

STEVAL-ISA076V2

USB compatible battery charger demo board with integrated power switch for Li-Ion/Li-Polymer based on the L6924U

Data brief

Features

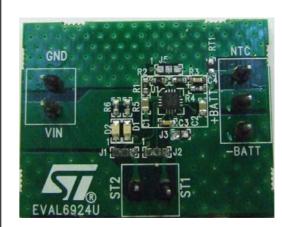
- Operating input voltage up to 12 V
- Fully integrated solution with power MOSFET, reverse blocking diode, sense resistor, and thermal control
- AC adapter or USB mode selection
- Programmable charge current for both AC adapter and USB power sources separately
- Low power/high power selection in USB mode
- Both linear and quasi-pulse operation
- 4.2 V preset charge voltage (±1 % accuracy)
- Programmable termination current
- Programmable charge timer
- Status outputs to drive LEDs or host processor interface
- Battery absence detection
- Closed loop thermal control
- NTC or PTC thermistor interface for battery temperature monitoring and protection
- RoHS compliant

Description

The STEVAL-ISA076V2 demonstration board is based on the L6924U which is a fully monolithic battery charger dedicated to single-cell Lilon/Polymer battery packs. It is the ideal solution for space-limited applications, such as PDAs, handheld equipment, cellular phones, and digital cameras.

When an external voltage regulated adapter or USB port is used, the L6924U works in linear mode, and charges the battery in a constant current/constant voltage (CC/CV) profile.

Moreover, when a current-limited adapter is used, the device can operate in Quasi-Pulse Mode, dramatically reducing the power dissipation.

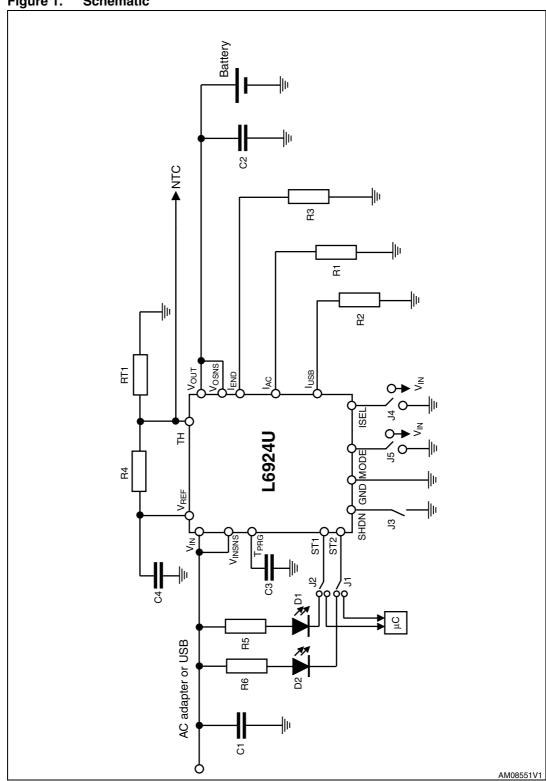


STEVAL-ISA076V2

Schematic diagram STEVAL-ISA076V2

1 Schematic diagram

Figure 1. Schematic



STEVAL-ISA076V2 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
25-Feb-2011	1	Initial release.

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