

Function proposal

Hardware

Inputs

- **Rotary Encoders**

Function: used as dials to draw the picture and to navigate through other functions such as saving page and switching between one and two player mode.

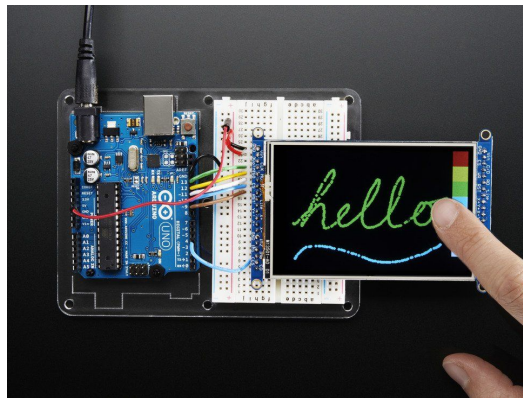
- <https://www.sparkfun.com/products/9117>
- <https://www.adafruit.com/product/377>
- <https://learn.adafruit.com/pro-trinket-rotary-encoder>



- **Buttons**

Function: power on and off, enter button used to select settings and save drawings

Outputs



- <https://www.adafruit.com/product/2050>
- 3.5" TFT 320x480 + Touchscreen Breakout Board w/MicroSD Socket

Processing

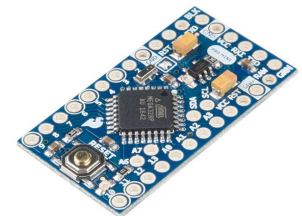
- **Arduino Pro Mini**

Function:

Purchasing:

- <https://www.sparkfun.com/products/11113>

Documentation:



- **Virabotics sd card reader and writer**

Function: This is used to save images

Purchasing:

Documentation:



- <http://scholarslab.org/makerspace/saving-arduino-sensor-data/>

or

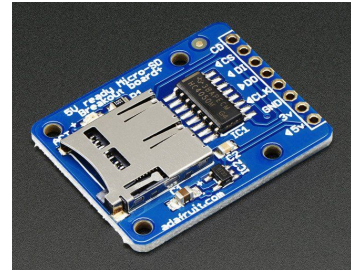
- sd breakout board

Function: This would be used to save images

Purchase source:

- <https://www.adafruit.com/product/254>

Documentation:



- <https://learn.adafruit.com/adafruit-micro-sd-breakout-board-card-tutorial?view=all>

Power

- **TP5410 - LiPo Charger/Boost Converter**

Purchase Source: <https://www.ebay.com/itm/191990401129>

Documentation: <https://www.youtube.com/watch?v=aND0j2Y2IkM>

- Power - Explain the hardware necessary to power your device. Devices must be powered via LiPo batteries, and should be rechargeable and monitor for low power conditions.
 - Power-Related Hardware Name
 - Function Description in Device
 - Documentation Source URL (Libraries, Schematics, Guides, etc.)
- Software
 - Create a comprehensive list of software that you will use to develop your hardware. Include any libraries, drivers, etc. not listed in hardware.
 - Software Name
 - Functional Description
 - Documentation Source URL (Reference, Guides, etc.)