Remote 16-Bit I/O Expander for I²C-Bus with Interrupt

PCA8575

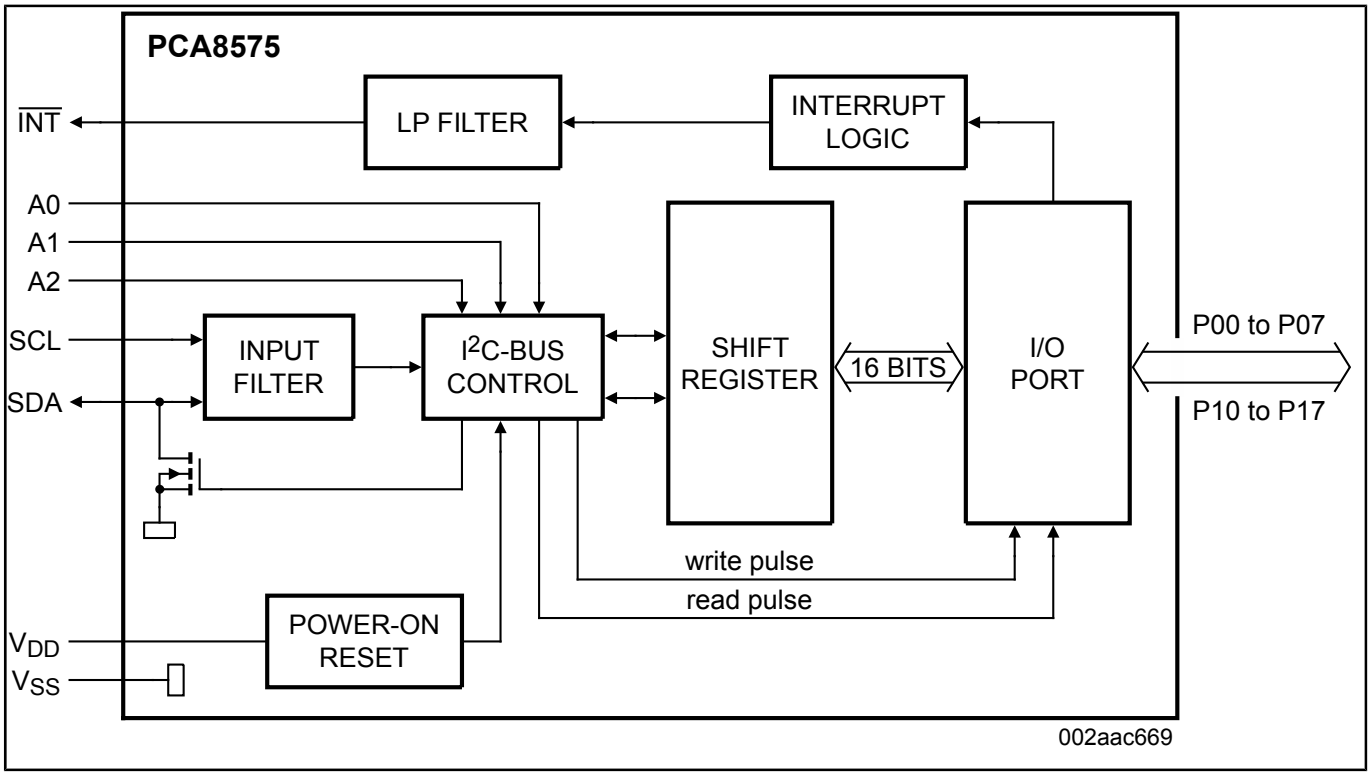
Last Updated: Oct 31, 2023

The PCA8575 provides general purpose remote I/O expansion for many microcontroller families via the two-line bidirectional I²C-Bus (serial clock (SCL), serial data (SDA)).

