



# 可热插拔的**I<sup>2</sup>C**总线和**SMBus**总线缓冲器

## **PCA9511A**

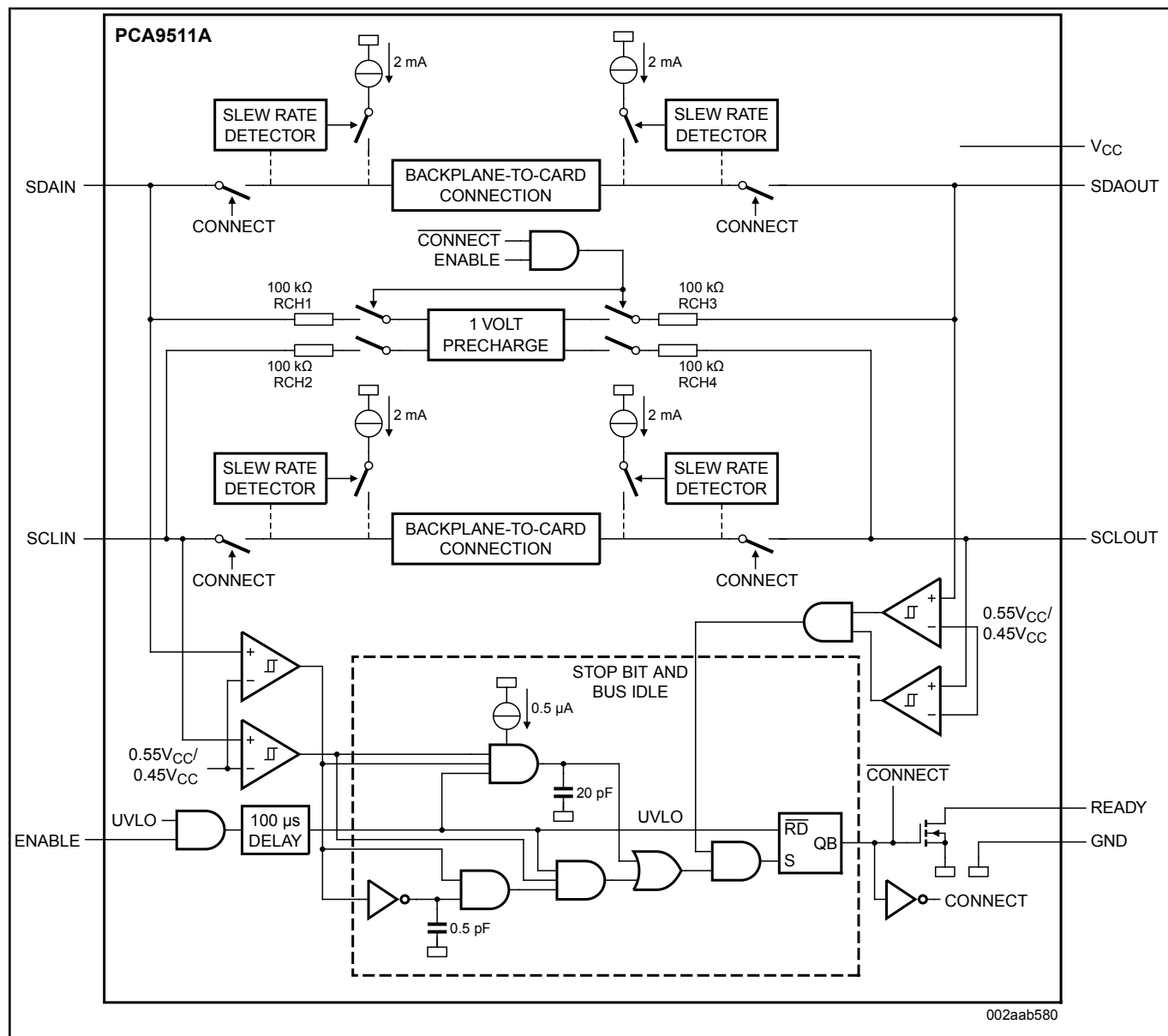
Last Updated: Mar 7, 2025

PCA9511A是一款热插拔**I<sup>2</sup>C**总线和**SMBus**缓冲器，允许将I/O卡插入带电背板中而不会损坏数据和时钟总线。控制电路会防止背板连接到卡上，直至背板上出现停止命令或总线闲置且卡上没有总线冲突。当连接建立时，PCA9511A提供双向缓冲，保持背板和卡电容隔离。

