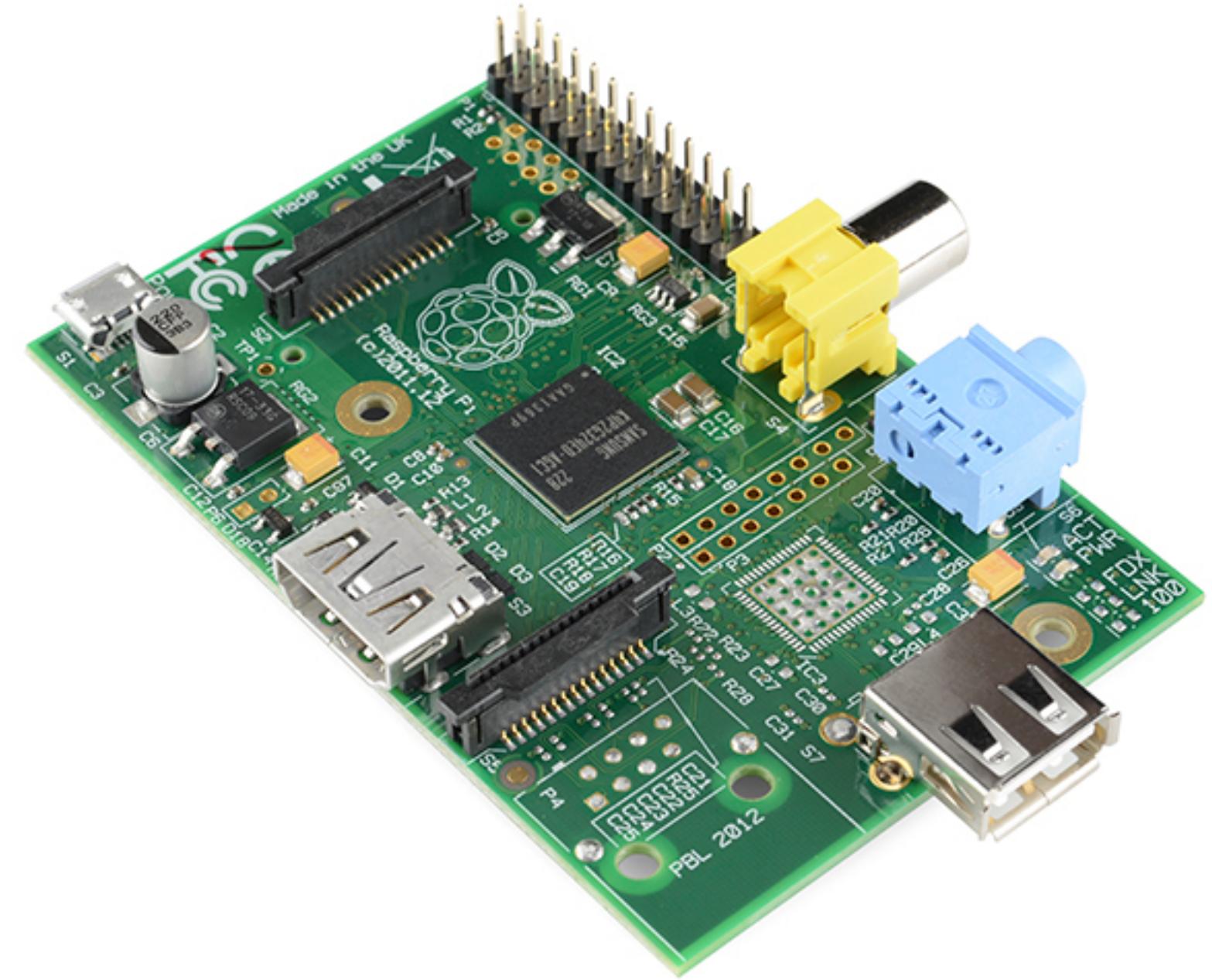




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CI Alarm System



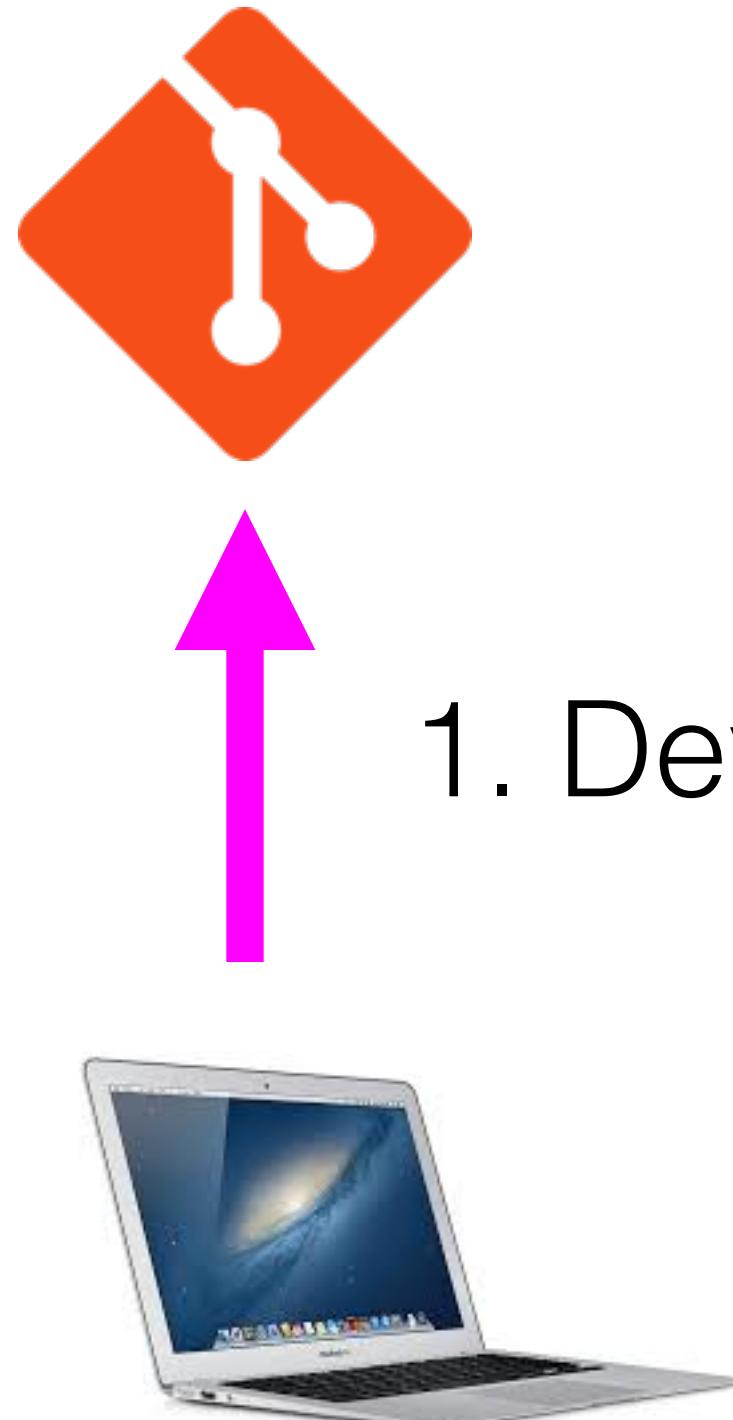
By Kevin Rohling

