
Highly integrated PMIC customized for Intel SoC with multi power rails, power path management, 1-cell battery charger and fuel gauge

FEATURES

- 3.5V~7V Input Operating Range and Support 1-Cell Battery
- 40uA Off-State Battery Discharge Current
- IPS (Intelligent Power Select) with external PMOS for battery path
- Support TWSI (Two Wire Serial Interface)
- 3MHz Li battery PWM Charger with Internal NMOS-NMOS Pair, Up to 2.8A Charge Current
- 6-ch Bucks up to 6A and 14-ch LDOs up to 0.5A Protection
 - Input Over-Voltage Protection Voltage
 - Short Protect for PMOS in BAT Path
 - Battery Thermistor Sense hot/cold charge suspend
 - Programmable Safety Timer for Charger
 - Charge Over-Current Protection
 - Die thermal balance for charger
 - Faulty condition shutdown
- Status Indication
 - Adapter Present
 - Charger Operation Status
 - Battery Detection
- 76 pin , 9×9mm² QFN Package

APPLICATIONS

- Tablet PC, DVR, Desktop, Dongle
- UMPC-like, Student Computer

DESCRIPTION

AXP288 is a highly integrated PMIC targeting at 1-cell Li-battery (Li-ion or Li-polymer) applications, customized for Intel Cherry Trail-T3 SoC. It provides an easy and flexible battery management solution for large current charge and system power supply.

AXP288 comes with a 5v input Charger that supports up to 2.8A charge current. To ensure the security and stability of the power system, AXP288 provides multiple channels 12-bit ADC for voltage/current/temperature monitor and integrates protection circuits such as OVP, UVP, OTP, and OCP. Moreover, AXP288 features a unique E-Gauge™ (Fuel Gauge) system, making power gauge easy and exact.

In addition, AXP288 embraces a fast interface for the system to dynamically adjust charge current and power rail output voltage so that the battery charge time could be saved and battery life can be extended to the largest extent.

Besides, AXP288 features an IPS™ (Intelligent Power Select) circuit to transparently select power path among adapter and Li-battery to system load.

AXP288 is available in 9mm x 9mm 76-pin QFN package, and the package is Pb free.

