

LTC3556EUFD#PBF

Data Sheet

High Ef?ciency USB Power Manager with Dual Buck and Buck-Boost DC/DCs; Package: QFN; No of Pins: 28; Temperature Range: -40°C to +125°C

Manufacturers <u>Analog Devices, Inc</u>

Package/Case QFN28

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTC3556EUFD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC3556 is a highly integrated power management and battery charger IC for Li-Ion/Polymer battery applications. It includes a high efficiency current limited switching PowerPath manager with automatic load prioritization, a battery charger, an ideal diode, and three synchronous switching regulators (two bucks and one buck-boost). Designed specifically for USB applications, the LTC3556's switching power manager automatically limits input cur- rent to a maximum of either 100mA or 500mA for USB applications or 1A for adapter-powered applications.

The LTC3556's switching input stage transmits nearly all of the 2.5W available from the USB port to the system load with minimal power wasted as heat. This feature allows the LTC3556 to provide more power to the application and eases the constraint of thermal budgeting in small spaces. The two buck regulators can provide up to 400mA each and the buck-boost can deliver 1A.

The LTC3556 is available in the low profile 28-pin (4mm × 5mm × 0.75mm) QFN surface mount package.

Features

Application

High Efficiency Switching PowerPathTM Controller with Bat-TrackTM Adaptive Output Control HDD-Based MP3 Players, PDAs, GPS, PMPs

Programmable USB or Wall Current Limit (100mA/500mA/1A)

Other USB-Based Handheld Products

Full Featured Li-Ion/Polymer Battery Charger

Instant-On Operation with a Discharged Battery

1.5A Maximum Charge Current

Internal $180m\Omega$ Ideal Diode Plus External Ideal Diode Controller Powers Load in Battery Mode

Low No-Load IQ when Powered from BAT ($<30\mu$ A)

DC/DCs

Dual High Efficiency Buck DC/DCs (400mA/400mA IOUT)

High Efficiency Buck-Boost DC/DC (1A IOUT)

All Regulators Operate at 2.25MHz

Dynamic Voltage Scaling on Two Buck Outputs

I2C Control of Enables, Mode, Two VOUT Settings

ENALL Pin with Power-Up Sequence Control

Low No-Load Quiescent Current: 20µA Each



Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc
MSOP10



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LTM8045EY#PBF
Analog Devices, Inc
BGA40



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Analog Devices, Inc
28-WFQFN