Fm+ Parallel Bus to I²C-Bus Controller

PCA9665_PCA9665A

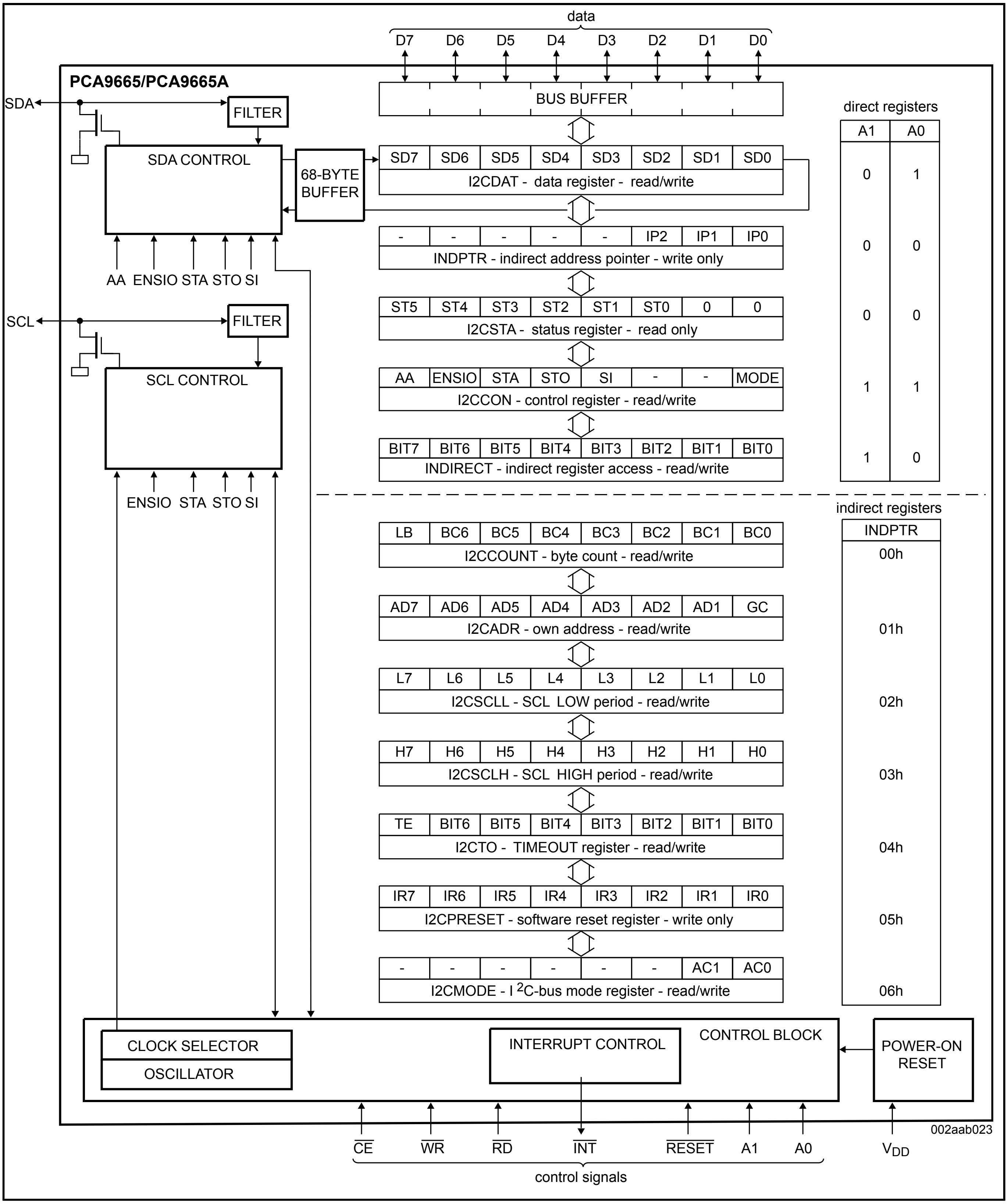
Last Updated: Sep 17, 2025

The PCA9665/PCA9665A serves as an interface between many standard parallel-bus microcontrollers/microprocessors and the serial I²C-bus and allows the parallel bus system to communicate bidirectionally with the I²C-bus. The PCA9665/PCA9665A can operate as a leader or a follower and can be a transmitter or receiver. Communication with the I²C-bus is carried out on a Byte or Buffered mode using interrupt or polled handshake. The PCA9665/PCA9665A controls all the I²C-bus specific sequences, protocol, arbitration and timing with no external timing element required.

