

Features

- 3, 4, 5-serial cell selected by the SEL pin
- High-accuracy voltage detection circuit for each cell:
 - (1) Over charge detection voltage n (n=1 to 5), 3.6V to 4.5V (50mV step), accuracy $\pm 25\text{mV}$
 - (2) Over charge release voltage n (n=1 to 5), 3.4V to 4.5V (50mV step), accuracy $\pm 50\text{mV}$
 - (3) Over discharge detection voltage n (n=1 to 5), 2.0V to 3.0V (100mV step), accuracy $\pm 80\text{mV}$
 - (4) Over discharge release voltage n (n=1 to 5), 2.0V to 3.4V (100mV step), accuracy $\pm 100\text{mV}$
- 2-level discharge over current detection
 - (1) Discharge over current detection voltage: 0.05V to 0.3V (50mV step), accuracy $\pm 15\text{mV}$
 - (2) Short circuit detection voltage: 0.5V to 1.0V (100mV step), accuracy $\pm 100\text{mV}$
- Charge over current detection voltage: -0.3V to -0.05V (50mV step), accuracy $\pm 30\text{mV}$
- Settable by external capacitor: over charge detection, over discharge detection, discharge over current detection and charge over current detection delay time
- Support over temperature protection
- Build-in disconnection detection function
- 0 V battery charge function available/unavailable optional
- Sleep mode/None sleep mode optional
- Secondary Protection
- TSSOP-24 package
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

Applications

- Lithium-ion rechargeable battery packs.
- Lithium polymer rechargeable battery packs.

General Description

The GS7713 is a protection IC for 3-series to 5-series cell lithium-ion rechargeable battery. The GS7713 includes high accuracy voltage detection circuits and adjustable delay circuits.

By cascade connection using this IC, it is also possible to protect 6-serial or more cells rechargeable lithium-ion battery pack.

The GS7713 is used for protecting battery pack from over charge, over discharge, over current and over temperature condition.

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