THE IDEA

BUILD AN ALERT SYSTEM FOR BROKEN BUILDS

THE IDEA

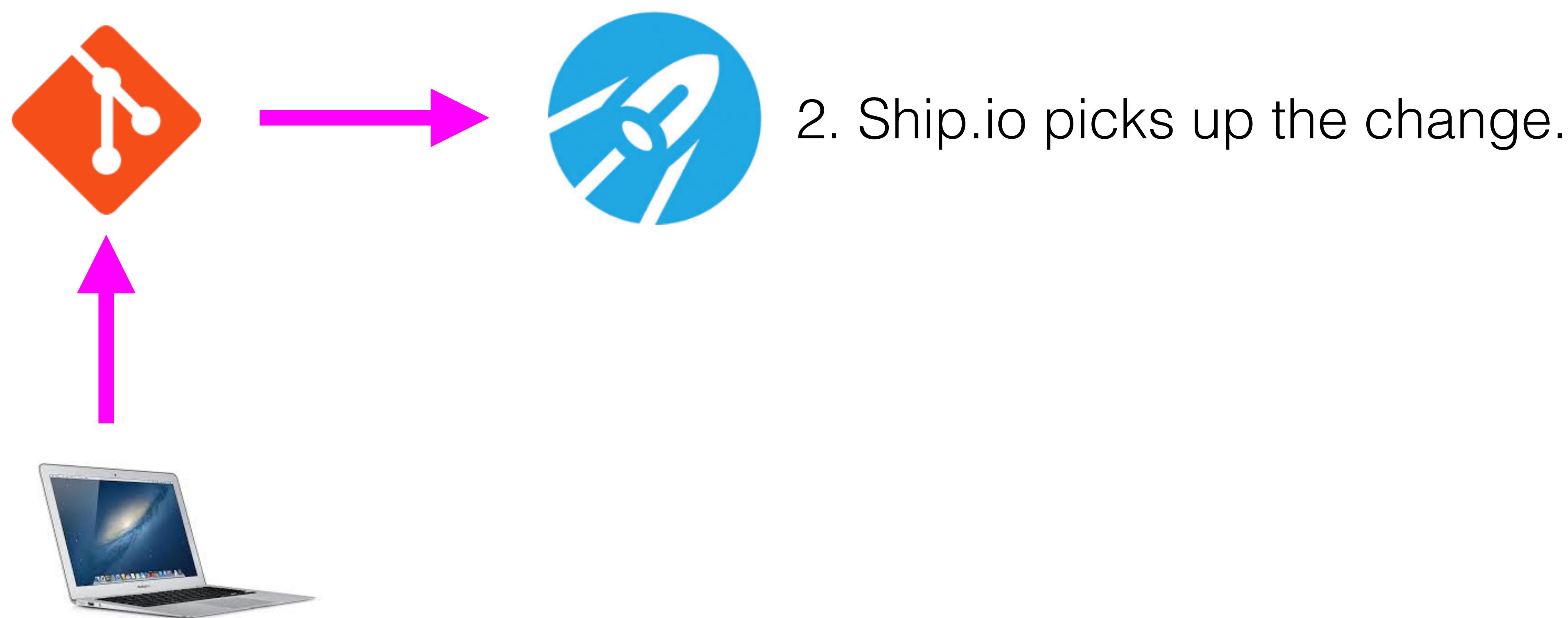
BUILD AN ALERT SYSTEM FOR BROKEN BUILDS



1. Developer commits broken code

