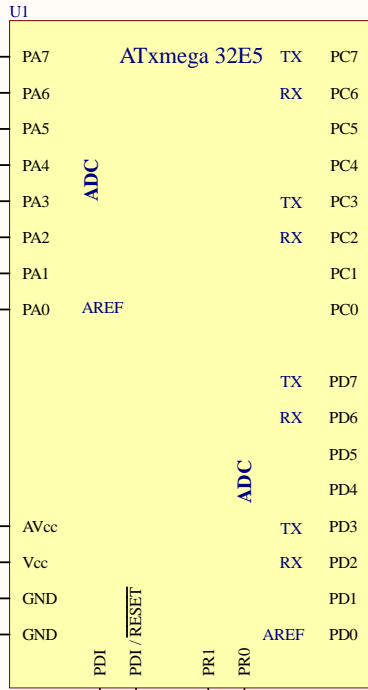
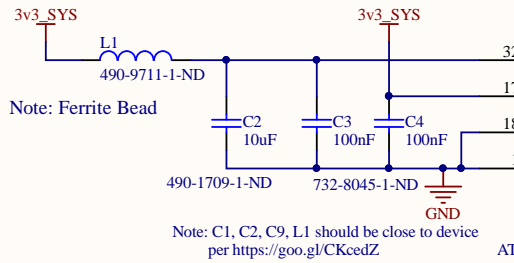


# MCU



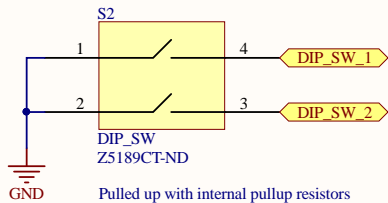
## Source Code

Note: Source code can be found at:  
<https://github.com/OSURoboticsClub/InventoryManagement>

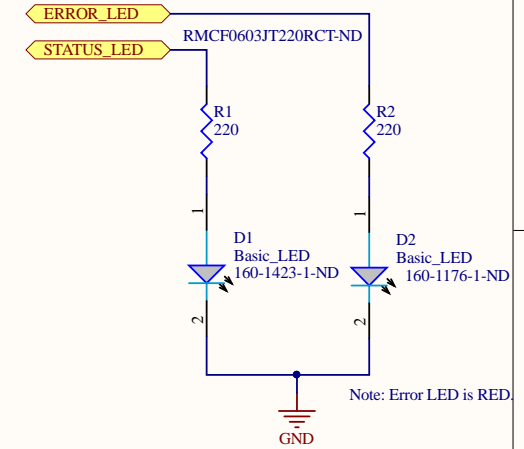


TODO: Do we want some voltage divider references on the ADC inputs?

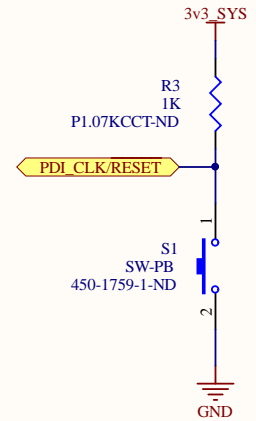
## Settings Switch



## MCU LEDs



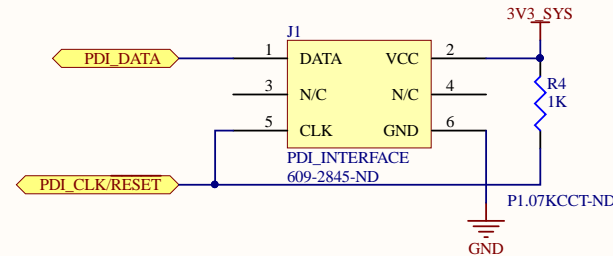
## MCU Reset



## XMega ADC Application Notes

Note: One of the first 7 channels needs to be GND, for our reference  
 Note: AREFA and AREFD are bit 0  
 Note: They need to be fed (3v3-.6) volts if used

