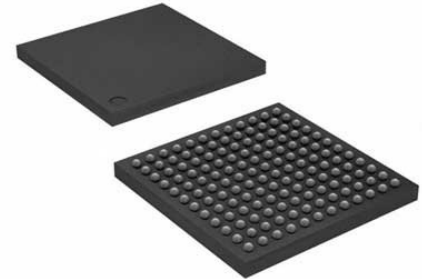


Dual 25A or Single 50A μ Module Regulator with Digital Power System Management

Manufacturers	Analog Devices, Inc
Package/Case	144-Lead BGA (16mm \times 16mm \times 5.86mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM4678EY#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com). We will contact you in 12 hours.

[RFQ](#)

General Description

The LTM4678 is a dual 25A or single 50A step-down μ Module[®] (power module) DC/DC regulator featuring remote configurability and telemetry-monitoring of power management parameters over PMBus—an open standard I²C-based digital interface protocol. The LTM4678 is comprised of digitally programmable analog control loops, precision mixed-signal circuitry, EEPROM, power MOSFETs, inductors and supporting components.

The LTM4678's 2-wire serial interface allows outputs to be margined, tuned and ramped up and down at programmable slew rates with sequencing delay times. True input current sense, output currents and voltages, output power, temperatures, uptime and peak values are readable. Custom configuration of the EEPROM contents is not required. 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 LTM4678 is offered in a 16mm \times 16mm \times 5.86mm CoP-BGA package available with SnPb or RoHS compliant terminal finish.

APPLICATIONS

Features

Dual Digitally Adjustable Analog Loops with Digital Interface for Control and Monitoring

Wide Input Voltage Range: 4.5V to 16V

Output Voltage Range: 0.5V to 3.4V

Sub-Milliohm DCR Current Sensing

Integrated Input Current Sense Amplifier

400kHz PMBus-Compliant I

Application

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

C Serial Interface

Supports Telemetry Polling Rates up to 125Hz

Integrated 16-Bit $\Delta\Sigma$ ADC

Constant Frequency Current Mode Control

Parallel and Current Share Up to 250A

16mm × 16mm × 5.86mm CoP-BGA Package

Readable Data

Input and Output Voltages, Currents, and Temperatures

Running Peak Values, Uptime, Faults and Warnings

Onboard EEPROM Fault Log Record

Writable Data and Configurable Parameters

Output Voltage, Voltage Sequencing and Margining

Digital Soft-Start/Stop Ramp, Program Analog Loop

OV/UV/OT, UVLO, Frequency and Phasing

Input and Output Voltages, Currents, and Temperatures

Running Peak Values, Uptime, Faults and Warnings

Onboard EEPROM Fault Log Record

Output Voltage, Voltage Sequencing and Margining

Digital Soft-Start/Stop Ramp, Program Analog Loop

OV/UV/OT, UVLO, Frequency and Phasing

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



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN