LTM4676AIY

Data Sheet

Dual 13A or Single 26A µModule (Power Module) Regulator with Digital Power System Management

Manufacturers	Analog Devices, Inc
Package/Case	144-Lead BGA (16mm x 16mm x 5.01mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	

Images are for reference only

Please submit RFQ for LTM4676AIY or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LTM4676A is a dual 13A or single 26A step-down µModule® (micromodule) DC/DC regulator with 40ms turn-on time. It features remote configurability and telemetry-monitoring of power management parameters over PMBus— an open standard I^2C-based digital interface protocol . The LTM4676A is comprised of fast analog control loops, precision mixed-signal circuitry, EEPROM, power MOSFETs, inductors and supporting components.

The LTM4676A's 2-wire serial interface allows outputs to be margined, tuned and ramped up and down at programmable slew rates with sequencing delay times. Input and output currents and voltages, output power, temperatures, uptime and peak values are readable. At start-up, output voltages, switching frequency, and channel phase angle assignments can be set by pin-strapping resistors. The LTpowerPlay™ GUI and DC1613 USB-to-PMBus converter and demo kits are available.

The LTM4676A is pin-compatible and the improved performance version of the LTM4676.

Applications

Features

Dual, Fast, Analog Loops with Digital Interface for Control and Monitoring

Wide Input Voltage Range: 4.5V to 26.5V

Output Voltage Range: 0.5V to 5.5V

400kHz PMBus-Compliant I

2

C Serial Interface

Integrated 16-Bit ΔΣ ADC

Supports Telemetry Polling Rates Up to 125Hz

Constant Frequency Current Mode Control

Parallel and Current Share Multiple Modules

All 7-Bit Slave Addresses Supported

Pin-Compatible to Dual 18A LTM4677

16mm × 16mm × 5.01mm BGA Package

Input and Output Voltages, Currents, and Temperatures

Running Peak Values, Uptime, Faults and Warnings

Onboard EEPROM Fault Log Record with ECC

Output Voltage, Voltage Sequencing and Margining

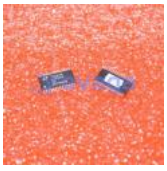
Digital Soft-Start/Stop Ramp

OV/UV/OT, UVLO, Frequency and Phasing

Application

System Optimization, Characterization and Data Mining in Prototype, Production and Field Environments

Related Products



LT3763EFE

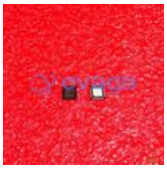
Analog Devices, Inc

TSSOP28

LT1038CK

Analog Devices, Inc

TO-3



LTC4417IUF

Analog Devices, Inc

QFN-24

LTC3440EMS

Analog Devices, Inc

MSOP10

LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P

LTC2990IMS#PBF

Analog Devices, Inc

10MSOP

LTM8045EY#PBF

Analog Devices, Inc

BGA40

LT4295IUFD#PBF

Analog Devices, Inc

28-WFQFN