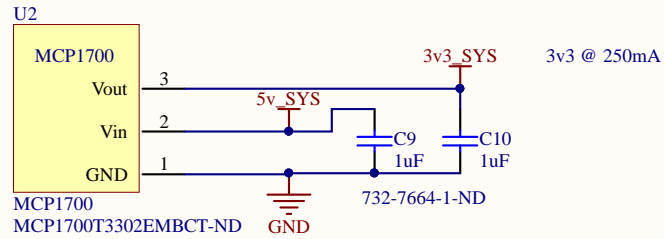
## MCU PDI



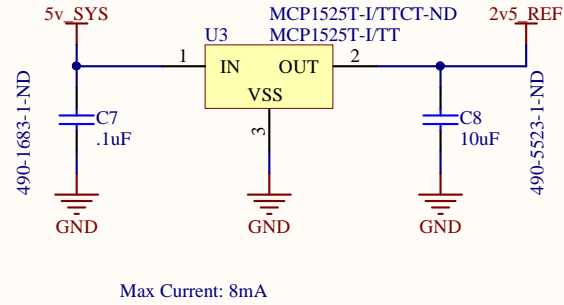
Title Microcontroller.SchDoc		
Size: A4	Number: 1	Engineer: Nick McComb
Date: 3/9/2017	Time: 10:26:24 PM	Sheet 1 of 4
File: C:\Users\nrpc_000\Google Drive\Robotics Club\OSURC Master Drive [2016-2017]\Programs\ECE Capstone - Inventory Man		



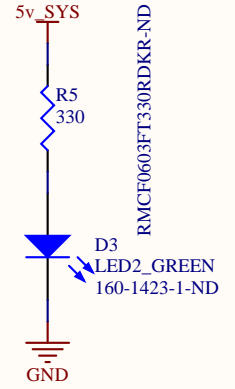
### 3v3 Linear



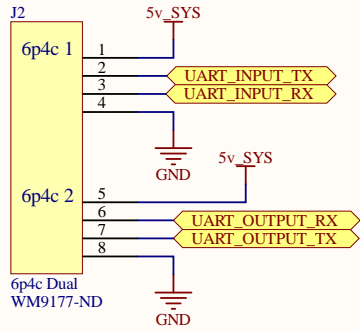
### 2v5 Reference



### Power Indication

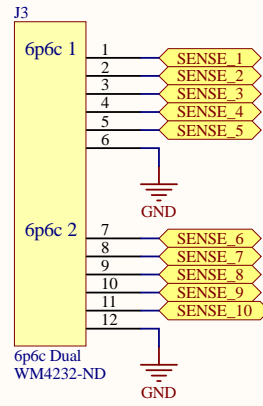


Title <b>PowerManagement.SchDoc</b>			Cannot open file C:\Users\Nick\Downloads\LogoBl ck.png
Size: <b>A4</b>	Number: <b>2</b>	Engineer: <b>Nick McComb</b>	
Date: <b>3/9/2017</b>	Time: <b>10:26:24 PM</b>	Sheet <b>2</b> of <b>4</b>	
File:			

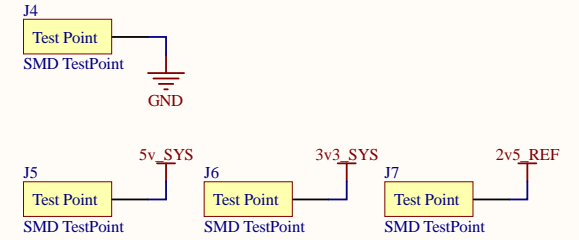


System Input

System Output



Drawer Sense



Title Interfaces.SchDoc		
Size: A4	Number: 3	Engineer: Nick McComb
Date: 3/9/2017	Time: 10:26:24 PM	Sheet 3 of 4
File: C:\Users\nrpc_000\Google Drive\Robotics Club\OSURC Master Drive [2016-2017]\Programs\ECE Capstone - Inventory Man		

**OSURC**  
OSU Robotics Club

# Mounting Holes

J8

Mounting Hole  
MountingHoles

J9


Mounting Hole  
MountingHoles

J10

Mounting Hole  
MountingHoles

J11

Mounting Hole  
MountingHoles

Title: MountingHardware.SchDoc			
Size: A4	Number: 4	Engineer: Nick McComb	
Date: 3/9/2017	Time: 10:26:24 PM	Sheet 4 of 4	
File:			