TYPICAL APPLICATION DIAGRAM

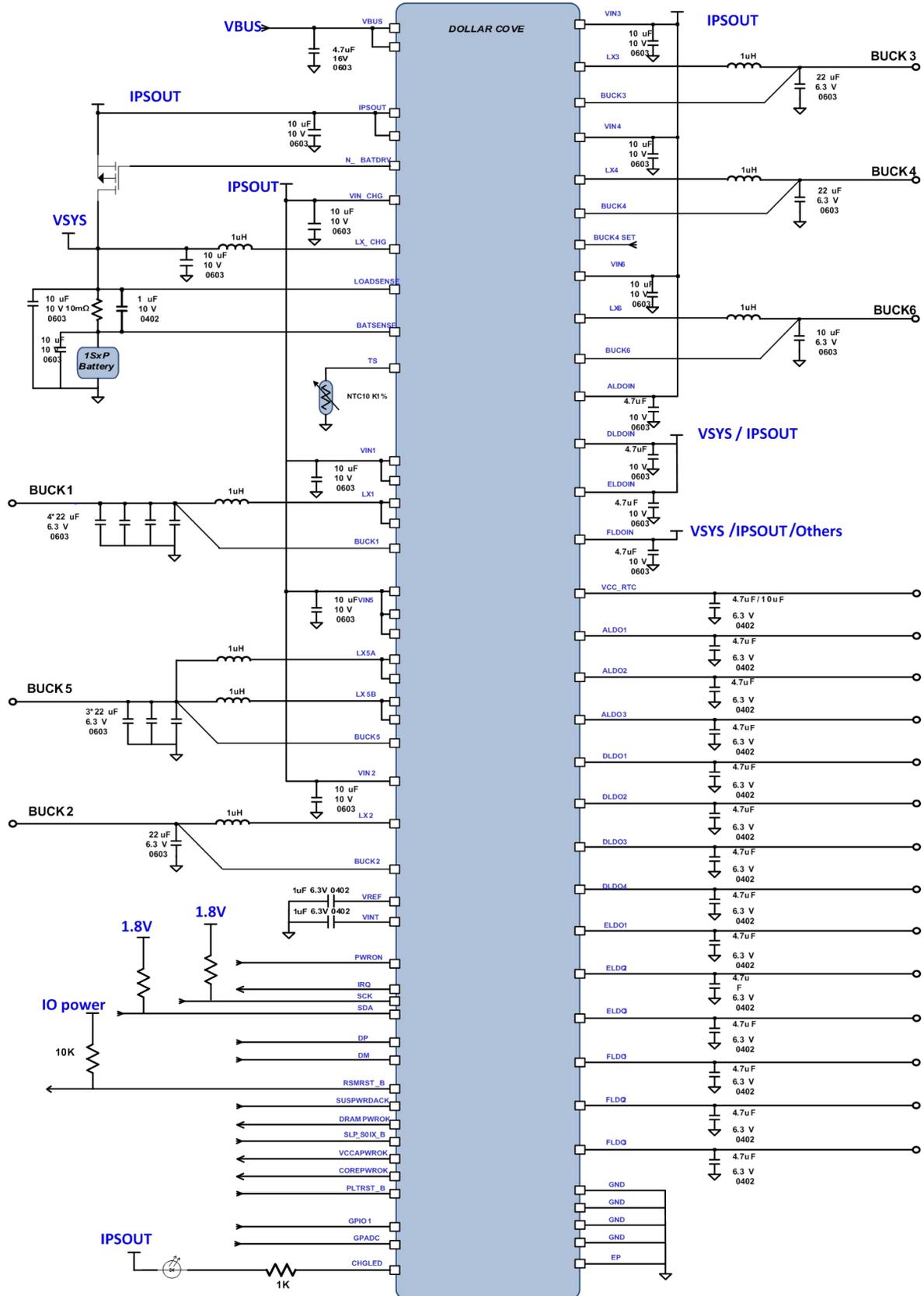


Figure 1. Typical Application Circuit

PIN CONFIGURATION

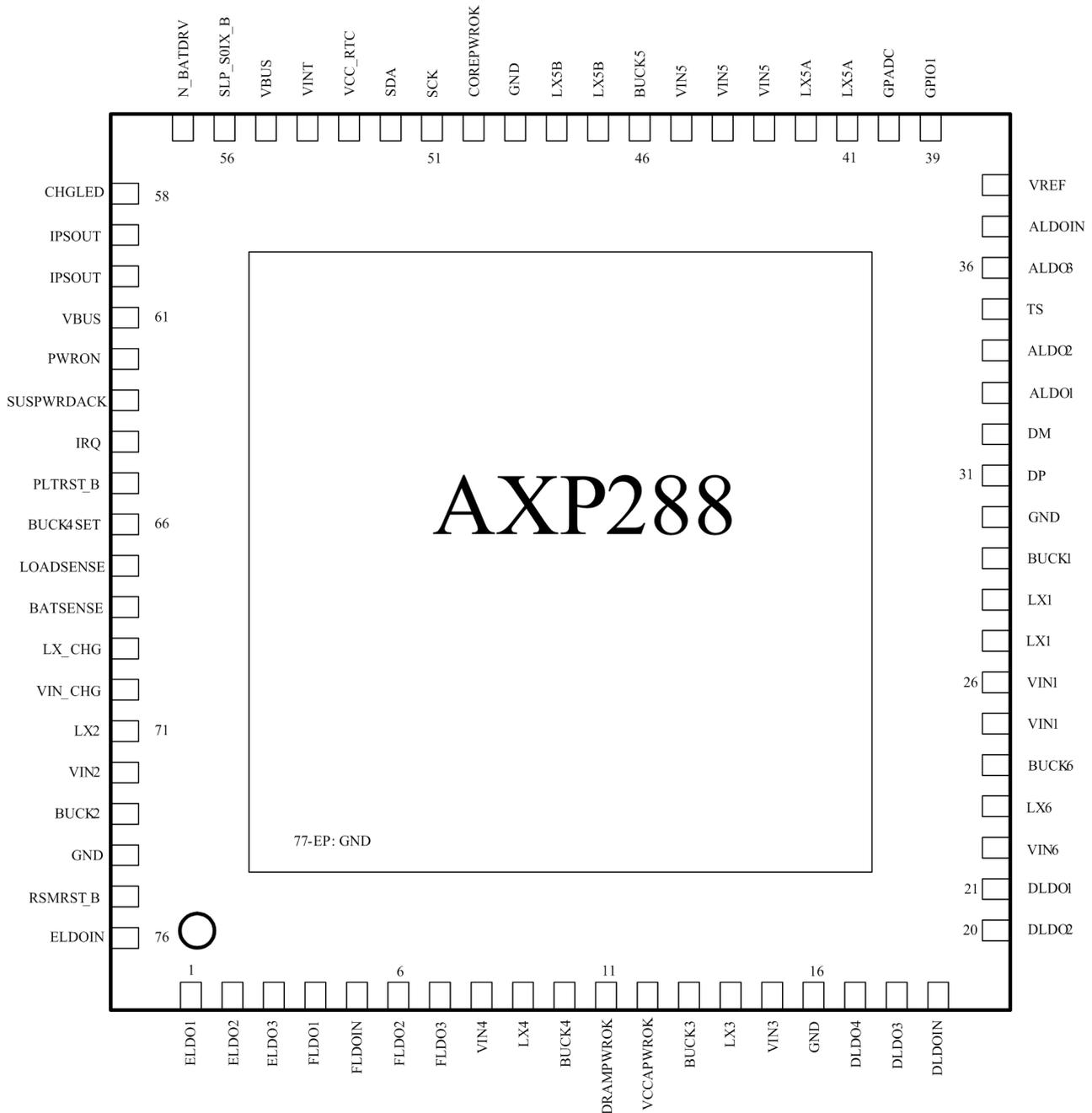


Figure 2. AXP288 Pin Configuration

DECLARATION

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