



CW1274

4~7 Cells Li-Ion/Polymer Battery Pack Protection IC

Features

- Overcharge protection
 - Threshold from 4.175V to 4.350V, 25mV steps, $\pm 25\text{mV}$ accuracy
 - Independent 3.650V, 3.850V threshold for LiFeCoPO₄ battery
- Over discharge protection
 - Threshold from 2.300V to 2.800V, 100mV steps, $\pm 30\text{mV}$ accuracy
- Excess current protection
 - Excess current 1:
Threshold from 0.050V to 0.100V, 50mV steps, $\pm 5\text{mV}$ accuracy
 - Excess current 2:
Threshold from 0.100V to 0.200V, 100mV steps, $\pm 10\text{mV}$ accuracy
 - Short circuits protection:
Threshold from 0.200V to 0.500V, 100mV steps, $\pm 20\text{mV}$ accuracy
- Charge over-current protection
 - Threshold from -0.010V to -0.050V, $\pm 5\text{mV}$ accuracy
- Temperature protection
 - Over and under temperature protections during charging and discharging
- Balance function
- Open-wire protection
- Auto-lock after discharge protection
- Cascading function
- Ultra low power dissipation
 - Normal operation 20 μA (25°C)
 - Sleep mode 5 μA (25°C)
- Package type: SSOP24

Applications

- Power tools
- E-bike
- Vacuum cleaner

General Description

The CW1274 series products are highly integrated protection ICs for 4~7 lithium-ion and lithium polymer battery packs connected in series.

CW1274 provides complete protection for battery pack by measuring the voltage, current and temperature.

CW1274 also integrates balance function to prolong the battery life and open-wire protection to ensure the battery safety.

CW1274 supports chip cascading function, which can save external components and improve the reliability while used in multi-channel batteries in series.

Typical Application

