Introduction to PSOC for Arduino and Motor Control

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AGENDA

01 Motor Control

02 What is PSOC?

03 Why PSOC4 Arduino?

04 Installation

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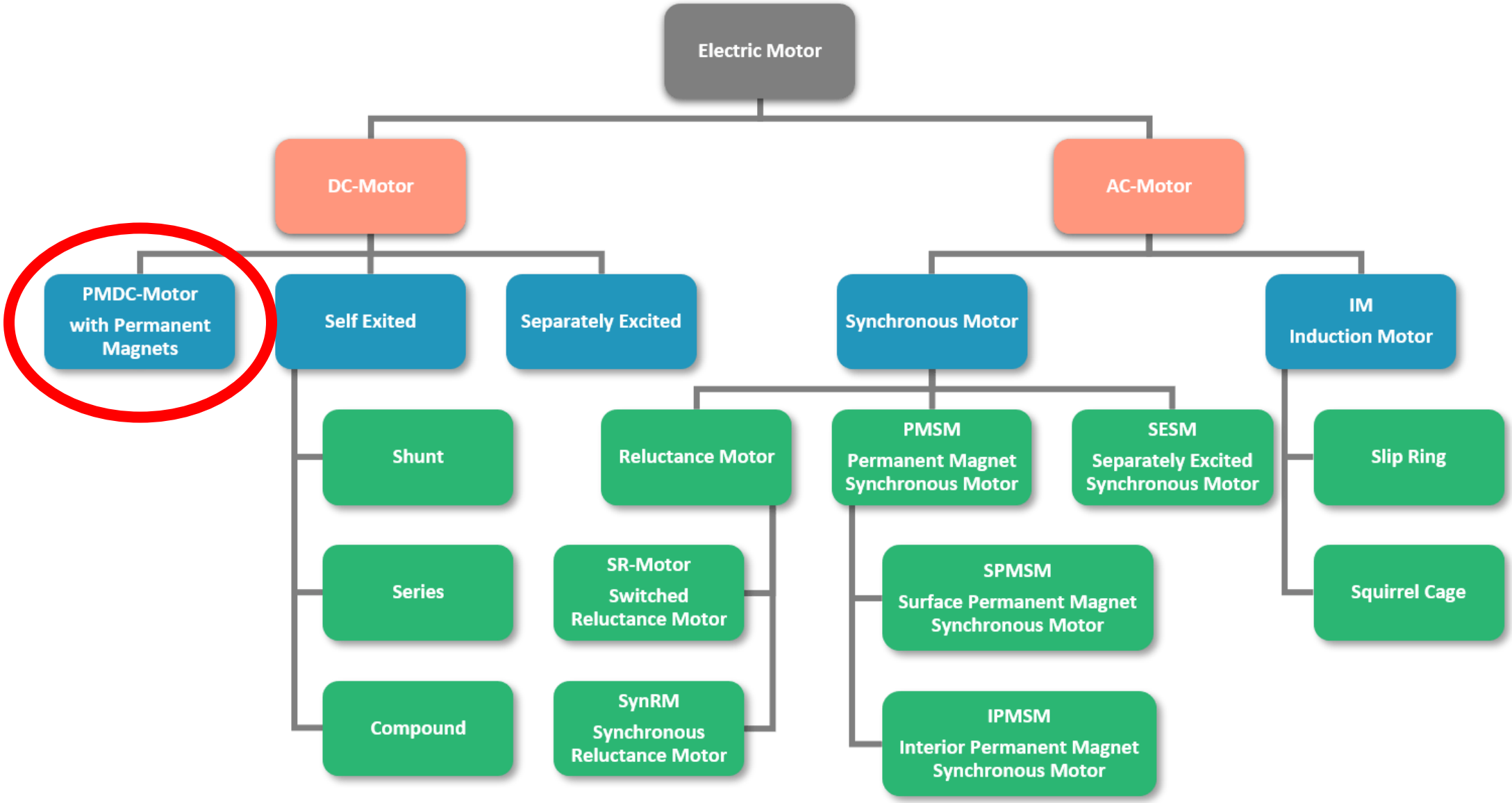
Motor Control



