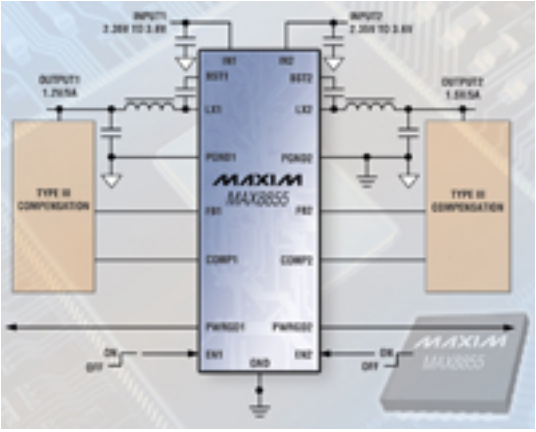
Dual, 3A/5A Step-Down Regulators Integrate Low-On-Resistance Switches



Maxim Integrated Products' MAX8833/MAX8855 is said to be the industry's first step-down regulators to operate from 3.3V or 2.5V inputs, provide dual 3A or dual 5A outputs (respectively), and integrate switches for space savings.The use of internal MOSFETs enables these devices to operate efficiently from low input voltages. With low on-resistances of 49 milliohms and 37 milliohms, respectively, the regulators are capable of providing efficiencies in the mid-90 percent range while switching above 1 MHz. These products are suited for DDR power supplies, processors that require more than one rail, and high-end enterprise equipment. Each device provides a programmable frequency up to 2 MHz and an external frequency-synchronization input. An external reference input enables the implementation of tracking applications, such as DDR power supplies, by allowing one channel to power Vddq while the tracking channel powers Vtt. Programmable soft-start for each channel supports a wide range of outputs. Additionally, a separate power-good signal and enable input for each output ensure simple sequencing. The MAX8833/MAX8855 also combine a high-bandwidth, voltage-error amplifier with high-frequency switching to allow the use of ceramic capacitors that have minimal values. The MAX8833/MAX8855 are available in a 5mm x 5mm, 32-pin TQFN package to allow interchangeability as current requirements change. Pricing starts at $2.59 for the MAX8833 and $3.41 for the MAX8855 (10,000-up).

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

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[1] http://www.maxim-ic.com/