

## STEVAL-ISA076V1

# Battery charger demonstration board with integrated power switch for Li-ION/Li-POLYMER based on the L6924D

Data brief

#### **Features**

- Operating input voltage up to 12 V
- Fully integrated solution with power MOSFET, reverse blocking diode, sense resistor, and thermal control
- Both linear and quasi-pulse operation
- Programmable charge current both in fast charge (up to 1 A) and in pre-charge mode
- Selectable 4.1 V and 4.2 V output voltage (±1% accuracy)
- Programmable termination current
- Programmable pre-charge mode voltage threshold
- Programmable charge timer
- Multifunction pin for flexible charge process termination
- Status outputs to drive LEDs or host processor interface
- Battery absence detection
- Closed loop thermal control
- NTC or PTC thermistor interface for hattery temperature monitoring and projection
- RoHS compliant

### **Description**

The STEVAL-S.^576V1 demonstration board is based on the L6924D that is a fully monolithic battery charger dedicated to single-cell Li-UCN/POLYMER battery packs. It is the ideal solution for space-limited applications, like PDAs, handheld equipment, cellular phones, and digital cameras.

When an external voltage regulated wall adapter is used, the L6924D works in linear mode, and charges the battery in a constant current/constant voltage (CC/CV) profile.

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Moreover, where current-limited adapter is used, the device can operate in quasi-pulse mode, dramatically reducing the power dissipation.

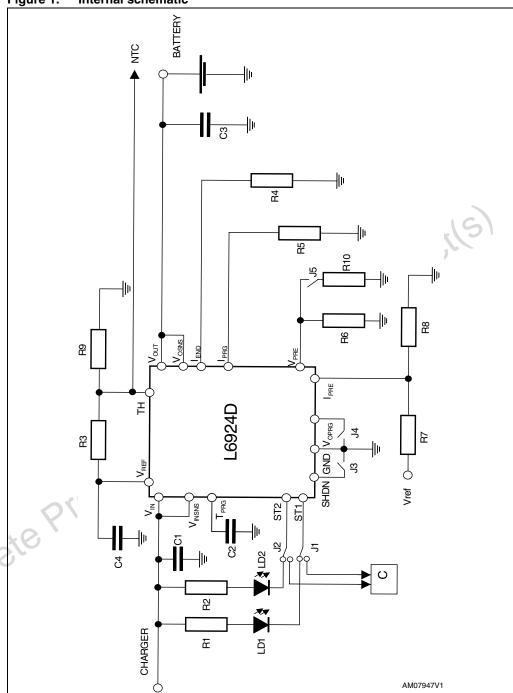
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Schematic diagram STEVAL-ISA076V1

# 1 Schematic diagram

Figure 1. Internal schematic



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STEVAL-ISA076V1 Revision history

## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
18-Oct-2010	1	Initial release.



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