

Advanced PMU for Samsung S5PC100, S5PC110 and S5PV210 Processors

FEATURES

- Optimized for Samsung S5PC100, S5PC110 and S5PV210 Processors
- Three Step-Down DC/DC Converters
- Four Low-Dropout Linear Regulators
- I²C[™] Serial Interface
- Advanced Enable/Disable Sequencing Controller
- Minimal External Components
- Tiny 5x5mm 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

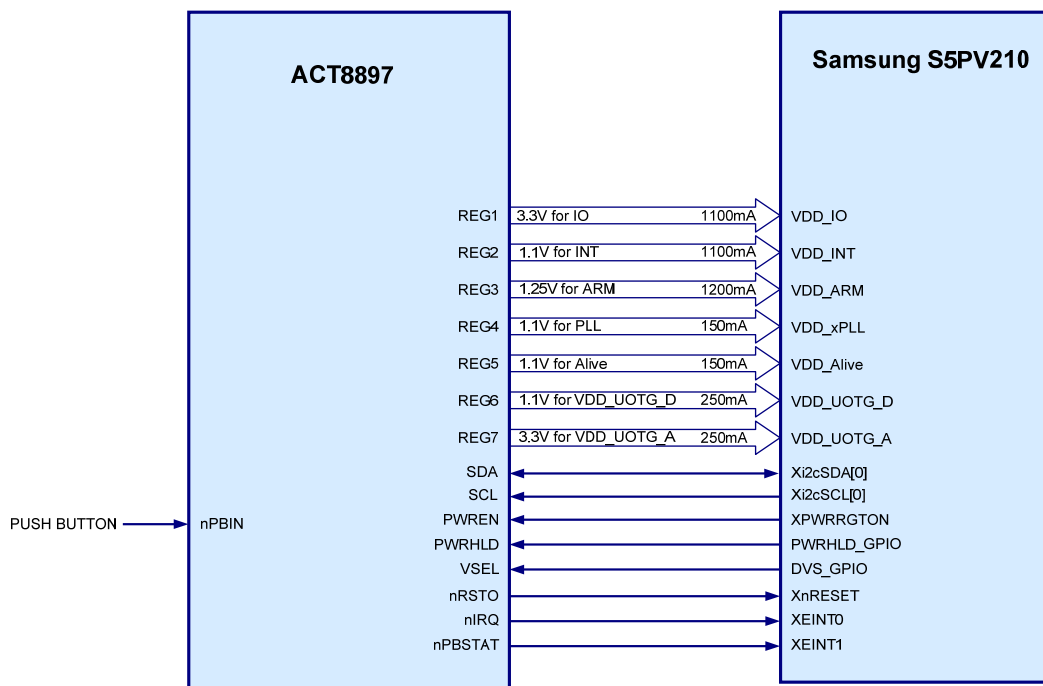
The ACT8897 is a complete, cost effective, highly-efficient *ActivePMU[™]* power management solution, optimized for the unique power, voltage-sequencing, and control requirements of the Samsung S5PC100, S5PC110 and S5PV210 processors.

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 1100mA of output current, while the third supports up to 1200mA. All four low-dropout linear regulators are high-performance, low-noise, regulators that supply up to 150mA, 150mA, 250mA, and 250mA, respectively.

The ACT8897 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	1100mA
REG2	Step-Down DC/DC		1100mA
REG3	Step-Down DC/DC		1200mA
REG4	LDO	0.6V to 3.9V	150mA
REG5	LDO		150mA
REG6	LDO		250mA
REG7	LDO		250mA

FUNCTIONAL BLOCK DIAGRAM

