


**I2C/SMBus Interface 100kHz/400kHz 5.5V 16-Pin TSSOP**  
T/R



Images are for reference only

[Inquiry](#)

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	TSSOP16
<b>Product Type:</b>	Drivers
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active

### General Description

The TCA9554 is a 16-pin device that provides 8 bits of general purpose parallel input and output (I/O) expansion for the two-line bidirectional I2C bus (or SMBus) protocol. The device can operate with a power supply voltage ranging from 1.65 V to 5.5 V. The device supports both 100-kHz (Standard-mode) and 400-kHz (Fast-mode) clock frequencies. I/O expanders such as the TCA9554 provide a simple solution when additional I/Os are needed for switches, sensors, push-buttons, LEDs, fans, and other similar devices.

The features of the TCA9554 include an interrupt that is generated on the INT pin whenever an input port changes state. The A0, A1, and A2 hardware selectable address pins allow up to eight TCA9554 devices on the same I2C bus. The device can also be reset to its default state by cycling the power supply and causing a power-on reset.

## Key Features

I2C to Parallel Port Expander

Open-Drain Active-Low Interrupt Output

Operating Power-Supply Voltage Range of 1.65V to 5.5V

5-V Tolerant I/O Ports

400-kHz Fast I2C Bus

Three Hardware Address Pins Allow up to Eight Devices on the I2C/SMBus

Input and Output Configuration Register

Polarity Inversion Register

Internal Power-On Reset

Low Standby Current Consumption

Power-Up With All Channels Configured as Inputs

No Glitch on Power Up

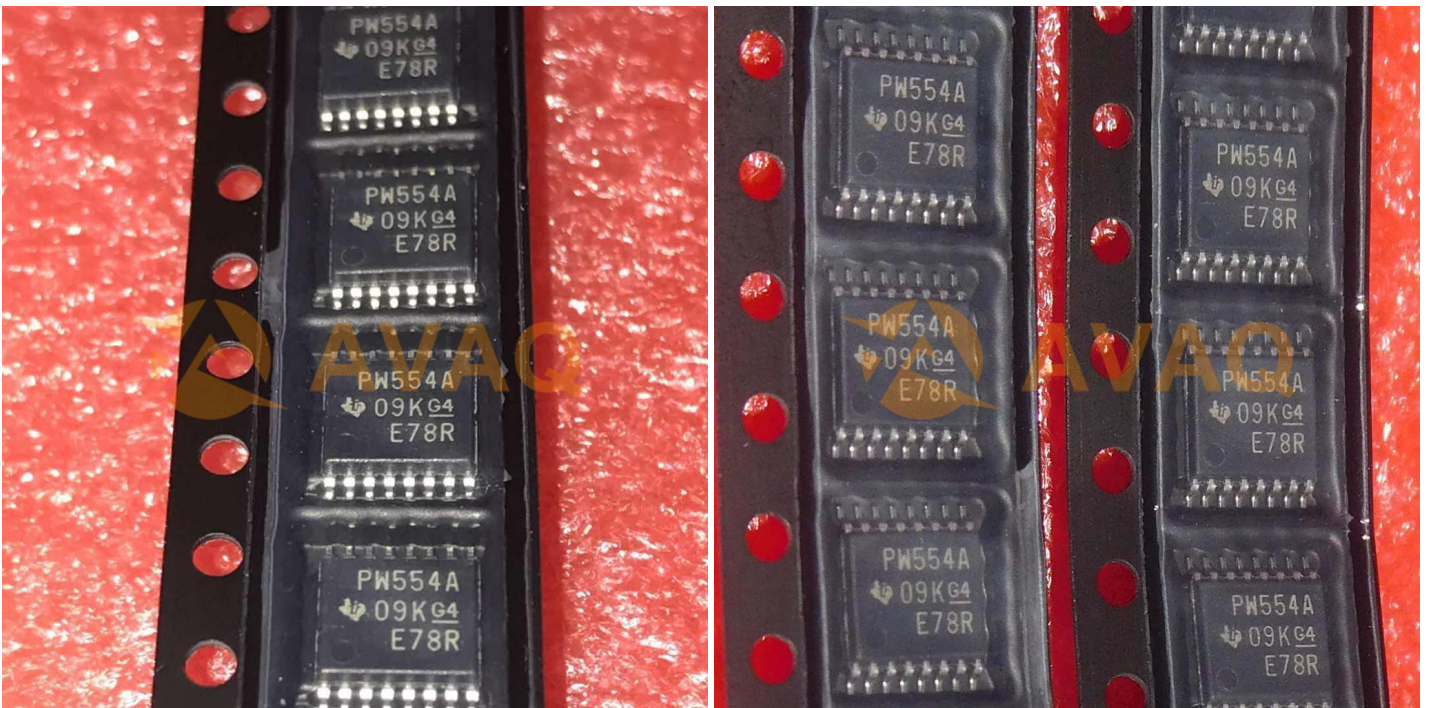
Noise Filter on SCL/SDA Inputs

Latched Outputs With High-Current Drive Maximum Capability for Directly Driving LEDs

Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II

ESD Protection Exceeds JESD 22  
2000-V Human-Body Model (A114-A)

1000-V Charged-Device Model (C101)



## Recommended For You

**TCA9534PWR**

Texas Instruments, Inc  
TSSOP16

**TCA9517DR**

Texas Instruments, Inc  
SOP8

**TCA6416APWR**

Texas Instruments, Inc  
TSSOP24

**TCA6416ARTWR**

Texas Instruments, Inc  
WQFN24

**TCA4311ADGKR**

Texas Instruments, Inc  
MSOP-8

**TCA9539QPWRQ1**

Texas Instruments, Inc  
TSSOP24

**TCA6408APWR**

Texas Instruments, Inc  
TSSOP16

**TCA9535DBR**

Texas Instruments, Inc  
SSOP24

**TCA9517DGKRQ1**

Texas Instruments, Inc  
VSSOP8

**TCA6408AQPWRQ1**

Texas Instruments, Inc  
TSSOP16

**TCA9535DBT**

Texas Instruments, Inc  
SSOP24

**TCA9803DGKR**

Texas Instruments, Inc  
MSOP8

**TCA9554ADBQR**

Texas Instruments, Inc  
SSOP16

**TCA9534APWR**

Texas Instruments, Inc  
TSSOP16

**TCA9536DGKR**

Texas Instruments, Inc  
VSSOP-8