

ADM1191-2ARMZ-R7

Data Sheet

Digital Power Monitor with Convert Pin and ALERTB Output; Package: MSOP; No of Pins: 10; Temperature Range: Industrial

Manufacturers

Analog Devices, Inc

Package/Case

MSOP10

Product Type

Power Monitor, Control, & Protection; Power Monitors

RoHS

Rohs

Images are for reference only

Please submit RFQ for ADM1191-2ARMZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The ADM1191 is an integrated current sense amplifier that offers digital current and voltage monitoring via an on-chip, 12-bit analog-to-digital converter (ADC), communicated through an I2C interface.

An internal current sense amplifier senses voltage across the sense resistor in the power path via the VCC pin and the SENSE pin.

A 12-bit ADC can measure the current seen in the sense resistor, as well as the supply voltage on the VCC pin.

An industry-standard I2C interface allows a controller to read current and voltage data from the ADC. Measurements can be initiated by an I2C command or via the convert (CONV) pin. The CONV pin is especially useful for synchronizing reads on multiple ADM1191 devices.

Alternatively, the ADC can run continuously, and the user can read the latest conversion data whenever it is required. Up to 16 unique I2C addresses can be created, depending on the way the A0 pin and the A1 pin are connected.

A SETV pin is also included. A voltage applied to this pin is internally compared to the output voltage on the current sense amplifier. The output of the SETV comparator asserts when the current sense amplifier output exceeds the SETV voltage. When this event occurs, the ALERTB output asserts.

The ALERTB output can be used as a flag to warn a micro-controller or field programmable gate array (FPGA) of an overcurrent condition. ALERTB outputs of multiple ADM1191 devices can be tied together and used as a combined alert.

The ADM1191 is packaged in a 10-lead MSOP.

Features

Powered from 3.15 V to 26 V

Precision current sense amplifier

Precision voltage input

12-bit ADC for current and voltage readback

Convert pin (CONV) for commanding an ADC read

SETV input for setting overcurrent alert threshold

ALERTB output provides an overcurrent interrupt

I2C® fast mode-compliant interface (400 kHz maximum)

Two address pins allow 16 devices on the same bus

10-lead MSOP

Application

Power monitoring/power budgeting

Central office equipment

Telecommunication and data communication equipment

PCs/servers

Related Products



ADP3336ARMZ-REEL7

Analog Devices, Inc MSOP-8



ADP3367ARZ

Analog Devices, Inc SOIC-8



<u>ADP3330ARTZ3.3-RL7</u>

Analog Devices, Inc SOT-23-6



ADR421ARZ

Analog Devices, Inc

SOP-8



AD737JRZ

Analog Devices, Inc SOP-8



AD636JH

Analog Devices, Inc TO-100-10



ADR434BRZ

Analog Devices, Inc SOIC-8



ADR3412ARJZ-R7

Analog Devices, Inc

SOT-23-6