



Dual-Supply Translating Transceiver (Auto-Direction Sensing, Three-State)

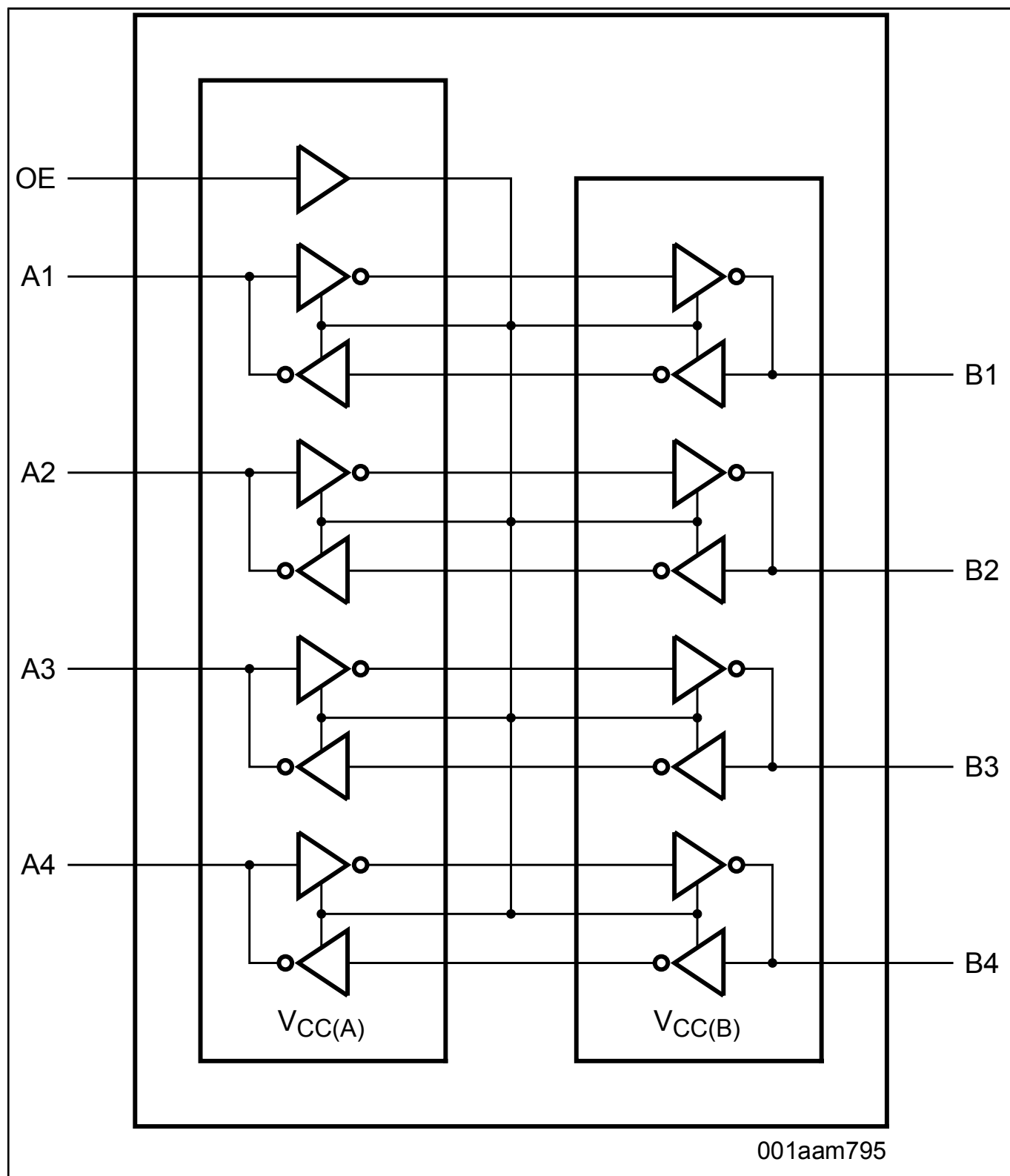
NTB0104

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The NTB0104 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 enable input (OE) and two supply pins (VCC(A) and VCC(B)). VCC(A) can be supplied at any voltage between 1.2 V and 3.6 V and VCC(B) can be supplied at any voltage between 1.65 V and 5.5 V, making the device suitable for translating between any of the low voltage nodes (1.2 V, 1.5 V, 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.

NTB0104 Block Diagram



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