

Device name: 8-bit Analog Digital Converter with Potentiometer
(Referring only to the potentiometer and the ADC component for this project)

Model number: PCF8591

Supply voltage range: [2.5V–6V]

Input type(s): [Analog]

[details: The potentiometer is one of the devices built into the module, the input voltage varies depending on supply voltage (0-3.3V or 0-5V)]

Output type(s): [Digital]

[details: Outputs an 8-bit digital value (0–255) proportional to the potentiometer's position]

Interface: [I2C]

[details: Communicates with host via I2C protocol.]

Description:

The potentiometer is used as a voltage divider that varies the voltage to the PCF8591 ADC. The ADC converts this analog voltage into an 8-bit digital value (0–255), representing the position of the potentiometer knob.

Symbol:

