

trevortomesh / OSHRepo

An Example Open Source Hardware Repo

22 commits 2 branches 0 releases 1 contributor Unlicense

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trevortomesh	Update README.md	Latest commit 309c3b0 on 27 Oct 2016
build	added directory structure	2 years ago
examples	added directory structure	2 years ago
folderName	Uploaded Joystick Image	2 years ago
hardware	added directory structure	2 years ago
img	added directory structure	2 years ago
src	added directory structure	2 years ago
.gitignore	Initial commit	2 years ago
Canada_flag_map.svg	Added canadian flag map thingy	2 years ago
LICENSE	Initial commit	2 years ago
README.md	Update README.md	2 years ago

README.md

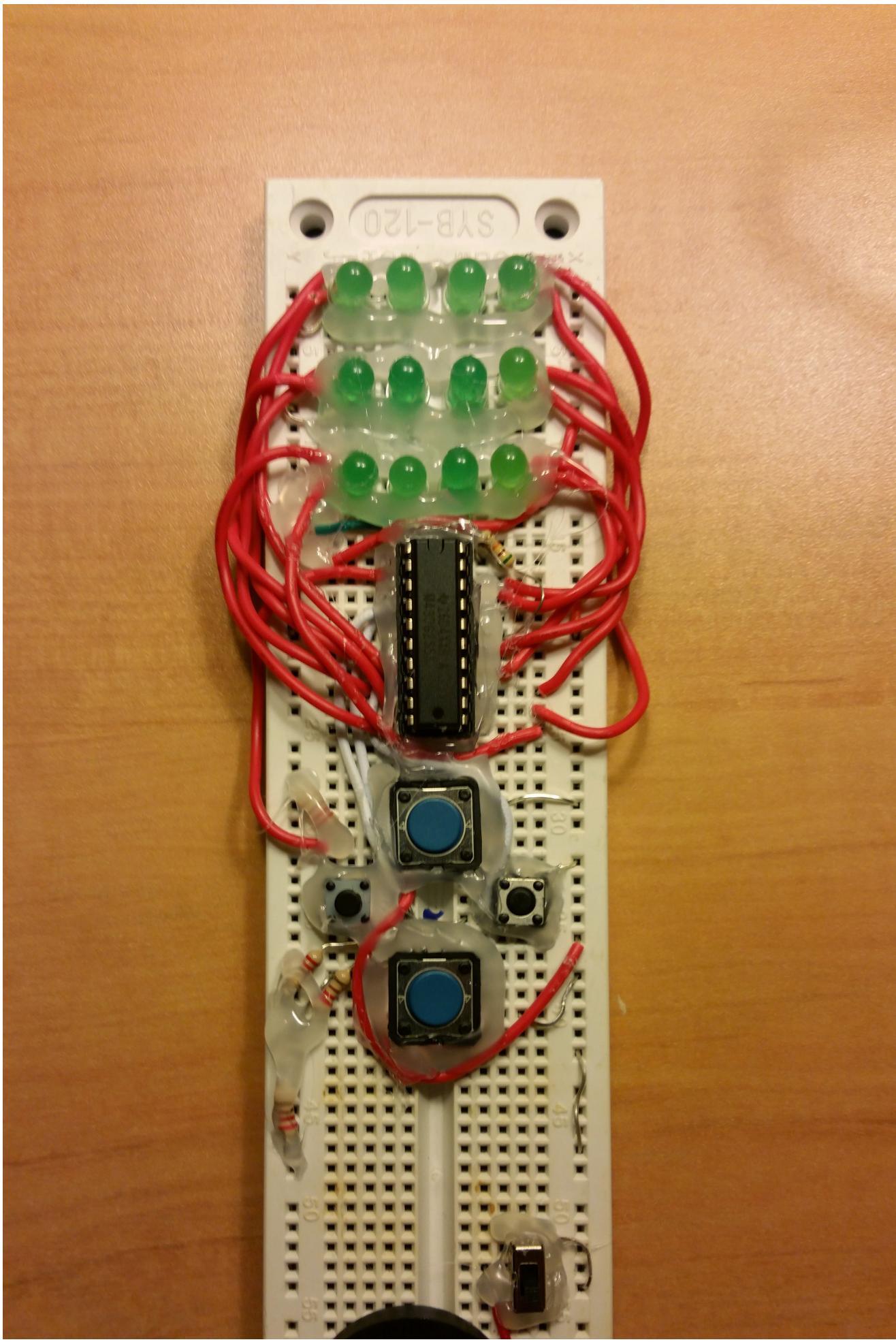
Repository Title [version number]

