



STEVAL-ISB007V1

Low cost Li-Ion battery charger demonstration board
based on the ST7260 and L6924U

Data Brief

Features

- Can be used in USB mode or adapter mode
- LEDs indicate status of charging conditions
- ICC connector available to program the microcontroller
- Li-Ion / Li-Polymer battery charger

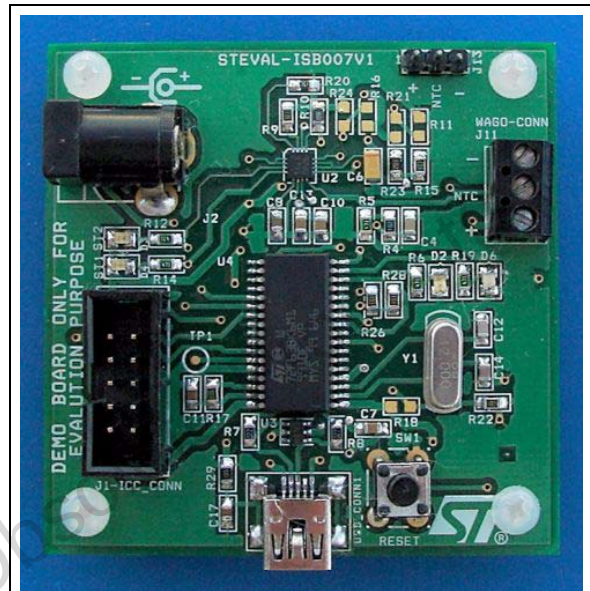
Description

The STEVAL-ISB007V1 demonstration board is based on the L6924, a standalone Li-Ion/ Li-Polymer battery charger. Power to the board can be supplied either by USB or an external DC adaptor.

In USB mode, the charging current of the battery complies with high-power USB device specifications. The L6924 is powered by 5 V from the USB, thus also charging the battery.

An ST7260 microcontroller is used for enumeration with the PC, to control the SD pin and to ensure compliance with USB high-power bus-powered specifications.

The board also features a general-purpose adaptor socket for use when the board is powered by an external DC supply. In this case the L6924 is completely independent of the microcontroller.



