

regulator's dropout voltage. These transistors each have about 1.1Ω on-resistance. To prevent battery current from bleeding through the OUT2 transistor's intrinsic body diode when operating from the wall adapter, the wall-adapter voltage should be equal to or greater than the maximum battery voltage.

If you turn the regulators on and off with the shutdown inputs SHDN1 and SHDN2, choose the MAX8865 rather than the MAX8866, whose auto-discharge feature will attempt to discharge the battery. As shown, the MAX8865S with a 5V wall adapter and 3-cell battery provides up to 100mA at 2.84V.

A similar idea appeared in the 2/3/97 issue of Electronic Design.

Dual Mode is a trademark of Maxim Integrated Products.

More Information

MAX8865S: [QuickView Sheet](#) -- [Full \(PDF\) Data Sheet](#) -- [Free Samples](#)