

Resistive Touch Screen 4-Wire 16-Pin TSSOP T/R

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: TSSOP16

Product Type: Drivers

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

TSC2007IPWR Image

Images are for reference only

[Inquiry](#)

General Description

The TSC2007 is a very low-power touch screen controller designed to work with power-sensitive, handheld applications that are based on an advanced low-voltage processor. It works with a supply voltage as low as 1.2V, which can be supplied by a single-cell battery. It contains a complete, ultra-low power, 12-bit, analog-to-digital (A/D) resistive touch screen converter, including drivers and the control logic to measure touch pressure.

In addition to these standard features, the TSC2007 offers preprocessing of the touch screen measurements to reduce bus loading, thus reducing the consumption of host processor resources that can then be redirected to more critical functions.

The TSC2007 supports an I2C serial bus and data transmission protocol in all three defined modes: standard, fast, and high-speed. It offers programmable resolution of 8 or 12 bits to accommodate different screen sizes and performance needs.

The TSC2007 is available in a 12-lead, (1.555 ±0.055mm) x (2.055 ±0.055mm), 3 x 4 array, wafer chip-scale package (WCSP), and a 16-pin, TSSOP package. The TSC2007 is characterized for the -40°C to +85°C industrial temperature range.

Key Features

4-Wire Touch Screen Interface

Single 1.2V to 3.6V Supply/Reference

Ratiometric Conversion

Effective Throughput Rate:
Up to 20kHz (8-Bit) or 10kHz (12-Bit)

Preprocessing to Reduce Bus Activity

I2C[®] Interface Supports:
Standard, Fast, and High-Speed Modes

Simple, Command-Based User Interface:
TSC2003 Compatible

8- or 12-Bit Resolution

On-Chip Temperature Measurement

Touch Pressure Measurement

Digital Buffered PENIRQ Pull-Up

Auto Power-Down Control

Low Power:
32.24 μ A at 1.2V, Fast Mode, 8.2kHz Eq Rate

39.31 μ A at 1.8V, Fast Mode, 8.2kHz Eq Rate

53.32 μ A at 2.7V, Fast Mode, 8.2kHz Eq Rate

Enhanced ESD Protection:
 \pm 8kV HBM

\pm 1kV CDM

\pm 25kV Air Gap Discharge

\pm 15kV Contact Discharge

1.5 x 2 WCSP-12 and 5 x 6.4 TSSOP-16 Packages

APPLICATIONS

Cellular Phones

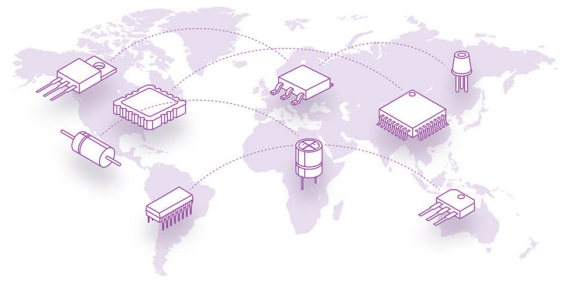
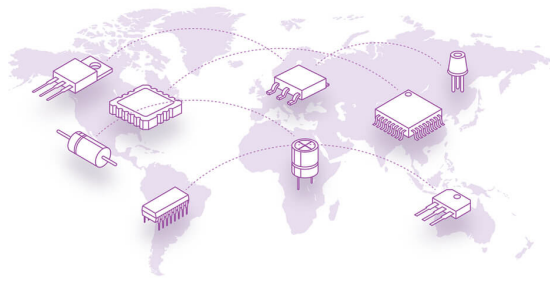
PDA, GPS, and Media Players

Portable Instruments

Point-of-Sale Terminals

Multiscreen Touch Control Systems

U.S. Patent NO. 6246394; other patents pending. I2C is a trademark of NXP Semiconductors. All other trademarks are the property of their respective owners.



Recommended For You

TSC2046IPWR

Texas Instruments, Inc

TSSOP16

TSC2013QRSARQ1

Texas Instruments, Inc

QFN16

TSC2046IPW

Texas Instruments, Inc

TSSOP16

TSC2004IRTJR

Texas Instruments, Inc

QFN20

TSC2046IRGVR

Texas Instruments, Inc

QFN16

TSC2014IYZGR

Texas Instruments, Inc

DSBGA

TSC2007IYZGR

Texas Instruments, Inc

DSBGA12

TSC2003IPWR

Texas Instruments, Inc

TSSOP16

TSC2007IPW

Texas Instruments, Inc

TSSOP16

TSC2004IYZKR

Texas Instruments, Inc

BGA

TSC2046EIPWR

Texas Instruments, Inc

TSSOP16

TSC2003IPW

Texas Instruments, Inc

TSSOP16

TSC2013QPWRQ1

Texas Instruments, Inc

TSSOP-16

TSC2046EIPW

Texas Instruments, Inc

TSSOP-16

TSC2200IPW

Texas Instruments, Inc

TSSOP-28