
Highly integrated PMIC with 4 DC/DC Buck Converters and 7 LDOs

FEATURES

- 3V~5.5V Input Operating Range
- 15uA Off-Mode Current
- Support TWSI (Two Wire Serial Interface)
- **4 Buck DC/DC Step Down Converters**
 - DC-DC1: PFM/PWM mode, scaling in 1.7-3.5V, 50mV/step, Output current 1A
 - DC-DC2: PFM/PWM mode, scaling in 0.7-2.275V, 25mV/step, Output current 2A, DVM
 - DC-DC3: PFM/PWM mode, scaling in 1.7-3.5V, 50mV/step, Output current 1.2A
 - DC-DC4: PFM/PWM mode, scaling in 1.7-3.5V, 25mV/step, Output current 1.2A
- **7 LDOs**
 - LDO0: Output current 1.5A, Internal 500/900/1500mA current limited option
 - RTCLDO: on for RTC31, output 3.1V, One for RTC13, Output 1.3/1.8V
 - ALDO1: Analog LDO, scaling in 1.2-3.3V, 300mA
 - ALDO2: Analog LDO, scaling in 1.2-3.3V, 300mA
 - DLDO1: Digital LDO or Switch, scaling in 0.7-3.5V, 100mV/step, 300mA
 - DLDO2: Digital LDO or Switch, scaling in 0.7-3.5V, 100mV/step, 300mA
 - GPIOLD0: low noise LDO, scaling in 0.7-3.5V, 100mV/step, 30mA
- **System Management**
 - Support software shutdown or hardware power Off
 - External wake-up source
 - Output monitor
 - PWROK signal for reset or power off
 - OVP/UVP
 - Programmable power on voltage or sequence
- **Host Interface**
 - Programmable Interrupt and wake-up

management

- Internal Timer
- 40 pin, 5x5mm² QFN Package

APPLICATIONS

- Mobile Internet Device, xPad
- Digital Photo Frame, Portable DVD Player, Set-top Box Entertaining and Education Machine
- Network devices
- Safety monitor
- Application Processor Systems

DESCRIPTION

AXP152 is a highly integrated power management IC that provides easy and flexible power solution for applications that require multi-rail outputs. It has fully met the increasingly complex needs of application processors on accurate power control.

AXP152 integrates four step-down converters (Buck DC-DC converter), seven low dropout regulators. It also features protection circuitry such as over/under-voltage protection (OVP/UVP), over-temperature protection, and over-current protection (OCP) to guarantee the power system security and stability.

In addition, AXP152 includes a Two Wire Serial Interface (TWSI), through which the application processor is capable of enabling/disabling some power outputs, programming the voltage to decrease the power consumption, and provides customers with unprecedented experience of power management

AXP152 is available in 5mm x 5mm 40-pin QFN package, and the package is Pb free.

