

GLF73910-AD01C Ultra-Efficient I_QSmart™ Battery Protection IC

DESCRIPTION

The EV011-GLF73910-AD01C evaluation board features the GLF73910-AD01C that is an I_QSmart™ ultra-efficient, full battery protection IC with the accurate over charging voltage, over discharging voltage, and short circuit protections for lithium battery safety.

When the battery is charged past the over voltage detection level, the GLF73910-AD01C switch opens in a preset delay time. As the battery voltage decreases below the over discharge detection voltage level, the GLF73910-AD01C is turned off immediately, consuming an ultra -low leakage current (I_{SD}) to save the battery. In addition, at load short conditions, the GLF73910-AD01C is latched off and remain the off state in a preset delay time.

The GLF73910-AD01C is activated by applying V_{ON} to the VOUT pin from a charger or a DC power supplier.

FEATURES

- V_{OC}, Over Charge Detection: 4.35 V_{BAT}
 - Monitor VOUT to release V_{OC}
- V_{OD}, Over Discharge Detection: 2.80 V_{BAT}
- Load Short Circuit Protection with Delay Time to avoid a false trigger
- 1.5 A Continuous Charging Current Capability from VOUT to VBAT Pin
- 0 V Battery Charging
- Main Switch is Activated by Applying V_{ON} the VOUT Pin from Charger
- Low R_{ON}: 36 mΩ Typ. @ 3.6 V_{BAT}
- I_Q = 720 nA Typ @ 3.6 V_{BAT}
- I_{SD} = 70 nA Typ @ V_{BAT} < V_{OD}
- Latch-off at Over Discharge Detection and Short Circuit Protection. Apply V_{ON} to VOUT pin to turn on again
- Reverse Polarity Connection Protection
- 0.97 mm x 0.97 mm x 0.55 mm Chip Scale Package 4 Bumps, 0.5 mm Pitch

PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R _{ON} (Typ) V _{BAT} =3.6 V	Over Charge Voltage V _{oc}	Over Discharge voltage V _{od}	0 V Charging
EV011-GLF73910-AD01C	GLF73910-AD01C	CE	36 mΩ	4.35 V	2.80 V	Available