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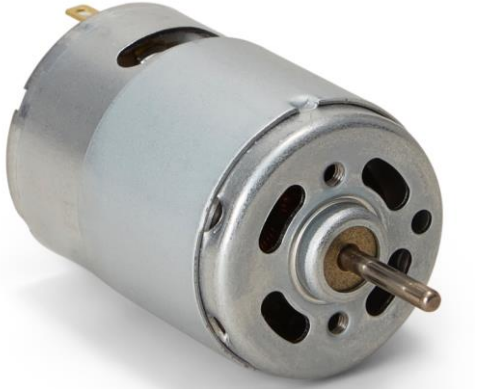
Motor Control



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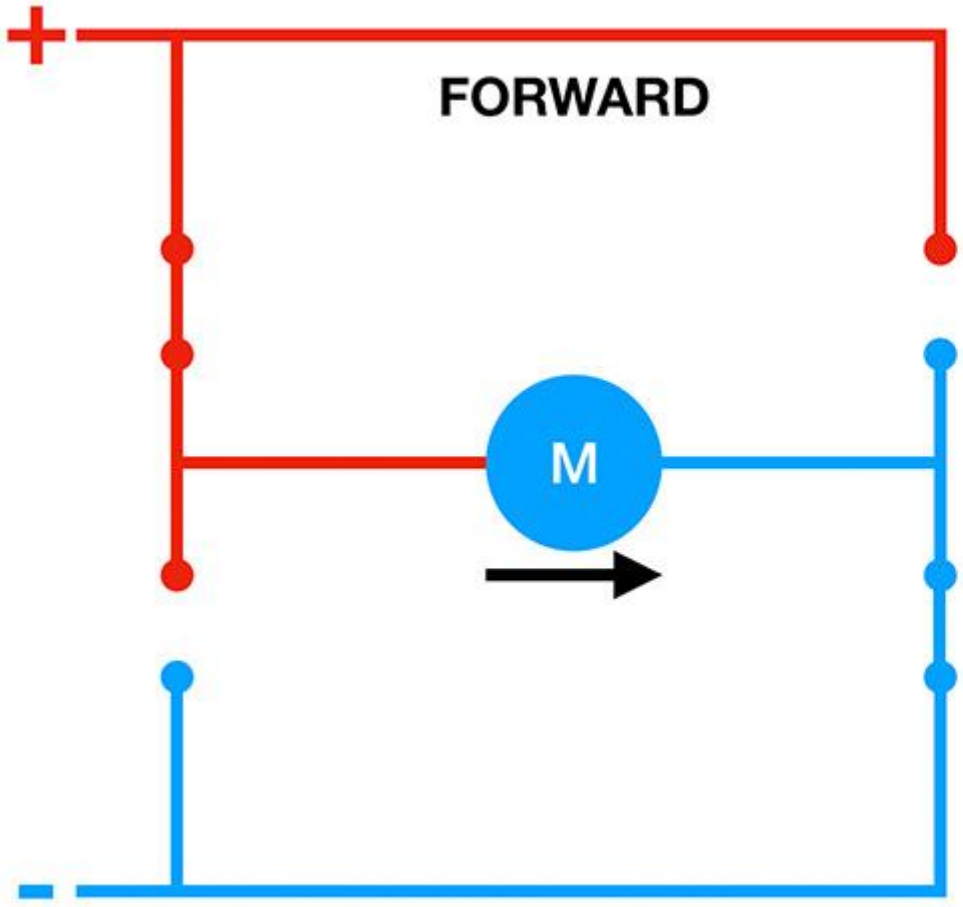
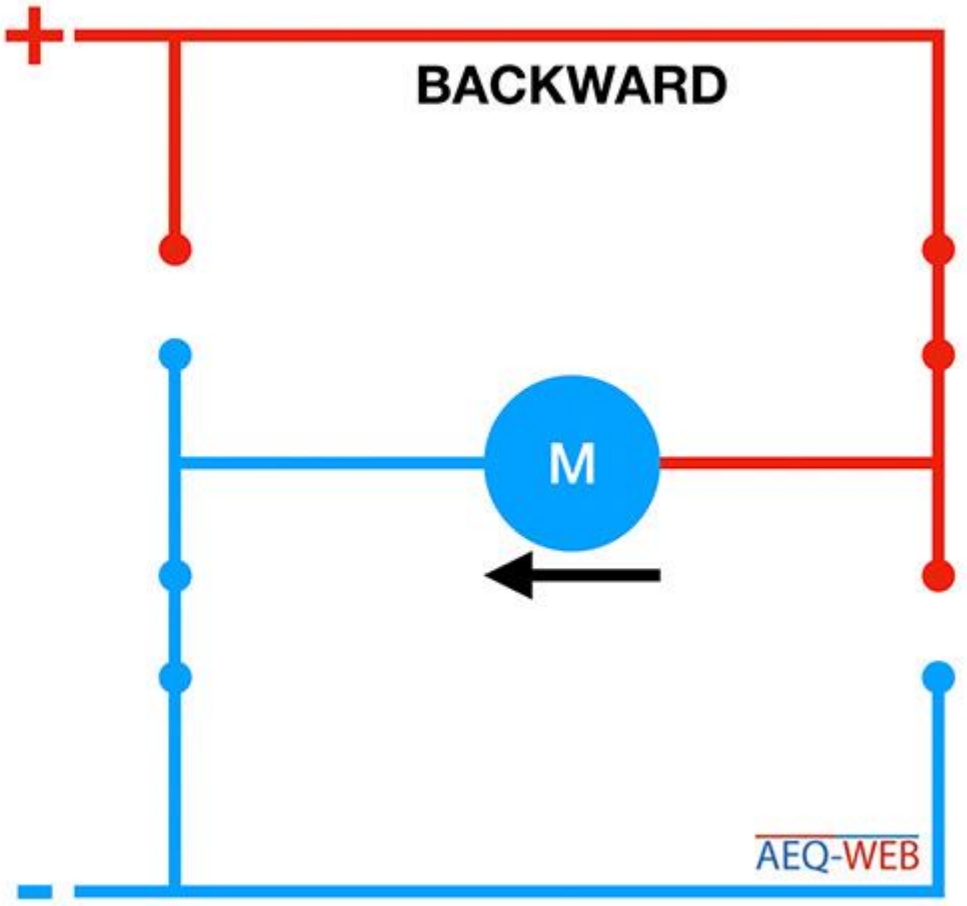
Motor Control





