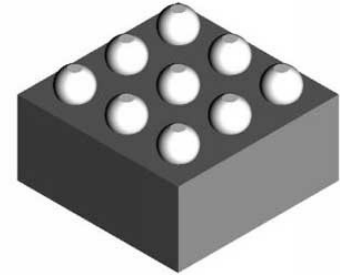


EN55022B Compliant 58V, 24W Inverting-Output DC/DC  $\mu$ Module Regulator

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	77-Lead BGA (9mm x 15mm x 5.01mm)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTM4651IY or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com). We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTM4651 is an ultralow noise, 58V, 24W DC/DC  $\mu$ Module<sup>®</sup> inverting topology regulator. It regulates a negative output voltage (VOUT<sup>-</sup>) 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<sup>-</sup> 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:  $V_{IN} + |V_{OUT-}| \leq 58V$ . 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  $-24\text{VOUT}$ ,  $= 60^\circ\text{C}$ , $>$

Output Voltage Range:  $-26.5\text{V} \leq \text{VOUT} \leq -0.5\text{V}$

Safe Operating Area:  $\text{VIN} + |\text{VOUT}| \leq 58\text{V}$

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  $\times$  9mm  $\times$  5.01mm BGA Package

## Application

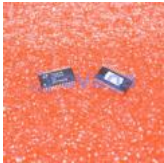
Avionics, Industrial Control and Test Equipment

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



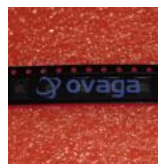
### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



### [LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN