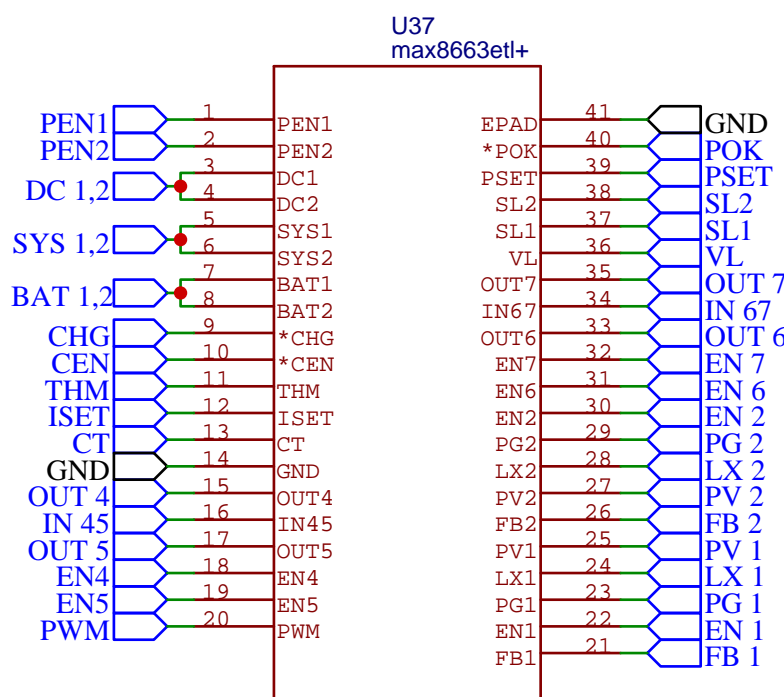
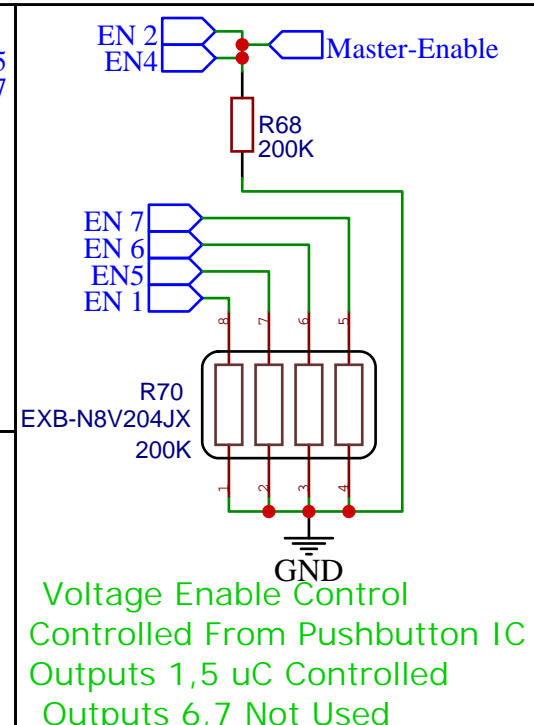
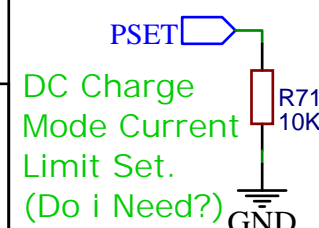
Charge Enable When
CEN = 0v



DC Input Current Limit
VPEN1 = 0V, VPEN2 = 5V
(500mA USB mode)



