

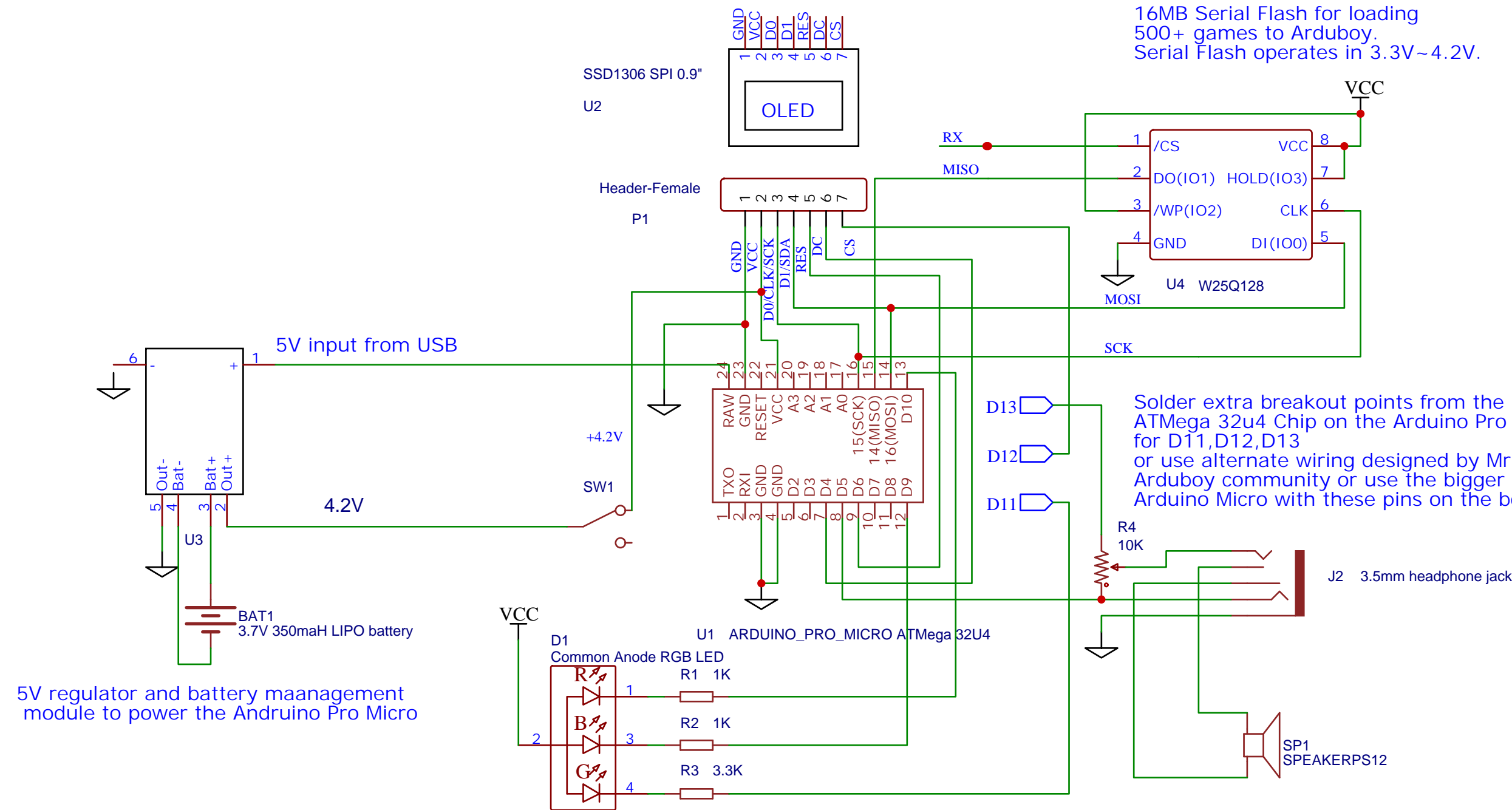
This is a Credit Card arduboy that made using a real credit card. smaller than half of a credit card.

Parts:  
Arduino Pro Micro (or Arduino Micro)  
0.9" mono OLED with SPI interface on SSD1306 controller. The 7 pin male header of the OLED is plugged into the female header.  
The OLED chosen must have the 7th pin for CS. Otherwise, it'll conflict with the Flahcart,  
causing screen flickering and misalignment when loading games from flashcart or when playing video stored on the flashcart  
16MB serial flash to load 500+ Arudboy games to be self-programmed to Arduino Micro anytime through the Cathy 3K bootloader  
(original circuit, python scripts for game loading, and the Cathy 3K bootloader and homemade arduby package is designed by Mr.Blinky (inks below).  
4.2V regulator and battery managemeeent module - 5V is taken from the RAW pin of the Arduino Pro Micro (which is sourced from the USB port).  
To allow the board to be powerd off during charging, the onboard regulator need to be removed.  
3.7V LiPO Battery is charged by the battery management module that provide charging at 4.2V that also supply 4.2V to the VCC pin of the Arduino Pro Micro,  
the VCC of the OLED and the serial flash.  
To use the serial flash for game loading, the Cathy 3K boot loader must be burnt to the Pro Micro using USBasp.

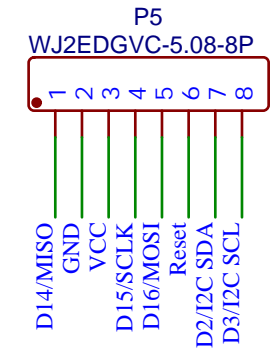
Credits and References to original authors of Arduboy and Flashcart:

1. Original Arduboy production schematics:  
<https://community.arduboy.com/t/production-arduboy-schematic/702>
2. MR.Blinky's original design of flashcart:  
<https://github.com/MrBlinky/Arduboy/tree/master/flashcart>
3. MR. Blinky;s GITHUB with python scripts and sample flash cart image binaries for sample games :  
<https://github.com/MrBlinky/Arduboy-Python-Utilities>
4. MR. Blinky's homemade package (required to operate the flash cart with alternate wiring and different types of OLED other than the SSD1306 used in original Arduboy:  
<https://github.com/MrBlinky/Arduboy-homemade-package>

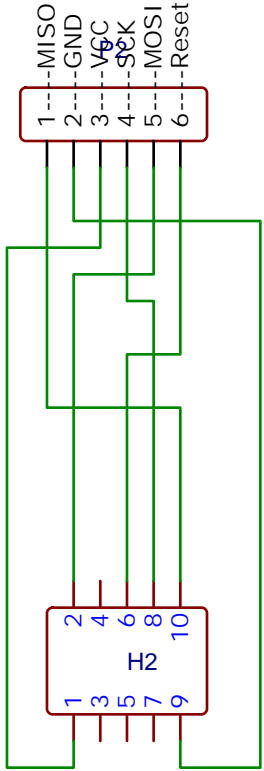
Credit Card Arduboy by cheungbx 2019/12/24  
=====



Female Header to connect to the button hat,  
that can be swapped for other form of joysticks or anlog dials.  
The first 6 pins doubles up as the port to connect to connect a  
conversion cable to a USBasp to burn  
the Cath 3K bootloader to the Pro Micro.  
The USBasp conversion cable below can be used.



USBasp Cable for Credit Card ArduBoy



View from bottom of female header\_2x5  
insert to the male header of the USBasp Programmer