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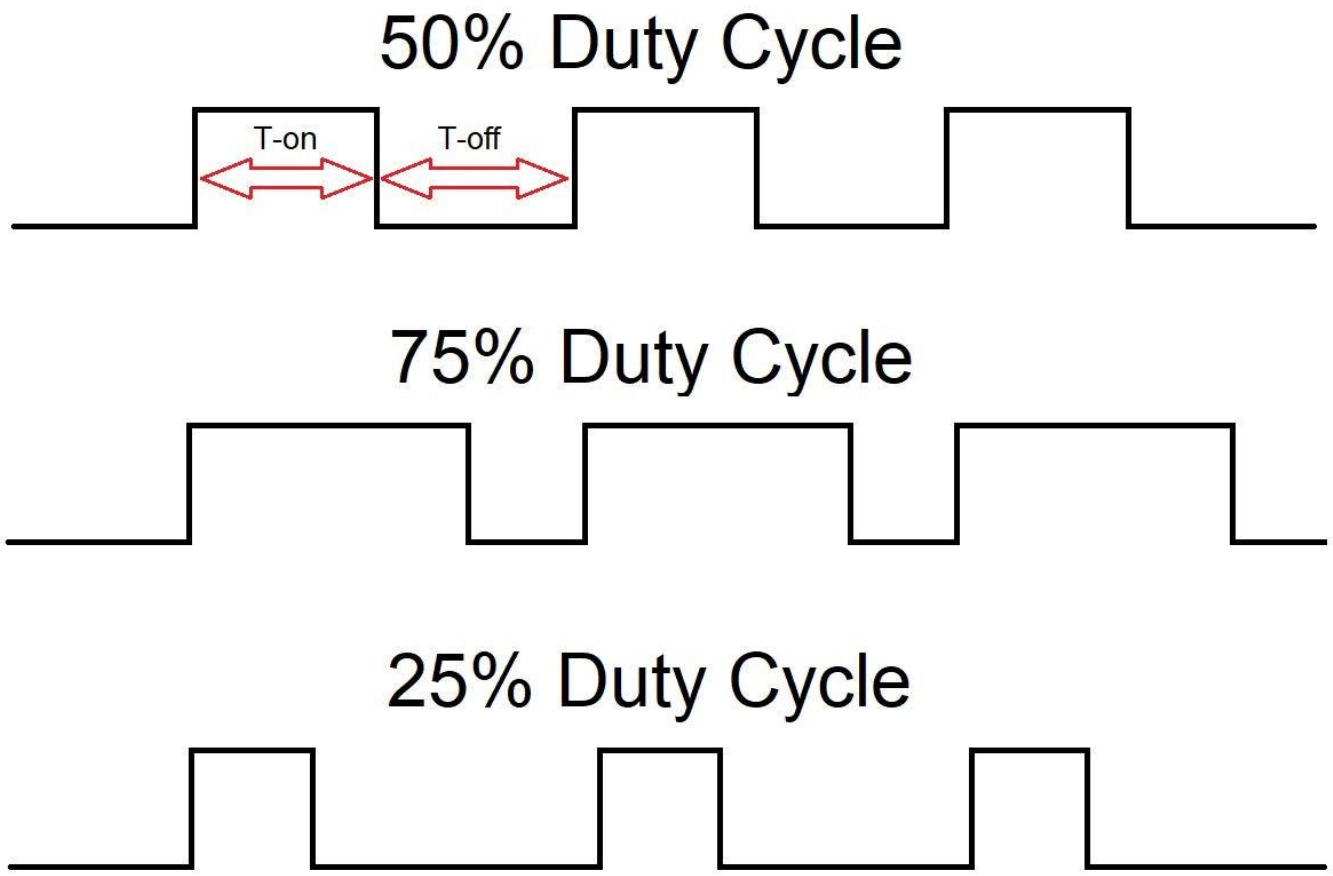
Motor Control



