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## Overview

This xCHIP module houses 2 AA batteries to supply power to other connected xCHIP.

The PB01 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 dual AA cells batteries.

### 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 Dual AA 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  $\mu$ A
- -40°C to +85°C Ambient Temperature Range

## External Links

### Datasheet

- AAT1217 From Skyworks Solutions Inc. ([http://www.skyworksinc.com/uploads/documents/AAT1217\\_202050B.pdf](http://www.skyworksinc.com/uploads/documents/AAT1217_202050B.pdf))

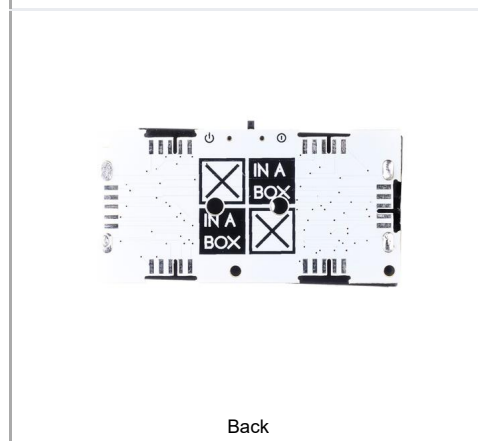
### Shop

- Buy PB01 (<https://xinabox.cc/products/PB01>)

## PB01 - Dual AA Battery Power Pack (AAT1217)



Front



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CHIP

<b>Main Category</b>	Power
<b>Sub Category</b>	Battery
<b>Introduced</b>	1 January 2017
<b>Current version</b>	1.0.0
<b>Current version date</b>	1 January 2017
<b>Dimensions</b>	
<b>Size</b>	2x4U (32x64mm)
<b>Weight</b>	13.8 g (excluding batteries)
<b>Height</b>	21.6/17.2/3.3 mm
<b>V<sub>out</sub> Usage</b>	3.3 V
<b>Main Chip Set</b>	
<b>Main Chip</b>	AAT1217