For full datasheet, click **HERE**.

Two-Channel Flash LED Driver with Independent Current Control

Features

- High efficiency synchronous boost converter with 2MHz/4MHz switching frequency option
- I^{2}C interface programming and hardware STROBE/TORCH control
- Two-channel independent current sources
  - ▸ LED1: Up to 1.5A (7 bits)
  - ▸ LED2: Up to 0.75A (6 bits)
  - ▸ Flash/Torch/IR modes
  - ▸ Independent LED on/off and current settings
  - ▸ Programmable ramp shape and time control
  - ▸ Three input low voltage protection modes
  - ▸ Flash time-out protection
  - ▸ LED cathode ground connection for improved thermal dissipation
- LED open/short protection
- I^{2}C fault read back (I^{2}C address = 0x63)

Applications
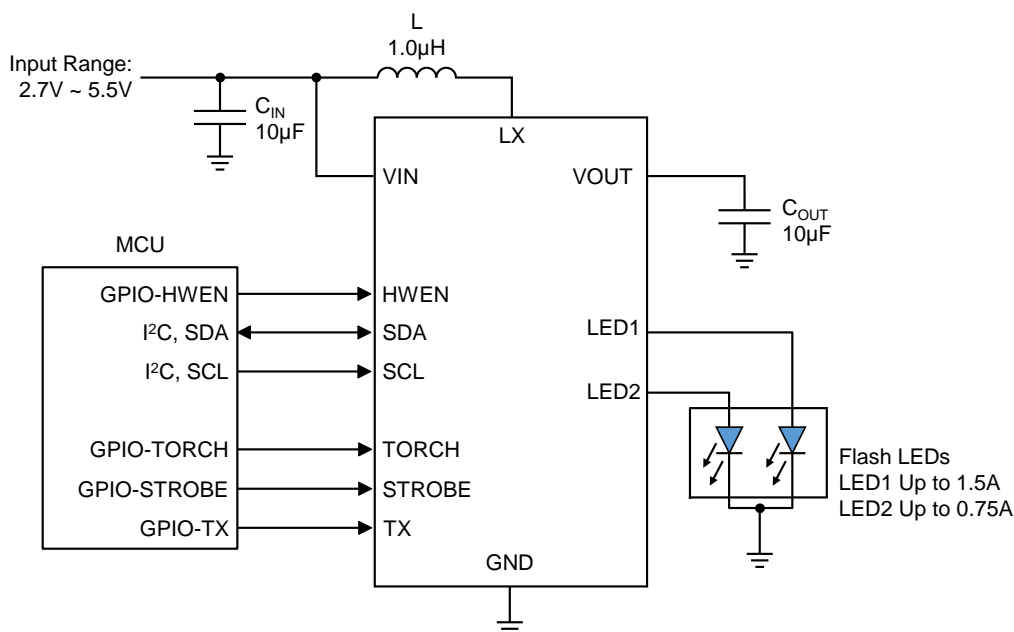
- Smartphones and Tablets Camera Flash
- Digital Cameras

Brief Description

KTD2682 is the ideal power solution for high-power flash LEDs. It includes a highly integrated synchronous boost converter and two current sources, providing a very small total solution in portable application. It has both I^{2}C interface and hardware STROBE/TORCH pins for maximum control flexibility. The two integrated current sources are independently controlled, their on/off conditions and current settings in Flash/Torch/IR modes can be programmed independently by the I^{2}C interface. It also has three selectable input low voltage protection modes to prevent a system reset under low battery condition. Thermal regulation is also integrated to limit the IC temperature and continuously provide the maximum output current.

Various protection features are integrated into KTD2682, including cycle-by-cycle input current limit protection, output over-voltage protection, LED fault (open or short) protection, flash timeout protection and thermal shutdown protection.

KTD2682 is available in a RoHS and Green 12-ball 1.42mm x 1.66mm WLCSP package with 0.4mm pitch.

Typical Application

Ordering Information

Part Number	Marking	Operating Temperature	Package
KTD2682EUD-TR	IHXXYYZZZZ[1]	-40°C to +85°C	WLCSP-12, 1.42mm x 1.66mm

1. XX = Date Code, YY = Assembly Code, ZZZZ = Serial Number.