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
- I²C interface programming and hardware STROBE/TORCH control
- Two-channel independent current sources
  - LED1: Up to 1.5A (7 bits)
  - LED2: Up to 1.0A (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 up to 1.44s
  - LED cathode ground connection for improved thermal dissipation
- LED open/short protection
- I²C fault read back (I²C address = 0x63)

Applications

- Smartphones and Tablets Camera Flash
- Digital Cameras

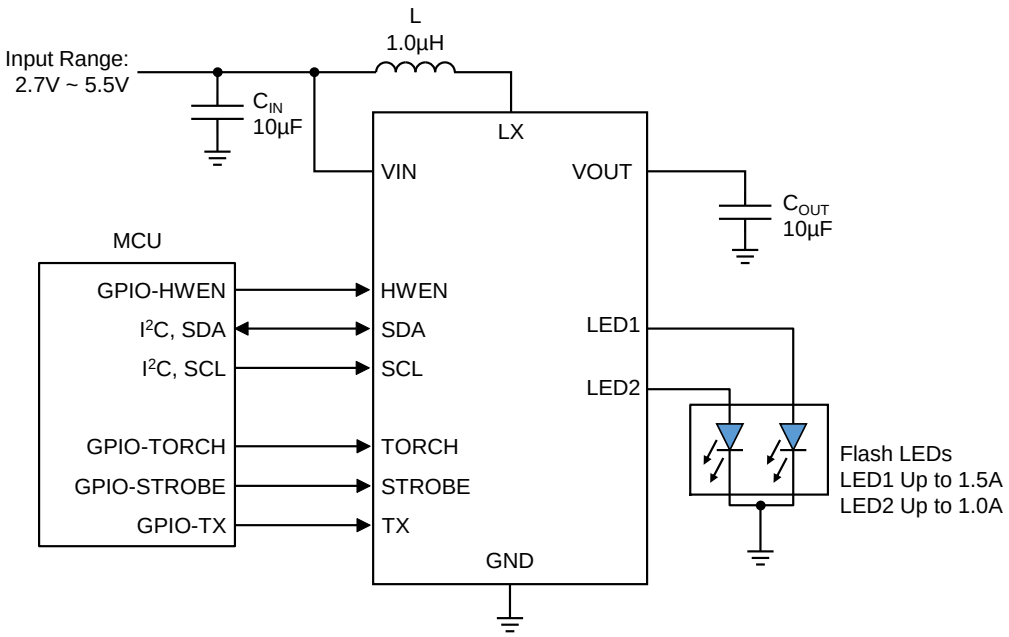
Brief Description

KTD2684 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 I²C 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 I²C 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 KTD2684, 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.

KTD2684 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
KTD2684EUD-TR	INXXYYZZZZ[1]	-40°C to +85°C	WLCSP-12, 1.42mm x 1.66mm

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