

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
- I²C™ Serial Interface
- Advanced Enable/Disable Sequencing Controller
- Minimal External Components
- Tiny 4x4mm TQFN44-32 Package
 - 0.75mm Package Height
 - Pb-Free and RoHS Compliant

GENERAL DESCRIPTION

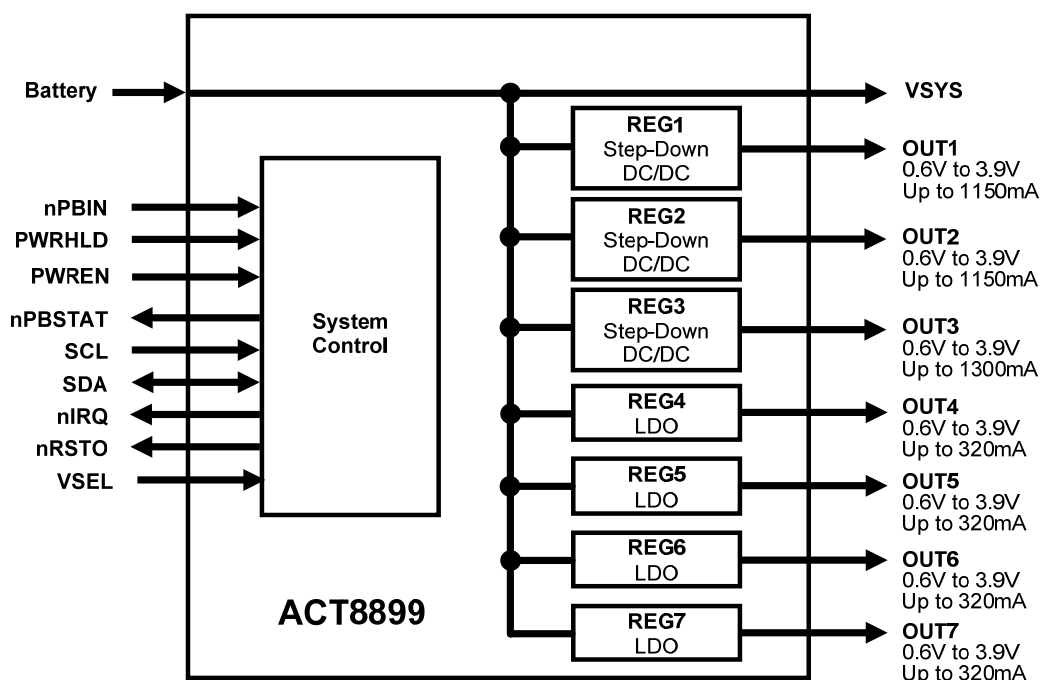
The ACT8899 is a complete, cost effective, highly-efficient *ActivePMU™* power management solution, optimized for the unique power, voltage-sequencing, and control requirements of the Freescale i.MX53 processor.

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

The three DC/DC converters utilize a 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 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