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What is PSOC

- PSOC = Programmable System on Chip
- Microcontroller

- Functions:
- PWM
- ADC
- communication protocols (UART, CAN, SPI, I2C)

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Why PSOC for Arduino?

Arduino ecosystem = simple, popular, numerous libraries

PSOC = powerful, flexible

Through integration, you can:

- Still develop easily in Arduino style
- Benefit from existing Arduino code
- Big community

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ARDUINO™

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Installation

https://github.com/infineon/hackathon

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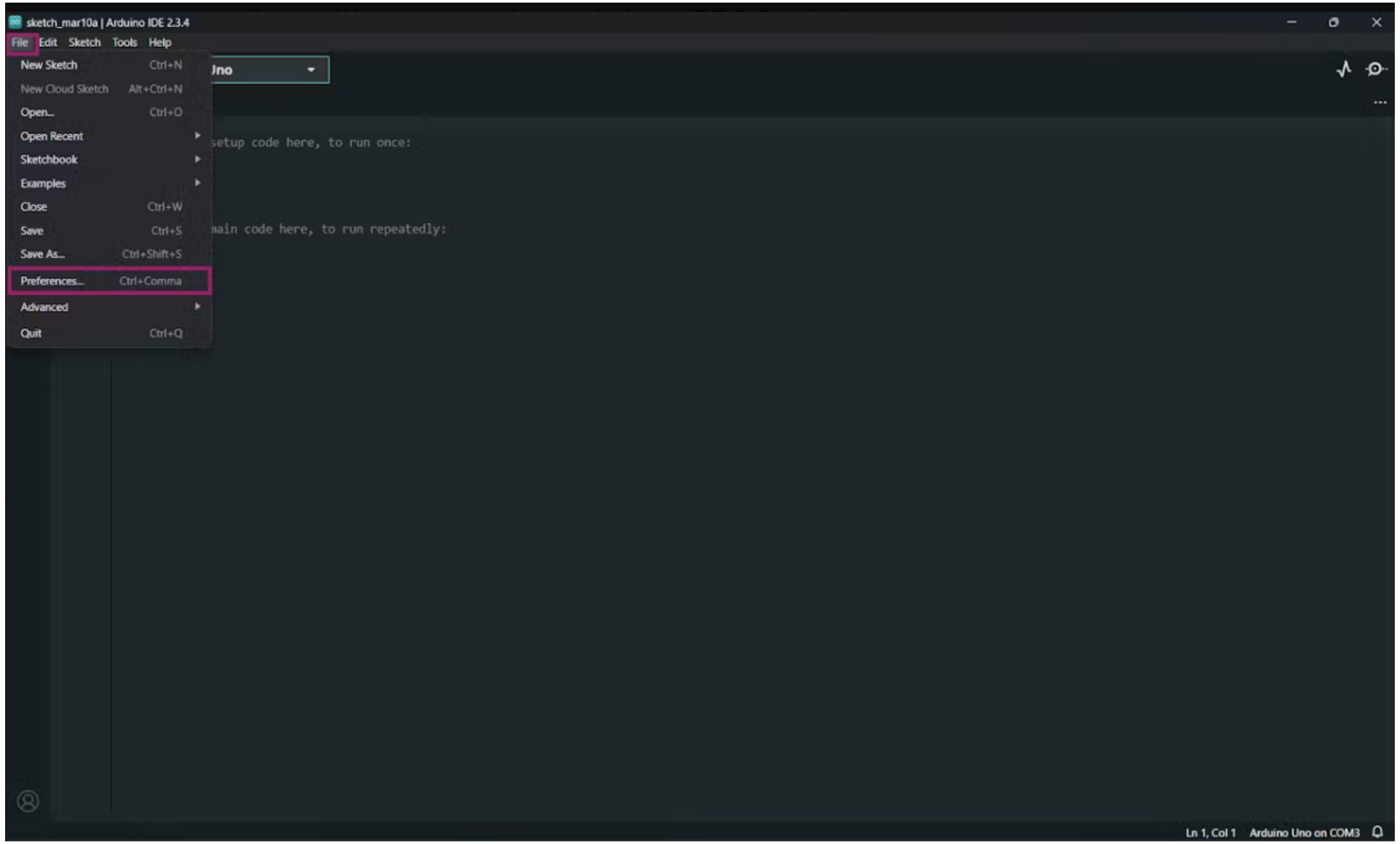
Installation

