Buffered Four-Channel Two-Wire Bus Switch

PCA9646

Archived

このページには、製造中止（生産終了）となった製品の情報が記載されています。本ページに記載されている仕様および情報は、過去の参考情報です。

Last Updated: Sep 17, 2024

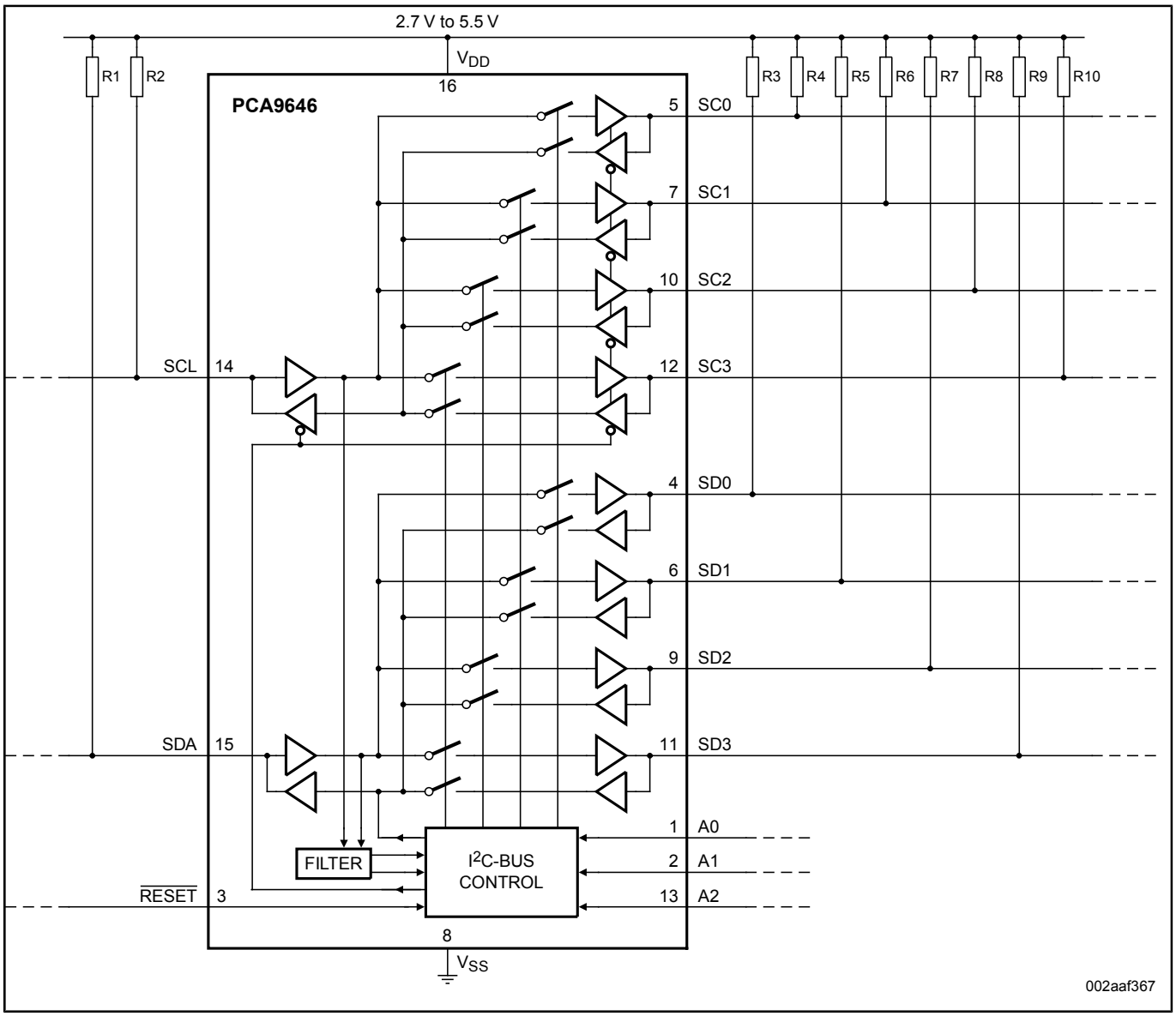
The PCA9646 is a monolithic CMOS integrated circuit for 2-wire bus buffering and switching in applications including I²C-bus, SMBus, PMBus and other systems based on similar principles.

