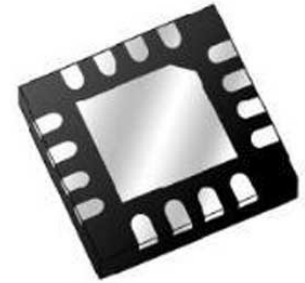


Capacitive Touch Screen 4-Wire 16-Pin VQFN EP T/R

Images are for reference only

[Inquiry](#)**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** QFN16**Product Type:** Drivers**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active**General Description**

The TSC2046 is a next-generation version to the ADS7846 4-wire touch screen controller which supports a low-voltage I/O interface from 1.5V to 5.25V. The TSC2046 is 100% pin-compatible with the existing ADS7846, and will drop into the same socket. This allows for easy upgrade of current applications to the new version. The TSC2046 also has an on-chip 2.5V reference that can be used for the auxiliary input, battery monitor, and temperature measurement modes. The reference can also be powered down when not used to conserve power. The internal reference operates down to 2.7V supply voltage, while monitoring the battery voltage from 0V to 6V.

The low power consumption of < 0.75mW typ at 2.7V (reference off), high-speed (up to 125kHz sample rate), and on-chip drivers make the TSC2046 an ideal choice for battery-operated systems such as personal digital assistants (PDAs) with resistive touch screens, pagers, cellular phones, and other portable equipment. The TSC2046 is available in TSSOP-16, QFN-16, and VFBGA-48 packages and is specified over the -40°C to +85°C temperature range.

Key Features

SAME PINOUT AS ADS7846

2.2V TO 5.25V OPERATION

1.5V TO 5.25V DIGITAL I/O

INTERNAL 2.5V REFERENCE

DIRECT BATTERY MEASUREMENT (0V TO 6V)

ON-CHIP TEMPERATURE MEASUREMENT

TOUCH-PRESSURE MEASUREMENT

QSPI? AND SPI? 3-WIRE INTERFACE

AUTO POWER-DOWN

AVAILABLE IN TSSOP-16, QFN-16, AND VFBGA-48 PACKAGES

APPLICATIONS

PERSONAL DIGITAL ASSISTANTS

PORTABLE INSTRUMENTS

POINT-OF-SALE TERMINALS

PAGERS

TOUCH SCREEN MONITORS

CELLULAR PHONES

All trademarks are the property of their respective owners.

Recommended For You

TSC2007IPWR

Texas Instruments, Inc

TSSOP16

TSC2046IPWR

Texas Instruments, Inc

TSSOP16

TSC2013QRSARQ1

Texas Instruments, Inc

QFN16

TSC2046IPW

Texas Instruments, Inc

TSSOP16

TSC2004IRTJR

Texas Instruments, Inc

QFN20

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