

## STC3117 evaluation board



### Features

- Patented OptimGauge™ 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  $\mu$ A 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.

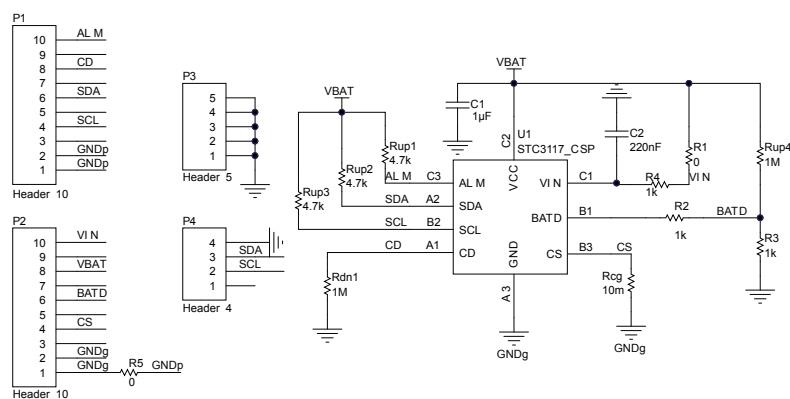
An alarm output signals low SOC or low voltage conditions and also indicates fault conditions like a missing or swapped battery.

#### Summary table

Gas gauge IC with battery charger control for handheld applications	<b>STC3117</b>
---	----------------

# 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.

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STEVAL-ISB017V1](#)