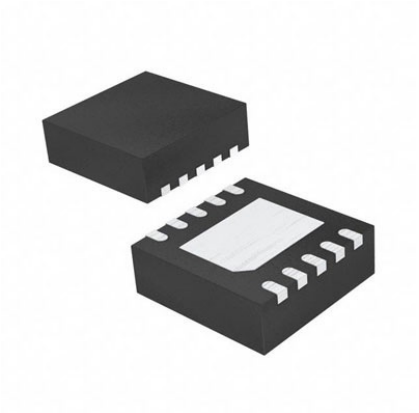
BQ28Z610DRZT

Fuel Gauge/Protection Li-Ion/Li-Pol 26V 12-Pin VSON EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	VSON12
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The Texas Instruments bq28z610 device is a highly integrated, accurate, 1-series to2-series cell gas gauge and protection solution, enabling autonomous charger control and cellbalancing.

The bq28z610 device enables autonomous charge control through Master ModeI2C broadcasts of charging current and voltage information, eliminatingsoftware overhead that is typically incurred by the system's host controller.

The bq28z610 device provides a fully integrated pack-based solution with a flashprogrammable custom reduced instruction-set CPU (RISC), safety protection, and authentication for1- to 2-series cell Li-Ion and Li-Polymer battery packs.

The bq28z610 gas gauge communicates via an I2C compatibleinterface and combines an ultra-low-power, high-speed TI bqBMP processor, high-accuracy analogmeasurement capabilities, integrated flash memory, an array of peripheral and communication ports,an N-CH FET drive, and a SHA-1 Authentication transform responder into a complete, high-performancebattery management solution.

The bq28z610 device provides an array of battery and systemsafety functions, including overcurrent in discharge, short circuit in charge, and short circuit indischarge protection for the battery, as well as FET protection for the N-channel FETs, internalAFE watchdog, and cell balancing. Through firmware, the devices can provide a larger array offeatures including protection against overvoltage, undervoltage, overtemperature, and more.

Key Features

Autonomous Battery Charging Control Using Dedicated Master Mode I2C Interface

Cell Balancing with Internal Bypass To Optimize Battery Health

High-Side Protection N-CH FET Drive Allows Serial Bus Communication During Fault Conditions

Programmable Protection Levels for Voltage, Current, and Temperature

Support for Simultaneous Current and Voltage Sampling

High-Accuracy Coulomb Counter with Input Offset Error < 1 µV (Typical)

Supports Down to 1-mΩ Current Sense Resistor While Capable of 1-mA Current Measurement

Supports Battery Trip Point (BTP) Function for Windows Integration

SHA-1 Authentication Responder for Increased Battery Pack Security

Compact 12-Pin VSON Package (DRZ)

Recommended For You

BQ51013BRHLR

Texas Instruments, Inc

VQFN20

BQ51050BRHLT

Texas Instruments, Inc

QFN

BQ51050BRHLR

Texas Instruments, Inc

VQFN-20

BQ24045DSQR

Texas Instruments, Inc

WSON10

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

BQ24105RHLR

Texas Instruments, Inc

VQFN20

BQ24190RGER

Texas Instruments, Inc

VQFN24

BQ24010DRCR

Texas Instruments, Inc

QFN

TPS54360BQDDAQ1

Texas Instruments, Inc

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