

## Advanced PMU for Portable Handheld Equipment

### FEATURES

- Three Step-Down DC/DC Converters
- Four Low-Dropout Linear Regulators
- Dedicated enable pins for the voltage regulators for flexible power sequencing.
- Integrated *ActivePath<sup>™</sup>* Charger
- I<sup>2</sup>C<sup>™</sup> Serial Interface
- Minimal External Components
- Tiny 5x5mm TQFN55-40 Package
  - 0.75mm Package Height
  - Pb-Free and RoHS Compliant

### APPLICATIONS

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

### GENERAL DESCRIPTION

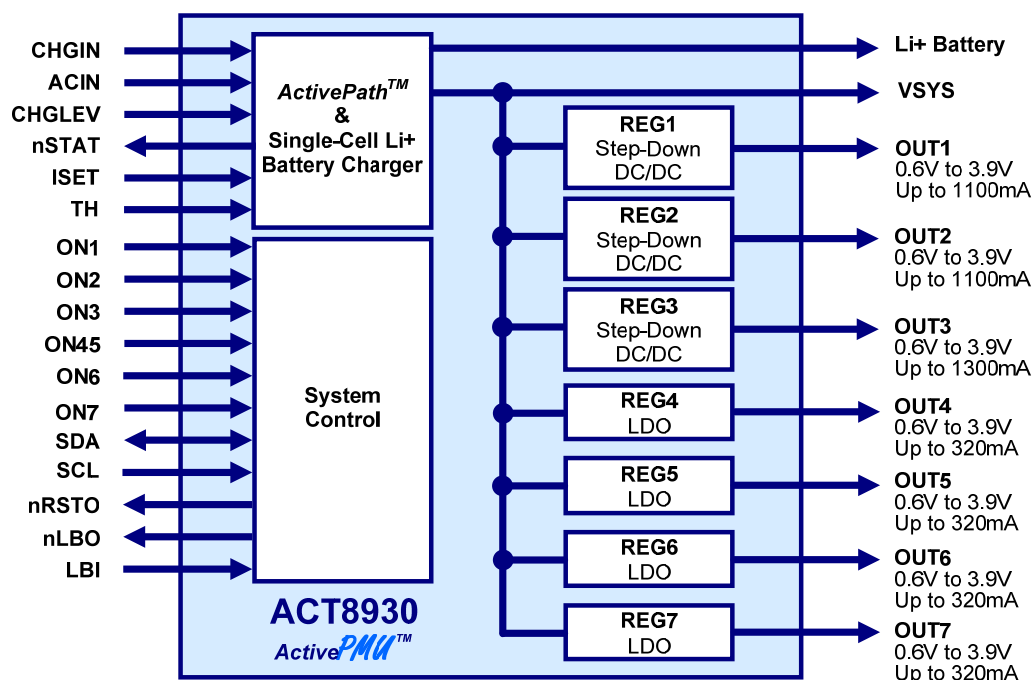
The ACT8930 is a complete, cost effective, highly-efficient *ActivePMU<sup>™</sup>* power management solution, for portable handheld equipment such as Smartphones, Mobile Internet Devices (MID), eBooks and etc.

This device features three step-down DC/DC converters and four low-noise, low-dropout linear regulators, along with a complete battery charging solution featuring the advanced *ActivePath<sup>™</sup>* system-power selection function.

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 1100mA 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 ACT8930 is available in a compact, Pb-Free and RoHS-compliant TQFN55-40 package.

### SYSTEM BLOCK DIAGRAM



## PRODUCT OPTIONS

Block	Function	Output Voltage	Capability
ActivePath	System Power Selection	4.6V	Up to 2A
CHGR	Battery Charger	4.2V	Programmable up to 1A
REG1	Step-Down DC/DC	Adjustable, or 0.6V to 3.9V	1100mA
REG2	Step-Down DC/DC		1100mA
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

