



Analog Spotlight

High-Side Current/Power Monitor with Analog Output

PAC1921

General Information

The PAC1921 is a dedicated current-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 lossless registers allowing for integration periods of 500us to 2.9 seconds. The measurement is averaged and presented on the analog output pin (OUT) with a selectable full scale range of 3V, 2V, 1.5V or 1.0V. The measurement information is also available via SMBus if desired.

Device Features

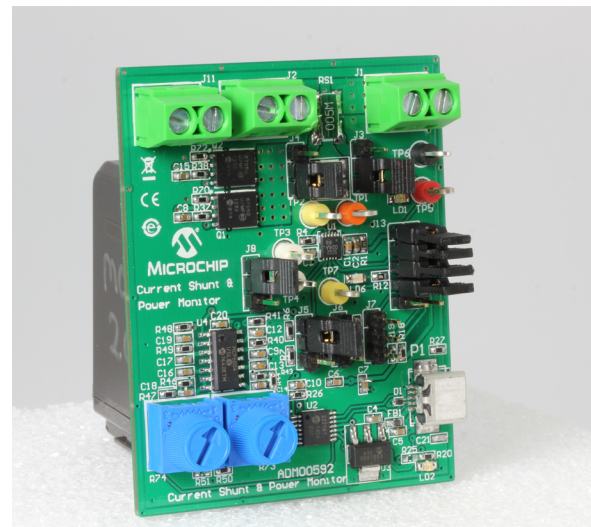
- High-Side current sensor
 - 100mV full-scale current sense voltage range
 - Second order delta sigma ADC 11-bit to 14-bit resolution
 - Selectable current binary gain ranges: 1x - 128x
 - Gain for Vbus 1x – 32x
- Configurable measurement type: Power, Current or Voltage
- Configurable voltage output (3V, 2V, 1.5V, 1.0V)
 - All output values are also available over SMBus
- New Device Topology
 - Provides integrated average power measurement
 - Power measurements provided to MCU with ADC inputs
 - Output voltage proportional to selected measurements
- 1% Power measurement accuracy
- Auto-Zero offset
- Auto sleep state
- VDD = 3.3V nominal (3.0V to 5.5V)
- Bus range: 0V to 32V
- Package: 10-pin 3 x 3 VDFN

Applications

- Networking
- Industrial automation
- Power supplies
- Servers
- Power distribution

Development Tools

- PAC1921 High-Side Power and Current Monitor Evaluation Board (ADM00592)
- PAC1921 High-Side Current Sense and Power Monitor GUI Software



PAC1921 High-Side Power and Current Monitor Evaluation Board
(Part # ADM00592)

www.microchip.com/PAC1921

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