

Dual 50A or Single 100A μ Module Regulator with Digital Power System Management

Manufacturers	Analog Devices, Inc
Package/Case	330-Lead BGA (22mm x 15mm x 7.87mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM4700IY or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com). We will contact you in 12 hours.

[RFQ](#)

General Description

The LTM4700 is a dual 50A or single 100A 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 LTM4700 is comprised of fast analog control loops, precision mixed signal circuitry, EEPROM, power MOSFETs, inductors and supporting components. The LTM4700 product video is available on website.

The LTM4700'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. 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 LTM4700 is offered in a 15mm x 22mm x 7.87mm BGA package available with SnPb or RoHS compliant terminal finish.

APPLICATIONS

Features

Dual 50A or Single 100A Digitally Adjustable Outputs with Digital Interface for Control, Compensation and Monitoring

Wide Input Voltage: 4.5V to 16V

Output Voltage Range: 0.5V to 1.8V

IN

OUT

Integrated Input Current Sense Amplifier

Application

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

Telecom, Datacom, and Storage Systems

400kHz PMBus-Compliant I

2

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 Multiple Modules

15mm × 22mm × 7.87mm BGA Package

Readable Data:

Input and Output Voltages, Currents, and Temperatures

Running Peak Values, Uptime, Faults and Warnings

Internal EEPROM and Fault Logging with ECC

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Running Peak Values, Uptime, Faults and Warnings

Internal EEPROM and Fault Logging with ECC

Writable Data and Configurable Parameters:

Output Voltage, Voltage Sequencing and Margining

Digital Soft-Start/Stop Ramp

Optimize Analog Loop Compensation

OV/UV/OT, UVLO, Frequency and Phasing

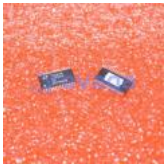
Output Voltage, Voltage Sequencing and Margining

Digital Soft-Start/Stop Ramp

Optimize Analog Loop Compensation

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Related Products



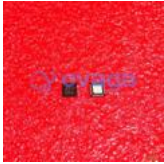
[LT3763EFE](#)

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](#)

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28-WFQFN