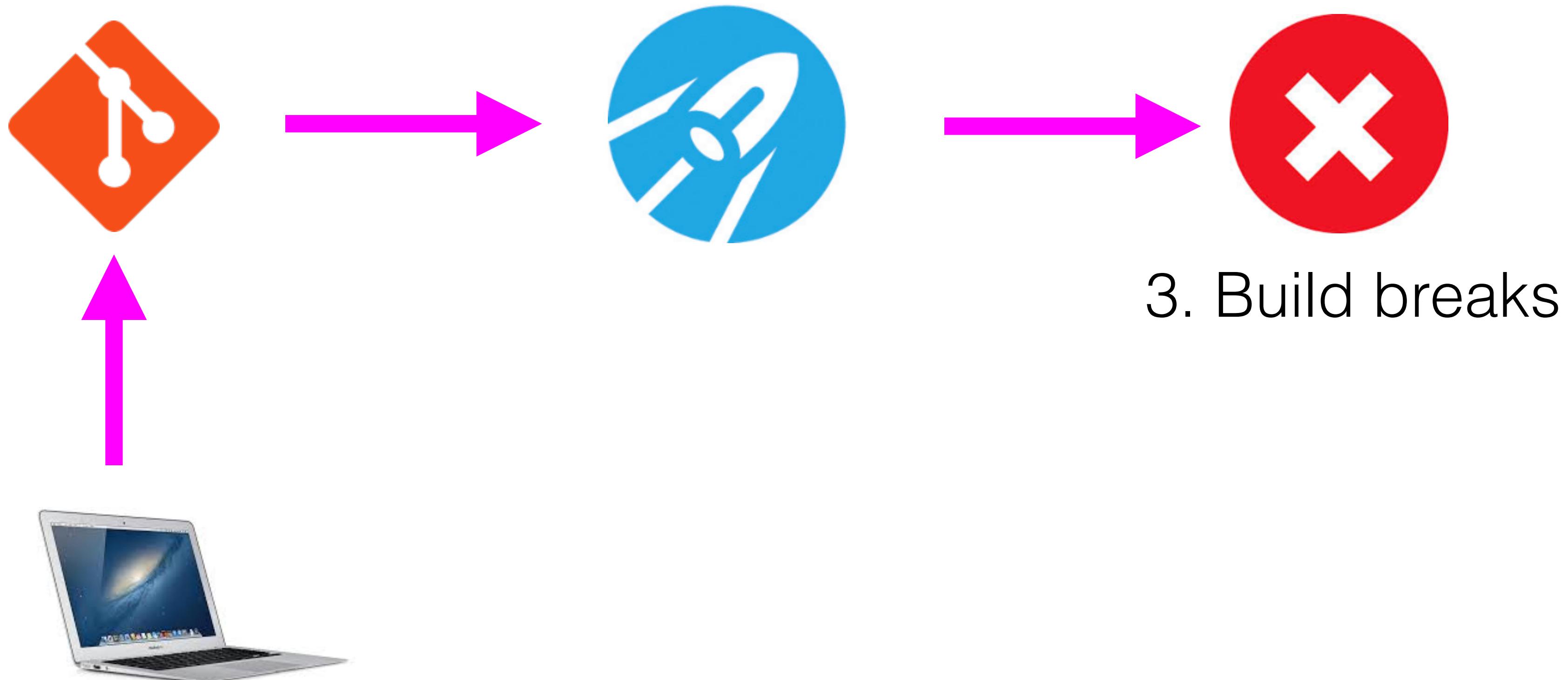
THE IDEA

BUILD AN ALERT SYSTEM FOR BROKEN BUILDS



THE IDEA

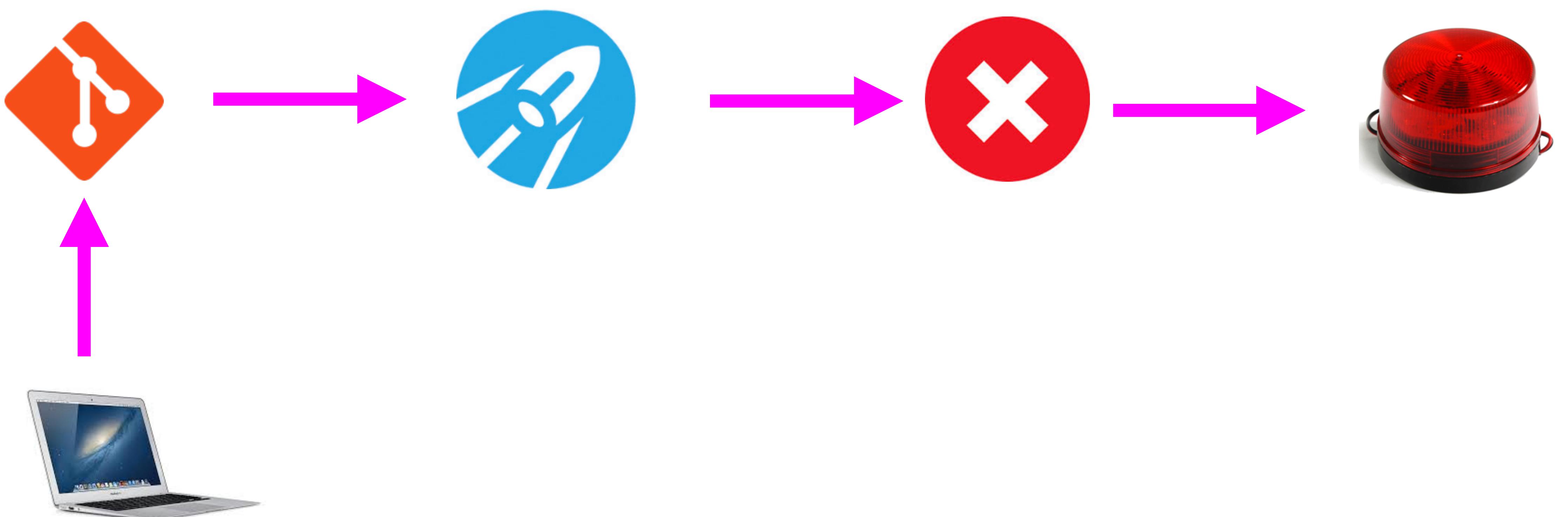
BUILD AN ALERT SYSTEM FOR BROKEN BUILDS



