



# 8-Bit A/D and D/A Converter

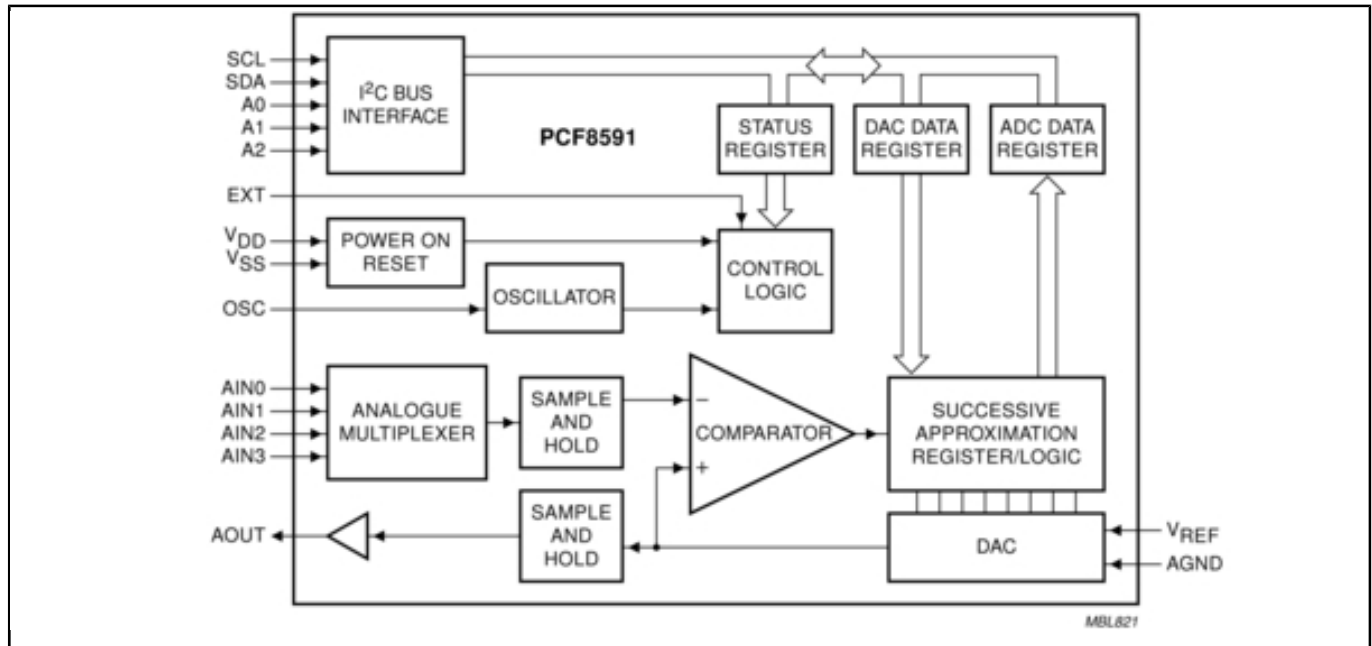
## PCF8591

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The PCF8591 is a single-chip, single-supply low-power 8-bit CMOS data acquisition device with four analog inputs, one analog output and a serial I<sup>2</sup>C-bus interface. Three address pins A0, A1 and A2 are used for programming the hardware address, allowing the use of up to eight devices connected to the I<sup>2</sup>C-bus without additional hardware. Address, control and data to and from the device are transferred serially via the two-line bidirectional I<sup>2</sup>C-bus.

The functions of the device include analog input multiplexing, on-chip track and hold function, 8-bit analog-to-digital conversion and an 8-bit digital-to-analog conversion. The maximum conversion rate is given by the maximum speed of the I<sup>2</sup>C-bus.

## Block diagram: PCF8591P, PCF8591T Block Diagram



View additional information for [8-Bit A/D and D/A Converter](#).

**Note:** The information on this document is subject to change without notice.

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