TYPICAL APPLICATION DIAGRAM

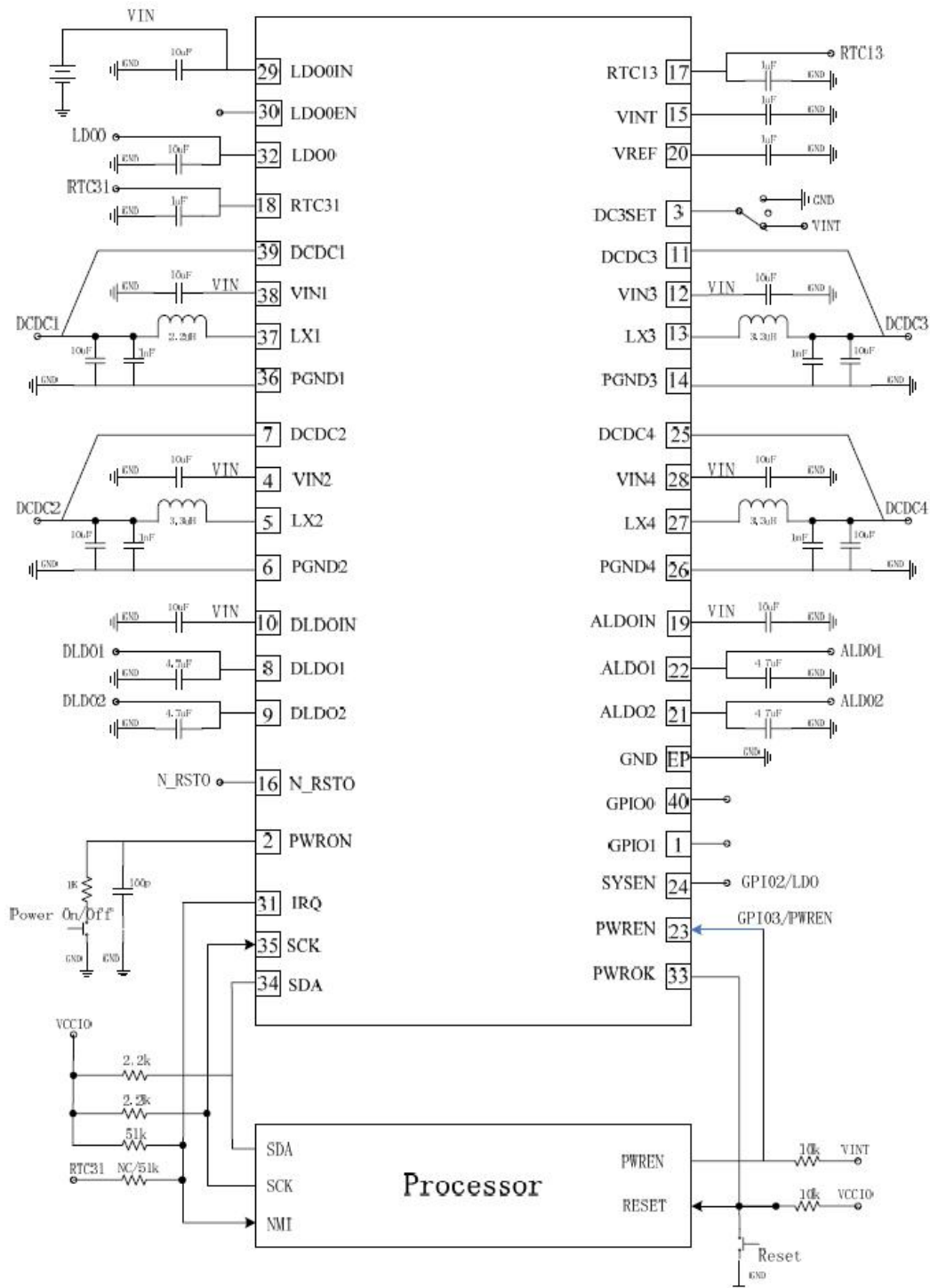


Figure 1.1 Typical Application Circuit without Battery

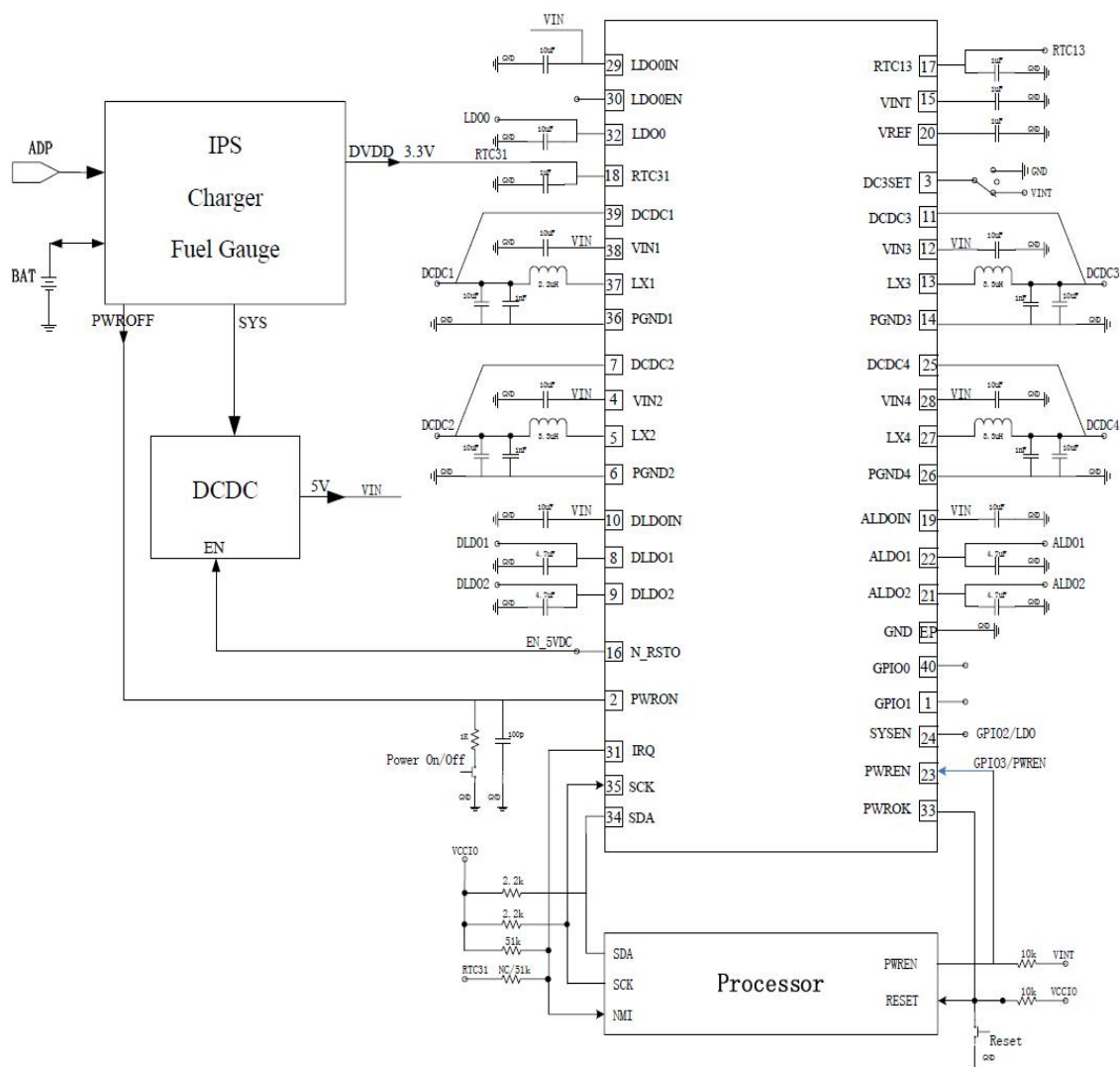


