

# Universal Platform for Building Energy Management

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# Outline

1 Objective

2 Stepper Motor

3 Progress

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# Objective

- Research and decide on a new device

# Stepper Motor

- Decided on stepping motor as new device
- 28BYJ-48 with ULN2003A stepping motor driver

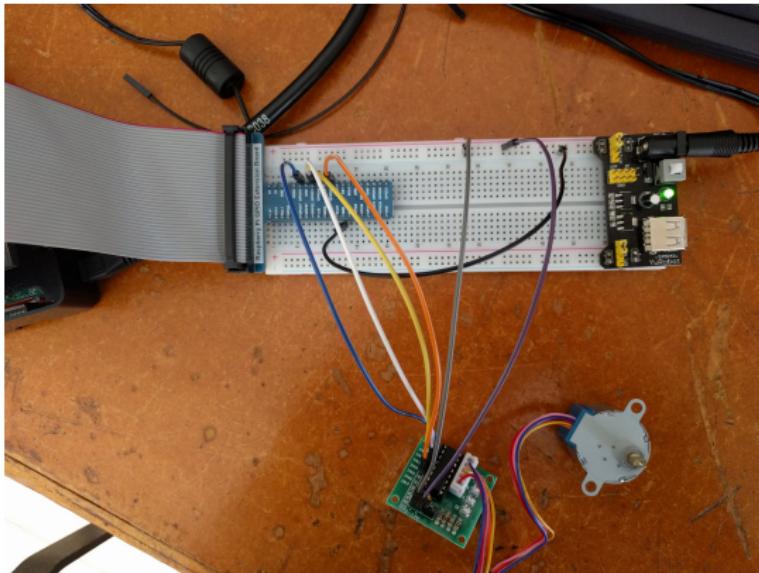


Figure: <https://www.makerfabs.com/28byj-48-stepper-motor-5v.html>

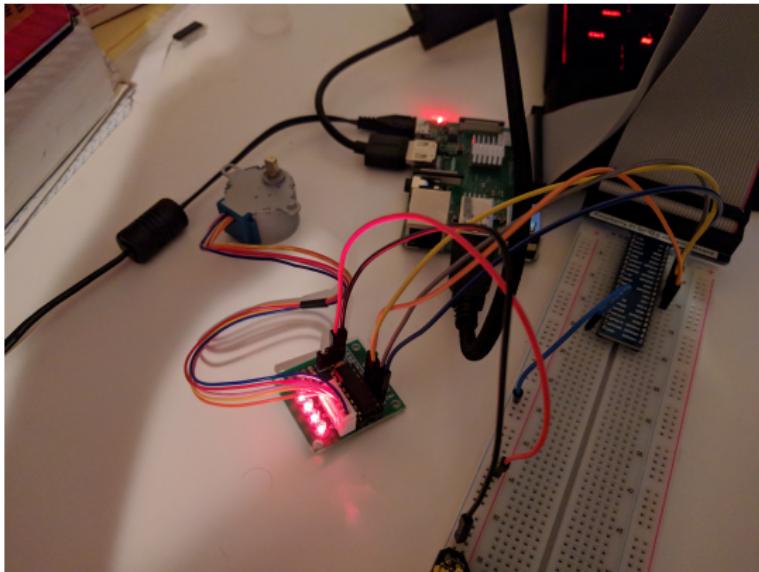


Figure: Aliexpress.com

# Progress



# Progress



# Plans

- Decide on whether to use XBee or Raspberry Pi to control motor
- Create primitive TCP/IP web server on RPi using Python socket programming
- Create widgets in device dashboard page for controlling motor (number of steps, run continuously)

# For Further Reading I



X. Zhang, R. Adhikari, M. Pipattanasomporn, M. Kuzlu, and S. Raihman

Deploying IoT Devices to Make Buildings Smart: Performance Evaluation and Deployment Experience.

*2016 IEEE 3RD World Forum on IOT*