



## STEVAL-TLL007V1

High-power LED driver demonstration board for dual flash with I<sup>2</sup>C interface based on the STCF05

Data brief

### Features

- Boost DC-DC converter with synchronous rectification
- Drives two power white LEDs in series with a current up to 400 mA
- Efficiency up to 85%
- 3 passive components only
- 24 mm<sup>2</sup> PCB area only
- 1.8 MHz fixed frequency PWM
- Full I<sup>2</sup>C control
- Motherboard based on  $\mu$ PSD used like USB bridge
- RoHS compliant



### Description

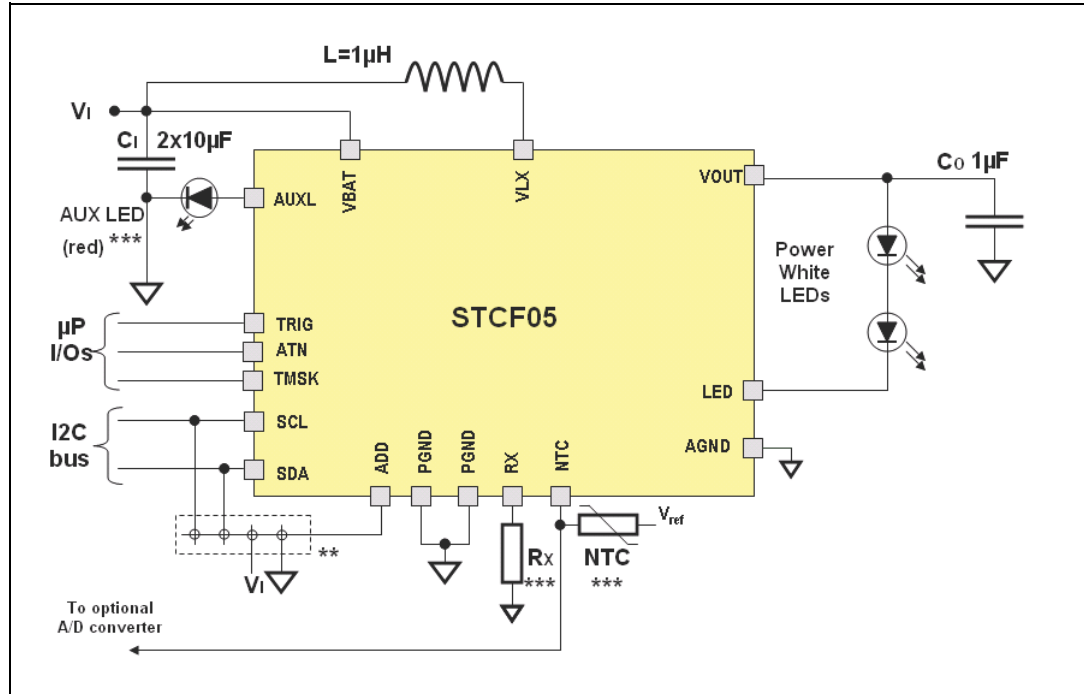
This demonstration board is dedicated to the STCF05 flash LED driver IC, which is a boost current mode converter with an I<sup>2</sup>C interface and internal current source. The STCF05 is designed to drive two LEDs in series with a total forward voltage from 5.3 V to 10.2 V.

For easy connection to a PC, the STEVAL-TLL007V1 uses a  $\mu$ PSD-based motherboard used as a bridge.

The STCF05 motherboard uses a USB human interface device to communicate with the PC. It is not necessary to install a driver, if the operating system in use is capable of enumerating USB human interface devices.

# 1 Circuit schematic

Figure 1. Typical application schematic



## 2 Revision history

**Table 1. Document revision history**

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
15-May-2009	1	Initial release.
12-Jan-2010	2	Minor text changes.

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