

# GPIO

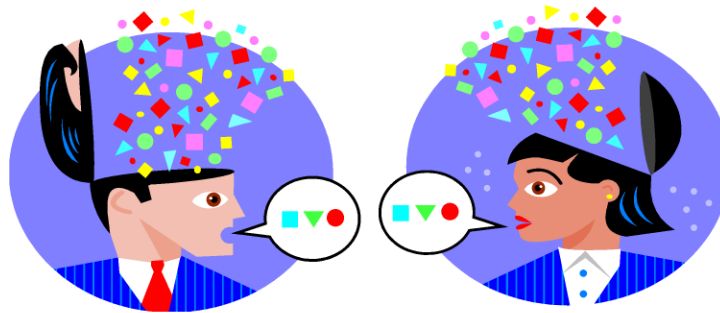
Networks and Embedded Software

Module 4.3.3

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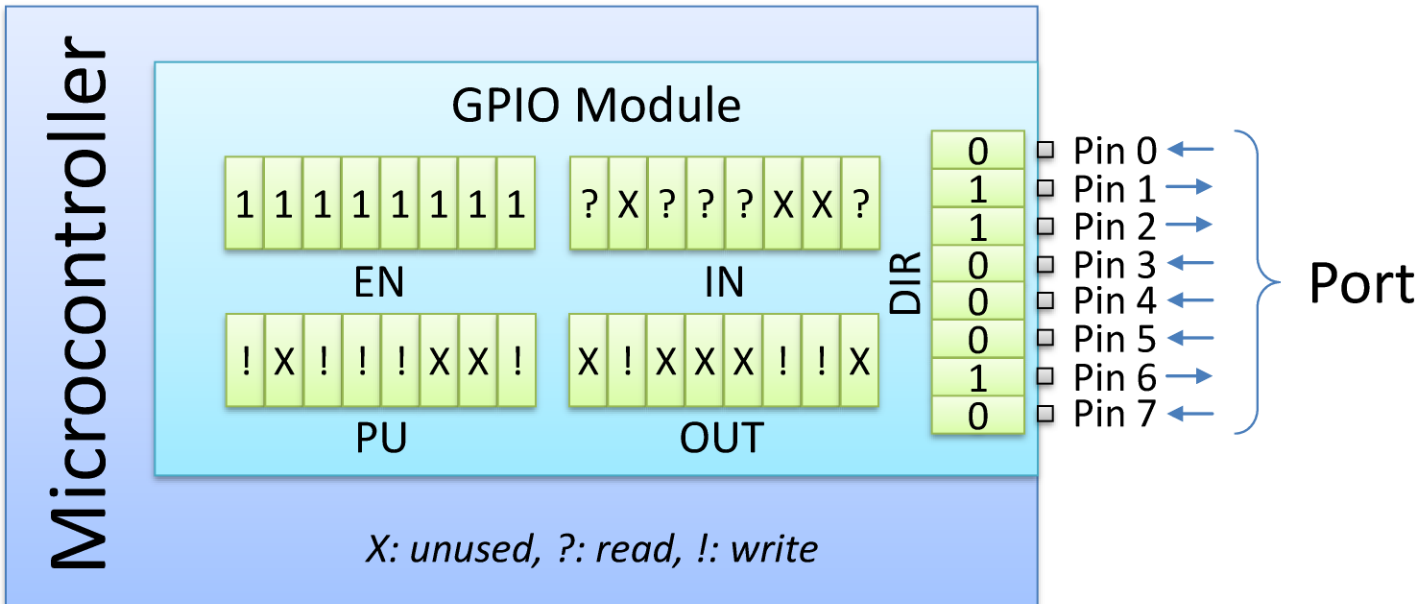
# GPIO (1)

- General Purpose Input / Output
  - Handles Digital Ports
    - Drives output pins high or low
    - Reads the status of input pins



# GPIO (2)

- Module



# GPIO (3)

- Registers
  - Control
    - Enable Register (EN)
      - Pins are multiplexed
      - Enables GPIO for selected pin
    - Data Direction Register (DIR)
      - Configures pin for input or output
    - Pull Configuration Register (PU)
      - Enables pull-up register for selected pin
      - Valid only for input pins

# GPIO (4)

- Registers (continued)
  - Data
    - Output (OUT)
      - Drives the pin high or low
      - Valid only for output pins
  - Status
    - Input (IN)
      - Indicates the value present on the pin
      - Valid only for input pins