



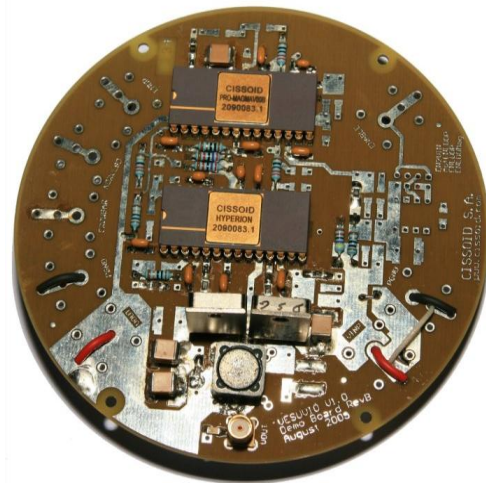
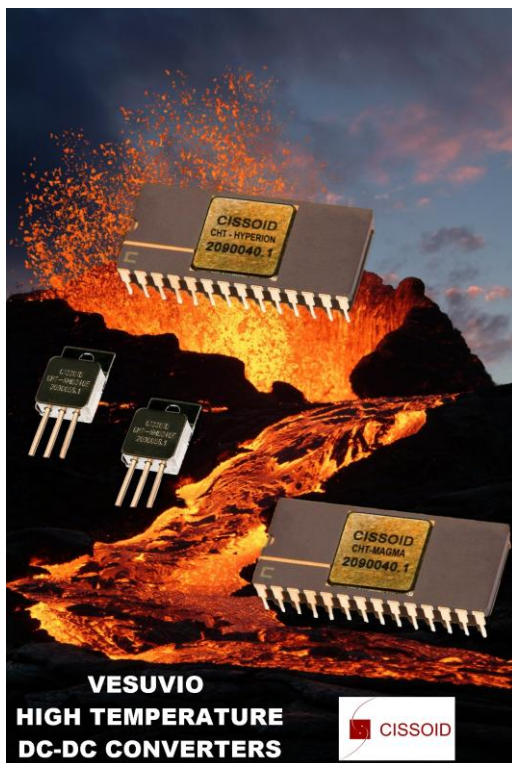
The Leader in High Temperature Semiconductor Solutions

PRESS RELEASE

CISSOID Introduces VESUVIO, The World's First 225°C DC-DC Converter Platform for High Reliability & Electric Vehicle Applications

Mont-Saint-Guibert, Belgium – October, 2009 - CISSOID, a leader in high temperature semiconductor solutions, has unveiled their unique VESUVIO technology, which implements Buck (Step-Down) DC-DC Converters operating reliably and with high efficiency from -55°C to +225°C.

Based on CISSOID's two-chip set MAGMA-HYPERION and power transistors, the VESUVIO technology includes a reference design and a demonstration board.



VESUVIO DEMONSTRATION BOARD

VESUVIO can step input voltages from 6 to 30V down to an output voltage adjustable from 1.2V up to 90% of the input. VESUVIO Buck Converters demonstrate efficiencies in excess of 90% above 200°C. When configured as Synchronous DC-DC Converter, it operates in Continuous Current Mode (CCM) at a constant frequency, making ripple filtering easier for demanding sensor applications. VESUVIO technology uses the soft-start capability of MAGMA PWM controller to enable a smooth start-up. The input voltage feed forward compensation makes it very robust to input voltage transient variations and provides a DC line regulation better than $\pm 1.5\text{mV/V}$. The demonstration board is adjusted to a 5V output and is able to deliver up to 10W at 225°C. The board is rated to 175°C but can be tested higher for short periods of time. It is ideally shaped for test purposes with thermo-streamers.

Besides this example, VESUVIO technology can be used to build DC-DC buck converters with output voltages up to 27V and delivering up to 50W. The reference design and its bill-of-material can be mapped onto high temperature substrates and assembled in high reliability modules.

Tony Denayer, CEO at CISSOID, said “Our VOLCANO product family of high temperature DC-DC converters is expanding: after ETNA, announced earlier this year, VESUVIO is the second generation of converters bringing high efficiency and reliability up to 225°C. With VESUVIO, CISSOID not only brings solutions to demanding applications such as oil & gas and aeronautics. We also open up new possibilities for the battery chargers of electric vehicles. Fast chargers based on CISSOID technology do not require cooling which is a major improvement in compactness, reliability and complexity of the systems. This provides significant reduction of the overall cost and weight.” CISSOID will keep introducing other types of converters, including those meant for higher input voltages.

VESUVIO technology is available for licensing and includes the reference design and its schematic, a demonstration board, datasheet and application note, as well as the bill-of-material. For more information, visit www.cisoid.com or contact the company's representatives at www.cisoid.com/company/about-us/contacts.html .

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About Cissoïd - www.cissoïd.com

Cissoïd is a leader in high temperature electronics providing monolithic semiconductor solutions, and the pioneer in Silicon-on-Insulator (SOI) products with over 20 years of background and R&D in SOI. As a leading fabless semiconductor company, Cissoïd delivers standard products and custom solutions meeting high temperature requirements, primarily to the Oil & Gas, Aerospace and Automotive markets.

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