

1A Charge Pump LED Driver

DESCRIPTION

The EUP3611 is a large-current charge pump designed specifically for white LEDs used in camera flash applications. Only one small bucket capacitor is required to develop the output drive, providing a low EMI solution compared with inductive boost regulators.

The EUP3611 has two operation modes: Flash mode and Movie mode. In Flash mode, the EUP3611 is capable of delivering up to 1A. A safety timer is also included to ensure the LED can not be on indefinitely and overheat.

The EUP3611 is available in a 10-pin TDFN and WCSP-12 packages.

FEATURES

- Flash mode - output current up to 1A at $V_{IN}=3.6V$
- Flash and movie - two selectable modes
- Built in flash mode safety timer protection
- 1X and 2X automatic mode for high efficiency
- Input range – 2.7V to 5.5V
- External flash control pin for synchronization to a camera module or graphics controller
- Short-circuit, over-voltage, over-current and over-temperature protection
- Soft-start functionality
- 3mm×3mm TDFN-10 and 1.2mm×1.6mm WCSP-12 Packages
- RoHS compliant and 100% lead (Pb)-free Halogen-Free

APPLICATIONS

- Mobile Camera Phones
- Digital Cameras
- PDAs with Built-In Cameras

Typical Application Circuit

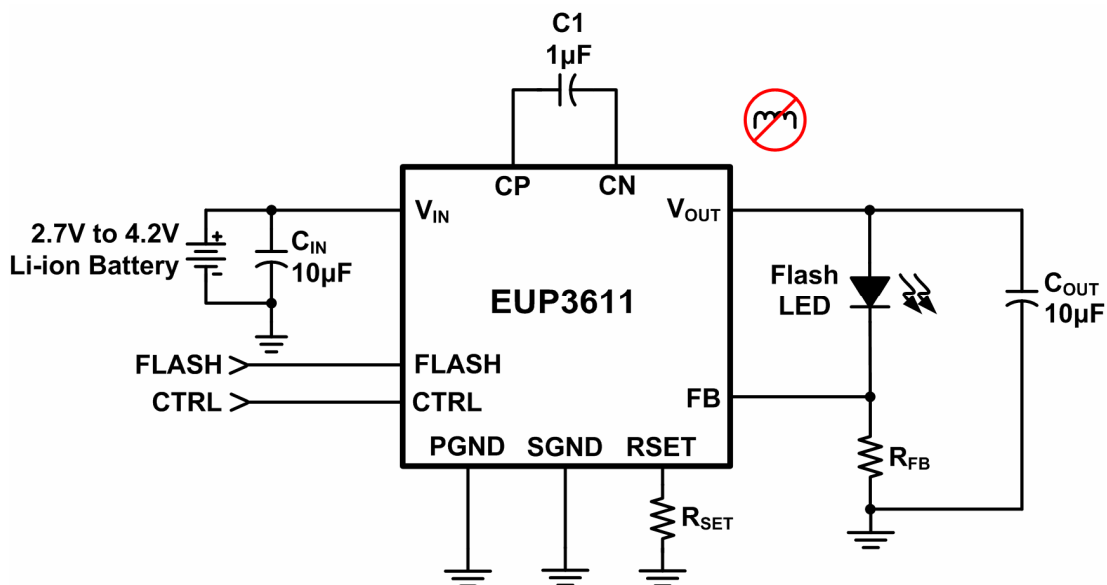


Figure 1.