



4-Bit Dual Supply Bidirectional I3C/ I²C-Bus, SMBus and SPI Voltage-Level Translator

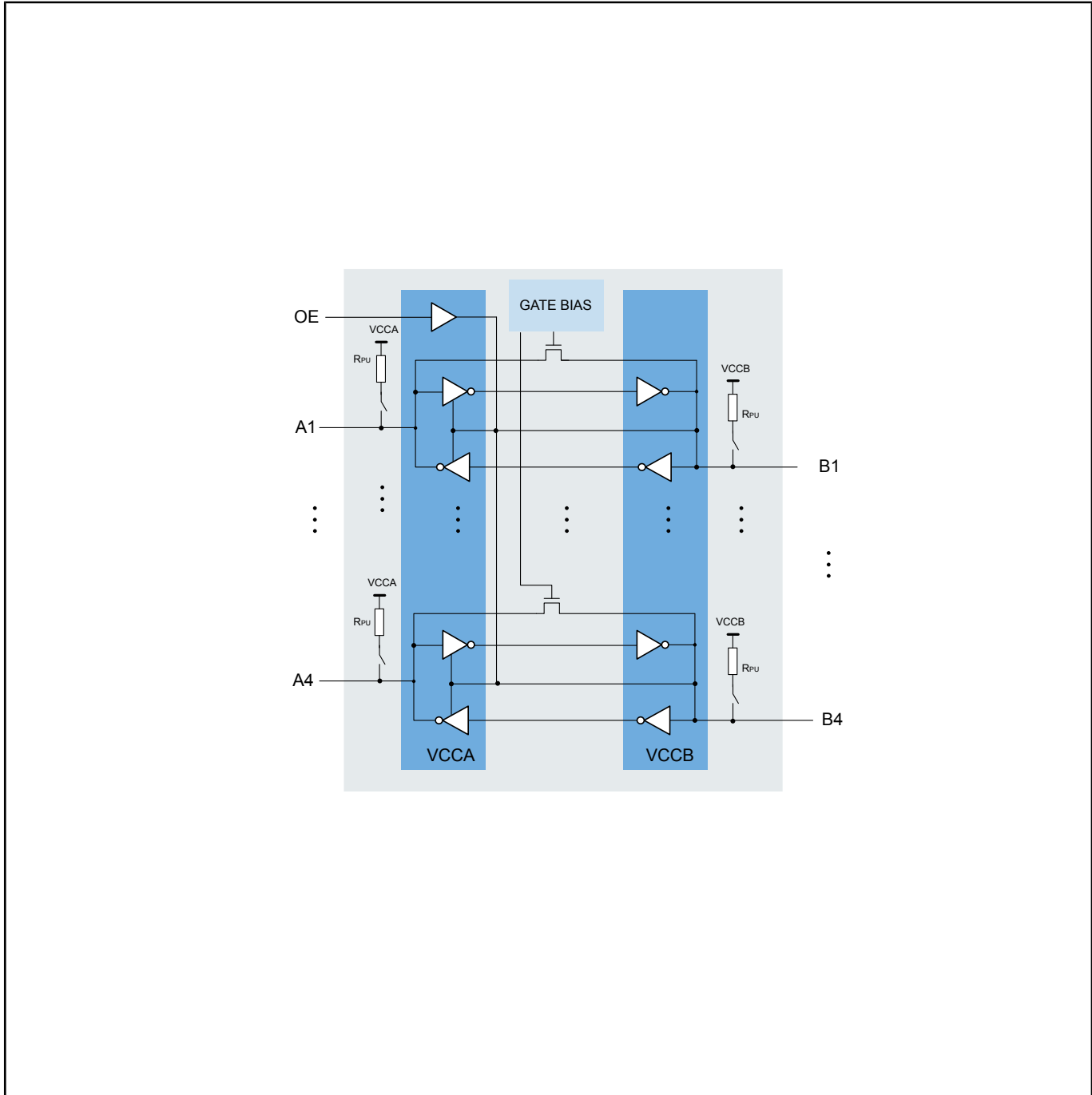
P3A1604

Active

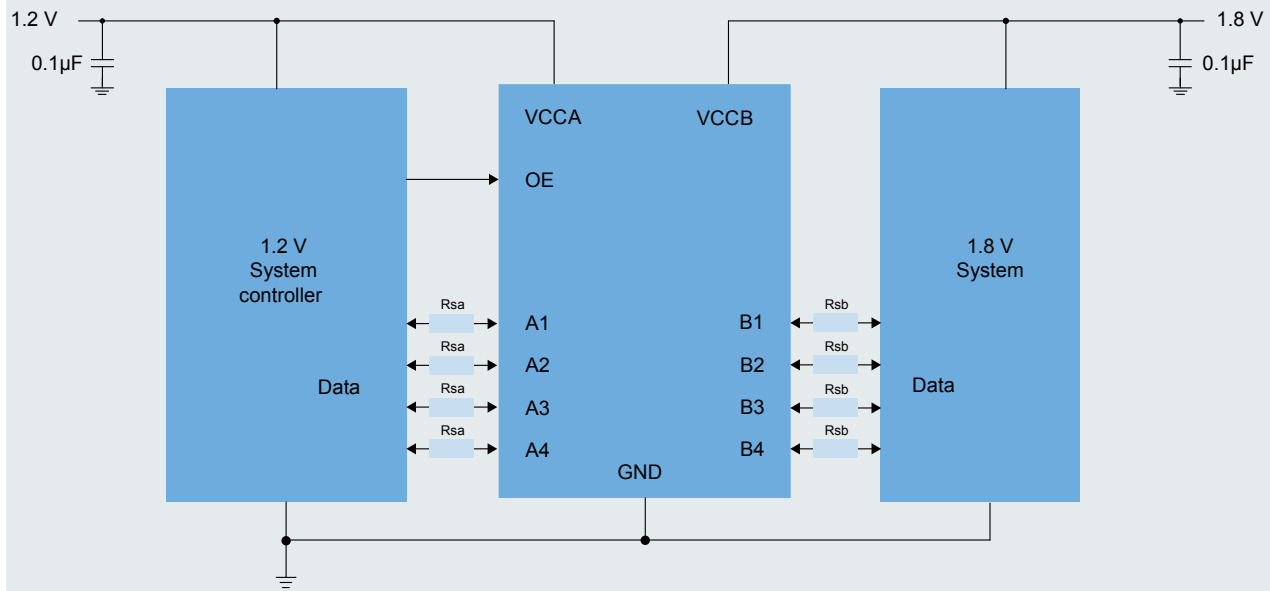
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The P3A1604UK is a 4-bit, dual supply translating transceiver with auto direction sensing, that enables bidirectional voltage level translation. The P3A1604UK has wide supply voltage range, VCCA from 0.72 V to 1.98 V and VCCB from 1.62 V to 3.63 V. It supports I3C / I²C / SMBus / SPI applications. This device helps translate the latest SoC / ASIC / MCU using advance process nodes to interface with peripherals at higher voltage rails.

P3A1604 Internal Block Diagram



P3A1604 Typical Application Circuit Block Diagram



VCCA range: 0.72 V to 1.98 V, VCCB range: 1.62 V to 3.63 V
 Rsa & Rsb (~ 30 Ω) are optional based on the signal integrity.
 For Open Drain signal, at least one side pull up R on either A side or B side I/O pin is required.

[View additional information for 4-Bit Dual Supply Bidirectional I3C/I²C-Bus, SMBus and SPI Voltage-Level Translator.](#)

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

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