- 1. Download Arduino
- https://www.arduino.cc/en/software/
- Open Arduino
  - File → Preferences



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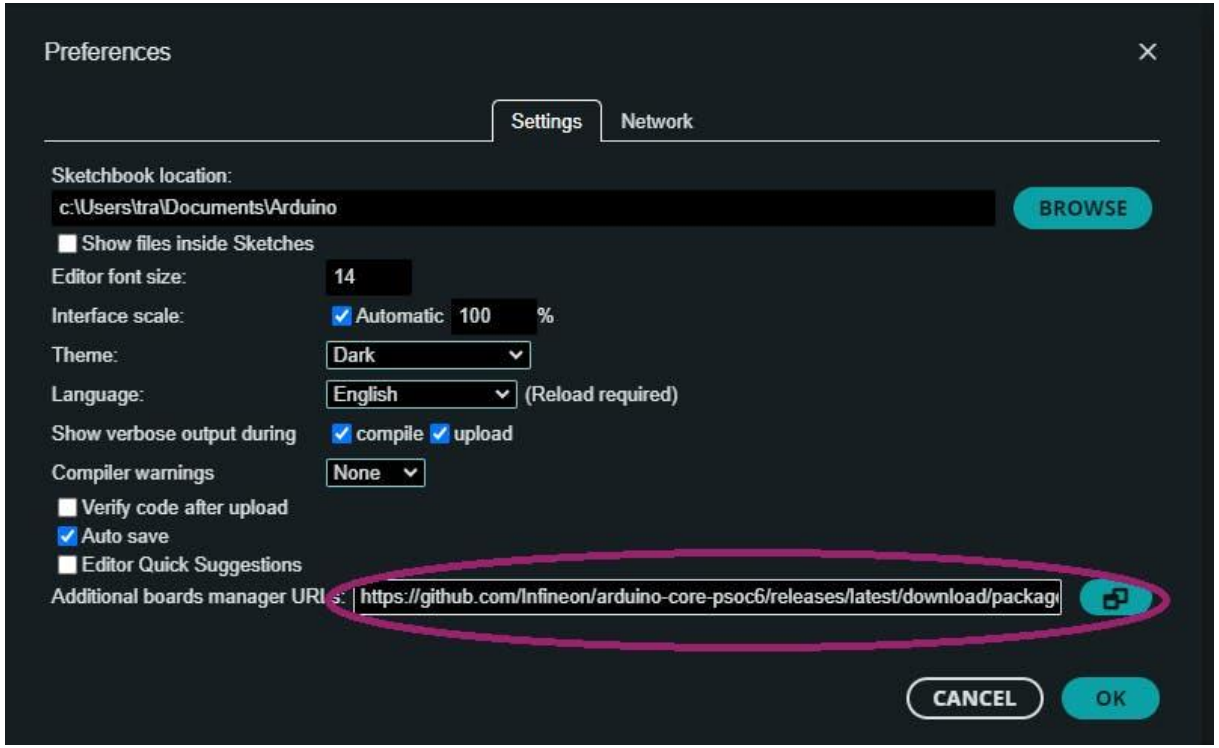
Installation

– Insert Link

https://github.com/Infineon/arduino-core-psoc6/releases/latest/download/package_psoc6_index.json



