

Low Voltage Startup, 1MHz 500mA Synchronous Step-Up DC-DC

FEATURES

- Low V_{in} Start-up Voltage down to 850mV Ideal for Single Alkaline Cell operations
- Capable of delivering 500mA output current at $V_{in}=3.0V$, $V_{out}=3.3V$
- 1MHz Switching Frequency allows small inductor and output cap
- Input boost-strapping allows using small or no input cap
- Low Noise PWM control
- Internally Compensated Current Mode Control
- Internal Synchronous Rectifier
- Logic Control Shutdown ($I_Q < 1\mu A$)
- Available in SOT23-5

DESCRIPTION

The ETA1019 is a step-up converter that provides a boosted output voltage from a low voltage source. Because of its proprietary design, it starts up at a very low input voltage down to 850mV, making it an ideal choice for single cell alkaline/NiMH battery operations.

A switching frequency of 1MHz minimizes solution footprint by allowing the use of tiny, low profile inductors and ceramic capacitors. The current mode PWM design is internally compensated, reducing external parts count.

ETA1019 is housed in a tiny SOT23-5 package.

APPLICATIONS

- Medical Instruments
- Bluetooth Headsets
- Flash-Based MP3 Players
- Wireless Mice
- One to Three Cell Battery Operated Devices

TYPICAL APPLICATION

