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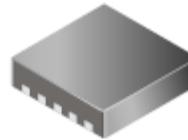
A8835 Photoflash Capacitor Charger with Programmable Current Limit and IGBT Driver

Please contact [marketing](#) for further information.

Package: 10-contact TDFN/MLP (suffix EJ)

Features

- Eight-level, digitally-programmable current limits from 550 mA to 1.75 A
- Voltage sensing feedback before output diode for low leakage
- No external pull-down resistors needed
- Power with 1 Li+ or 2 Alkaline/NiMH/NiCAD batteries
- Low quiescent current draw (1 μ A max in shutdown mode)
- Zero-voltage switching for lower loss
- Adjustable output voltage
- Integrated IGBT driver with trigger
- Charge complete indication >75% efficiency
- Low-profile (0.75 mm high) 3 mm \times 3 mm MLP/TDFN 10-contact package



Applications

- Digital camera flash
- Film camera flash
- Cell phone flash
- Emergency strobe light



Description

The A8835 is a highly integrated IC that charges photoflash capacitors for digital and film cameras. An integrated MOSFET switch drives the transformer in a flyback topology. It also features an integrated IGBT driver that facilitates the flash discharge function and saves board space.

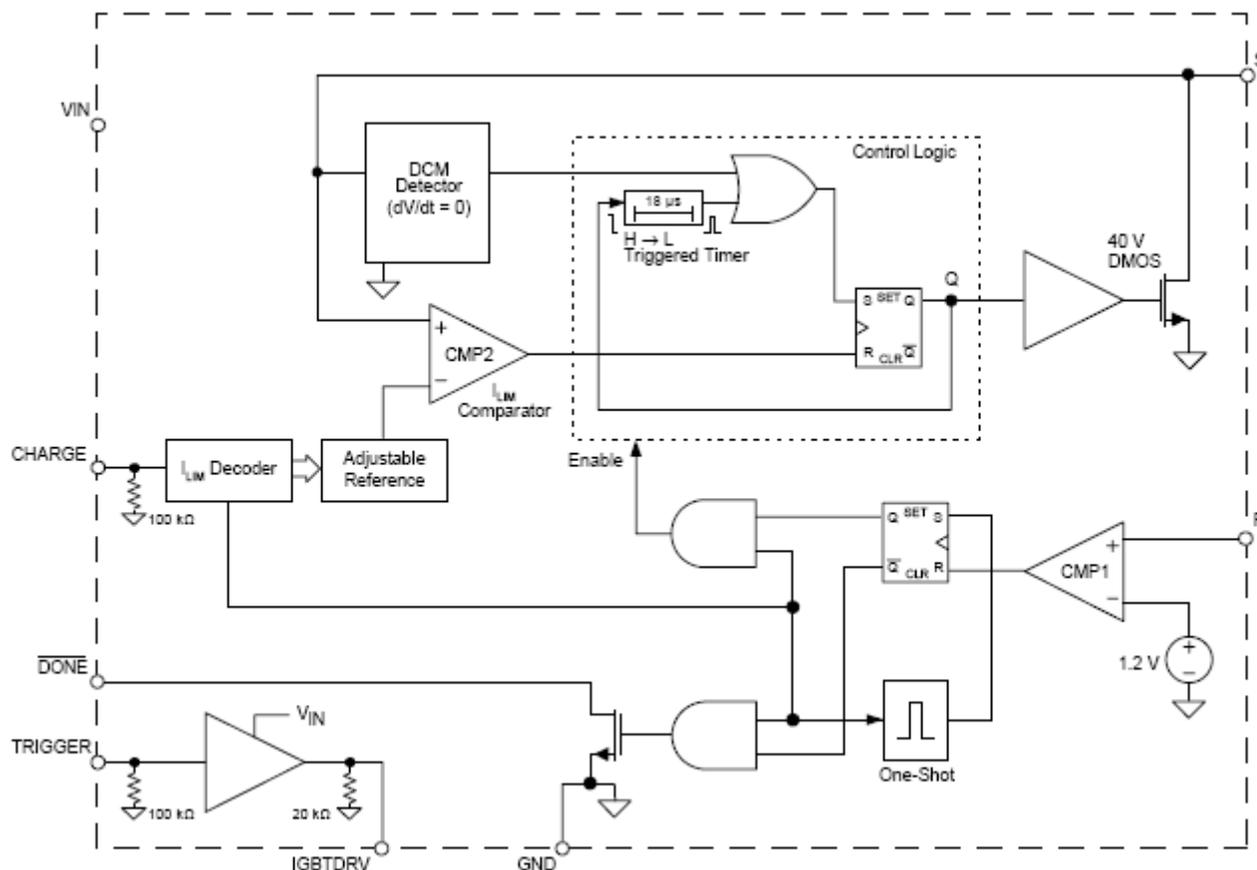
The CHARGE pin enables the A8835 and starts the charging of the output capacitor. When the designated output voltage is reached, the A8835 stops the charging until the CHARGE pin is toggled again. The DONE pin is an open-drain indicator of when the designated output voltage is reached.

The peak current limit can be adjusted to eight different levels between 550 mA and 1.75 A, by clocking the CHARGE pin. This allows the user to operate the flash even at low battery voltages.

The A8835 can be used with two Alkaline/NiMH/NiCAD or one single-cell Li+ battery connected to the transformer primary. Connect the VIN pin to a 3.0 to 5.5 V supply, which can be either the system rail or the Li+ battery, if used.

The A8835 is available in a very low profile (0.75 mm) 10-contact 3 mm × 3 mm MLP/TDFN package, making it ideal for space-constrained applications. It is lead (Pb) free, with 100% matte-tin leadframe plating.

Functional Block Diagram



Complete Part Numbers

Part Number	Package Type	RoHS Compliant	Part Composition/ RoHS Data	Temperature	Comments	Samples	Distributor Stock
A8835EEJTR-T	10-lead MLP	Yes	view data	-40 °C to 85 °C	new	Contact Local Sales Representative	<input type="button" value="Check Stock"/>

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