

Negative Charge Pump Achieves High Efficiency for Driving Up to Six White/RGB LEDs



Maxim Integrated Products' MAX8647 a negative charge pump provides what is said to be the industry's highest efficiency in powering LCD display backlights. The negative charge-pump architecture eliminates in-line resistance from battery to LEDs and delays mode switching from 1x to 1.5x during battery discharge. A proprietary, adaptive-mode switching technology controls each of the six white or RGB LEDs independently. As a result, the MAX8647 achieves a 12 percent boost in efficiency, according to the company, even with large LED forward-voltage (V_f) mismatch. Typical applications are cell phones, smartphones, and portable media players where every milliamp-hour (mAh) of battery life is important. Prices start at \$1.95 for the MAX8647, and \$1.70 for the MAX8648 (2,500-up).

Maxim Integrated Products

800-998-8800, www.maxim-ic.com [1]

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