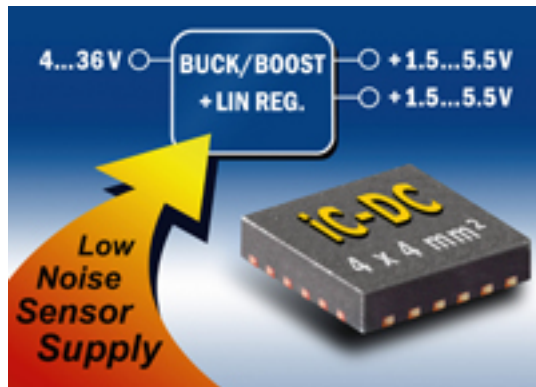


DC-DC Converter Generates Two Stabilized Output Voltages for Intelligent Sensor Systems



From one chip and a variable input voltage of 4 V to 36 V, ic Haus' ic-DC generates two stabilized output voltages that can be adjusted between 1.5 V and 5.5 V for the compact voltage supply of industrial sensors and small subsystems. The combination of switching converter plus two back-end linear regulators minimizes the amount of space required for the power pack and achieves a good residual ripple of typically 10 mVpp – desirable for the supply of precision analog circuits. The buck/boost switching converter technology makes any distinction between devices supplied with 5 V or 10–30V unnecessary, according to the company, as a steady +5 V supply is provided for sensor electronics, for example. The two independently adjustable output voltages Vcc1 and Vcc2 can provide a total of 300 mA and supply digital and analog circuit components separately. The switching converter typically operates at 3 MHz, thus reducing the size of the external coil to approx. 2 mm x 2 mm and that of the external back-up capacitors to a few microfarads while adhering to the EMC requirement for industrial sensors.

ic Haus

630-245-1000, www.ichaus.com

[1]

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