ESP8266 + MicroPython

Moss Code 2019-03-20

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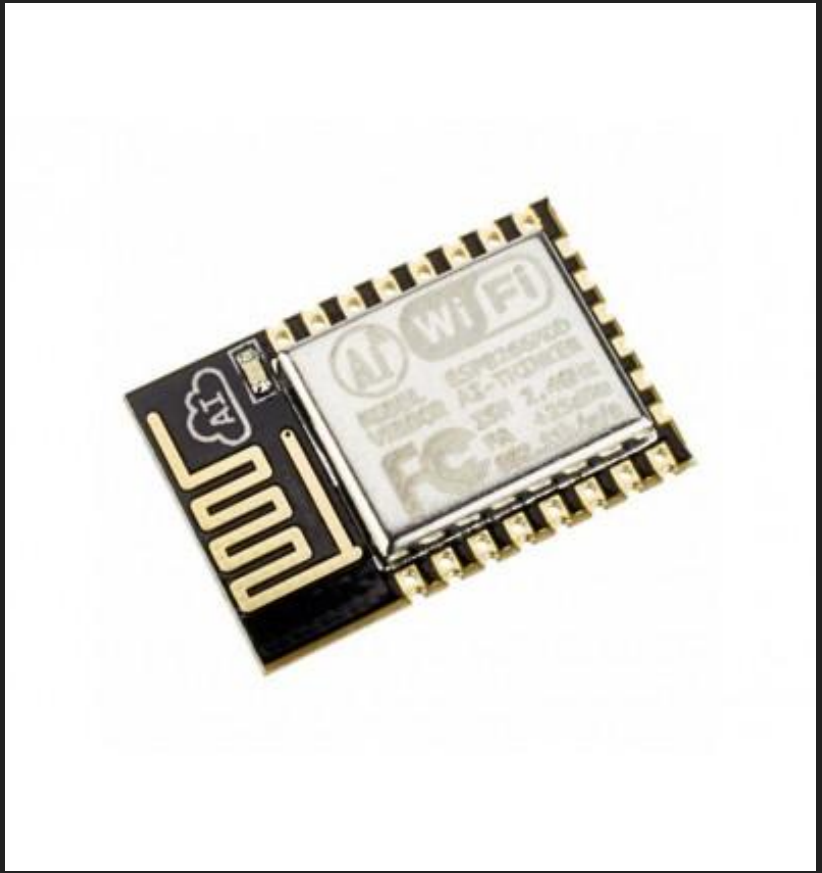
Hei, jeg heter Stig!

- Jobb
  - Datanerd @ PQX Media AS
  - Utvikling, Nettverk, DevOps og Linux
  - Linux, Perl, Python og MySQL, og slikt
  - Jobbet med programmering siden i 1999
- Morro
  - Hackerspaces: Verket FabLab, Hackeriet, DimSumLabs
  - NixOS
  - IoT dingser

ESP8266

- 80 Mhz
- WiFi
- $2 / 20 NOK
- 4MB flash

- **Micropython**
- Espruino (JS)
- Lua
- Arduino IDE



MicroPython

- “OS” for microcontrollers
- Python 3
- REPL
- Compiler + vm
- File System

https://micropython.org/

MicroPython has libraries!

Minimal implementations of common Python modules

- umqtt
- ussl
- ujson
- +++

https://docs.micropython.org/en/latest/library/index.html

Hardware interfaces

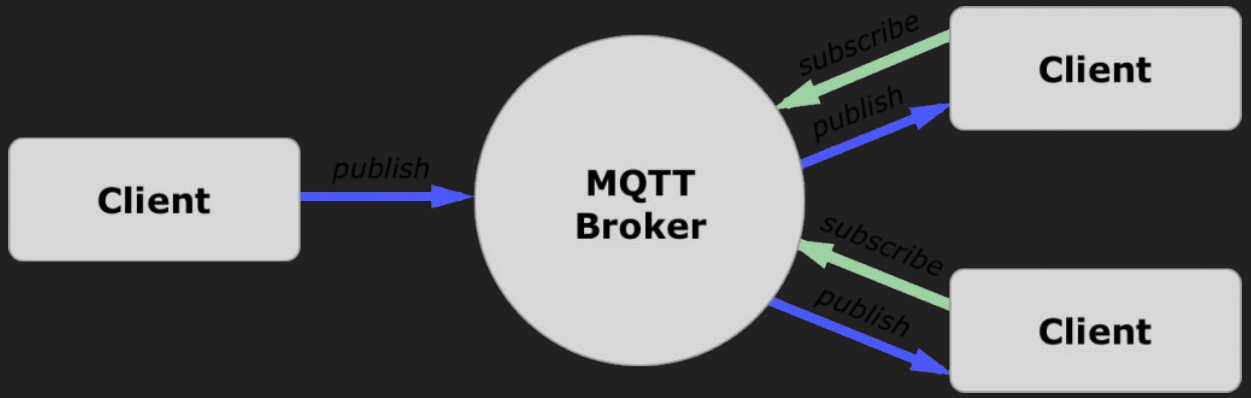
- Digital and Analog I/O
- WiFi
- I2C
- Power/CPU

https://docs.micropython.org/en/latest/esp8266/quickref.html

MQTT: A “chat room” for IoT-things

- Publish / Subscribe
- Persistent TCP Connection
- WebSocket Support

Mosquitto: https://mosquitto.org/



Demo