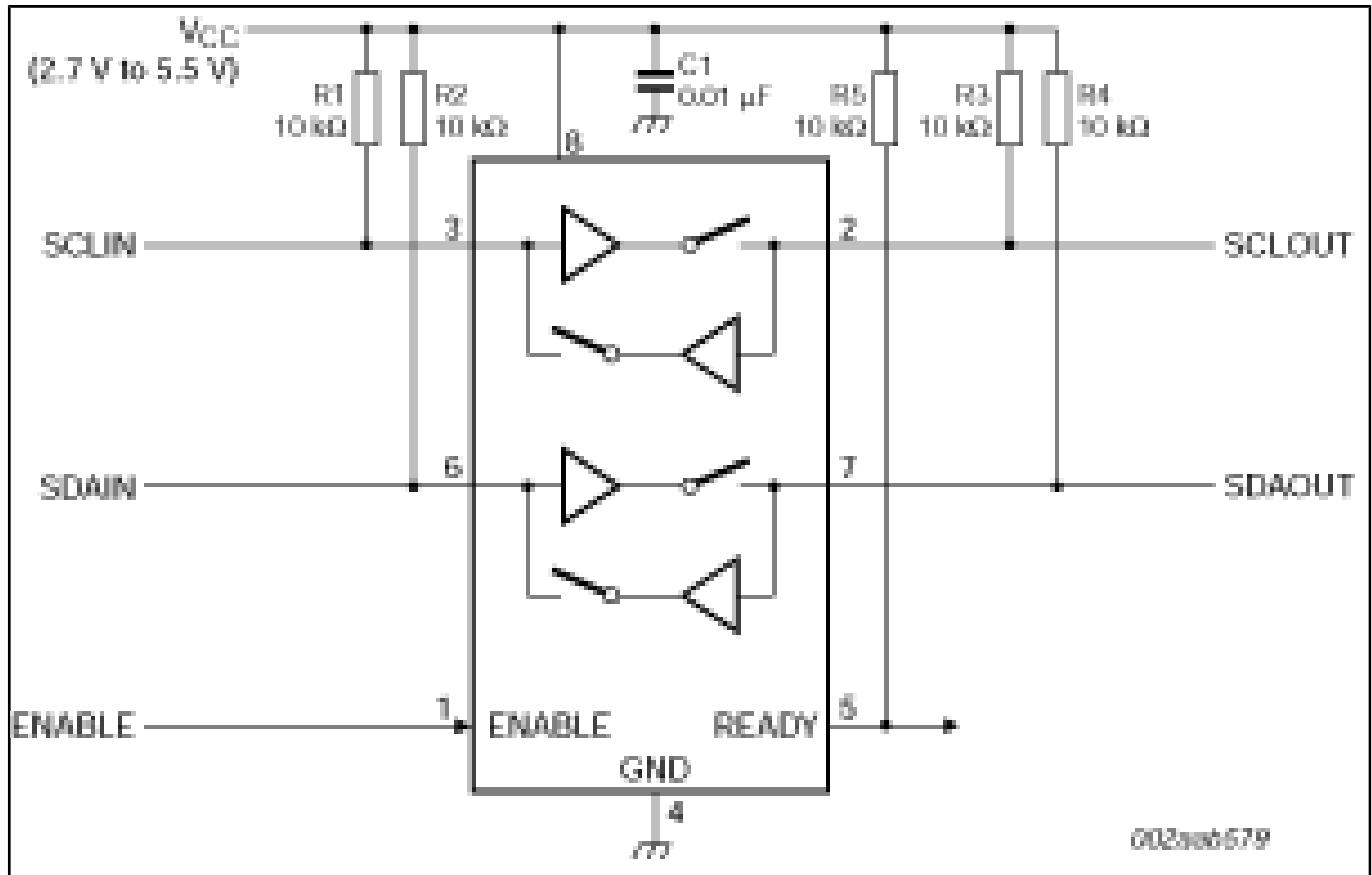
PCA9511A上升时间加速器电路允许使用更弱的DC上拉电流，同时仍满足上升时间要求。PCA9511A采用数字使能输入引脚(在输入高电平时启用器件并在输入低电平时强制器件进入低电流模式)，和开漏**READY**输出引脚(指示背板和卡侧是(高电平)与否(低电平)连接在一起)。

插入过程中，PCA9511A的**SDA**和**SCL**线路预充电至1V，以最大程度地减少芯片寄生电容充电所需的电流。

## PCA9511A Block Diagram



## PCA9511AD, PCA9511ADP, PCA9513AD, PCA9513ADP, PCA9514AD, PCA9514ADP Block Diagram



View additional information for [可热插拔的I<sup>2</sup>C总线和SMBus总线缓冲器](#).

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