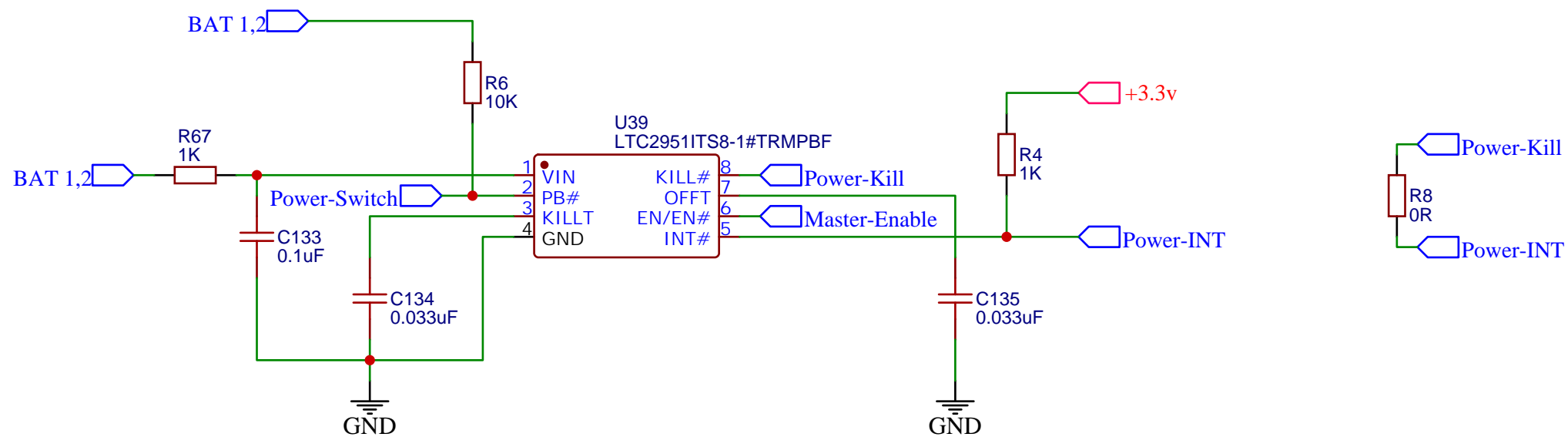
SL2
SL1
Leave Open
Out 4, 5, 6, 7
+3.3v



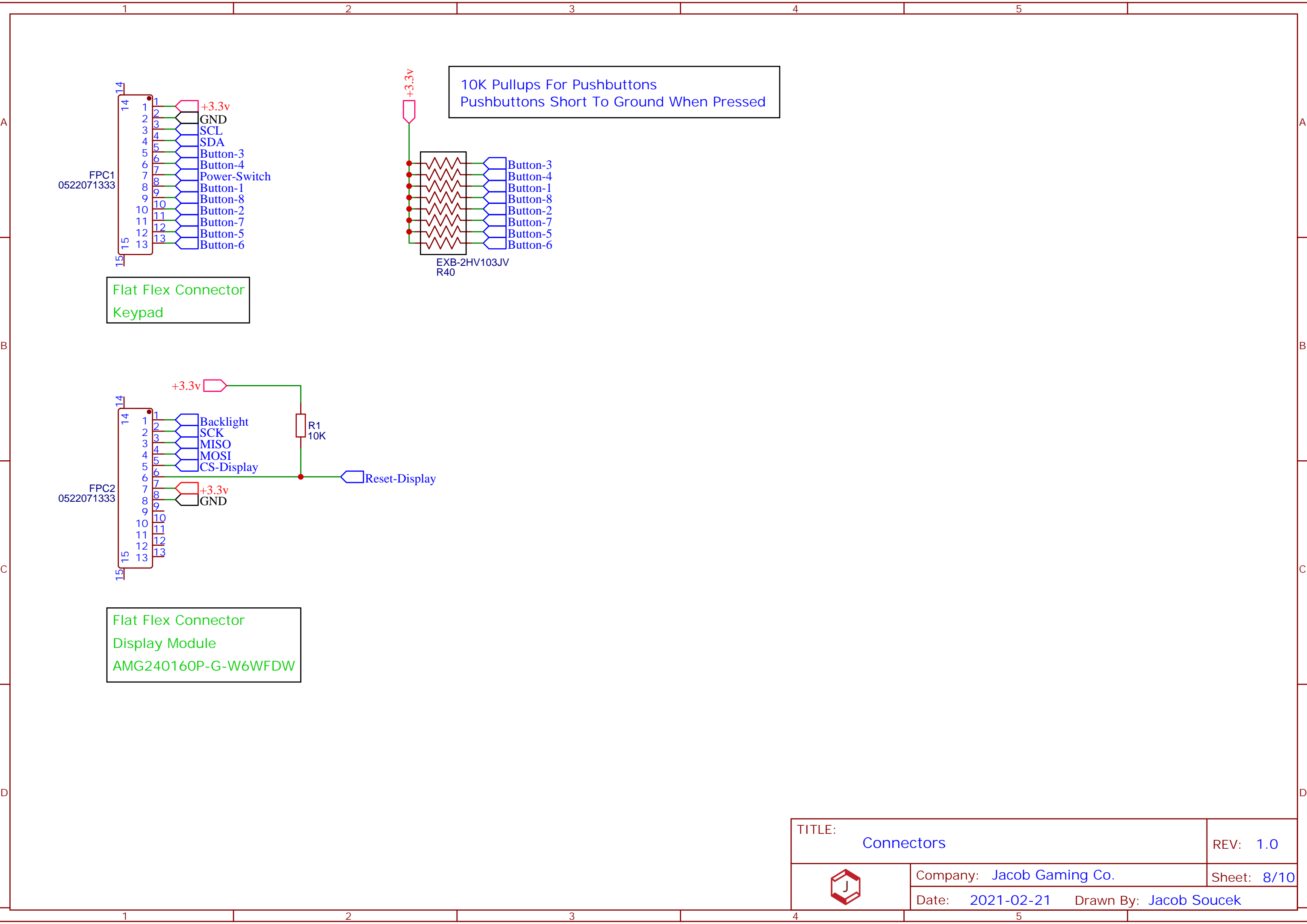
R6 Not Used, Only There In Case I Need It.

