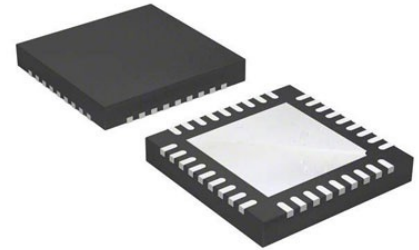


105V, 2.3A Low EMI Synchronous Step-Down Regulator with Fast Current Programming

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	36-Lead QFN (5mm x 6mm x 0.75mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC7103HUHE#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC7103-1 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  $V_{IN}$  while delivering up to 2.3A of output current.

The LTC7103-1 features high frequency operation and a low minimum on-time that reduce inductor size and enable constant-frequency operation even at very high step-down ratios. In addition, the LTC7103-1 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 LTC7103-1 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. Compared to the LTC7103, the LTC7103-1 is pin compatible, except that it also offers continuous inductor current mode.

## APPLICATIONS

## Features

Wide V

IN

Ultralow EMI/EMC Emissions: CISPR 25 Compliant

2 $\mu$ A I

Q

IN

OUT

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

SENSE

Brick Wall Current Limit

Low Minimum On-Time: 40ns

Wide V

OUT

IN

PassThru

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

PLL Synchronization to External Clock

EXTV

CC

OPTI-LOOP

Input and Output Overvoltage Protection

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

AEC-Q100 Qualification in Process

## Application

Battery Chargers and CC/CV Supplies

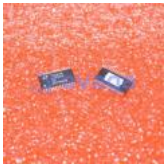
Automotive and Military Systems

Industrial, Avionics and Heavy Equipment

Medical Instruments and Telecommunication

## Related Products

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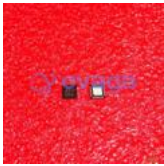
[LT3763EFE](#)

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