

## **Campbell Collins Enables Power Supply Designs to Enter the Digital Age Using PMBus Monitoring & Control Interface**

Stevenage, UK – 2<sup>nd</sup> December 2009 - Campbell Collins Ltd, a specialist supplier of power source products and capacitors, is proud to offer the new range of digitally controlled DC/DC converters and switching regulators from Ericsson Power Modules. Covering both the isolated fractional brick type devices, and non-isolated Point of Load (POL) converters, Design Engineers are now able to integrate the highest levels of digital configuration, control and monitoring capabilities into their power supply designs.



The BMR453 and BMR454 series are Quarter Brick and Eighth Brick devices respectively, capable of delivering up to 396W (BMR453) and 240W (BMR454) to the load. The devices operate over an input range of 36-75V, and offer an adjustable output voltage of 8.1 to 13.2V for Intermediate Bus Architecture (IBA) applications. Efficiencies are as high as 96%. The units have 1500Vdc input to output isolation, and offer an MTBF in excess of 1.1Mhrs.

Unique to this range of isolated DC/DC products is the ability to both read and write information to and from the devices using the industry standard PMBus protocol, which is directly compatible with any 2 wire I<sup>2</sup>C host bus. Examples of parameters that can be monitored and reported across this bus are Input Voltage; Output Voltage; Output Current; Internal Junction Temperature; Switching Frequency & Duty Cycle. Examples of the parameters that can be controlled via the PMBus include the Output Voltage set point; Input Voltage Turn On/Off Levels; Remote Control Logic Levels; Margin Up/Down levels; Soft Start Power Up levels; Over Temperature, Over Voltage and Over Current set points, and the switching frequency.

In addition to these isolated units, the BMR450 and BMR451 are complimentary non-isolated digital Point of Load Switching Regulators capable of delivering 20A and 40A respectively from a 4.5-14V input voltage range. The output voltage is programmable from 0.6V to 5.5V for the 20A device and from 0.6V to 3.6V for the 40A unit. Efficiencies for these units are as high as 96.8%. Through Hole and Surface Mount devices are available, and package sizes are 25.65mm x 12.9mm x 8.2mm for the 20A and 30.85mm x 20mm x 8.2mm for the 40A device. These digital POL devices are also able to be interrogated for the same detailed information as the isolated devices using the PMBus (I<sup>2</sup>C) 2-wire system.

Using these Ericsson Isolated and Non-Isolated devices together enables the Designer to create an elegant Intermediate Bus Architecture using Board Mounted Power Modules while optimising efficiency levels & operating parameters, and using the highest degree of control and monitoring capabilities available today. A

test board containing sample units is available on loan from Campbell Collins to allow the Engineer to evaluate the units using Ericsson's custom designed Graphical User Interface.

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**Note to Editors:** A high resolution image for this press release is available on request.

#### **About Campbell Collins Ltd**

Campbell Collins Ltd is a UK based Franchised Distributor of Power Sources and Capacitors for the Military, Aerospace, Transportation, Industrial and Telecom/Datacom marketplaces. In business for over 20 years, we have built a name for ourselves as a reliable, trustworthy and valuable partner to our customers and franchises alike, offering the highest levels of pre and post design support services.

Focussing on Power related products from key players in the Power Supply, Semiconductor and Capacitor product areas, we are a franchised, design in distributor for Gaia Converter, MS Kennedy, SSDI, Lansdale Semiconductor, Ericsson Power Modules, MTM Power, Mitra Energy, Power Mate, FT Cap, LeClanche Capacitors, Icel, Audience, and the full line of Kemet companies including BHC, Arcotronics and Evox Rifa.

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