1

2

3

4

A

A

B

B

C

C

D

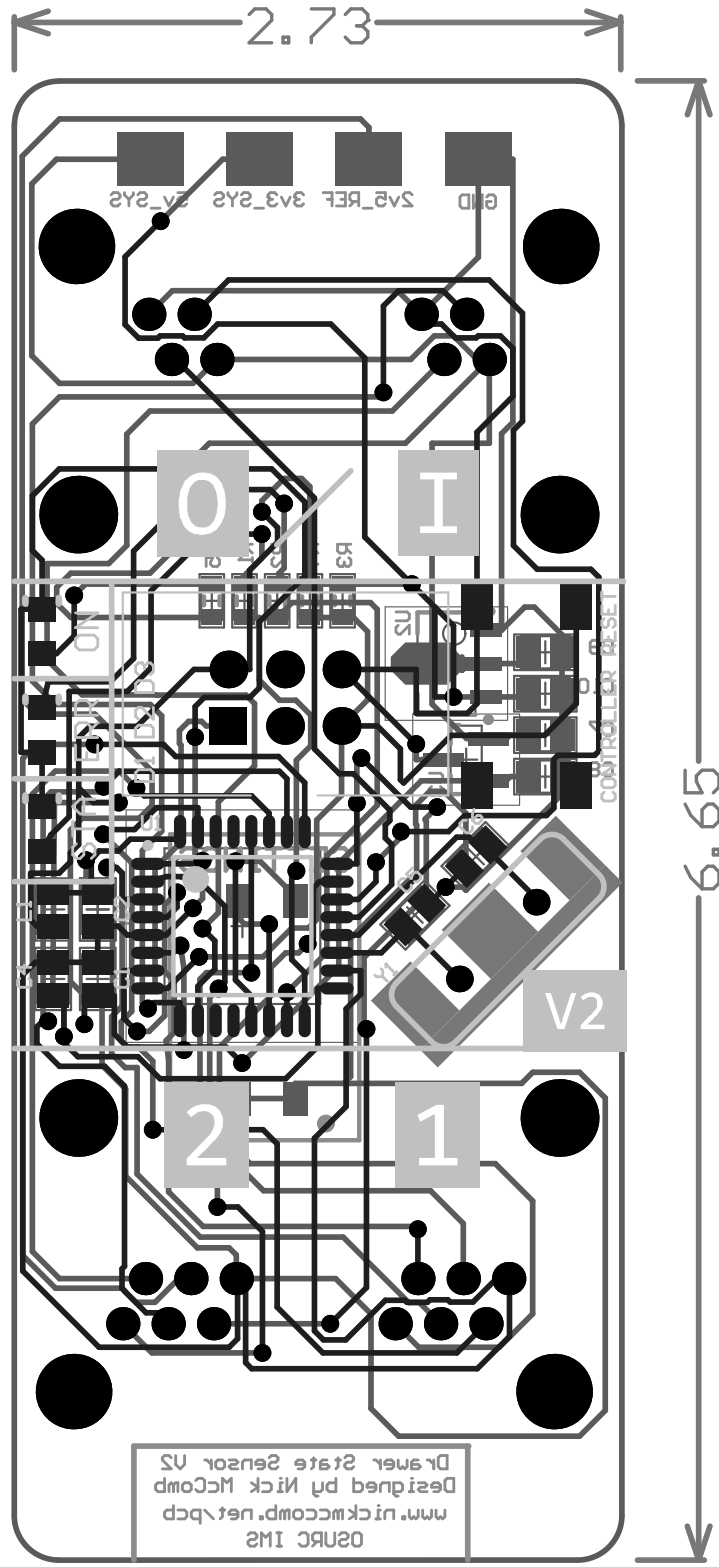
D

1

2

3

4



OSURC IMS  
www.nickmcomp.net/bcd  
Designed by Nick McComp  
Driver State Sensor V2

2.73

6.65