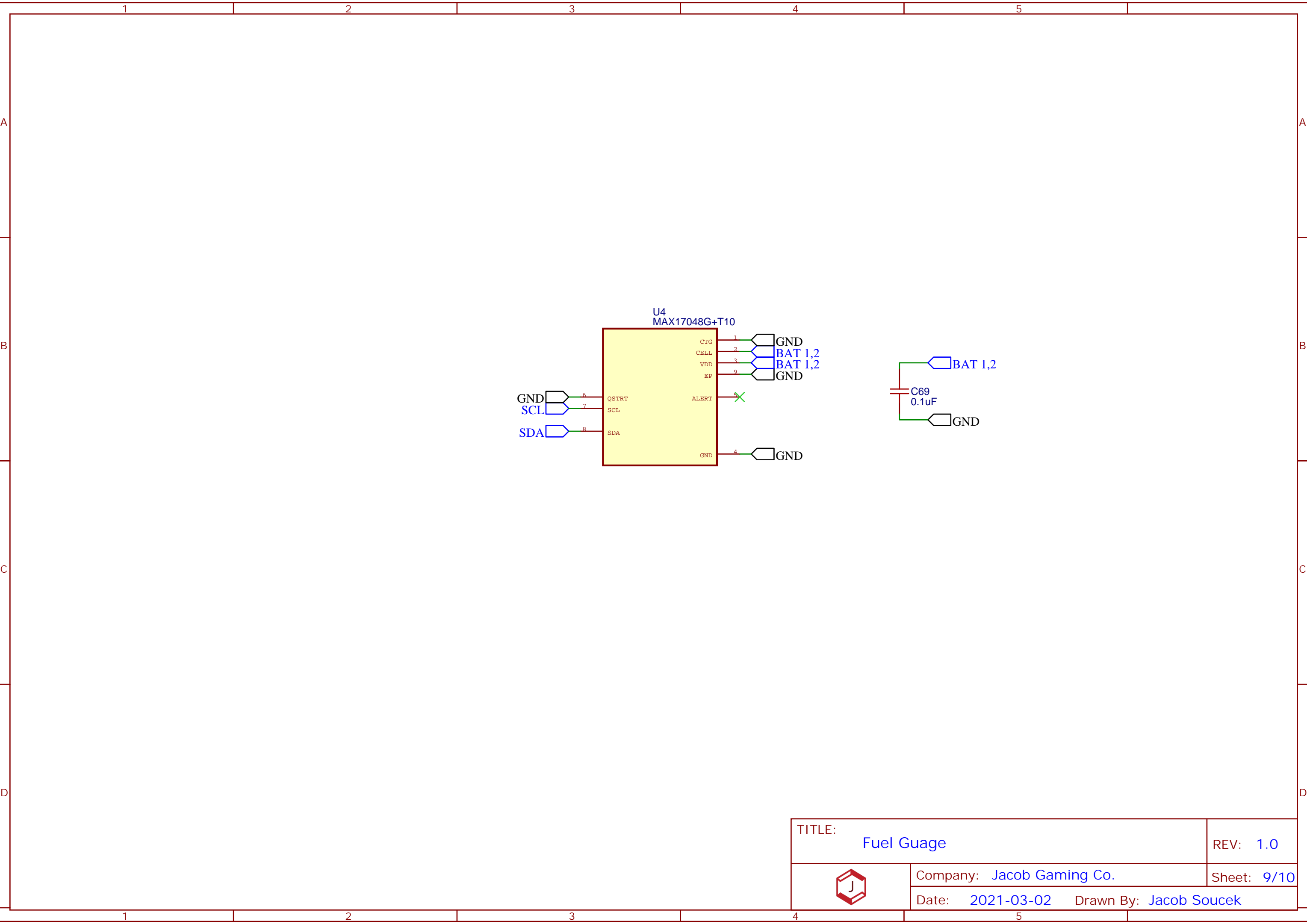
R67 Reverse Battery Protection, Might Fit OR

