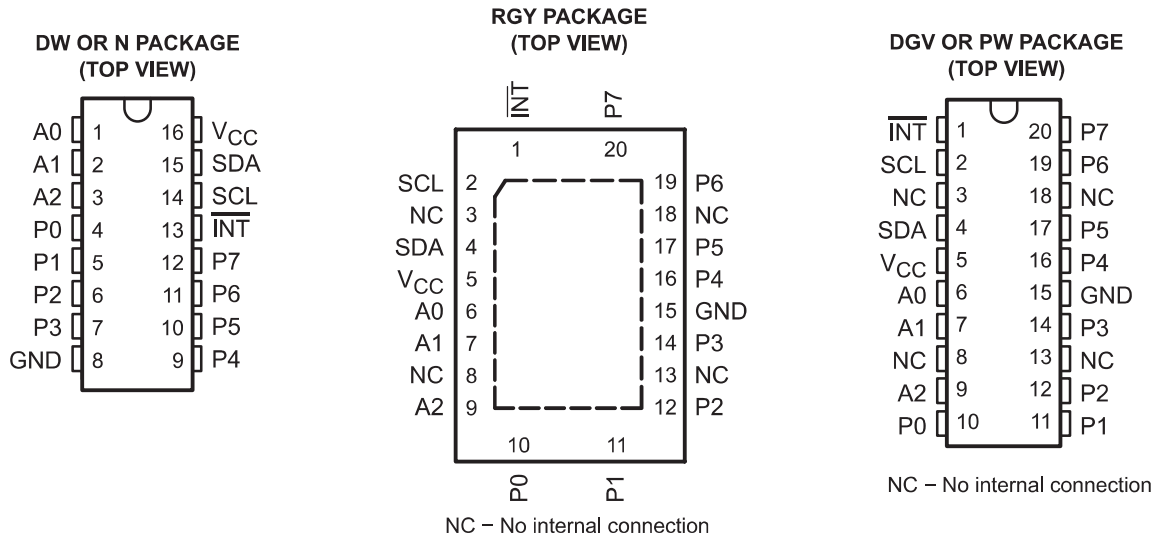


# PCF8574 REMOTE 8-BIT I/O EXPANDER FOR I<sup>2</sup>C BUS

SCPS068C - JULY 2001 - REVISED JANUARY 2004

- Low Standby-Current Consumption of 10  $\mu$ A Maximum
- I<sup>2</sup>C to Parallel-Port Expander
- Open-Drain Interrupt Output
- Compatible With Most Microcontrollers
- Latched Outputs With High-Current Drive Capability for Directly Driving LEDs
- Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II



## description/ordering information

This 8-bit input/output (I/O) expander for the two-line bidirectional bus (I<sup>2</sup>C) is designed for 2.5-V to 6-V V<sub>CC</sub> operation.

The PCF8574 provides general-purpose remote I/O expansion for most microcontroller families via the I<sup>2</sup>C interface [serial clock (SCL), serial data (SDA)].

The device features an 8-bit quasi-bidirectional I/O port (P0–P7), including latched outputs with high-current drive capability for directly driving LEDs. Each quasi-bidirectional I/O can be used as an input or output without the use of a data-direction control signal. At power on, the I/Os are high. In this mode, only a current source to V<sub>CC</sub> is active. An additional strong pullup to V<sub>CC</sub> 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.

## ORDERING INFORMATION

T <sub>A</sub>	PACKAGE†		ORDERABLE PART NUMBER	TOP-SIDE MARKING
–40°C to 85°C	QFN – RGY	Tape and reel	PCF8574RGYR	PF574
	PDIP – N	Tube	PCF8574N	PCF8574N
	SOIC – DW	Tube	PCF8574DW	PCF8574
		Tape and reel	PCF8574DWR	
	TSSOP – PW	Tape and reel	PCF8574PWR	PF574
	TVSOP – DGV	Tape and reel	PCF8574DGVR	PF574

† Package drawings, standard packing quantities, thermal data, symbolization, and PCB design guidelines are available at [www.ti.com/sc/package](http://www.ti.com/sc/package).



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