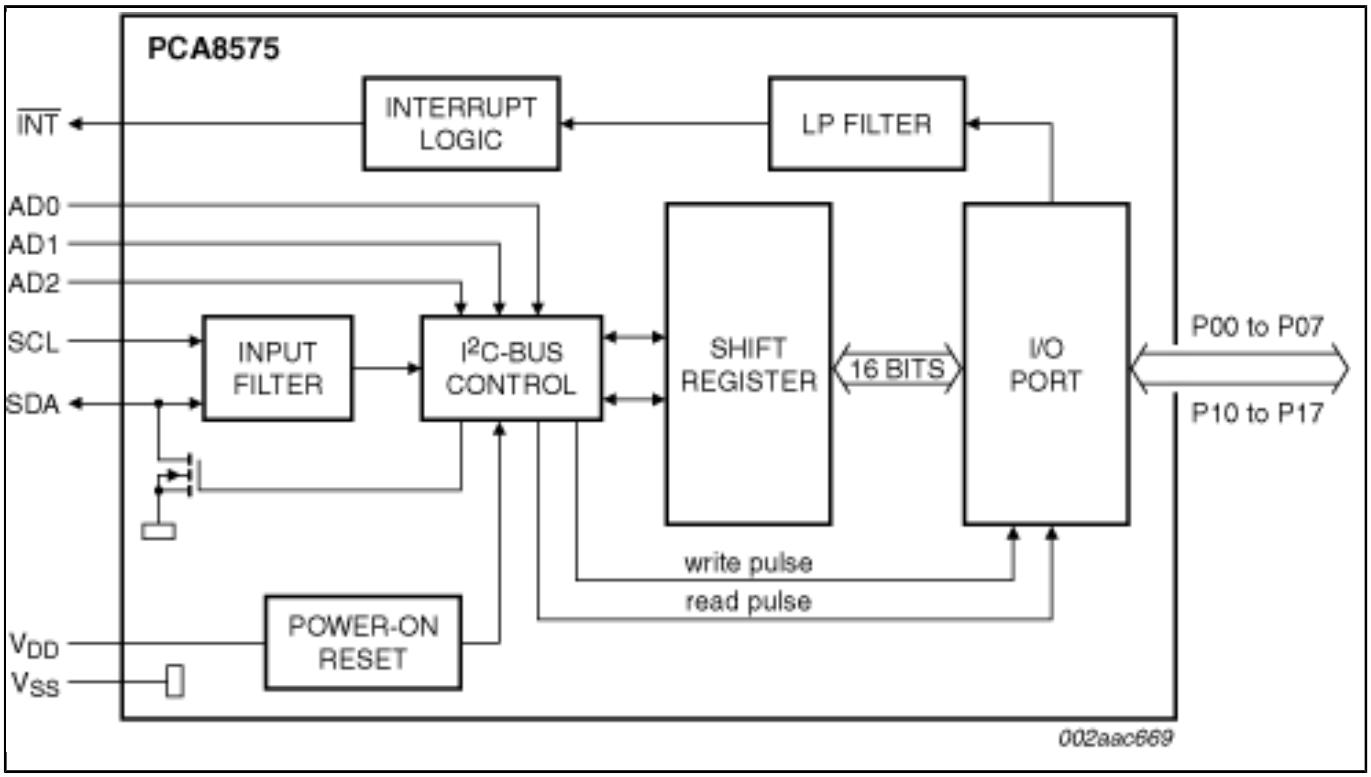
The device consists of a 16-bit quasi-bidirectional port and an I²C-bus interface. The PCA8575 has a low current consumption and includes latched outputs with high current drive capability for directly driving LEDs.

The PCA8575 also possesses an interrupt line (INT) which can be connected to the interrupt logic of the microcontroller. By sending an interrupt signal on this line, the remote I/O can inform the microcontroller if there is incoming data on its ports without having to communicate via the I²C-bus. The internal Power-On Reset (POR) initializes the I/Os as inputs.

PCA8575 Block Diagram Block Diagram



Block diagram: PCA8575BQ, PCA8575BS, PCA8575D, PCA8575DB, PCA8575DK, PCA8575PW Block Diagram



View additional information for Remote 16-Bit I/O Expander for I²C-Bus with Interrupt.

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