

Charge Pump Flash LED Driver with Safety Timer

DESCRIPTION

The EUP3618 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 regulator.

The EUP3618 has two operation modes: Flash mode and Movie mode. In Flash mode, the EUP3618 is capable of delivering up to 700mA. A safety timer is also included to ensure the LED can not be on indefinitely and overheat.

The EUP3618 is available in a 10-pin TDFN package.

FEATURES

- Input Voltage Range — 2.7V to 5.5V
- Flash and Movie — Two Selectable Modes
- Up to 700mA Output Current — Flash Mode
- Flash Mode Safety Timer Shut-Off
- 1X and 2X Automatic Mode for High Efficiency
- 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 Package
- RoHS Compliant and 100% Lead (Pb)-Free Halogen-Free

APPLICATIONS

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

Typical Application Circuit

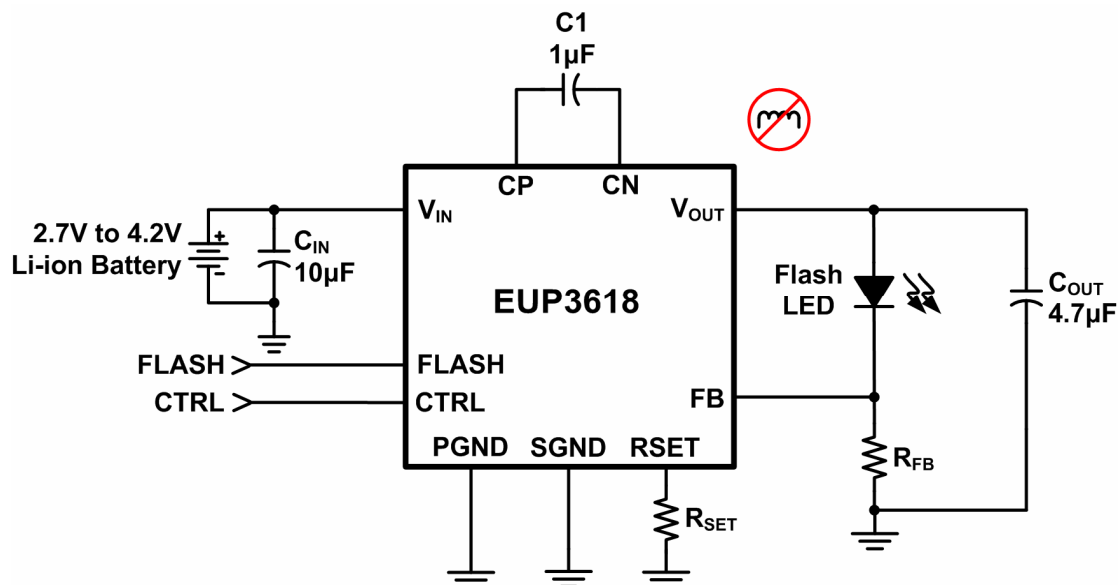


Figure 1.