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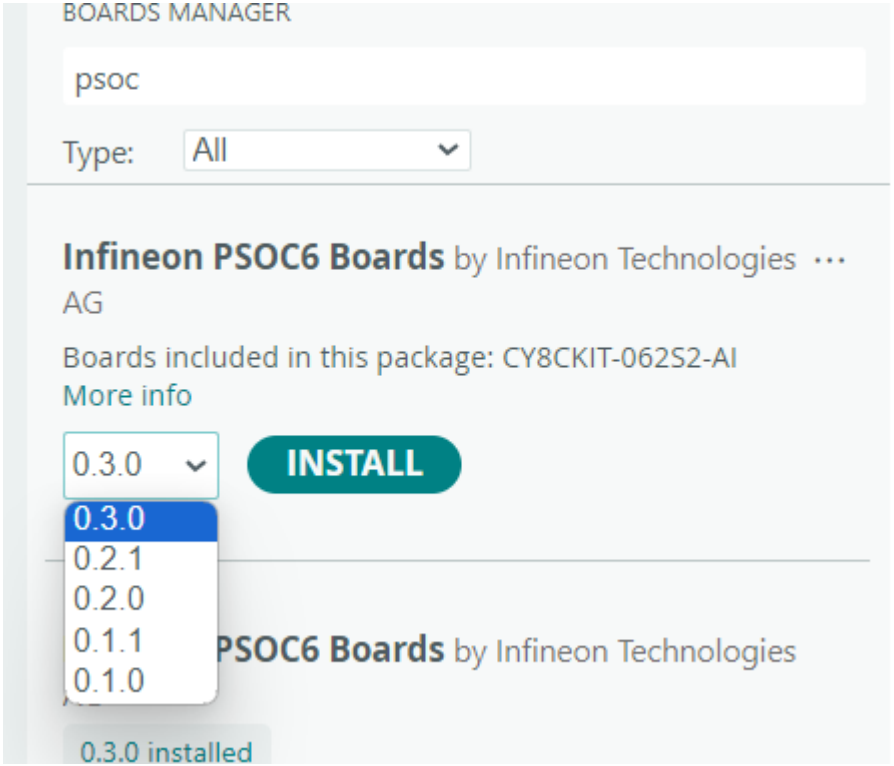
Installation

- Select the right version
- Version 0.3.0



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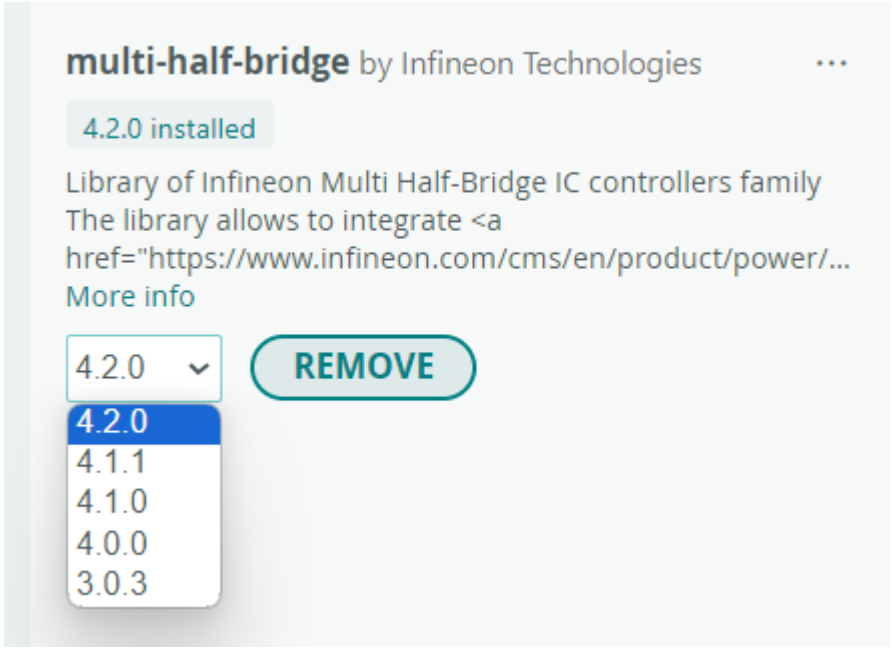
Installation

- Libraries:
  - Multi-half-bridge (4.2.0)
  - Arduino_BMI270_BMM150.h (1.2.1)
    with ZIP file



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Installation

Maybe you need it later

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