Two-Channel Power Management Unit
A 500mA Step-Up Converter and A 300mA LDO in SOP8

FEATURES

- Consists of A low Start-up Boost and a high PSRR LDO
- Low Vin Start-up Voltage down to 850mV Ideal for Single Alkaline Cell operations
- A Step-up capable of delivering 500mA output current at Vin=3.0V, V out=3.3V
- 1MHz Switching Frequency allows small inductor and output cap
- High PSRR LDO: 74dB
- LDO output current up to 300mA
- Logic Control Shutdown (IQ<1uA)
- Available in SOP-8

APPLICATIONS

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

DESCRIPTION

The ETA9040 is a tow-channel power management unit that consists of a step-up converter capable of delivering 500mA output current and a high PSRR 300mA LDO. The step-up converter can be bootstrapped from a low voltage source and generate output voltage up to 5V. It starts up at a very low input voltage down to 850mV, making it an ideal choice for single cell alkaline/NiMH battery operations. The input of the LDO can be connected to the output of the step-up converter. This configuration is therefore an effective way of generating an output that is higher or lower than the input voltage, in other words, a buck-boost converter. Since the output is step-down from a LDO, its ripple is much superior to that of traditional switching buck-boost converters.

A switching frequency of 1MHz minimizes solution footprint by allowing the use of tiny, low profile inductors and ceramic capacitors. Eliminating the need for Tantalum caps not only saves cost, it is also environmental friendly.
ETA9040 is housed in a SOP8 package.

TYPICAL APPLICATION