

LTM4651IY#PBF

Data Sheet

EN55022B Compliant 58V, 24W Inverting-Output DC/DC μ Module Regulator

Manufacturers

Analog Devices, Inc

Package/Case

77-Lead BGA (9mm x 15mm x 5.01mm)

Product Type

Power Management ICs

Images are for reference only

Please submit RFQ for LTM4651IY#PBF or Fmail to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTM4651 is an ultralow noise, 58V, 24W DC/DC μ Module® inverting topology regulator. It regulates a negative output voltage (VOUT–) from a positive input supply voltage (VIN), and is designed to meet the radiated emissions requirements of EN55022. Conducted emission requirements can be met by adding standard filter components.

Included in the package are the switching controller, power MOSFETs, inductor, filters and support components. The LTM4651 can regulate VOUT— to a value between -0.5V and -26.5V, provided that its input and output voltages adhere to the safe operating area criteria of the LTM4651: VIN + |VOUT-| \leq 58V. A switching frequency range of 250kHz to 3MHz is supported (400kHz default) and the module can synchronize to an external clock.

Despite being an inverting topology regulator, no level shift circuitry is needed to interface to the LTM4651's RUN, PGOOD or CLKIN pins; those pins are referenced to GND.

The LTM4651 is offered in a 15mm × 9mm × 5.01mm BGA package with SnPb or RoHS compliant terminal finish.

Features

Complete Low EMI Switch Mode Power Supply

EN55022 Class B Compliant

Wide Input Voltage Range: 3.6V to 58V

Up to 4A Output Current

24W Output from 12VIN to -24VOUT, = 60°C,>

Output Voltage Range: $-26.5V \le VOUT - \le -0.5V$

Safe Operating Area: $VIN + |VOUT-| \le 58V$

Parallel and Current Share with Multiple LTM4651s

Constant-Frequency Current Mode Control

Frequency Synchronization Range: 250kHz to 3MHz

Power Good Indicator and Programmable Soft-Start

Overcurrent/Overvoltage/Overtemperature Protection

15mm × 9mm × 5.01mm BGA Package

Application

Avionics, Industrial Control and Test Equipment

Video, Imaging and Instrumentation

48V Telecom and Network Power Supplies

RF Systems

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN