

32V, High Side Sensing/4 -Channel Power Monitor w/Accumulator

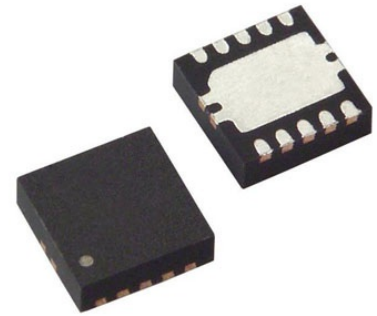
Manufacturers [Microchip Technology, Inc](#)

Package/Case VQFN

Product Type

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for PAC1954T-E/4MX or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The PAC1954 is a quad 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.

Features

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

100 mV Full-Scale Range (configurable to 50 mV)

External Sense Resistor Sets the Full-Scale Range Current

16-Bit Resolution Sense Current

Voltage Monitor with Wide VBus Range

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

16-Bit Resolution

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 of 8, 64, 256, 1024

5120 SPS for a Single Channel Burst Mode

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

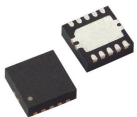
High Speed Mode (3.4 Mbps)

ALERT on Over/Undervoltage and Current or Overpower Conditions

Two Independent ALERT/GPIO Pins

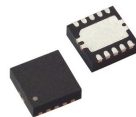
Coulomb Counting: When Selected, the Accumulator Accumulates VSENSE Values

Related Products



[PAC1944T-E/4MX](#)

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VQFN



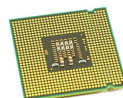
[PAC1952T-2E/4MX](#)

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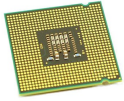
[DSA612PA3A-0130TVAO](#)

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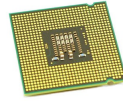
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