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1 Circuit schematics

Figure 1. Microcontroller section

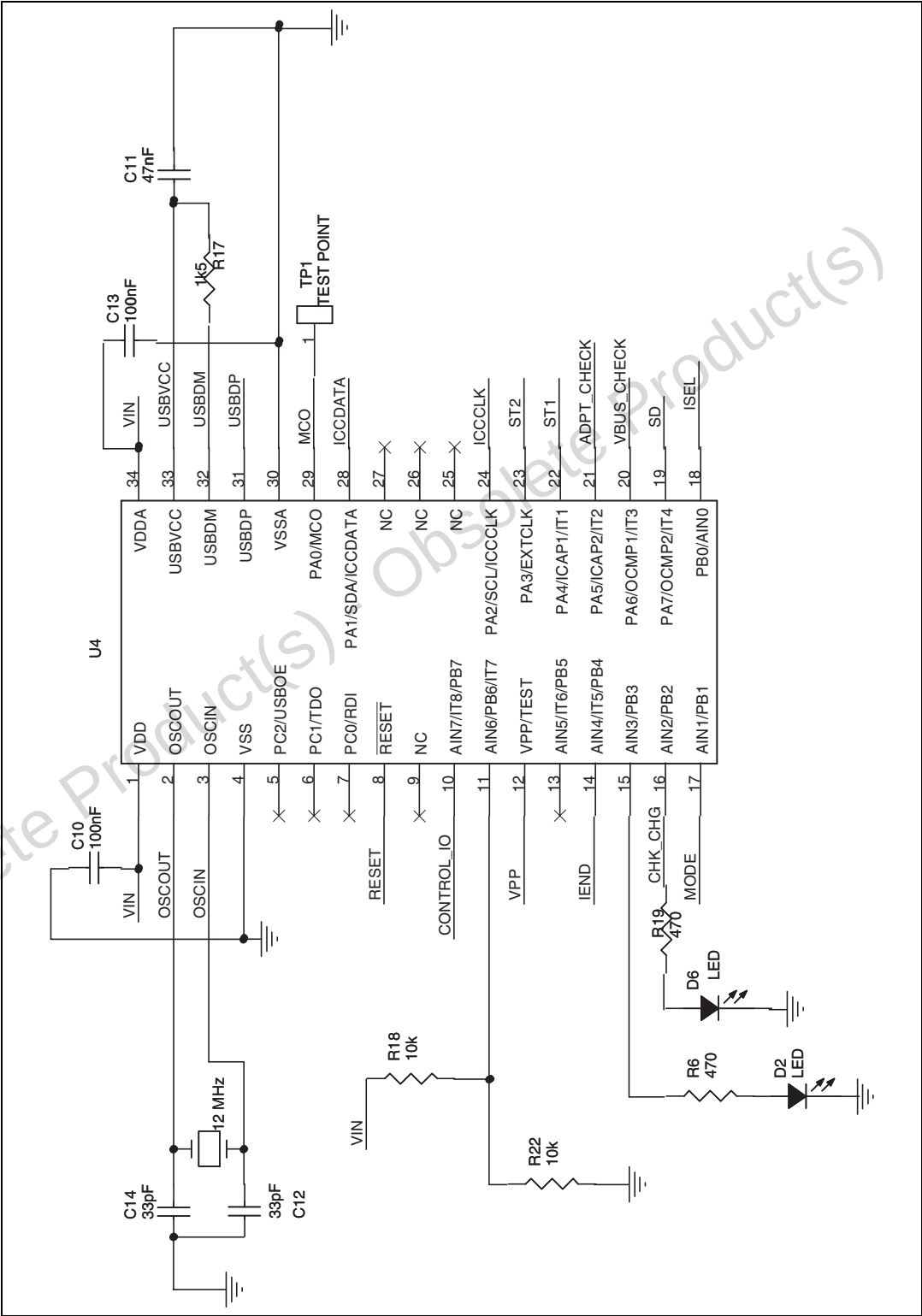
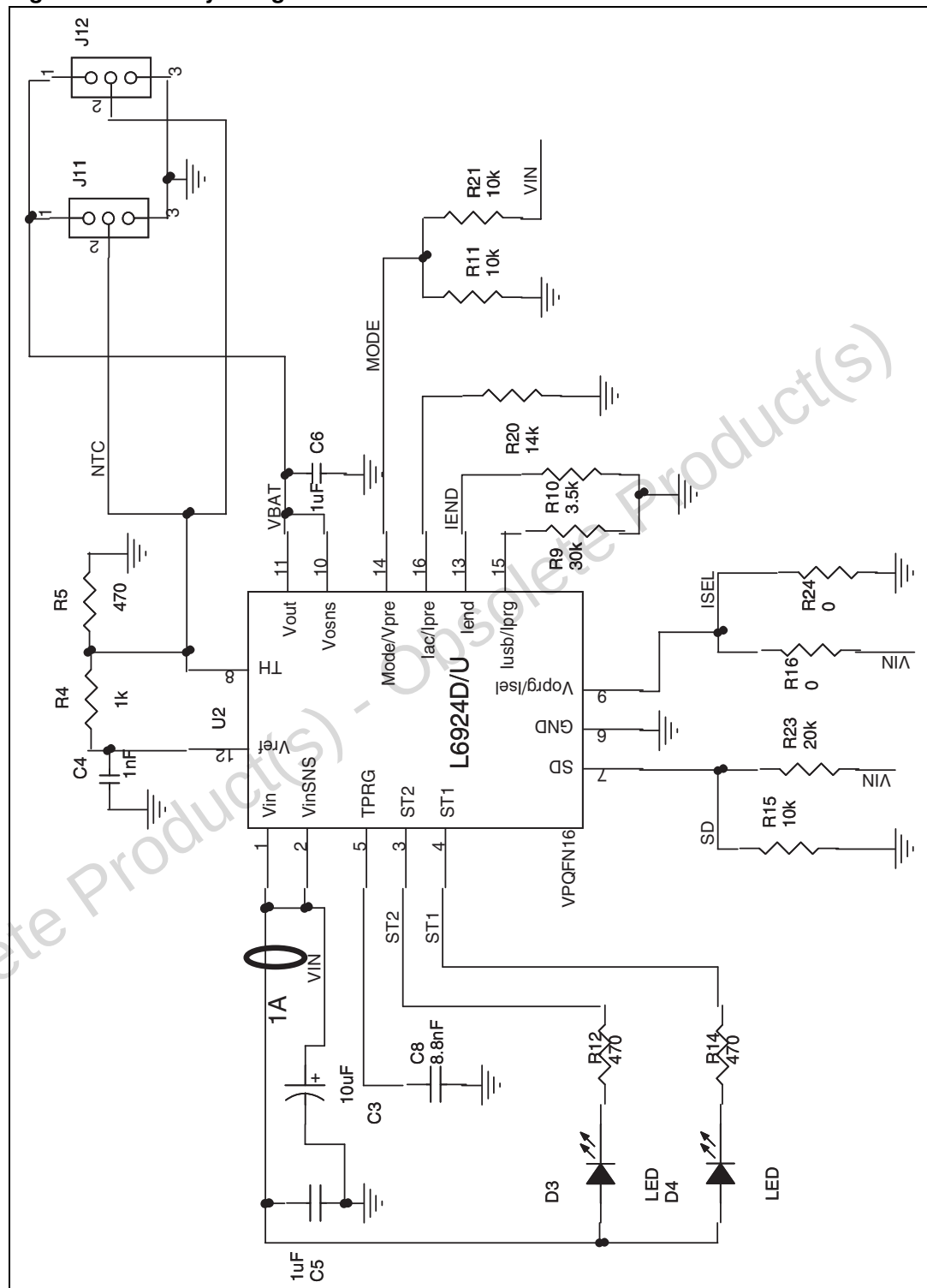


Figure 2. Battery charger⁽¹⁾

1. Pin no.description of L6924 is taken for both L6924D and L6924U.Pls refer to respective datasheets

The schematic diagram illustrates the USB to UART bridge circuit. It features a USB D8 connector with the following connections:

- VBUS** is connected to **VIN** through a diode.
- VIN** is connected to **VBUS** through a 10k resistor (R25) and to **GND** through a 10k resistor (R27).
- GND** is connected to **ADPT_V** through a 10k resistor (R26) and to **GND** through a 10k resistor (R28).
- ADPT_V** is connected to **ADPT_CHECK**.
- GND** is connected to **CONTROL_IO**.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
26-Feb-2009	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

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