

ACT8890

Product Brief, 29-Nov-10

# **Advanced PMU for Portable Handheld Equipment**

#### **FEATURES**

- Three Step-Down DC/DC Converters
- Four Low-Dropout Linear Regulators
- I<sup>2</sup>C<sup>™</sup> Serial Interface
- Advanced Enable/Disable Sequencing Controller
- Minimal External Components
- Tiny 5×5mm TQFN55-32 Package
  - 0.75mm Package Height
  - Pb-Free and RoHS Compliant

### **APPLICATIONS**

- Personal Navigation Devices
- Portable Media Players
- Tablet Devices
- Smart Phones
- MIDs

#### **GENERAL DESCRIPTION**

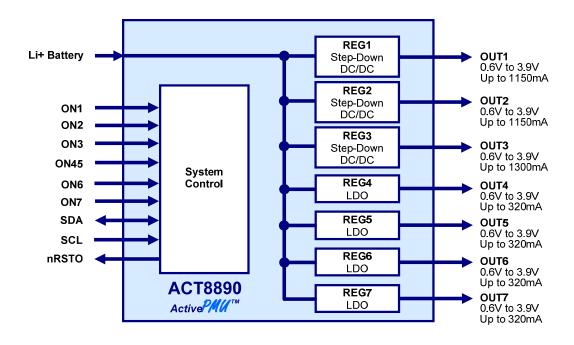
The ACT8890 is a complete, cost effective, highly-efficient *ActivePMU*<sup>TM</sup> power management solution, for portable handheld equipment such as Smartphones, Mobile Internet Devices (MID), eBooks and etc.

This device features three step-down DC/DC converters and four low-noise, low-dropout linear regulators.

The three DC/DC converters utilize a high-efficiency, fixed-frequency (2MHz), current-mode PWM control architecture that requires a minimum number of external components. Two DC/DCs are capable of supplying up to 1150mA of output current, while the third supports up to 1300mA. All four low-dropout linear regulators are high-performance, low-noise, regulators that supply up to 320mA each.

The ACT8890 is available in a compact, Pb-Free and RoHS-compliant TQFN55-32 package.

### TYPICAL APPLICATION DIAGRAM





## **PRODUCT OPTIONS**

Block	Function	Output Voltage	Capability
REG1	Step-Down DC/DC	Adjustable, or 0.6V to 3.9V	1150mA
REG2	Step-Down DC/DC		1150mA
REG3	Step-Down DC/DC		1300mA
REG4	LDO	0.6V to 3.9V	320mA
REG5	LDO		320mA
REG6	LDO		320mA
REG7	LDO		320mA

## **FUNCTIONAL BLOCK DIAGRAM**

