

Battery Management 55V Buck-Boost Multi-Chemistry Battery Charger

Manufacturers	Analog Devices, Inc
Package/Case	QFN38
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4020IUHF#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4020 is a high voltage power manager providing PowerPath™ instant-on operation and high efficiency battery charging over a wide voltage range. An onboard buck-boost DC/DC controller operates with battery and/or system voltages above, below, or equal to the input voltage.

The LTC4020 seamlessly manages power distribution between battery and converter outputs in response to load variations, battery charge requirements and input power supply limitations.

The LTC4020 battery charger can provide a constant-current/constant-voltage charge algorithm (CC/CV), constant-current charging (CC), or charging with an optimized 4-step, 3-stage lead-acid battery charge profile. Maximum converter and battery charge currents are resistor programmable.

The IC's instant-on operation ensures system load power even with a fully discharged battery. Additional safety features include preconditioning for heavily discharged batteries and an integrated timer for termination and protection.

Features

Wide Voltage Range: 4.5V to 55V Input, Up to 55V Output (60V Absolute Maximums)

Synchronous Buck-Boost DC/DC Controller

Li-Ion and Lead-Acid Charge Algorithms

Instant-On for Heavily Discharged Batteries

Ideal Diode Controller Provides Low Loss PowerPath When Input Power is Limited

Input Voltage Regulation for High Impedance Input Supplies and Solar Panel Peak Power Operation

Onboard Timer for Protection and Termination

Bad Battery Detection with Auto-Reset

NTC Input for Temperature Qualified Charging

Binary Coded Open-Collector Status Pins

Low Profile (0.75mm) 38-Pin 5mm × 7mm QFN Package

Application

Portable Industrial and Medical Equipment

Solar-Powered Systems

Military Communications Equipment

12V to 24V Embedded Automotive Systems



Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

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MSOP10



[LTC1966CMS8#PBF](#)

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MSOP-8P



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[LT4295IUFD#PBF](#)

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