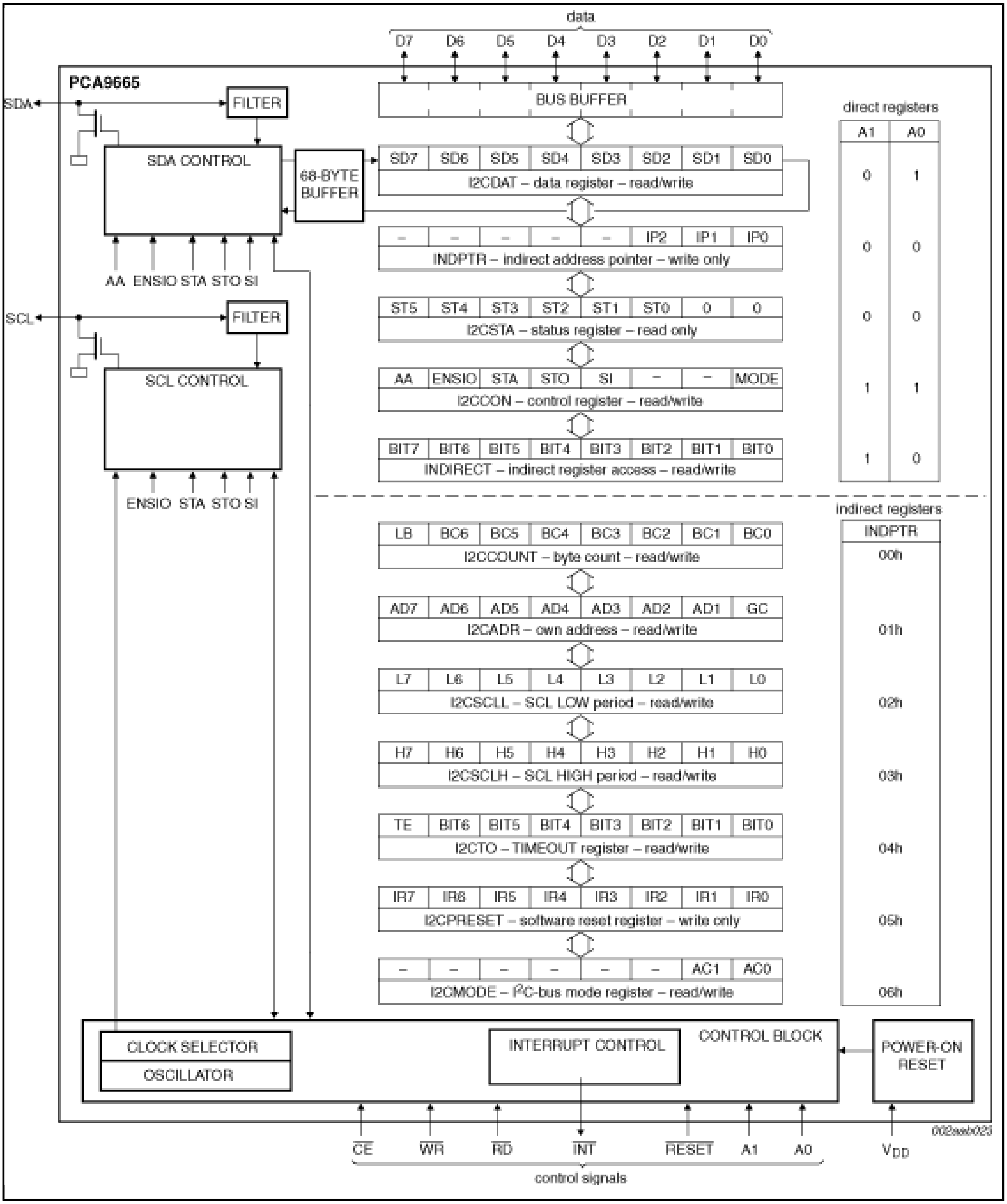
The PCA9665 and PCA9665A have the same footprint as the PCA9564 with additional features:

- 1 MHz transmission speeds
- Up to 25 mA drive capability on SCL/SDA
- 68-byte buffer
- I²C-bus General Call
- Software reset on the parallel bus

PCA9665_PCA9665A BLOCK DIAGRAM Block Diagram



Block diagram: PCA9665BS, PCA9665D, PCA9665N, PCA9665PW Block Diagram



View additional information for Fm+ Parallel Bus to I²C-Bus Controller.

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