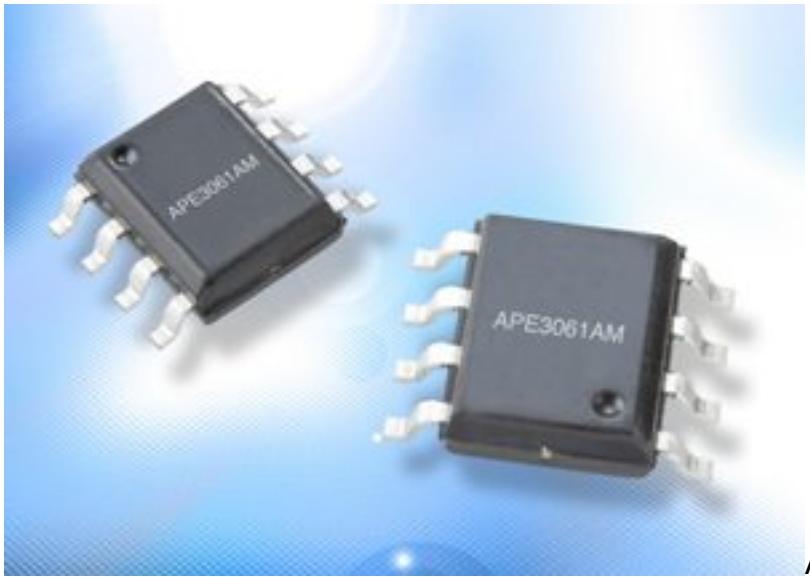
Uprated PWM Controller Offers Size and Cost Benefits



Advanced Power Electronics Corp. (USA), a leading Taiwanese manufacturer of MOS power semiconductors for DC-DC power conversion applications, has updated two of its most popular PWM controllers to provide customers with space saving and more cost effective devices without sacrificing performance and reliability.

The well-accepted APE3061 PWM controller is now available in a small 8-lead DFN package, reducing package size down from 5x6mm (SO-8) to 3x3 mm, without any negative impacts on power handling capability. The new APE3061GN3-HF-3 component supports input voltages from 3V up to 24V and is designed to drive an external N-channel MOSFET. The output voltage is dependent on the external N-MOSFET and is programmable using an internal reference voltage of 1.0V and external resistors connected as a voltage divider. The controller benefits from built-in enable and thermal shutdown functions. Switching frequency is fixed, around 500kHz, allowing for easy filtering and low noise. The size of the external components can be reduced as well. A soft-start time, preventing overshoot at start-up, can be programmed by an outside capacitor.

Using copper wire for internal wire bonding, the APE3061M-HF-3 PWM controller has been updated to the new APE3061AM-HF-3 version. This offers customers a more cost effective solution without impacting performance and reliability. The new, lower cost version uses the same SO-8 Pb-free package as existing APE3061M-HF-3 controllers, which will stay in production for customers wanting to avoid requalification costs. The new APE3061AM-HF-3 device supports input voltages from 3V up to 24V, with an oscillation frequency of 500kHz and an enable/shutdown function. The pulse width varies in a range from 0 to 85%, according to the load current.

Advanced Power Electronics Corp.

www.a-powerusa.com [1]

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