STEVAL-ISB017V1

Data brief

STC3117 evaluation board





Summary table	
Gas gauge IC with battery charger control for handheld applications	STC3117

Features

- Patented OptimGaugeTM algorithm for accurate battery capacity calculation
- Robust initial open-circuit-voltage (OCV) measurement at power up
- Programmable low battery alarm
- Missing/swapped battery detection
- Average current internal calculation
- End-of-Charge detection
- Internal temperature sensor
- Battery swap detection with protection against false battery insertion
- Low power 40 µA in voltage-only, 2uA max. in standby mode
- 1.49 x 1.594 mm 9-bump CSP package
- RoHS compliant

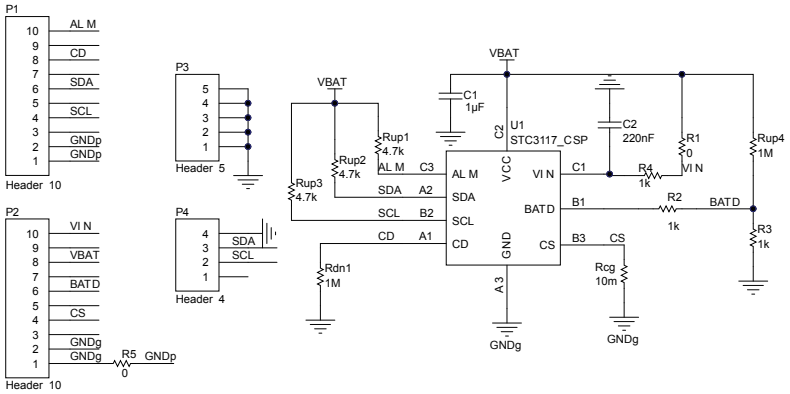
Description

The STC3117 includes the STMicroelectronics OptimGauge™ algorithm. It provides accurate battery state-of-charge (SOC) monitoring, tracks battery parameter changes with operation conditions, temperature and aging, and allows the application to get a battery state-of-health (SOH) indication.

An alarm output signals low SOC or low voltage conditions and also indicates fault conditions like a missing or swapped battery.

1 Schematic diagram

Figure 1. **STEVAL-ISB017V1 circuit schematic**



Revision history

Table 1. **Document revision history**

Date	Version	Changes
18-Aug-2014	1	Initial release.
04-Jun-2018	2	Text formatting changes.

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