Each of the four outputs may be independently enabled in any combination as determined by the contents of the programmable control register. Each I/O is impedance isolated from all others, thus allowing a total of five branches of 2-wire bus with the maximum specified load (e.g., 5 × 400 pF for Fm+ I²C-bus at 1 MHz or 5 × 4 nF at lower frequencies) (Ref. 1). More than one PCA9646 may be used in series, providing a substantial fan-out capability.

The PCA9646 includes a unidirectional buffer for the clock signal and a bidirectional buffer for the data signal. The direction of the clock signal may also be set by the contents of the programmable control register. Clock stretching and timing must always be under control of the controller device.

The PCA9646 has excellent application to 2-wire bus address expansion and increasing of maximum load capacitance. Very large LED displays are a perfect example.

PCA9646 Block Diagram



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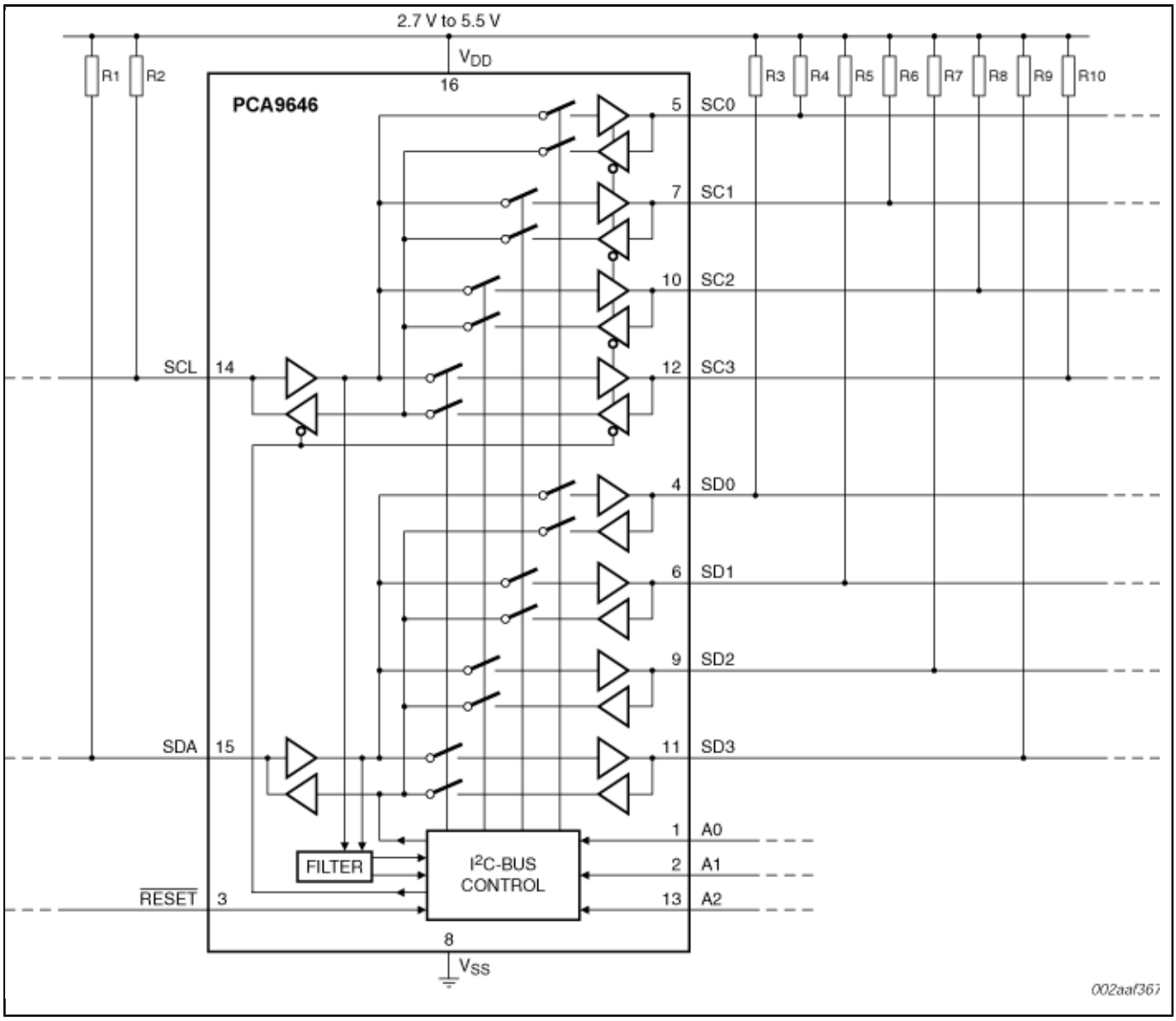

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