

105V, 1A Low EMI Synchronous Step-Down Regulator with Fast Current Programming

Manufacturers	Analog Devices, Inc
Package/Case	QFN-36
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT7101HUHE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT7101 is a high efficiency, monolithic synchronous step-down DC/DC converter utilizing a constant frequency, average current mode control architecture. It operates from an input voltage range of 4.4V to 105V and provides an adjustable regulated output voltage from 1V to VIN while delivering up to 1A of output current.

The LT7101 features high frequency operation and a low minimum on-time that reduce inductor size and enable constant-frequency operation even at very high stepdown ratios. In addition, the LT7101 achieves the lowest possible dropout voltage with 100% maximum duty cycle operation. During light load operation, converter efficiency and output ripple can be optimized by selecting Burst Mode, pulse-skipping or forced continuous operation.

The LT7101 includes accurate, high speed average current programming and monitoring without the need for an external sense resistor. Additional features include a bypass LDO to maximize efficiency, fixed or adjustable output voltage and loop compensation, and a wide array of protection features to enhance reliability.

Features

Wide VIN Range: 4.4V to 105V (110V Abs Max)

Ultralow EMI/EMC Emissions: CISPR 25 Compliant

2 μ A IQ When Regulating 48VIN to 3.3VOUT

Fast and Accurate Output Current Programming and Monitoring with No External RSENSE

Brick Wall Current Limit

Low Minimum On-Time: 35ns

Wide VOUT Range: 1V to VIN

100% Maximum Duty Cycle Operation

Programmable Fixed Frequency: 200kHz to 2MHz

Eight, Pin-Selectable Fixed (1.2V to 15V) or Adjustable Output Voltages

Selectable Continuous, Pulse-Skipping, or Low Ripple Burst Mode® Operation at Light Loads

PLL Synchronization to External Clock

EXTVCC LDO Powers Chip from

OPTI-LOOP® or Fixed Internal Compensation

Input and Output Overvoltage Protection

Thermally Enhanced (5mm \times 6mm) QFN Package

Application

Battery Chargers and CC/CV Supplies

Automotive and Military Systems

Industrial, Avionics and Heavy Equipment

Medical Instruments and Telecommunication Systems



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](#)

Analog Devices, Inc
28-WFQFN