Figure 1.2 Typical Application Circuit with Battery System

PIN CONFIGURATION

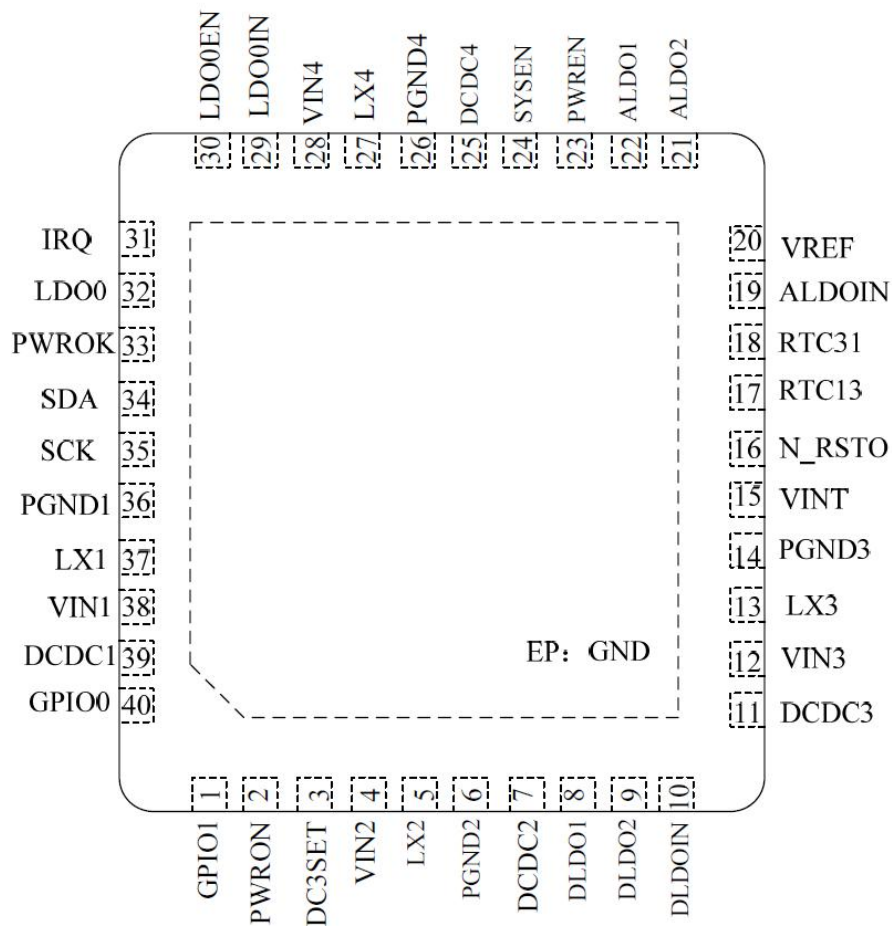


Figure 2. AXP152 Pin Configuration

DECLARATION

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