

## Power System Manager 4.5V to 15V Automotive 144-Pin BGA

### Tray



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** BGA

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The LTM2987 is a 16-channel  $\mu$ Module<sup>®</sup> (micromodule) Power System Manager used to sequence, trim (servo), margin, supervise, manage faults, provide telemetry and create fault logs. PMBus commands support power supply sequencing, precision point-of-load voltage adjustment and margining. DACs use a proprietary soft-connect algorithm to minimize supply disturbances. Supervisory functions include overvoltage and undervoltage threshold limits for sixteen power supply output channels and two power supply input channels, as well as over and under temperature limits. Programmable fault responses can disable the power supplies with optional retry after a fault is detected. Faults that disable a power supply can automatically trigger black box EEPROM storage of fault status and associated telemetry. An internal 16-bit ADC monitors sixteen output voltages, two input voltages, and die temperature. In addition, odd numbered channels can be configured to measure the voltage across a current sense resistor. A programmable watchdog timer monitors microprocessor activity for a stalled condition and resets the microprocessor if necessary. A single wire bus synchronizes power supplies across multiple LTC Power System Management (PSM) devices. Configuration EEPROM with ECC supports autonomous operation without additional software.

## Key Features

Sequence, trim, margin and supervise 16 power supplies

Manage faults, monitor telemetry and create fault logs

PMBus™ compliant command set

Supported by LTpowerPlay™ GUI

Margin or trim supplies to 0.25% accuracy

Fast OV/UV supervisors per channel

Coordinate sequencing and fault management across multiple LTC PSM devices

Automatic fault logging to internal EEPROM

Operate autonomously without additional software

Internal temperature and input voltage supervisors

Accurate monitoring of 16 output voltages, two input voltages and internal die temperature

Programmable watchdog timer

## Application

Computers & Computer Peripherals, Industrial, Test & Measurement, Medical

## Recommended For You

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### LTC4412ES6

Analog Devices, Inc  
SOT23-6

### LTC4259ACGW-1

Analog Devices, Inc  
SSOP36

### LTC4259ACGW

Analog Devices, Inc  
SSOP36

### LTC1530IS8

Analog Devices, Inc  
SOP8

### LTC4252-2IMS

Analog Devices, Inc  
MSOP10

### LTC4412ES6#PBF

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### LTC4412ES6#TRPBF

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SOT23-6

### LTC2942CDCB#TRMPBF

Analog Devices, Inc  
DFN-6

### LT1054IN8

Analog Devices, Inc  
DIP-8

### LTC4416EMS#PBF

Analog Devices, Inc  
MSOP10

### LTC4357IMS8

Analog Devices, Inc  
MSOP8

### LTC4414IMS8#PBF

Analog Devices, Inc  
MSOP8

**LTC4413EDD**

Analog Devices, Inc

DFN10

**LT3469ETS8#TRMPBF**

Analog Devices, Inc

SOT23-8

**LTC4412HVIS6**

Analog Devices, Inc

SOT23-6