

ENGI 301

PCB Project

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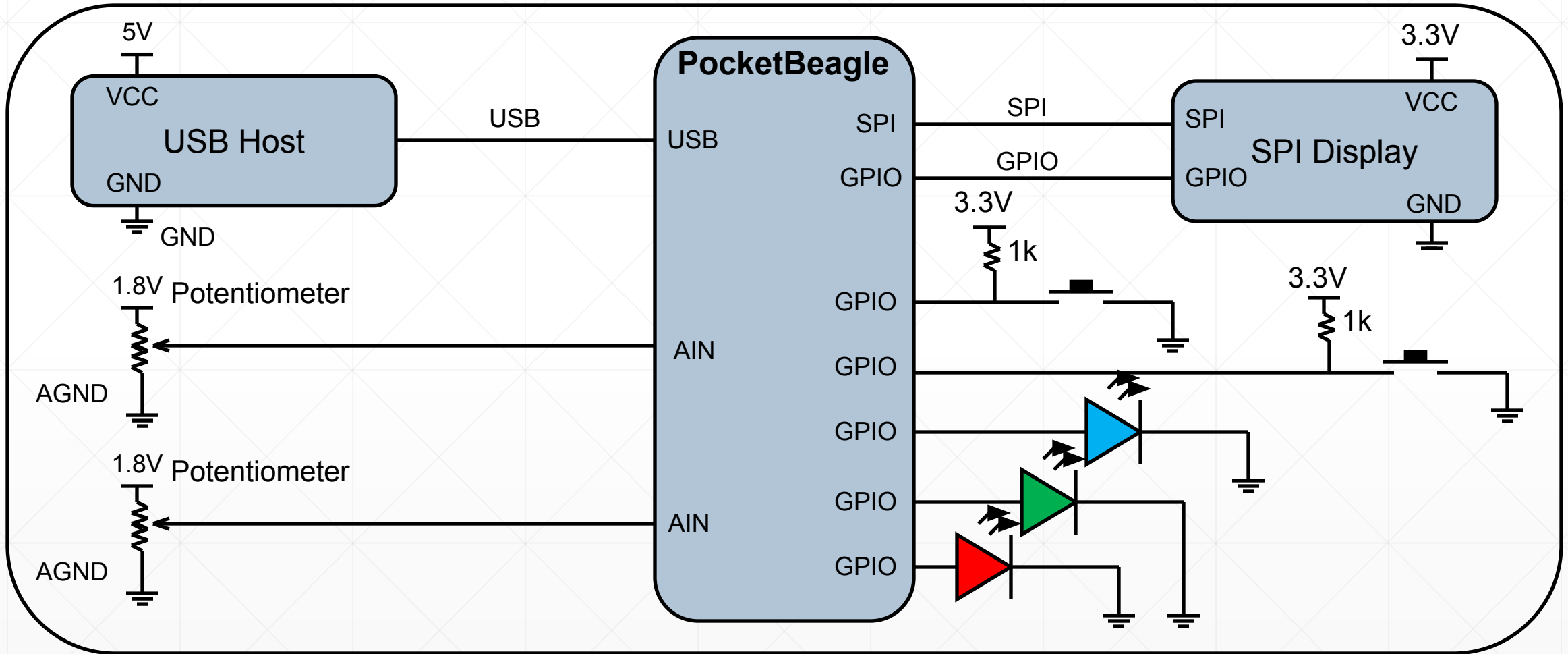
Due 12/13/2022 @ 11:59pm