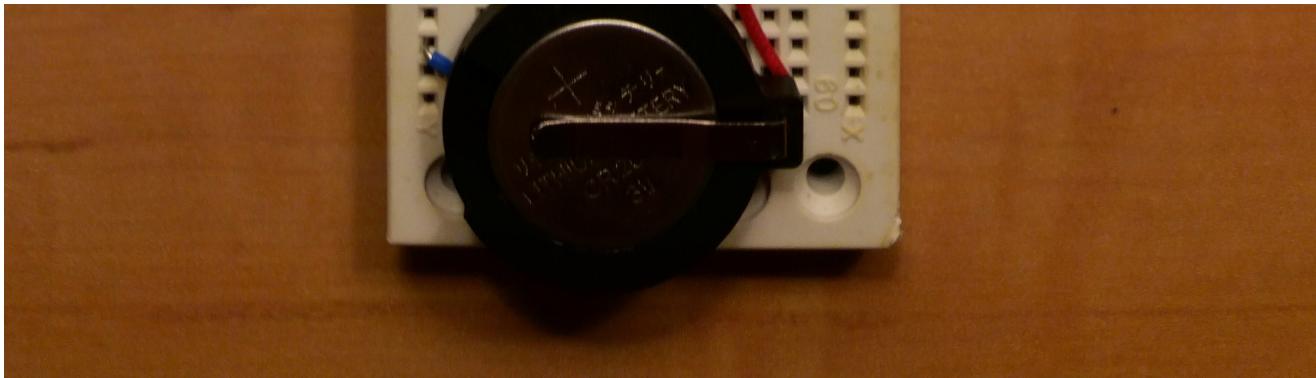
===== license BSD-3-Clause

The point of this repository is to serve as an example for how one might set-up a repo for an interactive hardware project. There doesn't seem to be any sort of agreement between developers as to how such a repo should be set up -- therefore, I'd like to propose this set-up.

This is where you describe your project in short. This will be where potential users look to understand what your project is about -- and it's your chance to catch their eye.

This specific project is an MSP430G2553 based game console. It was built for a conference and that's pretty much all I feel like writing about it because this is just an example, after all. It's a good idea to put some sort of picture of your completed project here like this -- but smaller:





Repository Contents

Here's where you'll provide a map of all the top-level contents (where applicable):

- **/src** - Here's where the software for your device goes (.ino, .cpp).
- **/hardware** - All the PCB design files / 3D models (.ftz, .brd, .sch, .stl).
- **/build** - Files that are compiled and ready to run / upload.
- **/libraries** - Any libraries that are needed to build your software for your device.
- **/examples** - Example files that can be run on your hardware.
- **/img** - This is where the image files for this readme are! Yay!
- **/LICENSE** - The license file.
- **/README.md** - The file you're reading now! :-D

Requirements and Materials

This is where you talk about what sort of libraries are required and what sort of hardware is needed:

Dependencies:

