

LTM4676AIY#PBF

Data Sheet

DC/DC CNVRTR 2X0.6-5.4V 144BGA

Manufacturers <u>Analog Devices, Inc</u>

Package/Case BGA-144

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

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

RFO

General Description

The LTM4676A is a dual 13A or single 26A step-down μ Module[®] (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^2 C-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 LTpowerPlayTM 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

Application

and Monitoring

Dual, Fast, Analog Loops with Digital Interface for Control System Optimization, Characterization and Data Mining in Prototype, Production and Field Environments

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 $\Delta\Sigma$ 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

 $16\text{mm} \times 16\text{mm} \times 5.01\text{mm}$ 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

Related Products



LT3763EFE Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24



LT1038CK Analog Devices, Inc TO-3



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