

AXP15060 PMIC For Multi-Core High-Performance System

1. FEATURES

- 6 DCDCs
 - DCDC1: 1.5~3.4V, IMAX=2A
 - DCDC2: 0.5~1.54V, IMAX=4A, DVM
 - DCDC3: 0.5~1.54V, IMAX=4A, DVM
 - DCDC4: 0.5~1.54V, IMAX=2.5A, DVM
 - DCDC5: 0.8~1.84V, IMAX=2.5A, DVM
 - DCDC6: 0.5~3.4V, IMAX=2.5A
- DCDC2 & DCDC3 can be set to dual-phase; DCDC4 & DCDC6 can be set to dual-phase.
- DVM(Dynamic Voltage scaling Management) ramp rate: 1step/15.625us and 1step/31.250us.
- 16 LDOs, 1 Switch
 - RTCLDO: 1.8V/3.3V, IMAX=100mA
 - ALDO1: 0.7~3.3V, IMAX=600mA
 - ALDO2: 0.7~3.3V, IMAX=300mA
 - ALDO3: 0.7~3.3V, IMAX=200mA
 - ALDO4: 0.7~3.3V, IMAX=300mA
 - ALDO5: 0.7~3.3V, IMAX=300mA
 - BLDO1: 0.7~3.3V, IMAX=300mA
 - BLDO2: 0.7~3.3V, IMAX=500mA
 - BLDO3: 0.7~3.3V, IMAX=300mA
 - BLDO4: 0.7~3.3V, IMAX=400mA
 - BLDO5: 0.7~3.3V, IMAX=600mA
 - CLDO1: 0.7~3.3V, IMAX=200mA
 - CLDO2: 0.7~3.3V, IMAX=200mA
 - CLDO3: 0.7~3.3V, IMAX=300mA
 - CLDO4: 0.7~4.2V, IMAX=200mA
 - LDO: V_{DDR}/2(source /sink), 0.7~1.4V, IMAX=200mA, input is DCDC5.
- Switch: 0.1ohm switch, input is DCDC1, IMAX=1A, soft turn on.

- TWSI(Two Wire Serial Interface) supporting standard mode (100KHz) and quick mode (400KHz), slave address is 0x36 or 0x37(7 bits) by customer
- RSB(Reduced Serial Bus) supporting for Allwinner platform, slave address is 0x03A2 or 0x04E6 by customer
- Internal temperature sensor and protection
- Monitor DCDCs output voltage, send interrupt and over temperature protection

- Customization for start up sequence and default voltage

2. APPLICATIONS

- VR, Tablet, Smartphone, Smart TV
- UMPC-like, Student Computer

3. DESCRIPTION

AXP15060 is a highly integrated power management IC targeting at applications that require multi-channel power conversion outputs. It provides an easy and flexible power management solution for multi-core processors to meet the complex and accurate requirements of power control.

AXP15060 supports 23 channel power outputs (including 6 channel DCDC). To ensure the security and stability of the power system, AXP15060 integrates protection circuits such as over-voltage protection (OVP), under-voltage protection (UVP) and over-temperature protection (OTP).

AXP15060 supports TWSI and RSB for system to dynamically adjust output voltages, enable power outputs and configure interrupt condition.

Device Information

Part Number	Package	Body Size
AXP15060	QFN-52	6mm * 6mm

Simplified Application Diagram

