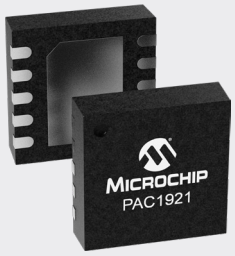
ANALOG SPOTLIGHT

PAC1921

High-Side Current/Power Monitor with Analog Output

General Information

The PAC1921 is a dedicated power-monitoring device with a configurable analog output that can present power, current or voltage. This product is designed for power measurement and diagnostic systems that cannot allow for latency when performing high-speed power management. Measurements are accumulated in large registers, allowing for integration periods of 500 µs to 2.9 seconds. Measurements are accumulated in large registers, allowing for integration periods of 500 µs to 2.9 seconds.



Features

- Configurable measurement type output: power, current or bus voltage
- Configurable voltage output (3V, 2V, 1.5V, 1V) all output values also available over SMBus
- High-side current sensor
  - 100 mV full-scale current sense voltage range
  - Second-order delta-sigma ADC with 11-bit or 14-bit resolution
  - Selectable current binary gain ranges: 1x through 128x
- Auto-zero offset
- Power supply 3.3V nominal (operational range 3.0V to 5.5V)
- Bus range 0V to 32V
- Available in 10-pin 3 mm x 3 mm VDFN RoHS compliant package

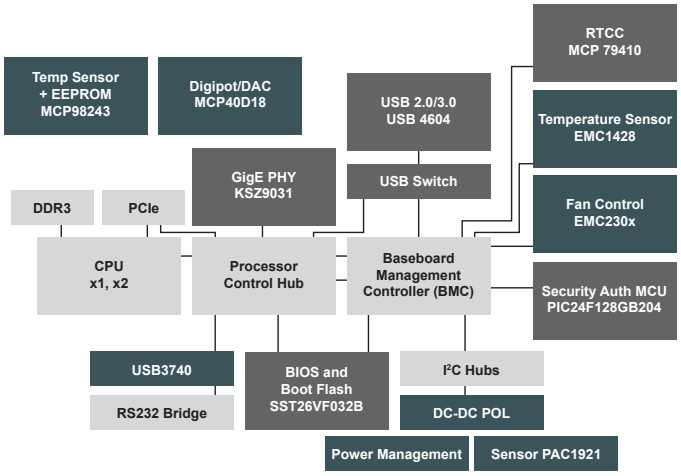
Applications

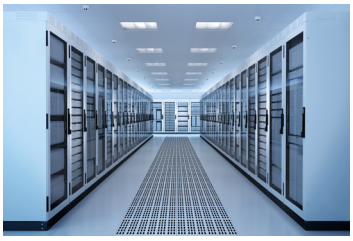
- Servers, notebooks and desktop computers
- Industrial automation
- Networking equipment
- Diagnostic equipment
- Power distribution and power supplies

Benefits

- Auto sleep state automatically shifts to low-power state
- New device topology provides integrated average power measurement
- 1% power measurement accuracy
- No filters required

PAC1921 Block Diagram





The Microchip name and logo and the Microchip logo are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. All other trademarks mentioned herein are property of their respective companies. © 2018, Microchip Technology Incorporated. All Rights Reserved. 6/18

DS20006041A