

COS13487EESA Datasheet - Auto-Direction RS-485 Transceiver

500kbps 3.0V-5.5V Half-Duplex Transceiver with Auto-Direction Control

1. Features & Description

The COS13487EESA is a 3.0V to 5.5V half-duplex RS-485/RS-422 transceiver featuring internal automatic driver direction control logic. It eliminates the need for an external MCU GPIO control pin to switch Driver Enable (DE) and Receiver Enable (/RE), simplifying isolation designs and preventing bus lockup.

2. Electrical Parameters

Supply Rail (VCC)	3.0V to 5.5V
Data Rate	Up to 500 kbps (slew-rate limited)
Bus ESD Protection	±15kV HBM ESD
Bus Unit Load	1/4 Unit Load (up to 128 nodes)
Package Options	SOP-8 (150 mil standard body)
Operating Temp	-40°C to +125°C

3. Pin Assignment

Pin 1: RO (Receiver Output) | Pin 2: RE (GND) | Pin 3: DE (VCC) | Pin 4: DI (Driver Input) | Pin 5: GND | Pin 6: A (Non-Inverting Bus) | Pin 7: B (Inverting Bus) | Pin 8: VCC.