ACT8332

Product Brief, 18-Dec-07
Advanced Information–All Information Subject to Change

Three-Channel Integrated Power Management IC for Handheld Portable Equipment

FEATURES

- **Multiple Patents Pending**
- **Three Integrated Regulators**
  - **350mA PWM Step-Down DC/DC**
  - **360mA Low Noise LDO**
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- **Independent Enable/Disable Control**
- **Minimal External Components**
- **3x3mm, Thin-DFN (TDFN33-10) Package**
  - **Only 0.75mm Height**
  - **RoHS Compliant**

APPLICATIONS

- **Portable Devices and PDAs**
- **MP3/MP4 Players**
- **Wireless Handhelds**
- **GPS Receivers**

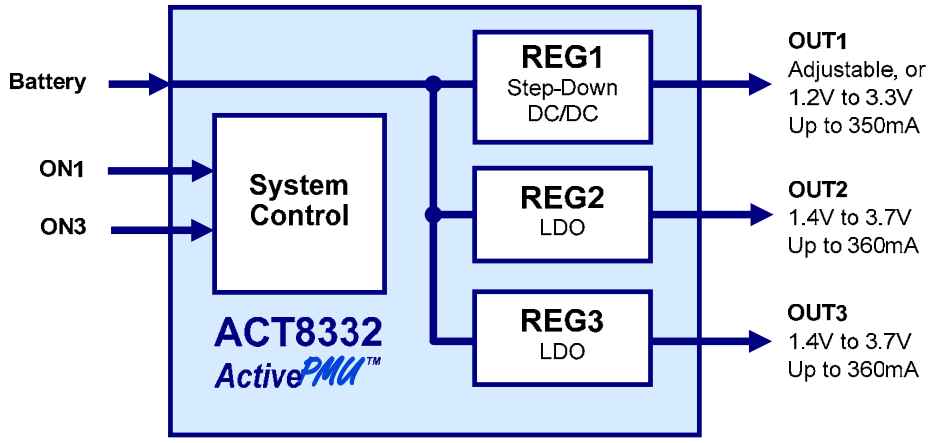
GENERAL DESCRIPTION

The patent-pending ACT8332 is a complete, cost-efficient *ActivePMU™* power management solution that is ideal for a wide range of portable handheld equipment. This device integrates a PWM step-down DC/DC converter and two low-noise, low-dropout linear regulators (LDOs) into a single, thin, space-saving package. This device is ideal for a wide range of portable handheld equipment that can benefit from the advantages of *ActivePMU™* technology but does not require a high level of integration.

REG1 is a fixed-frequency, current-mode PWM step-down DC/DC converter that is optimized for high efficiency and is capable of supplying up to 350mA. REG1's output is available in a variety of factory-preset output voltage, and an adjustable output voltage mode is also available. REG2 and REG3 are low noise LDOs that are available in a variety of fixed output voltage options and are each capable of supplying up to 360mA.

The ACT8332 is available in a tiny 3mm x 3mm 10-pin Thin-DFN package that is just 0.75mm thin.

SYSTEM BLOCK DIAGRAM



PRODUCT OPTIONS

Block	Function	Output Voltage①	Capability②
REG1	Step-Down DC/DC	Adjustable, 1.2V, 1.5V, 1.8V, 2.5V, 3.0V, or 3.3V	350mA
REG2	LDO	1.4V to 3.7V	360mA
REG3	LDO		360mA

①: Output voltage options detailed in this table represent standard voltage options, and are available for samples or production orders. Contact Active-Semi for more information regarding semi-custom output voltage combinations.

②: Contact factory for additional available products or custom requirements.

FUNCTIONAL BLOCK DIAGRAM