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NJR Corporation Introduces New Precision DC-to-DC Converter

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PRECISE DC-DC CONVERTER TIGHTENS REGULATION

Providing a more stable output voltage than previous dc-dc controllers, the NJM2360A can improve the efficiency of switching power supplies. With the ability to operate at switching frequencies from 0.1 Hz to 100 kHz, the controller contains all of the primary functions required for dc-dc conversion with input voltages ranging from 2.5 to 40 V. The switching controller can convert that input to any value from -1.2 to -40-V, or 1.2 to +40-V.

Key to the enhanced supply performance is an improved on-chip voltage reference that provides a 2.5-V level ±2%. Previous regulators employed references that delivered only 1.25 V ±5.6%.

The less precise reference required more stringent post regulation and reduced the power supply's efficiency. The NJM2360A controller can be used to implement step-up and step-down dc-dc converters and can sustain an output switch current of 1.5 A, which makes output pass transistors unnecessary in most moderate power-supply applications.

When idling, the converter consumes about 250 mW, while when under load, the power consumption increases to about 700 mW for an 8-lead miniDIP housed version; 600 mW for the 8-lead small-outline-housed option. The chip can operate over the -40 to +85 °C industrial temperature range.

In lots of 100 units, the NJM2360A sells for $1.25 each. Samples are available from stock.

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CIRCLE 977

■ *DAVE BURSKY*