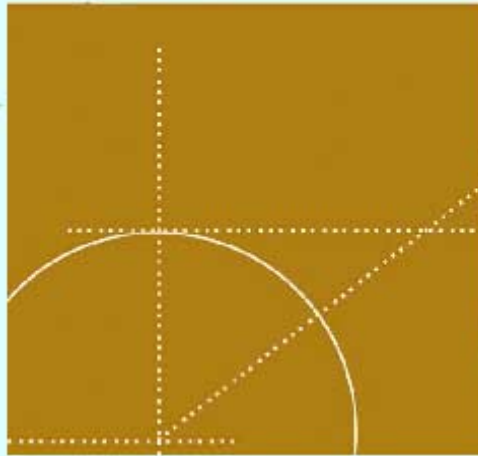




Cirrocomm, the Future is Wireless



REV 1.0

Battery Backup Functions and Applications

This document describes the battery backup functions and applications of enabled modules and devices.

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CIRCOMM

AN070RTC001-010

Note.

VBATT

1. The purpose of the VBATT pin is to keep the RTC time current while the VCC is off. This enables the output of UTC data, regardless of the fix state of the GPS module. With the UTC output, the GPS module would be able to obtain a valid fix in a shorter period of time.
2. VBATT input specification
 Operation voltage range: 2.5V ~5.3V
 Current consumption (Typical): At 5.0V 1.8uA. / At 3.5V 1.0uA. / At 2.5V 0.7uA.
3. Battery selection varies depending on customer's need.
 - A. Rechargeable Battery:
 1. Be certain the voltage specification matches that of the V-IN.
 2. R is the limiter for the battery charging current. This needs to comply with the limit set by the rechargeable battery.
 3. D is the backward current prevention diode.
 4. The longevity of the time for RTC keeping is positively related to the level of the battery charge.
 - B. Rechargeable super capacitor.
 1. Be certain the voltage specification matches that of the V-IN.
 2. R is the limiter for the charging current. This needs to comply with the limit set by the super capacitor.
 3. D is the backward current prevention diode.
 4. The longevity of the time for RTC keeping is positively related to the level of the battery charge.
 - C. Mercury Battery.
 1. Disregard R and D if mercury battery is used.
 2. The longevity of the time for RTC keeping is positively related to the level of the Ampere Hour rating of the battery.
 - D. Always-On power source
 1. Disregard "R" and "D" and connect directly to V-IN.
 2. Disregard "BT"

