

9 V Low Side Sensing Channel Power Monitor w/Accumulator

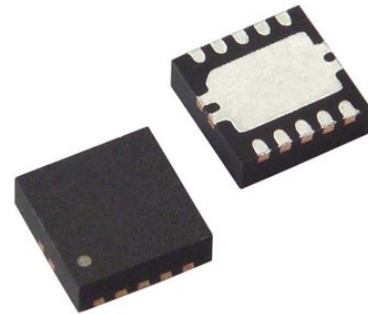
Manufacturers [Microchip Technology, Inc](#)

Package/Case VQFN

Product Type

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for PAC1952T-2E/4MX or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The PAC1952 is a dual power monitor and energy monitor that reports on bus voltage and sense voltage 16-bits of resolution. Power is reported as a simultaneous product of two 16-bit independent bus and sense voltages. All registers are accessible through I2C / SMBus including an 8 sample average for reading stability. The device can detect over/undervoltage, over/undercurrent and overpower against user programmed limits for each channel and generate ALERT outputs.

There are two versions of the PAC1952: the PAC1952-1 devices are for high-side current sensing and the PAC1952-2 devices are for low-side current sensing.

Features

High-Side/Low-Side Current Monitor with 2 Channels

100 mV Full-Scale Range for Sense Current (Configurable to 50 mV)

16-Bit Resolution on Sense Current

External Sense Resistor Sets the Full-Scale Current Range

Very Low Input Current Simplifies Routing

Voltage Monitor with Wide VBUS Range

0V to 32V FSR (Configurable to 16V)

16-Bit Resolution for Voltage Measurements

Real-Time Auto-Calibration of Offset Error for Voltage and Current

1% Power Measurement Accuracy Over a Wide Dynamic Range

On-Chip Accumulation of 30--Bit Power Results for Energy Measurement

User Programmable Sampling Rates: 8, 64, 256, 1024 SPS

2.7V to 5.5V Supply Operation

1.62-5.5V Capable I2C/SMBus and Digital I/O

SMBus 3.1 and I2C Fast Mode Plus, 1 Mbps

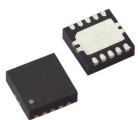
High Speed Mode (3.4 Mbps)

ALERT on Over/Undervoltage and Current or Overpower Conditions

Two Independent ALERT/GPIO Pins

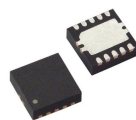
Coulomb Counting: When Selected, the Accumulator Accumulates VSENSE Values

Related Products



[PAC1954T-E/4MX](#)

Microchip Technology, Inc
VQFN



[PAC1944T-E/4MX](#)

Microchip Technology, Inc
VQFN



[DSA612PA3A-0130TVAO](#)

Microchip Technology, Inc
VFLGA



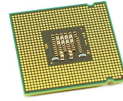
[DSA612PA2A-01DMTVAO](#)

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