

# ACT8899

Product Brief, 05-Dec-11

#### Advanced PMU for Freescale i.MX53 Processor

### **FEATURES**

- Optimized for Freescale i.MX53 Processor
- 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 4×4mm TQFN44-32 Package
  - 0.75mm Package Height
  - Pb-Free and RoHS Compliant

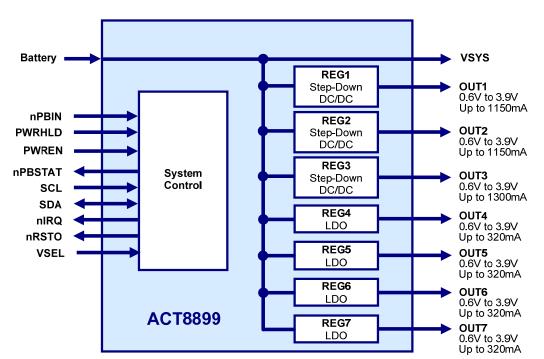
#### **GENERAL DESCRIPTION**

The ACT8899 is a complete, cost effective, highlyefficient *ActivePMU*<sup>TM</sup> power management solution, optimized for the unique power, voltagesequencing, and control requirements of the Freescale i.MX53 processor.

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

The three DC/DC converters utilize a highefficiency, 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 highperformance, low-noise, regulators that support up to 320mA.

The ACT8899 is available in a compact, Pb-Free and RoHS-compliant TQFN44-32 package.



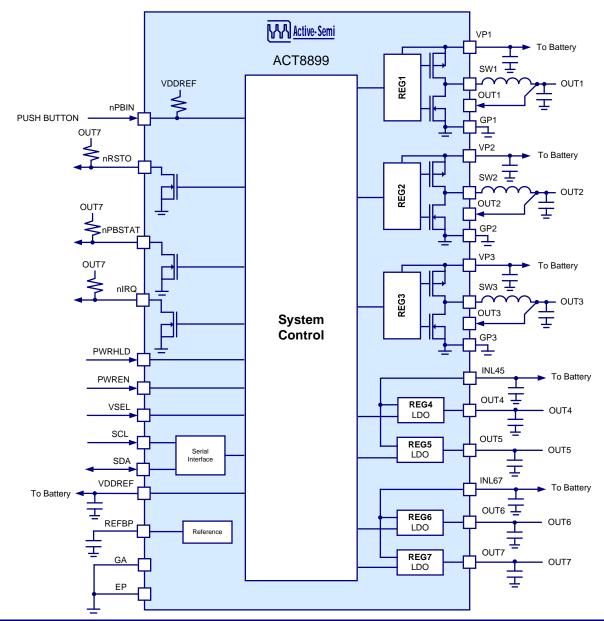
## SYSTEM BLOCK DIAGRAM



## **PRODUCT OPTIONS**

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

# FUNCTIONAL BLOCK DIAGRAM



Innovative Power<sup>™</sup>

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