THE IDEA

BUILD AN ALERT SYSTEM FOR BROKEN BUILDS

4. Alarm goes off



THE PARTS



1. Easy to setup CI, also great API

THE PARTS



ship.io

2. Strobe light,
the most important part.

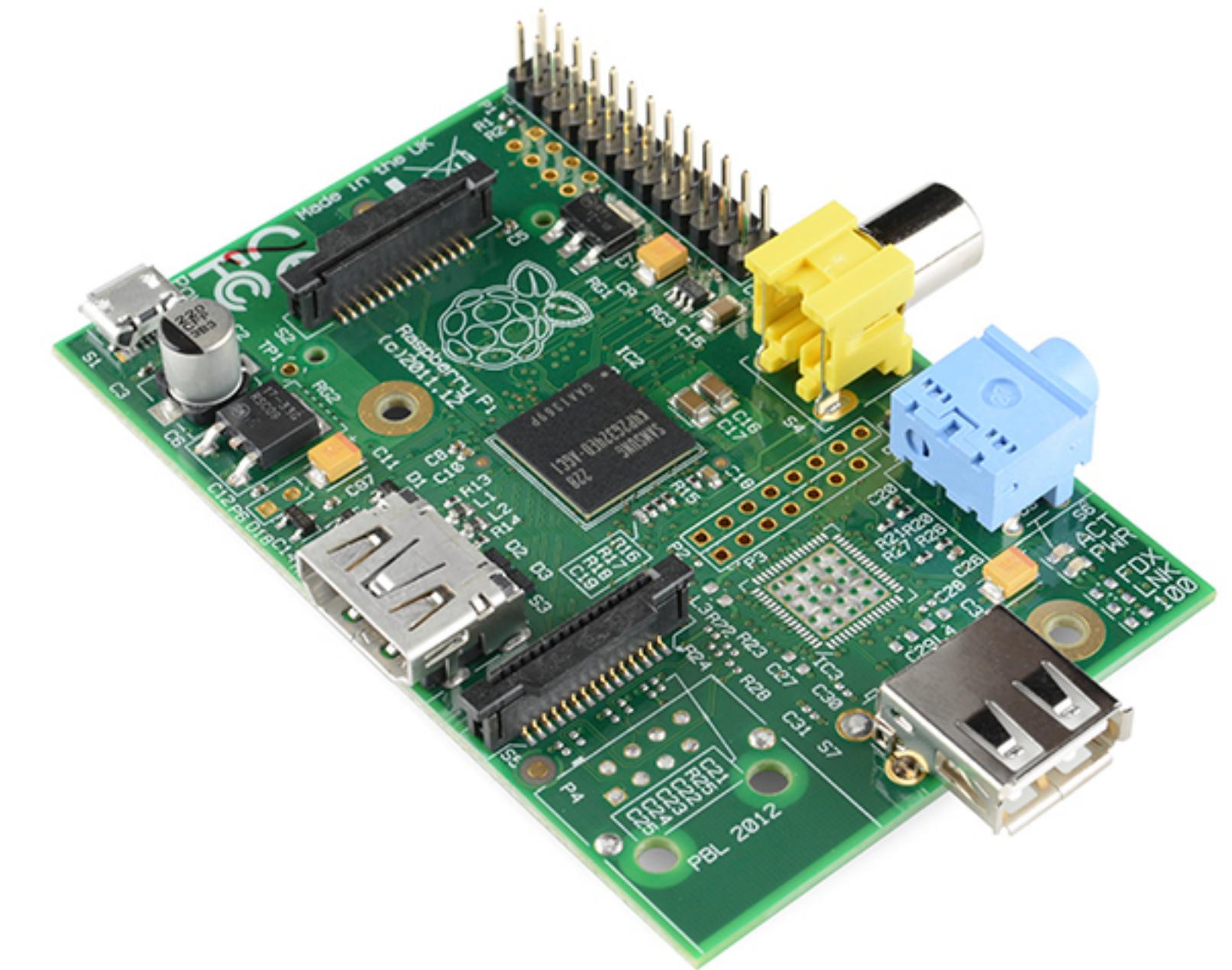


THE PARTS



ship.io

3. Raspberry Pi for interfacing w/ the strobe light and calling the Ship.io API.

