



4-Bit I²C-Bus and SMBus I/O Port

PCA9536

Last Updated: Aug 16, 2023

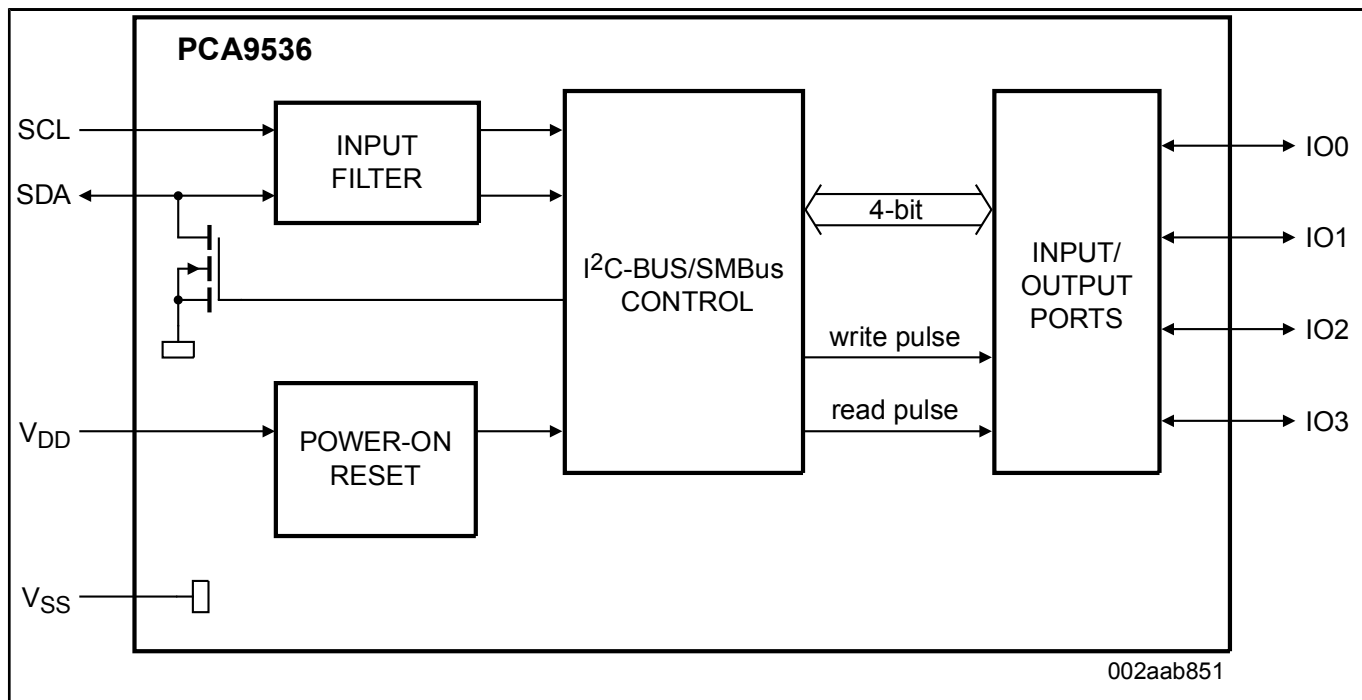
The PCA9536 is an 8-pin CMOS device that provides 4 bits of General Purpose parallel Input/Output (GPIO) expansion for I²C-bus/SMBus applications and was developed to enhance the NXP Semiconductors family of I²C-bus I/O expanders. I/O expanders provide a simple solution when additional I/O is needed 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.

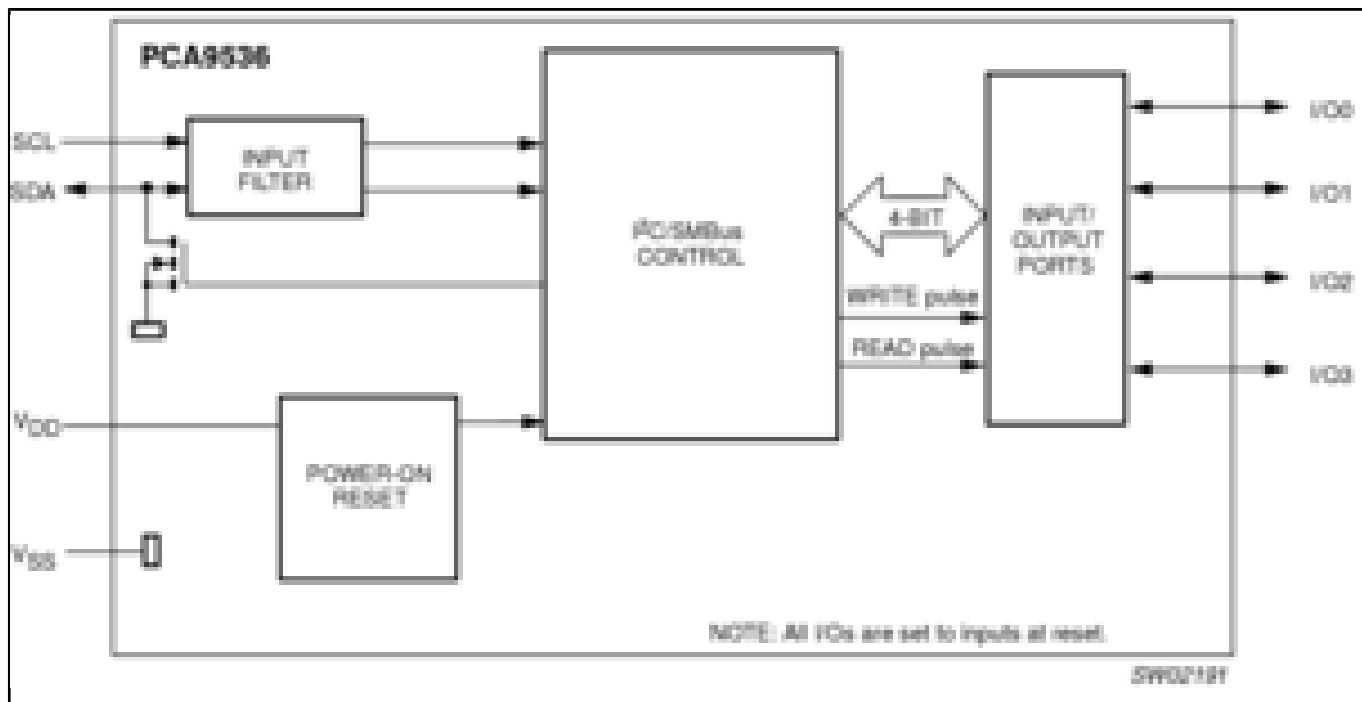
The power-on reset sets the registers to their default values and initializes the device state machine.

The I²C-bus address is fixed and allows only one device on the same I²C-bus/SMBus.

PCA9536 Block Diagram



PCA9536D, PCA9536DP, PCA9536TK Block Diagram



View additional information for [4-Bit I²C-Bus and SMBus I/O Port](#).

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

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.