

## General Description

The ET8020 is a 1.2MHz constant frequency current mode PWM step-down converter. It is ideal for applications requiring very high current up to 2A while still achieving over 90% efficiency during peak load conditions. The ET8020 also can run at 100% duty cycle for low dropout operation, extending battery life in portable systems while light load operation provides very low output ripple for noise sensitive applications.

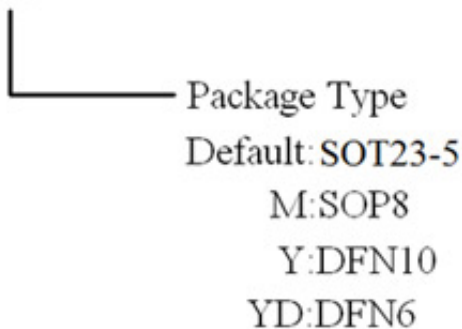
The ET8020 can supply up to 2A output load current from a 2.5V to 5.5V input voltage and the output voltage can be regulated as low as 0.6V. The high switching frequency minimizes the size of external components while keeping switching losses low. The internal slope compensation setting allows the device to operate with smaller inductor values to optimize size and provide efficient operation.

The ET8020 is available in a Pb-free, 3mm x 3mm DFN10 package, 2mm x 2mm DFN6 package, SOP8 package and SOT23-5 package and is rated over the -40°C to +85°C temperature range.

## Features

- Input Voltage Range: 2.5V to 5.5V
- Output Voltages from 0.6V to VIN
- 2A Output Current
- High Efficiency: Up to 95%
- 1.2MHz Constant Switching Frequency
- Allows Use of Ceramic Capacitors
- Current Mode Operation for Excellent Line and Load Transient Response
- Short-Circuit and Thermal Fault Protection
- Soft Start
- Low Dropout Operation: 100% Duty Cycle
- -40°C to +85°C Temperature
- Package : ET8020Y(DFN-10), ET8020M(SOP8), ET8020(SOT23-5), ET8020YD(DFN-6)

**ET8020X**

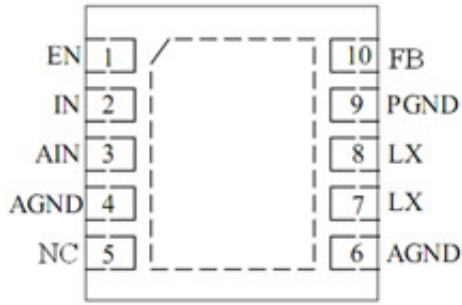


## Application

- Cellular Phones
- Digital Cameras
- DSP Core Supplies
- PDAs and Smart Phones
- Portable Instruments
- Pin Configuration

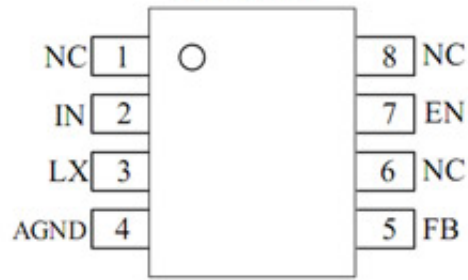
## Pin Configuration

TOP VIEW



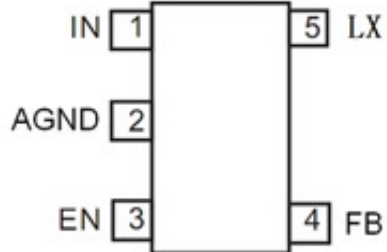
DFN10

TOP VIEW



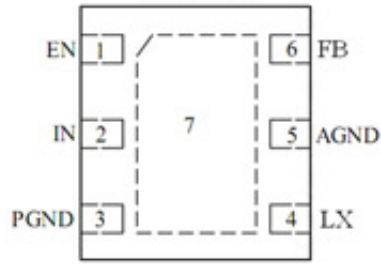
SOP8

TOP VIEW



SOT23-5

TOP VIEW



DFN6