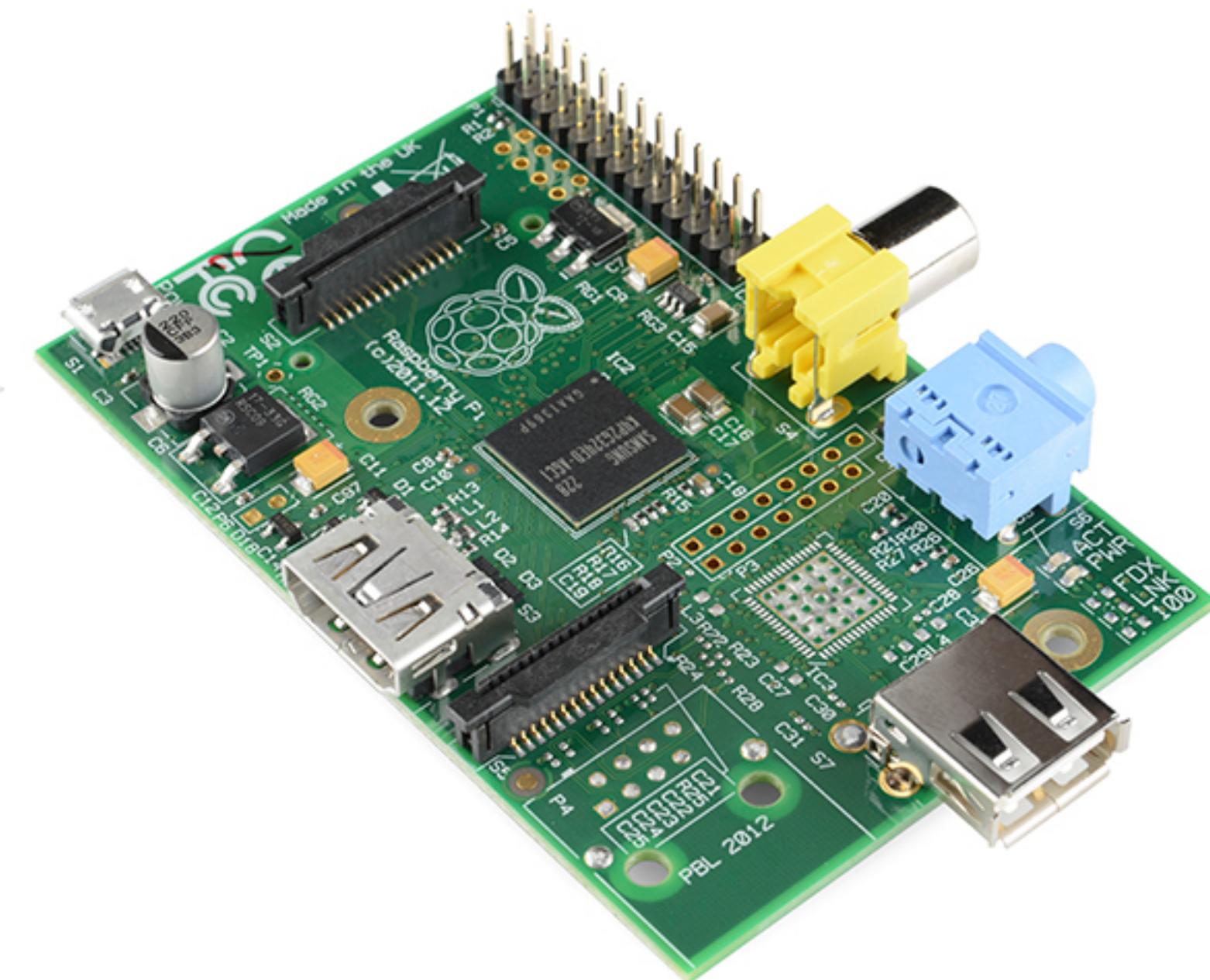


THE HARD PART

12 Volts



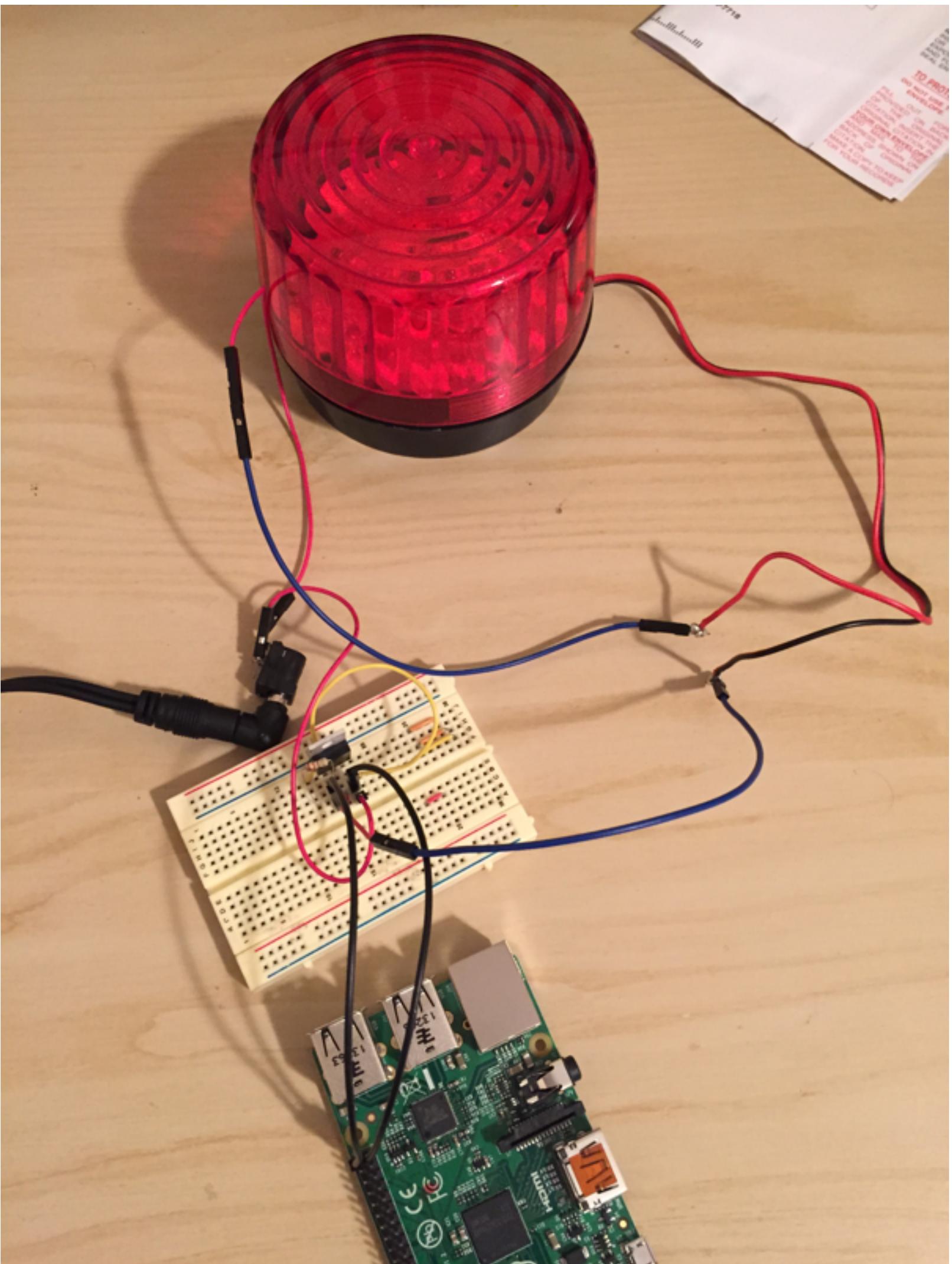
3 Volts



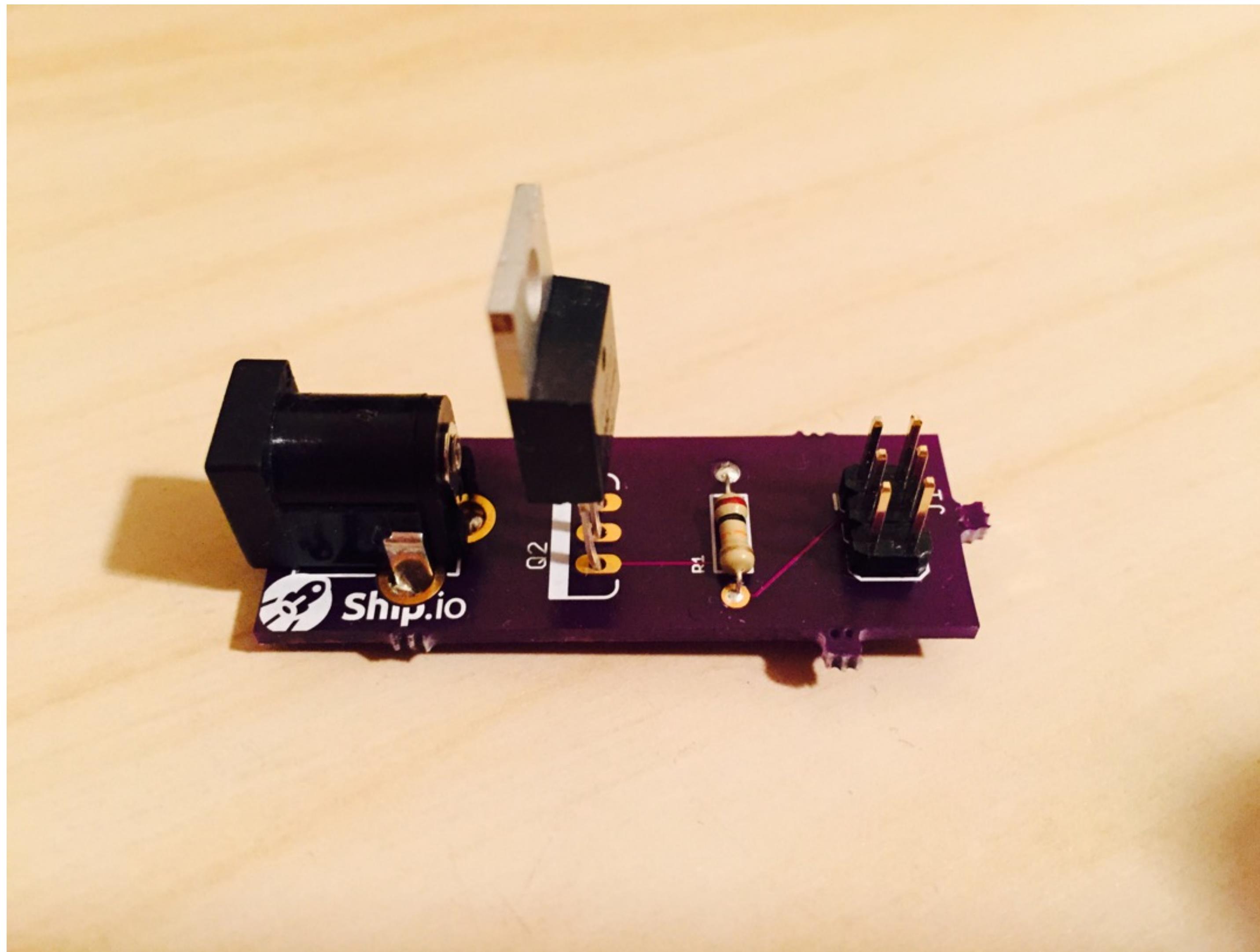
THE SOLUTION: MOSFET!