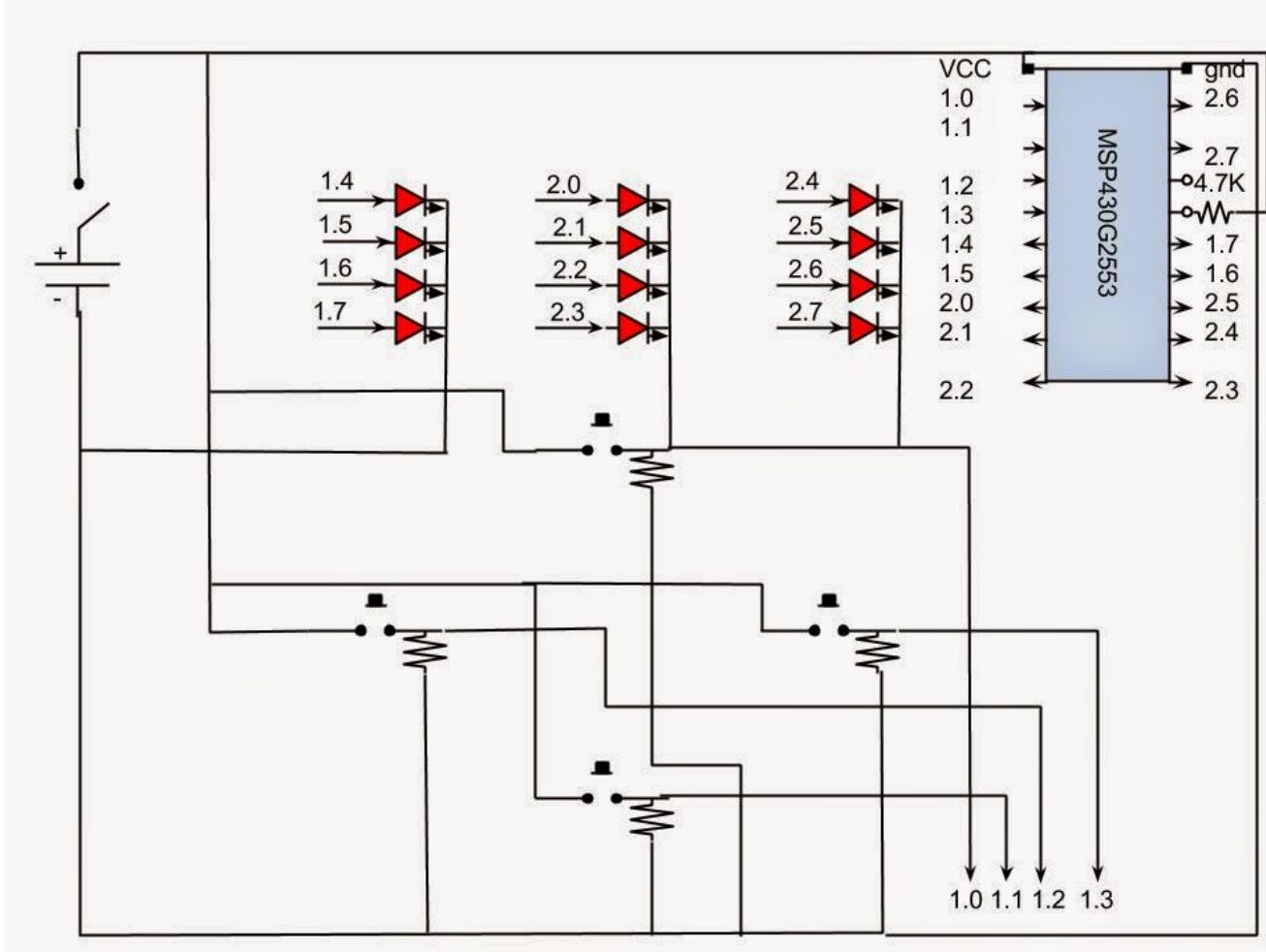
- energia-1.6.10E18 <https://www.energia.nu>
- msp430 command-line flasher <https://www.ti.com/tool/msp430-flasher>
- important libraries that need to be installed

Bill of Materials:

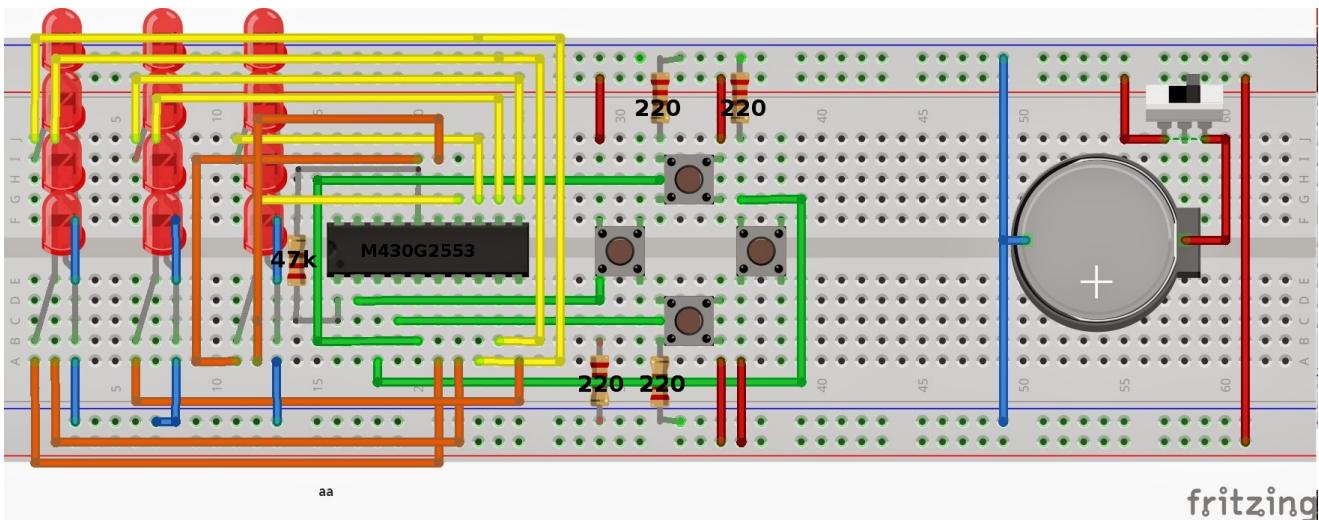
- 4 x push buttons
- 12 x green LEDs
- 1 x 4.7k resistor
- 4 x 220 ohm resistor
- 1 x slide switch
- 1 x battery holder
- 1 x breadboard
- 1 x MSP4302553

