

ON Semiconductor Expands Computing Power Management Portfolio to Include Power Solutions for Notebook Applications

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A leading global supplier of innovative power management solutions, ON Semiconductor (Nasdaq: ONNN) today announced the expansion of its power computing portfolio with the introduction of the NCP5214. This new DDR memory power controllers integrate both VDDQ and VTT termination voltages to deliver superior system efficiency and extend battery life for notebook applications.

The integration of two voltage outputs in the new NCP5214 works to simplify overall motherboard design and save valuable space in compact portable computers. The VDDQ voltage is supplied by a high efficiency, synchronous, pulse width modulation (PWM) controller that drives two external N-channel MOSFETs. The VTT termination voltage is supplied by a linear regulator which is set to track one half of the VDDQ voltage. The VTT regulator is specified at a robust source/sink capability of 2.4 amps (A) peak.

While competitive devices offer a light load efficiency of 87 percent below 1 A, the NCP5214 performs at greater than 92 percent efficiency. The excellent light-load efficiency of these devices - paired with a shutdown current of less than 5 microamps - helps extend battery life critical in portable computing. Protection features that include VDDQ-output over-voltage protection, input under-voltage protection, thermal shutdown, and soft start circuitry and short circuit protection for both regulators all help to create a robust solution.

“The NCP5214 is the first of several power products for notebook computing that ON Semiconductor plans to introduce,” said Michael Stapleton, ON Semiconductor Director of Analog Computing Products. “All the notebook solutions under development address needs identified by computer manufacturing customers and draw upon ON Semiconductor’s proven technical expertise in the areas of desktop CPU, DDR memory, and system-wide power management, advanced integration platforms and product packaging.”

The NCP5214 will be offered in a DFN-22 leadless package and priced at \$1.34 per unit in 1,000-unit quantities.

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