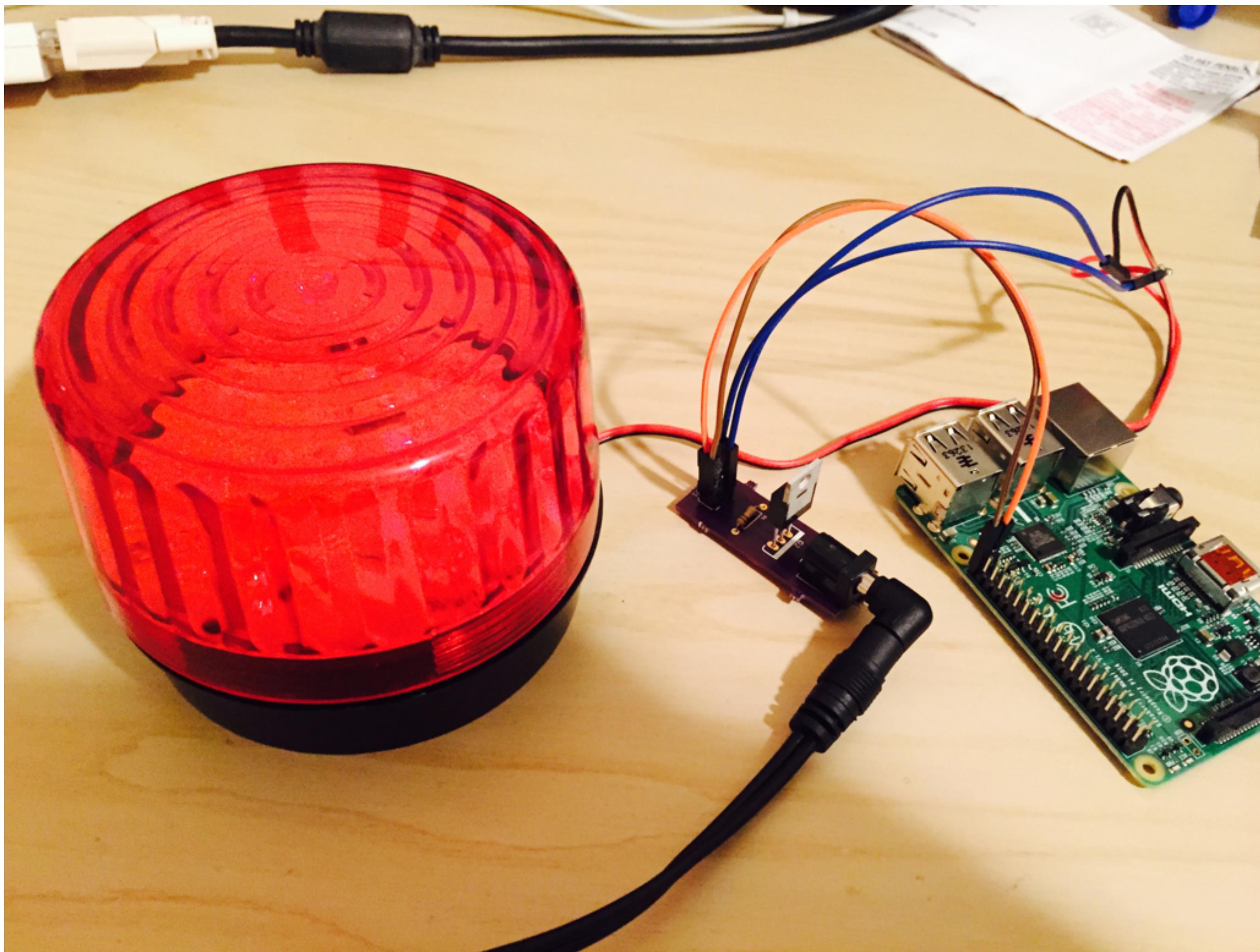
1st Iteration: Breadboard



2nd Iteration: Custom PCB



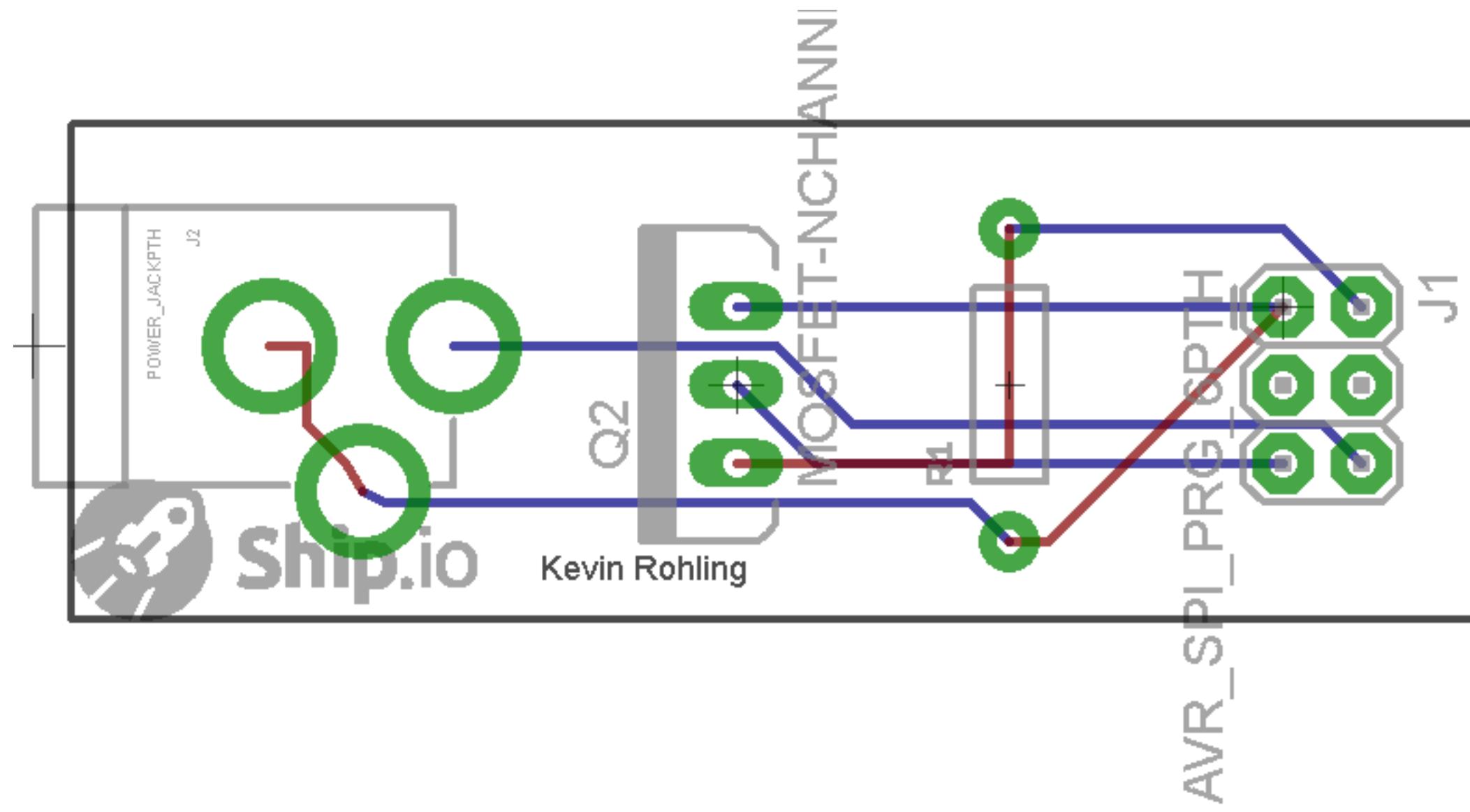
2nd Iteration: Custom PCB



Making the PCB



Eagle CAD for designing the PCB



Making the PCB



Eagle CAD for designing the PCB



SparkFun for the parts



OSH Park for printing the PCB

Ship.io API

<https://ship.io/api>

1. GET YOUR JOB ID

Jobs

 **GET** <https://ship.io/jobs.json>

Description

This operation will return a list of all jobs belonging to the authenticated user.