R8 Used When MCU Is Still Being Developed, Forces Kill Override



TITLE: Pushbutton Power Switch		REV: 1.0
	Company: Jacob Gaming Co.	Sheet: 7/10
	Date: 2021-02-15 Drawn By: Jacob Soucek	



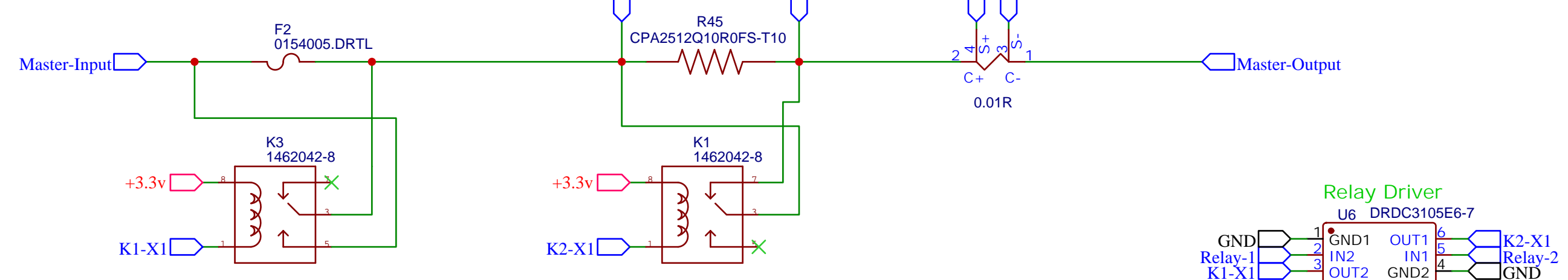


TITLE: Fuel Guage		REV: 1.0
		Sheet: 9/10
	Company: Jacob Gaming Co.	Date: 2021-03-02 Drawn By: Jacob Soucek

SHUNTS

uA/mA
10R

mA/A
0.01R



Allows The Fuse To Be Bypassed For
Ultra Low Dropout Operations. (2A Fuse)

PGA

Programmable Gain Device Sets The Ranges

ADC

24-bit For precision, 16 bit 1Ms/s For Graphing and ranging
Two 16-bit adc's for simultaneous shunt sensing

RC FILTER

X10 Op Amp Amplification

