

# INTL9617 Product Brief

---

## 1. Description

The INTL9617, as a CMOS integrated circuit, is designed to facilitate level shifting between low voltage (0.8V to 5.5V) and higher voltage (2.2V to 5.5V) Fast-mode Plus (Fm+) I2C-bus or SMBus applications. It incorporates all operating modes and features of the I2C-bus system during the level shifts. In addition, it offers bidirectional buffering for both the data (SDA) and the clock (SCL) line to extend the I2C-bus, thereby supporting the connection of the two buses compromising 540pF at 1MHz or up to 4000pF at lower speeds. With INTL9617 integrated, system designers are able to partition a bus into two sections, controlling both voltage levels and capacitance effectively. EN pin supports anti-backflow. The INTL9617 is packaged in a 3mm wide MSOP-8 lead body. Its rated operating temperature range is from -40°C to 85°C.

## 2. Features

- Two channels bidirectional I2C buffer
- Port A operating supply voltage range of 0.8-5.5V with normal level
- Port B operating supply voltage range of 2.2-5.5V with static offset level
- 5V tolerant enable pins
- 0 Hz - 1000 kHz clock frequency
- Active high repeater enable input referenced to VCCB
- Latching free operation
- Open-Drain I2C I/O
- Supports clock stretching across the repeater
- Powered-off high-impedance I2C-bus pins
- Lead-free & fully rohs compliant
- Environment-friendly without halogen and antimony
- Operating Temperature=-40°C to 85°C
- Available package: MSOP-8(3.00mm X 3.00mm)

## 3. Applications

- IT infrastructure (servers, storages)
- Communication
- Network system, including switches and route

# INTL9617 Product Brief

## 4. Functional Diagram

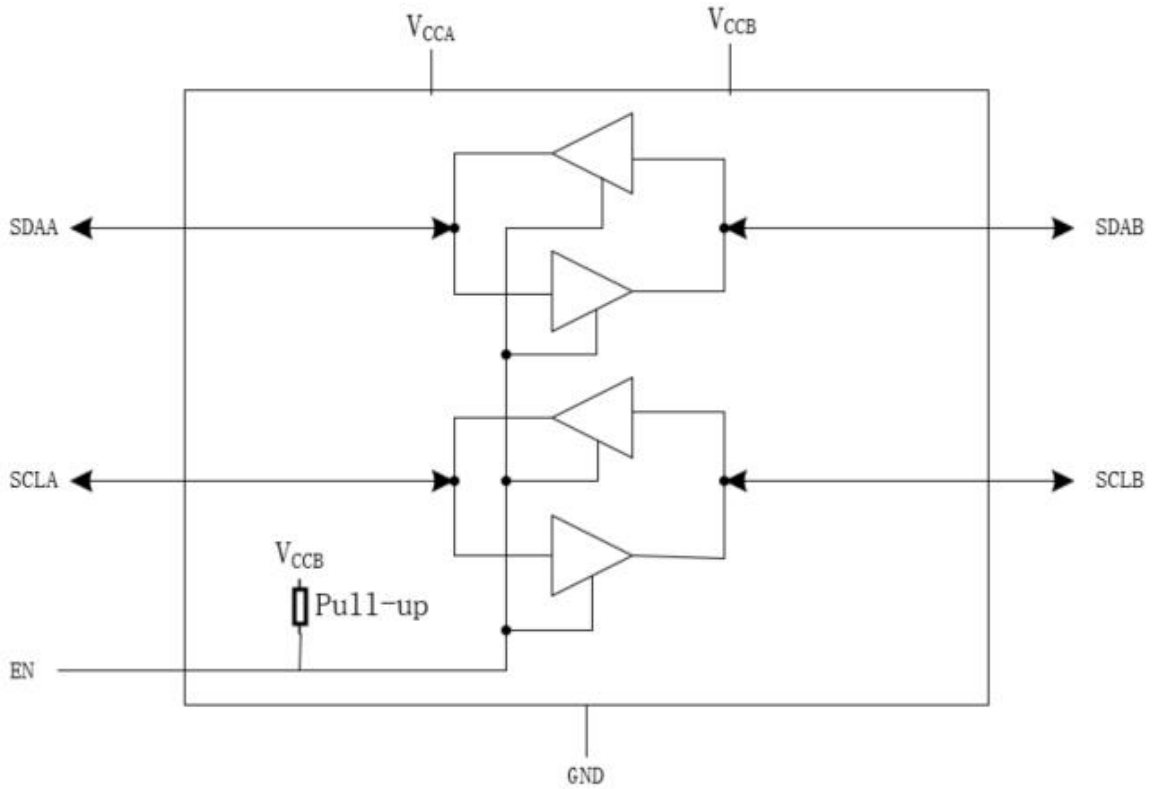


Figure 1 Functional Diagram