XinaBox Datasheet PB02 - Coin Battery Power Pack

Contents

Overview

This xCHIP module houses a single CR2032 coin cell to supply power to other connected xCHIPS.

The PB02 features an AAT1217 which is a high efficiency, synchronous, fixed frequency, step-up converter designed for battery-powered applications. The high 1.2 MHz switching frequency and completely integrated control circuitry maintains excellent regulation, ripple, and transient response throughout the full load range.

Light load mode operation and low quiescent current allow the AAT1217 to maintain high efficiency performance for light load conditions. With a 1.2A peak inductor current limit, the AAT1217 is capable of delivering 400mA from a single CR2032 coin cell.

Product Highlights

- 400 mA Output Current
- Over-Current Protection
- High Efficiency: Up to 93% Efficiency
- 1.2 MHz Fixed Switching Frequency
- 1.2 A Current Limit
- Light Load Mode Operation

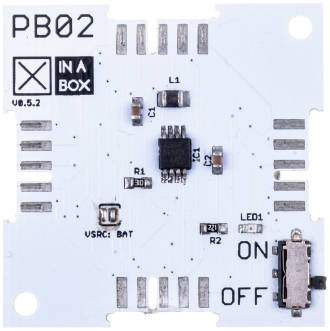
Applications

- Remote Sensing
- IoT Applications

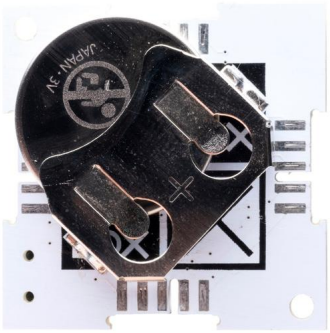
Specifications

- 400 mA Output from single CR2032 coin cell
- High Efficiency: Up to 93% Efficiency
- Internal Synchronous Rectifier
- Fixed Frequency Pulse Width Modulation (PWM) Current Mode Control Scheme with Internal Compensation
- 1.2 MHz Fixed Switching Frequency
- 1.2 A Current Limit
- Light Load Mode Operation
- Over-Current Protection
- EMI Reduction Anti-Ringing Control Circuitry
- Low Shutdown Current: <1.0 µA
- -40°C to +85°C Ambient Temperature Range

PB02 - Coin Battery Power Pack (AAT1217)



Front



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☒CHIP	
Main Category	Power
Sub Category	Battery
Introduced	1 January 2017
Current version	1.0.0
Current version date	1 January 2017
Dimensions	
Size	2x2U (32x32mm)
Weight	4.2 g (excluding battery)
Height	6.5/3.3/3.7 mm
V_{out} Usage	3.3 V
Main Chip Set	
Main Chip	AAT1217