The PCF8574 device is an 8-bit I/O expander for the two-line bidirectional bus (I2C) designed for 2.5-V to 5.5- V VCC operation. It provides general-purpose remote I/O expansion for most microcontroller families via the I2C interface (serial clock, SCL, and serial data, SDA, pins). **The PCF8574 device provides an open-drain output (INT) that can be connected to the interrupt input of a microcontroller. An interrupt is generated by any rising or falling edge of the port inputs in the input mode.** After time, tiv, INT is valid. Resetting and reactivating the interrupt circuit is achieved when data on the port is changed to the original setting or data is read from, or written to, the port that generated the interrupt. Resetting occurs in the read mode at the acknowledge bit after the rising edge of the SCL signal, or in the write mode at the acknowledge bit after the high-to-low transition of the SCL signal. Interrupts that occur during the acknowledged clock pulse can be lost (or be very short) due to the resetting of the interrupt during this pulse. Each change of the I/Os after resetting is detected and, after the next rising clock edge, is transmitted as INT. Reading from, or writing to, another device does not affect the interrupt circuit. This device does not have internal configuration or status registers. Instead, read or write to the device I/Os directly after sending the device address. **By sending an interrupt signal on this line, the remote I/O can inform the microcontroller if there is incoming data on its ports without having to communicate by way of the I2C bus. Therefore, PCF8574 can remain a simple slave device.** An additional strong pullup to VCC allows fast rising edges into heavily loaded outputs. This device turns on when an output is written high and is switched off by the negative edge of SCL. **The I/Os should be high before being used as inputs.**