High Current Hybrid Super Capacitor Charger with Monitor Function

DESCRIPTION

The MT2615 is a storage capacitor charge regulator with extensive protection designed to efficiently charge an energy storage device. With extensive protection function, it can protect the super capacitor for input over voltage, super capacitor under voltage. It can be used for a wide range of different types of super capacitor devices.

When the input supply is present and above the minimum system supply voltage, the regulator charges the storage element up to 6A peak inductor current. Once the storage element is charged, the circuit draws less than 1μA of current while it maintains the super capacitor or other storage element in its ready state.

With integrated input over-voltage and over-current protection, MT2615 provides a single chip solution for Super Capacitor energy storage system.

The MT2615 is externally programmable for minimum and maximum voltage of the storage element, such as super capacitor, minimum system voltage, and maximum charge currents. The internal DC/DC converter requires only a 2.2μH inductor.

MT2615 is available in QFN3x3_16L package.

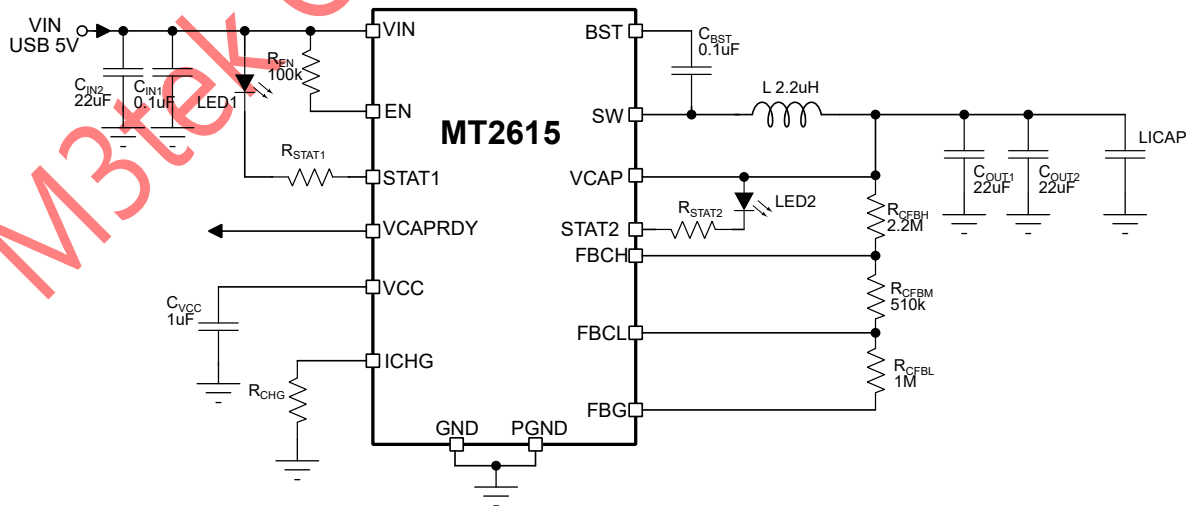
FEATURES

- 3.5V to 6V wide Input Voltage range
- 18V Vin surge capability
- Up to 5A charge current.
- Programmable Voltage Thresholds
- Programmable Super Cap Charge Current
- 1μA Ready Quiescent Current
- 4.5V VIN DPM function
- Small Solution Size
- QFN3x3_16L Package

APPLICATIONS

- Handheld Industrial Equipment
- Portable Computers
- Portable Devices with a Removable Battery
- Industrial Sensor and Actuators
- Aftermarket Automotive Tracking

TYPICAL APPLICATIONS



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