



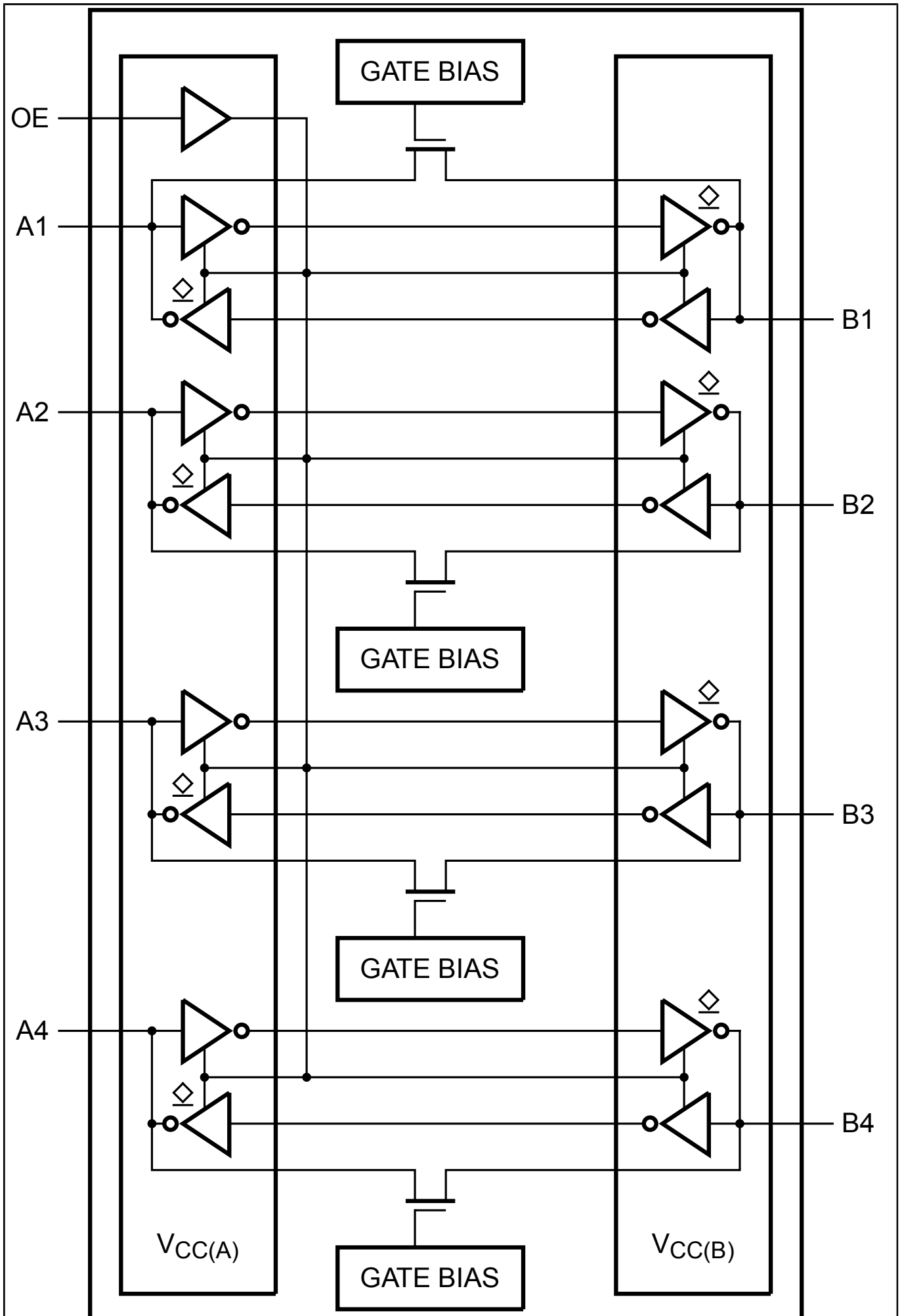
# Dual-Supply Translating Transceiver (Open-Drain, Auto-Direction Sensing)

## NTS0104

Last Updated: Mar 15, 2024

The NTS0104 is a 4-bit, dual supply translating transceiver with auto direction sensing, that enables bidirectional voltage level translation. It features two 4-bit input-output ports (An and Bn), one output enables input (OE) and two supply pins (VCC(A) and VCC(B)). VCC(A) can be supplied at any voltage between 1.65 V and 3.6 V and VCC(B) can be supplied at any voltage between 2.3 V and 5.5 V, making the device suitable for translating between any of the voltage nodes (1.8 V, 2.5 V, 3.3 V, and 5.0 V). Pins An and OE are referenced to VCC(A) and pins Bn are referenced to VCC(B). A LOW level at pin OE causes the outputs to assume a high-impedance OFF-state. This device is fully specified for partial power-down applications using IOFF. The IOFF circuitry disables the output, preventing the damaging backflow current through the device when it is powered down.

## NTS0104 Block Diagram Block Diagram



View additional information for [Dual-Supply Translating Transceiver \(Open-Drain, Auto-Direction Sensing\)](#).

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

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