Background Information

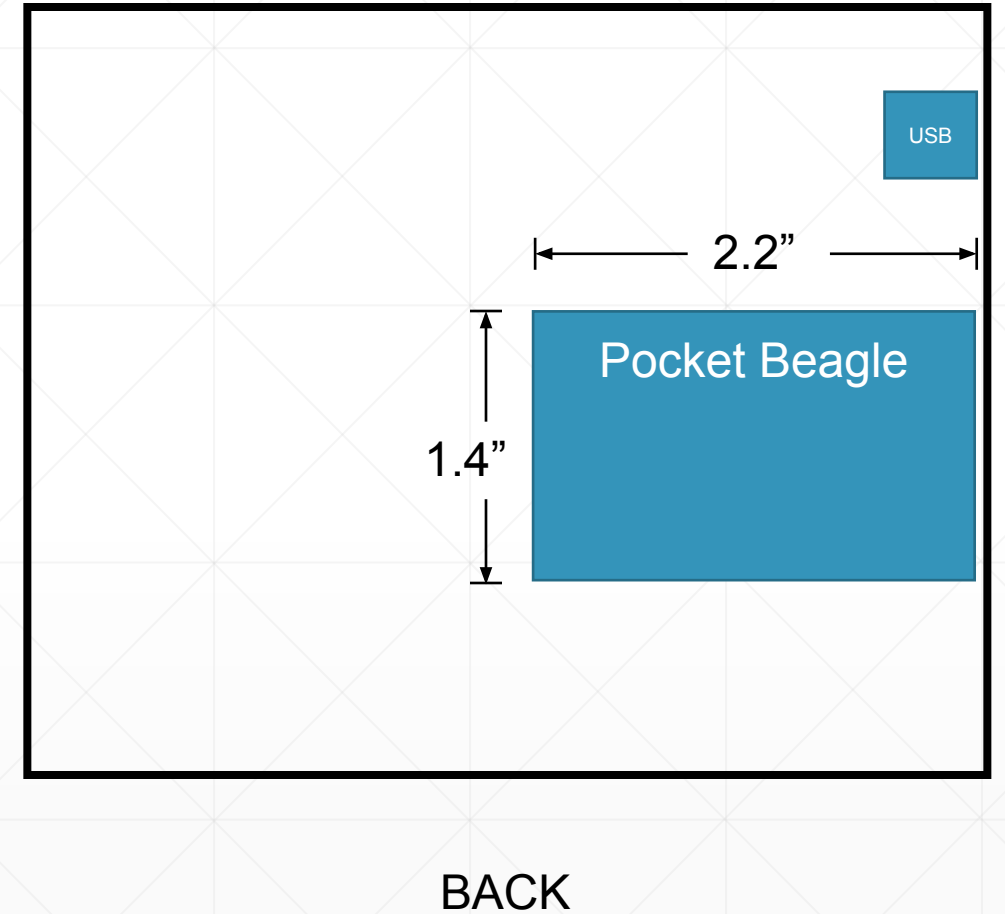
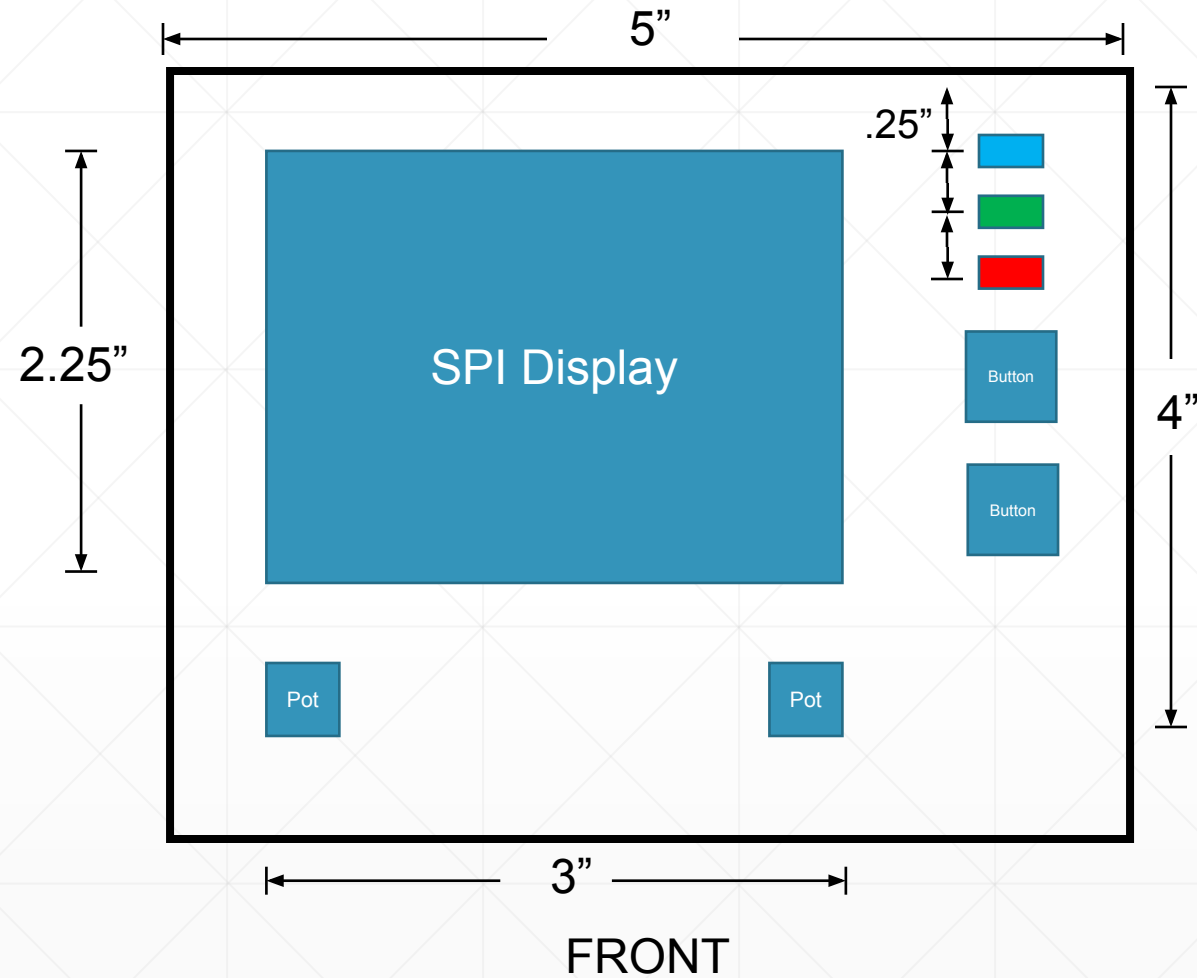
- Create a PCB for an “Etch-a-Sketch”
- Hardware:
 - SPI Display Screen
 - Two Potentiometers
 - Two Buttons (Reset the Game, Change Color)
 - Three LEDs (Red, Green, and Blue for Color)
 - USB Port (Expansion)



System Block Diagram – “Etch-a-Sketch”



Mechanical Drawing



BOM

Part:	Size:
<u>SPI Display Screen</u>	3" x 2.25"
<u>Potentiometer</u>	0.375" x 0.375"
<u>Button</u>	0.47" x 0.47"
Pocket Beagle	2.2" x 1.4"
USB Port Expansion	.48" x .45"