

## **DC/DC converter is open frame for reduced cost and quick time to market for lead free designs**

**Ericsson Power Modules' revised PKR DC/DC converter is manufactured using an open frame building process, offering reduced cost and increased compatibility with lead free soldering processes. With the lead free solder deadline now less just months away, the module makes it easy for designers, OEMs and CEMs to rapidly incorporate the part into their designs especially as it is fully interoperable with Ericsson's ubiquitous PKF MacroDens product.**

The revised PKR range consists of two products, the PKR4110B SI 3.3V at 4.5A, and the PKR4910A SI 3.3V at 3A. Additional products will be added to the PKR family throughout the rest of 2005 and through to the middle of 2006. The product series embraces 18-75V and 36-75V input ranges with single and dual outputs, therefore providing a complete program for low power applications.

The PKR is aimed at projects looking for cost reduction, particularly the cost of 'power per board'. It is also ideal for use in projects with a complex components mix requiring a low Delta T across the board, and for those that need to be lead-free soldering and RoHS compliant.

The most important application areas for the revised PKR series are telecom and datacom (router, servers, interface), however the series also addresses a wide range of applications using 48V distributed power architectures (e.g. process control) aiming for cost efficient power management and compliance with RoHS regulations and lead-free soldering processes.

Driven by the demand for cost reduction and the implementation of RoHS and lead free soldering, the revised PKR series products complies with the European RoHS directive and also the high temperature requirements needed for lead-free reflow soldering processes. Due to its efficient manufacturing process and the elimination of molding and expensive interconnections, PKR achieves an excellent price/performance ratio, which ultimately results in a significant price reduction for the end-user.

The PKR series' low delta T makes it possible for any customer to integrate the module into their boards without worry or concern for the potential negative impact that massive sub-assemblies may have on other components during the soldering process. Further, the series' full inter-operability (mechanical and electrical) with Ericsson's PKF MacroDens means no re-design when implementing PKR into the next generation of boards, or in the case of cost reduction exercises with respect to existing boards.

Ericsson Power Modules' PKR is a combination of a well proven topology and electrical platform developed for PKF MacroDens, and an innovative manufacturing process developed to respond to high volume demand and lead-free regulation. The Board-to-Board technology introduced by

Ericsson in the BMP (Board Mounted Product) segment is an important step for low power dc/dc converters in having to comply with cost efficiency without compromising any other parameters.

Conventional DC/DC modules use different mechanical interfaces to interconnect modules to customers' boards (lead-frame, column-balls, box-pins, etc). All of these methods add cost, increase the thermal resistance between modules and customer's board, and can add the risk of failure due to the lead-free soldering process's second reflow, which may introduce contact loss or a high impedance situation. By removing that interface, the Ericsson Board-to-Board technique guarantees that the product is not compromised and always delivers what it promises.

Ericsson Power Modules' PKR series is believed to be the best in its class, offering high performances and quality at a very competitive price. Based on more than 33 million MacroDens modules shipped to market and more than 2 million open frame Board-to-Board converters, the series offers the best solution to designers when chasing cost without jeopardizing quality. With its original design it complies with RoHS regulation and lead-free soldering processes, enabling an extremely short time-to-market.

*Ericsson is shaping the future of Mobile and Broadband Internet communications through its continuous technology leadership. Providing innovative solutions in more than 140 countries, Ericsson is helping to create the most powerful communication companies in the world.*

#### **FOR FURTHER INFORMATION, PLEASE CONTACT**

Patrick Le Fèvre, Marketing Director

Ericsson Power Modules AB

Phone: +46-8-568 695 07

Fax: +46-8-568 695 99

#### **Reader Inquiry reference:**

Press Release Reference: E0072(A)

If printing an Internet address please use Power Modules homepage and/or phone number to our International sales office:

URL: [www.ericsson.com/powermodules](http://www.ericsson.com/powermodules)

Europe: +46-8-568 696 20

U.S.A.: +1-972-583 6910/5254

China: + 86-21-5990 3258

#### **About Ericsson Power Modules**

Ericsson Power Modules is a supplier of world-class DC/DC power modules for distributed power architectures. With its global design, development, manufacturing and sales network Ericsson Power Modules is a leading supplier of power solutions to meet the customer demand for high performance.