

ACT8862

Product Brief, 05-Dec-11

Advanced PMU for Amlogic AML8726-M3

FEATURES

- Optimized for Amlogic AML8726-M3 Processor
- Three Step-Down DC/DC Converters
- Four Low-Dropout Linear Regulators
- I²C[™] 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 ACT8862 is a complete, cost effective, highlyefficient *ActivePMU*TM power management solution, optimized for the unique power, voltagesequencing, and control requirements of the Amlogic AML8726-M3 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 supply up to 80mA, 320mA, 320mA and 320mA, respectively.

The ACT8862 is available in a compact, Pb-Free and RoHS-compliant TQFN44-32 package.

Amlogic AML8726-M3 ACT8862 REG1 1.25V 1150mA VCC1.2V AO REG2 1.55V 1150mA VCC1.5V REG3 1300mA 3.0V REG4 3.0V 80mA VDDIO_AO REG5 3.0V 320mA AVDD3V 320mA AVDD2.5V 2.5V REG6 REG7 1.8V 320mA HDMI_VCC GPIOAO 5 SDA SCL GPIOAO 4 PUSH BUTTON nPBIN PWREN GPIOAO 2 PWRHLD GPIOAO_6 VSEL GPIOAO_3 nRSTO Resetn

TYPICAL APPLICATION DIAGRAM

nIRQ

nPBSTAT

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GPIOAO_8

RTC GPO



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	80mA
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

