



8-Bit A/D and D/A Converter

PCF8591

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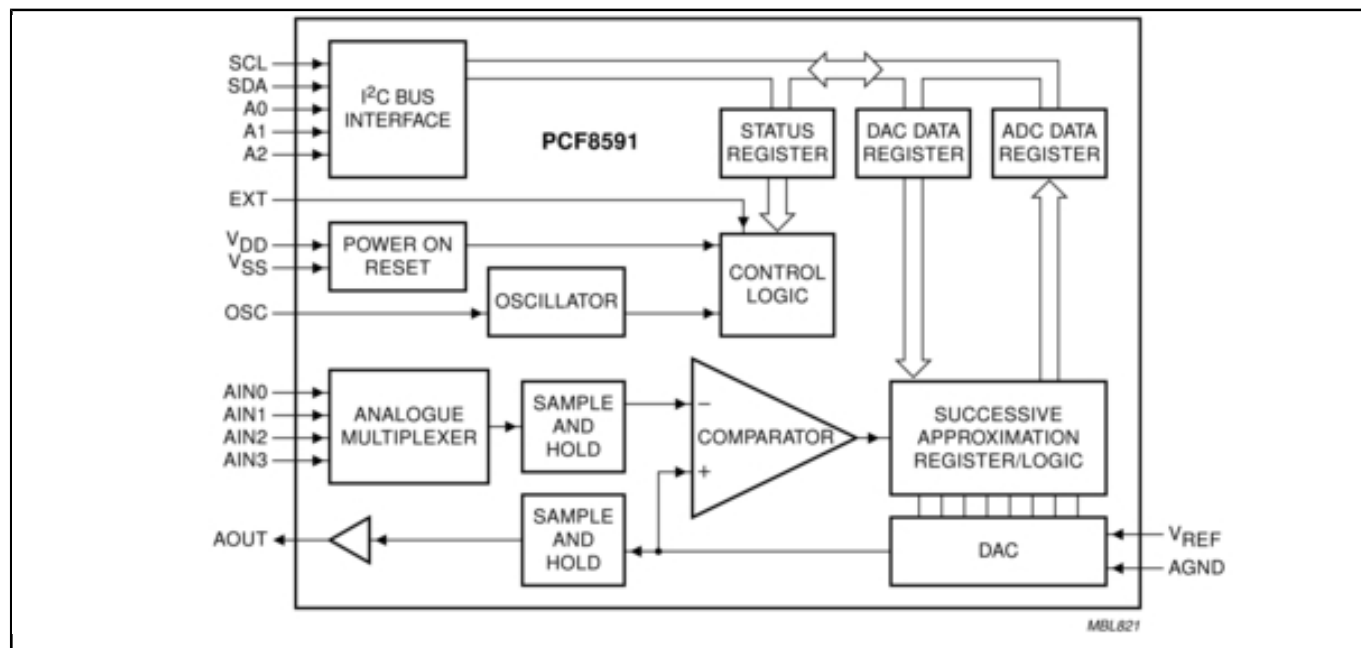
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The PCF8591 is a single-chip, single-supply low-power 8-bit CMOS data acquisition device with four analog inputs, one analog output and a serial I²C-bus interface. Three address pins A0, A1 and A2 are used for programming the hardware address, allowing the use of up to eight devices connected to the I²C-bus without additional hardware. Address, control and data to and from the device are transferred serially via the two-line bidirectional I²C-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 I²C-bus.

Block diagram: PCF8591P, PCF8591T Block Diagram



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