

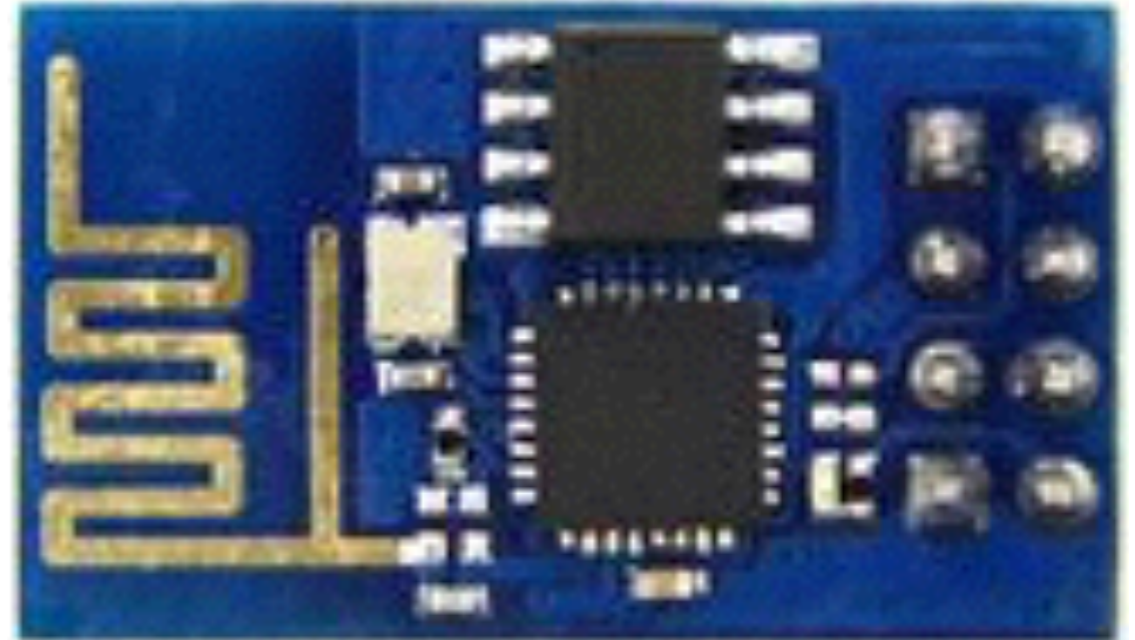
Internet of Things

New microcontroller to play with

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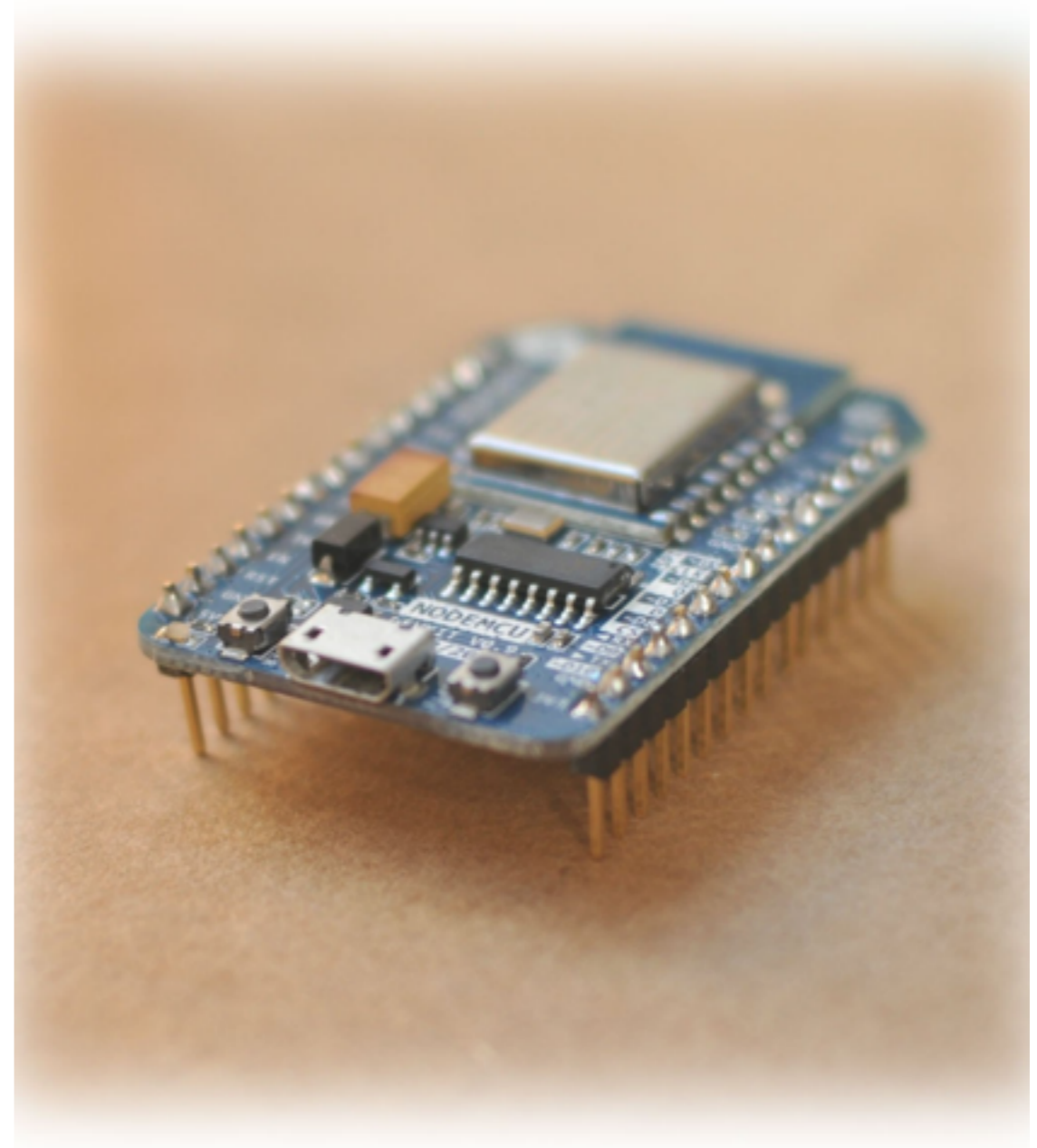
ESP8266

- Characteristics
 - Built-in Wifi-Stack (AP, Client)
 - Built-in IPv4 (no v6) stack
 - Antenna, balun etc. on module
 - Serial interface
 - 16 GPIO pins (2 available)
 - 4MB flash (varies)
- Price: about €8 (eBay)



nodeMCU

- Development kit for ESP8266
- USB on board
- all pins available
- breadboard friendly
- LUA programming environment
- Price: about €12 (eBay)



Example code

```
wifi.setmode(wifi.SOFTAP)

cfg={}
cfg.ssid="denogdemo"
cfg.pwd="denogdemo"
wifi.ap.config(cfg)

sv=net.createServer(net.TCP,30)
sv:listen(80, function(conn)
  conn:on("receive",function(conn,payload)
    print(payload)
    conn:send("HTTP/1.1 200 OK\n\n<html><body><h1>Hello DENOG</h1></body></html>\n")
  end)
  conn:on("sent",function(conn) tmr.delay(1000) conn:close() end)
end)
```

URLs

- http://nodemcu.com/index_en.html
- <https://github.com/nodemcu/nodemcu-firmware>
- <http://www.esp8266.com>