

Camera flash with SuperCap based on the STCF04

Data brief

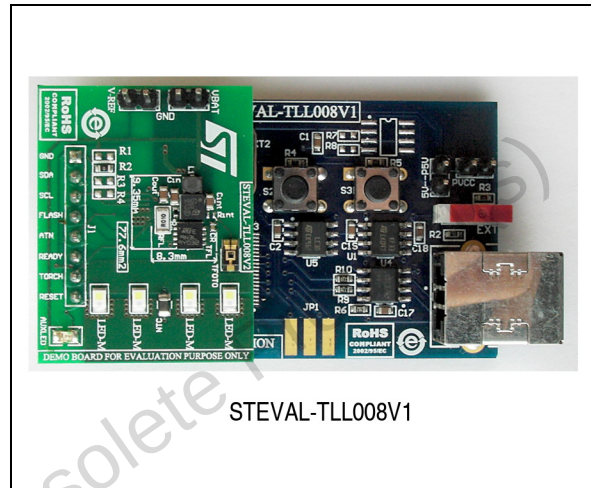
Features

- Different operation modes:
 - Shutdown mode, mainly used to decrease the power consumption of the device
 - Monitoring mode, used to monitor the SuperCap voltage
 - IDLE mode, which allows the accessing of all the internal registers
 - NTC feature, which can be used in all modes. The NTC is activated automatically in flash and Torch mode regardless of the value of the NTC_ON bit. NTC must be activated manually in all the other modes
 - Torch mode, intended to be used for low light intensities. The LED current in Torch mode can be adjusted in a range from 15 mA up to 300 mA
 - Flash mode, intended to be used for high light intensities. The LED current in Flash mode can be adjusted up to 10 A with the input voltage ranging from 2.7 V up to 5.5 V
- Status register and ATN pin
- Ready pin
- Light sensor (optional)
- RoHS compliant

Description

The STEVAL-TLL008V1 demonstration board is a flash LED driver using the STCF04 device, which is a buck-boost converter with an I²C interface dedicated to charging a SuperCap.

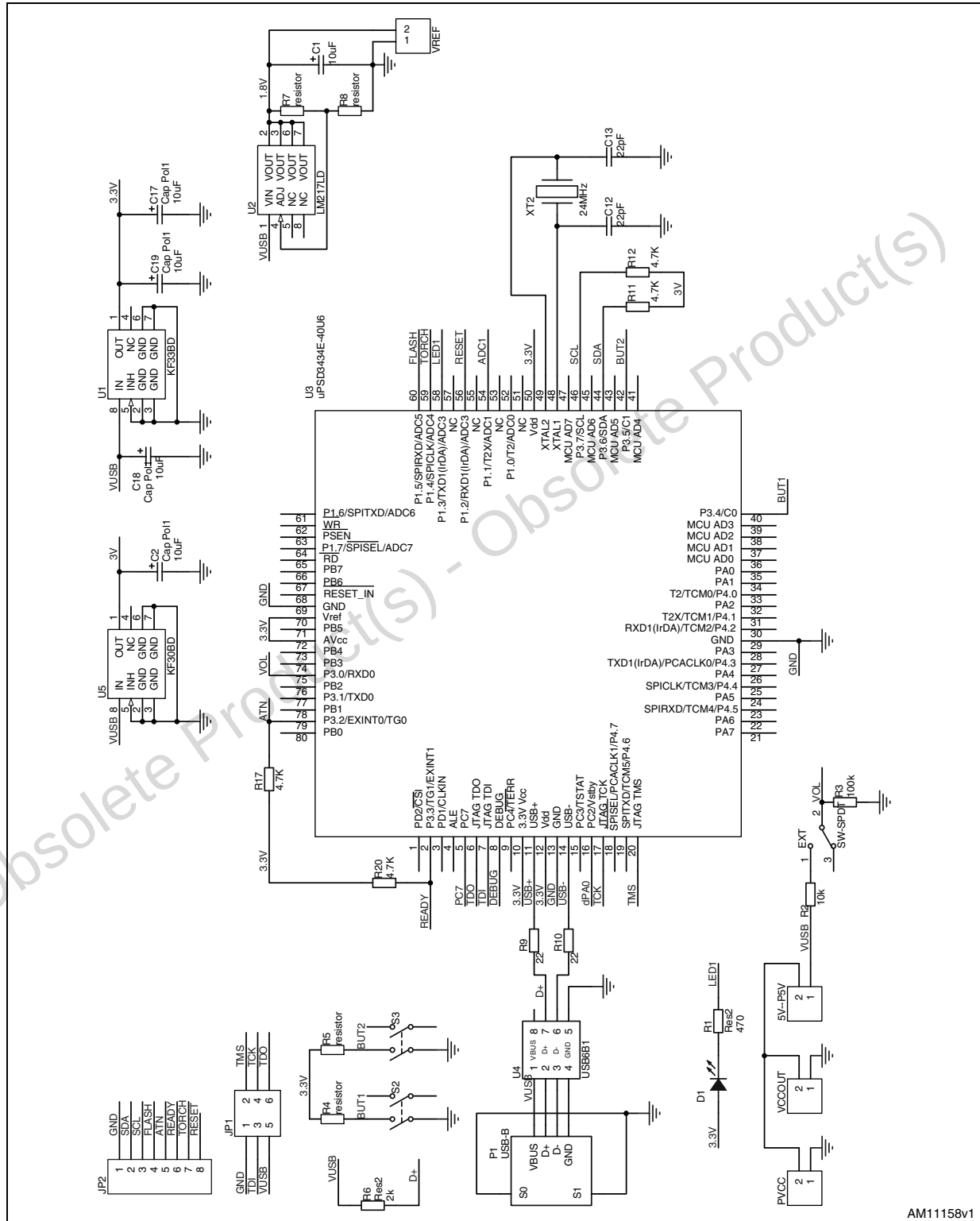
All LEDs with a forward voltage range from 2.5 V to 5 V are compatible with the STCF04. The forward voltage spread of any selected LED must, however, be within this range (2.5 V to 5 V). It is possible to set the level of the LED current in Flash mode and Torch mode by setting the dimming registers. The maximum level of the LED current in Flash mode can be set by changing the external flash resistor.



STEVAL-TLL008V1

1 Schematic

Figure 1. STEVAL-TLL008V1 schematic



AM11158v1

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
02-Feb-2012	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

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