

**ACT8895** 

Product Brief, 29-Nov-10

## Advanced PMU for SiRF Prima<sup>™</sup> and Atlas IV<sup>™</sup>

#### **FEATURES**

- Optimized for SiRF Prima<sup>™</sup>/Atlas IV<sup>™</sup> Processors
- 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 5×5mm 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**

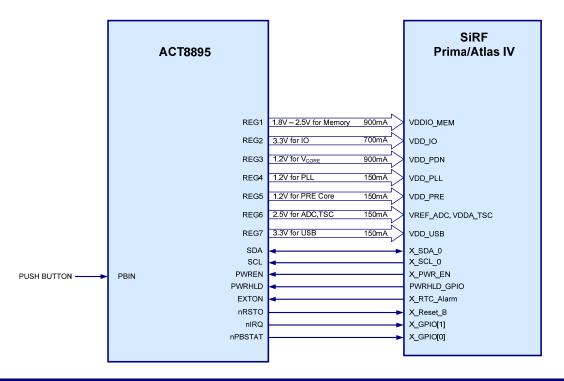
The ACT8895 is a complete, cost effective, highly-efficient *ActivePMU*<sup>TM</sup> power management solution, optimized for the unique power, voltage-sequencing, and control requirements of the SiRF Prima<sup>TM</sup> and Atlas IV<sup>TM</sup> processors.

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 900mA of output current, while the third supports up to 700mA. All four low-dropout linear regulators are high-performance, low-noise, regulators that each supply up to 150mA.

The ACT8895 is available in a compact, Pb-Free and RoHS-compliant TQFN55-32 package.

### TYPICAL APPLICATION DIAGRAM



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## **PRODUCT OPTIONS**

| Block | Function        | Output Voltage              | Capability |
|-------|-----------------|-----------------------------|------------|
| REG1  | Step-Down DC/DC | Adjustable, or 0.6V to 3.9V | 900mA      |
| REG2  | Step-Down DC/DC |                             | 700mA      |
| REG3  | Step-Down DC/DC |                             | 900mA      |
| REG4  | LDO             | 0.6V to 3.9V                | 150mA      |
| REG5  | LDO             |                             | 150mA      |
| REG6  | LDO             |                             | 150mA      |
| REG7  | LDO             |                             | 150mA      |

# **FUNCTIONAL BLOCK DIAGRAM**