Response

```
[  
  {  
    "id": "4fdaqe5xtid5oxnyq",  
    "name": "my_ios_app",  
    "repository": {  
      "name": "my_ios_app",  
      "selected_branch": "master",  
      "html_url": "https://github.com/mygithubuser/my_ios_app"  
    }  
  }  
]
```

Ship.io API

<https://ship.io/api>

2. CHECK BUILD STATUS

List Builds

 **GET** https://ship.io/jobs/:job_id/builds.json

Description

This operation will return a list of all builds for the specified job.

Response

```
[  
  {  
    "id": "68m7e9ag4",  
    "build_number": 1,  
    "commit_sha": "ec458234eaa46662b1c43d572188a7be1d2cb203",  
    "state": "FINISHED",  
    "successful": true,  
    "log_url": "https://ship.io/...",  
    "artifacts": [  
      {  
        "id": "53vhqab8c",  
        "name": "my_ios_app.ipa",  
        "download_url": "https://ship.io/..."  
      }  
    ]  
  }]
```

The Raspberry Pi Code

```
#Import Libraries
import urllib2
import json
import time
import RPi.GPIO as GPIO

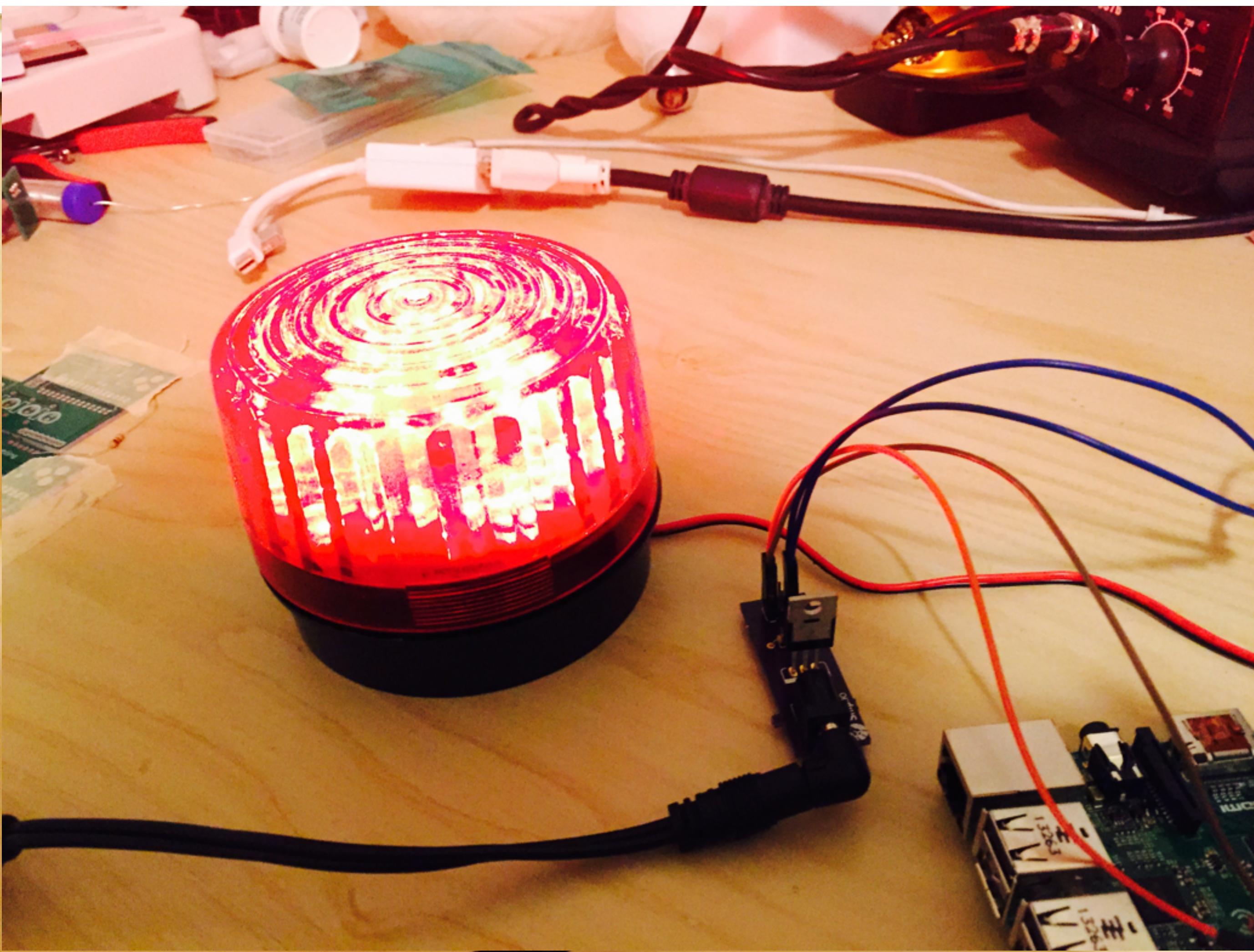
#Initialize our API URL (http://ship.io/api)
JOB_ID = "<YOUR JOB ID>"
API_TOKEN = "<YOUR API TOKEN>"
url = "https://ship.io/jobs/" + JOB_ID + "/builds.json?access_token=" + API_TOKEN

#Initialize our output pin
GPIO.setup(22, GPIO.OUT)
GPIO.output(22, False)

#Check every 30 seconds
while True:
    response = urllib2.urlopen(url)
    data = json.load(response)
    print data
    if data[0]['successful']:
        print "***Passing Build***"
        GPIO.output(22, False)
    else:
        print "***Broken Build***"
        GPIO.output(22, True)

    time.sleep(30)
```

Finished Product



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