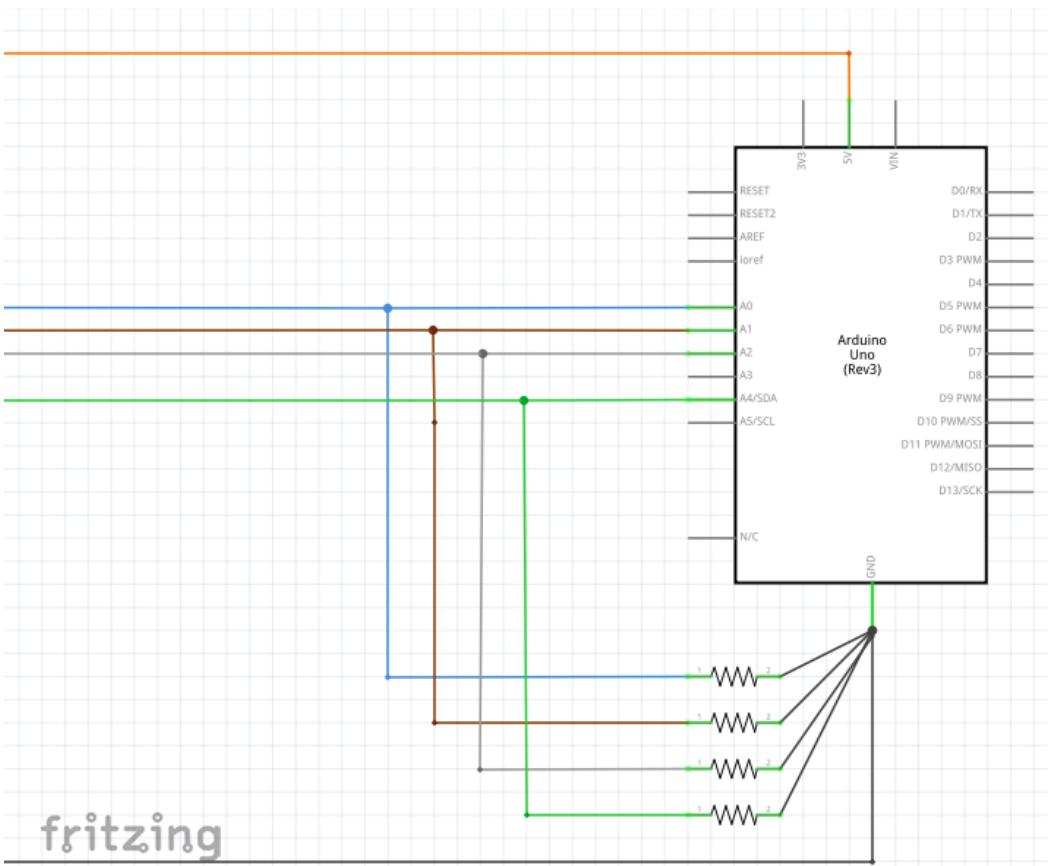
Build Instructions

Here is where you give specific instructions about how the device is built. The more detail the better -- especially if your build is very complicated. Here you should include schematics of your build:



And a breadboard view is also a good idea. It gives the potential user a better idea of how to put the thing together. So we'll throw one in here as well.





If there are any special instructions on how to assemble the hardware, we should note it here as well. For example, if the user should solder things in a specific order, you should give them a heads-up.

Firmware Installation

This is where you should describe how the firmware is installed onto the device. If it's really straightforward you may not need this section. However, if there are multiple libraries and components involved -- or if there is some sort of build process, this is a good place to put those instructions. Most users just want to be able to copy-paste and upload the firmware without having to jump through a bunch of hoops. You should set it up for them. For example:

To install:

```
MSP430Flasher.exe -n Unknown -w "MyGameFile_v1.2.txt" -v -g -z [VCC]
```

Usage

This is usually where you tell the user how the device works. Do you just upload the software and flip a switch? What sort of things does this thing do? Are there alternate settings / modes / programs that might be good to mention. This is where you tell the user exactly how the device or program is used. For example:

- Upload the code to the thing.
- Turn the thing on.
- The thing will do a thing and it'll be really cool.
- Don't forget to feed the badgers!

Team

The build team consists of:

- Trevor Tomesh -- I did everything.
- Joe McSchmoe -- He didn't do anything useful.
- Alison Roberts -- She made me food.

Maybe say something about how people can contribute here?

Credits

This is where you give credit to any third parties that you borrowed from.

- Kenneth Reitz - consultation on directory structure