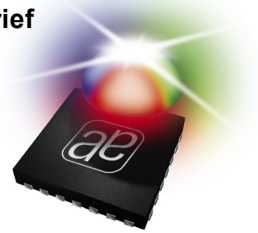


AS3636

Xenon Driver IC with LED Driver and Life Time Counter

ProductBrief



1 General Description

The AS3636 is a highly integrated photoflash charger including IGBT driver, inductive DCDC boost autofocus/video LED driver, an indicator LED driver and it includes system level ESD protection and a breakable fuse.

The AS3636 includes flash timeout, over- and undervoltage, overtemperature and LED short circuit protection functions. To reduce production test time a broken transformer or a broken coil is detected.

The AS3636 is controlled by an I²C interface with a dedicated STROBE input. Additionally the TORCH input controls the torch function. An interrupt output is available to signal an error condition to the controller.

The device includes 11 Bytes EEPROM, and an automatic life time counter to count the number of flashes performed.

The AS3636 is available in a space-saving WL-CSP package and operates over the -30°C to +85°C temperature range.

Warning: Lethal voltages are present on applications using AS3636! Do not operate without training to handle high voltages.



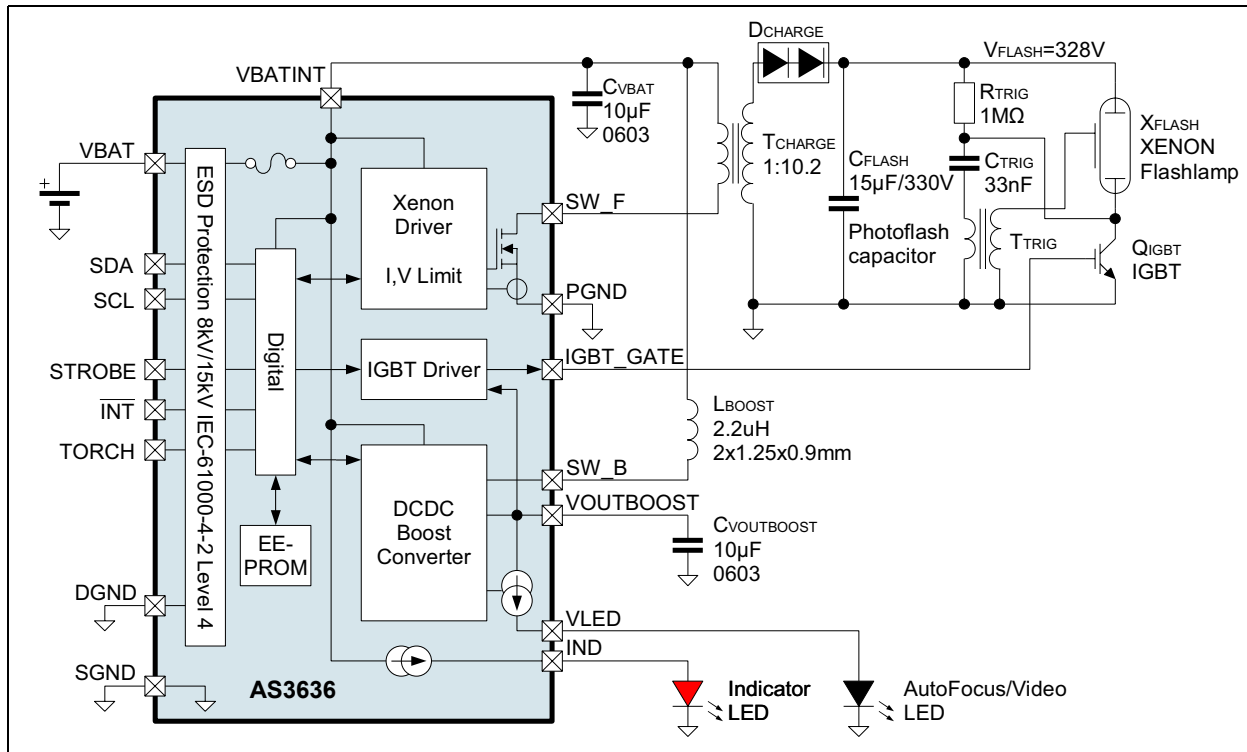
2 Key Features

- Xenon driver
 - Adjustable recharge timings
 - Adjustable current limits
 - In-production trimmable end of charge voltage
- IGBT Driver
 - Trimmable IGBT voltages
 - Trimmable IGBT driving waveform
 - Internal flash duration timer
 - External STROBE input
- DCDC Boost Converter
 - Autofocus/video LED current source
 - Voltage supply for IGBT
- Integrated one time breakable fuse in supply path
- Integrated system level ESD protection according to IEC-61000-4-2 Level 4 (8kV contact, 15kV air discharge)
- Available in tiny WL-CSP Packages
 - 4x4 balls 0.5mm pitch,
 - 2.0 x 2.15 x 0.6 mm

3 Applications

Xenon Flash with LED Torch for mobile phones

Figure 1. AS3636 Typical Operating Circuit



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