



# 4-Bit I<sup>2</sup>C-Bus and SMBus I/O Port

## PCA9536

Last Updated: Jun 15, 2022

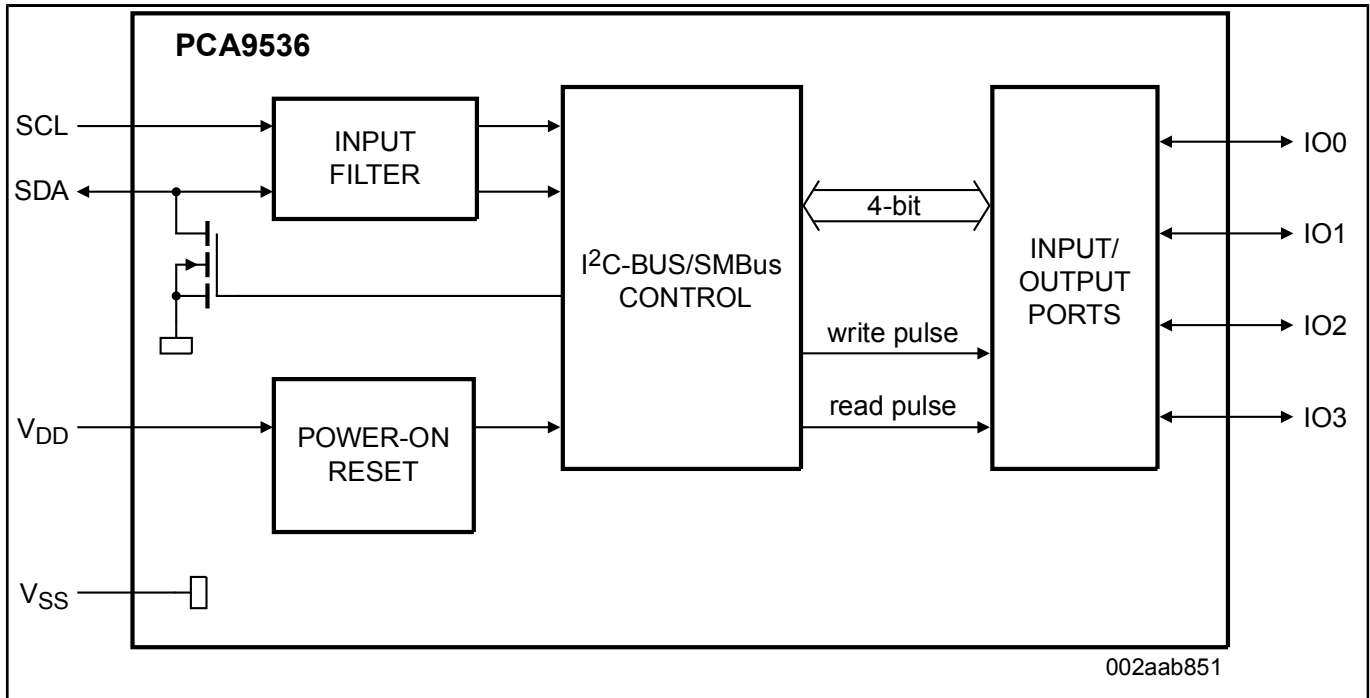
The PCA9536 is an 8-pin CMOS device that provides 4 bits of General Purpose parallel Input/Output (GPIO) expansion for I<sup>2</sup>C-bus/SMBus applications and was developed to enhance the NXP Semiconductors family of I<sup>2</sup>C-bus I/O expanders. I/O expanders provide a simple solution when additional I/O is needed for ACPI power switches, sensors, push buttons, LEDs, fans, etc.

The PCA9536 consists of a 4-bit Configuration register (input or output selection), 4-bit Input Port register, 4-bit Output Port register and a 4-bit Polarity Inversion register (active HIGH or active LOW operation). The system controller can enable the I/Os as either inputs or outputs by writing to the I/O configuration bits. The data for each input or output is kept in the corresponding Input Port or Output Port register. The polarity of the read register can be inverted with the Polarity Inversion register. All registers can be read by the system controller.

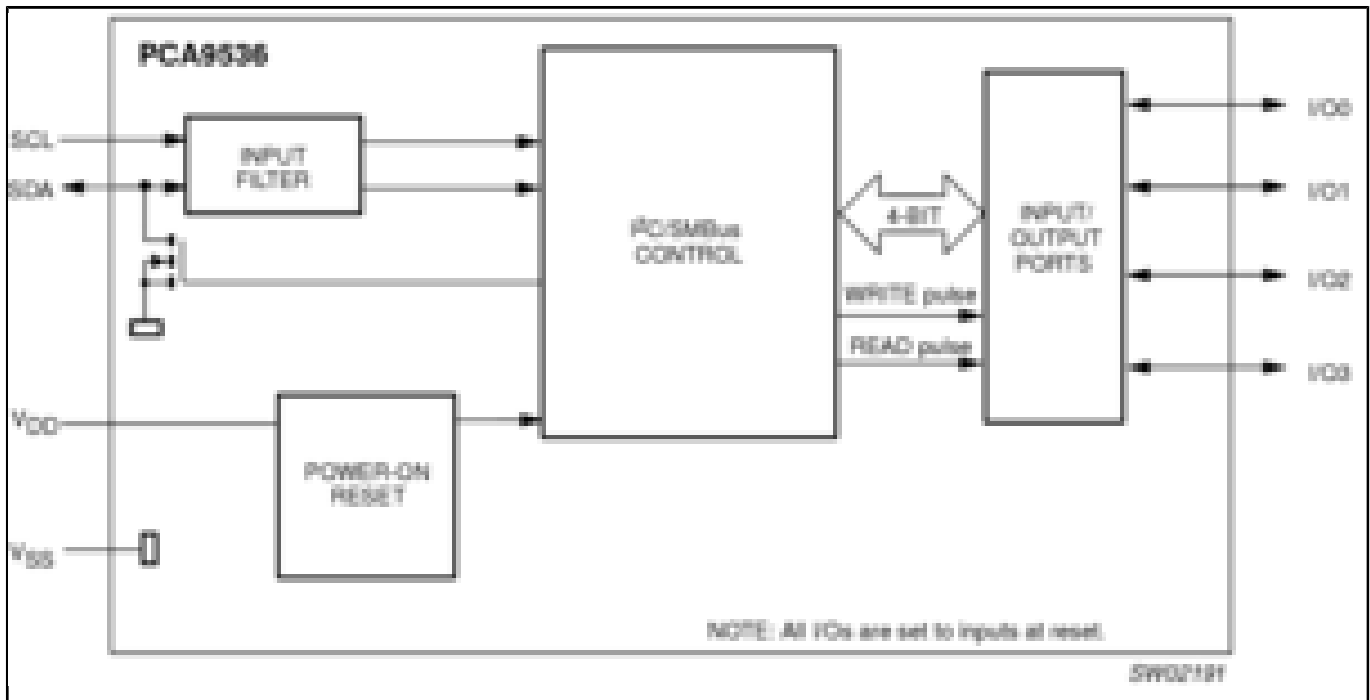
The power-on reset sets the registers to their default values and initializes the device state machine.

The I<sup>2</sup>C-bus address is fixed and allows only one device on the same I<sup>2</sup>C-bus/SMBus.

## PCA9536 Block Diagram Block Diagram



## Block diagram: PCA9536D, PCA9536DP, PCA9536TK Block Diagram



View additional information for [4-Bit I<sup>2</sup>C-Bus and SMBus I/O Port](#).

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

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