

Linear Battery Charger Li-Ion/Li-Pol 1000mA 4.2V 10-Pin VSON EP T/R

Manufacturer:	Texas Instruments, Inc	<input type="text" value="BQ24010DRCR Image"/>
Package/Case:	QFN	Images are for reference only
Product Type:	Power Management ICs	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The bqTINY series are highly integrated Li-Ion and Li-Pol linear charge management devices targeted at space limited portable applications. The bqTINY series offer integrated powerFET and current sensor, reverse blocking protection, high accuracy current and voltage regulation, charge status, and charge termination, in a small package.

The bqTINY charges the battery in three phases: conditioning, constant current, and constant voltage. Charge is terminated based on minimum current. An internal charge timer provides a backup safety feature for charge termination. The bqTINY automatically restarts the charge if the battery voltage falls below an internal threshold. The bqTINY automatically enters sleep mode when VCC supply is removed.

In addition to the standard features, different versions of the bqTINY offer a multitude of additional features. These include temperature sensing input for detecting hot or cold battery packs; power good (PG) output indicating the presence of valid input power; a TTL-level charge-enable input (CE) used to disable or enable the charge process; and a TTL-level timer and termination enable (TTE) input used to disable or enable the fast-charge timer and charge termination.

Key Features

Small 3-mm × 3-mm MLP (QFN) Package

Ideal for Low-Dropout Designs for Single-Cell Li-Ion or Li-Pol Packs in Space Limited Applications

Integrated Power FET and Current Sensor for Up to 1-A Charge Applications

Reverse Leakage Protection Prevents Battery Drainage

Integrated Current and Voltage Regulation

±0.5% Voltage Regulation Accuracy

Charge Termination by Minimum Current and Time

Pre-Charge Conditioning With Safety Timer

Status Outputs for LED or System Interface Indicates Charge and Fault Conditions

Battery Insertion and Removal Detection

Works With Regulated and Unregulated Supplies

Short-Circuit Protection

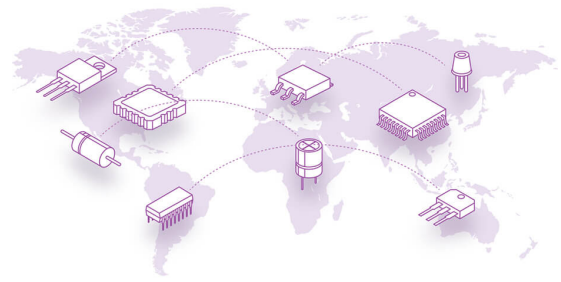
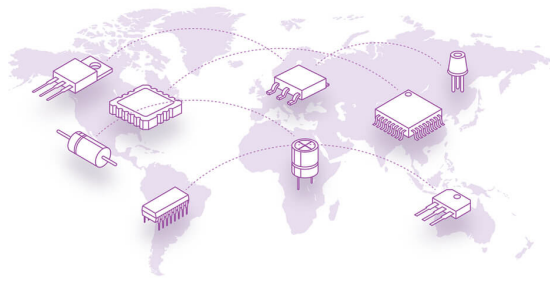
Charge Voltage Options: 4.2 V and 4.36 V

Description

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Recommended For You

BQ51013BRHLR

Texas Instruments, Inc

VQFN20

BQ51050BRHLT

Texas Instruments, Inc

QFN

BQ51050BRHLR

Texas Instruments, Inc

VQFN-20

BQ24045DSQR

Texas Instruments, Inc

WSO10

BQ24725ARGRT

Texas Instruments, Inc

QFN

BQ7693000DBT

Texas Instruments, Inc

TSSOP30

BQ25896RTWT

Texas Instruments, Inc

QFN24

TL432BQDBZR

Texas Instruments, Inc

SOT23-3

BQ2050HSN-A508

Texas Instruments, Inc

SOP16

BQ24192RGER

Texas Instruments, Inc

VQFN24

BQ2000SN-B5

Texas Instruments, Inc

SOP8

BQ24105RHLLR

Texas Instruments, Inc

VQFN20

BQ24190RGER

Texas Instruments, Inc

VQFN24

TPS54360BQDDAQ1

Texas Instruments, Inc

SOP-8

TLV431BQDBZRQ1

Texas Instruments, Inc

SOT23