

Ericsson Power Module's POLA devices improve performance of high current, low voltage power supplies

Based on the popular POLA platform, two point-of-load (POL) devices from Ericsson Power Modules provide easy paralleling making it possible for power servers and memory storage designers to access extremely flexible solutions for the next generation of low voltage supplies with very high DC currents approaching 100A.

The PMR5000 (50A) and PMR8000 (40A) are two additional products to Ericsson Power Modules' interoperable POLA product offering. Based on very advanced technologies such as TurboTrans, the devices provide the highest level of performance when the load changes quickly from an inactive low-current state to a fully processing high-current state whilst requiring a rock solid, precise supply voltage to be maintained.

Factors driving the demand for this type of product include high efficiency, very fast transient and response times, and easy paralleling to reduce part numbers kept in inventory. Applications requiring these features combined with a high level of flexibility in power management when addressing microprocessor and memory storage, plus easy paralleling to double power on-demand include servers, data storage, high capacity memory cards, solid-state drives, ATCA and a broad range of applications requiring high dynamic response point-of-load powering low-voltage high-current situations. These POLA devices are perfect for servers and high density memory cards aimed at replacing conventional hard disks.

"For the Point-of-Load Alliance (POLA), the addition of these two products responds to the high market interest for this business model of a group of power supplies companies sharing knowledge to support end-users with the most advanced products while securing second sources" said Patrick Le Fèvre – Marketing and Communication Director at Power Modules. "Since its formation in 2003, the POLA has experienced an amazing level of adoption and I'm sure PMR is the best solution to power new generations of servers and Flash based storage equipments."

The PMR series' high output current of up to 50A with easy paralleling and current sharing make it very simple to interconnect two modules to power up to 100A applications while maintaining high efficiency and a fast transient response time. Designed to meet ultra-fast transient response time requirements of up to 300A/ μ s, the PMR series is ideal for solid-state drives and high-capacity memory boards requiring high speed read/write capabilities.

Based on a highly optimized power-train and low power loss layout, the PMR series devices offer efficiency levels of up to 96%. With an output voltage range of 0.7V to 3.6V for the PMR5000, and 3.0V to 5.25V for the PMR8000, this high flexibility reduces the number of products in inventory while reducing time to market for designers requiring a large variety of voltages per board. Additionally, with an input voltage range of 4.5V to 14V for the PMR5000, and 8V to 14V for the PMR8000, this versatile voltage range increases design flexibility by supporting operations with tightly regulated intermediate bus or loosely regulated 9.6V to 12V supplies.

The PMR5000 and PMR8000 include TurboTrans and SmartSync technologies. TurboTrans optimizes the transient response of the regulator while simultaneously reducing the quantity of external output capacitors required to meet a target voltage deviation specification. Additionally, for a target output capacitor bank, TurboTrans can be used to significantly improve the regulators' transient response by reducing the peak voltage deviation. SmartSync allows for switching

frequency synchronization of multiple modules, thus simplifying EMI noise suppression tasks and reducing input capacitor RMS current requirements.

Protection includes output over-current protection (non-latching, auto reset), and adjustable under-voltage lockout. Other features include pre-bias start-up, autotrack sequencing, multi phase switch mode topology, and differential output voltage remote sense.

The PMR5000 and PMR8000 use double-sided, surface mount construction to provide a low profile and compact footprint. Package options include both through-hole and surface mount configurations that are lead (Pb) - free and RoHS compatible.

Part of Ericsson's third generation of POLA products, the PMR5000 and PMR8000 are based on innovative technologies reducing the amount of external capacitors while reducing output ripple and noise. Those technologies, that are already implemented in other POLA interoperable products (PMN and PMP), have proven benefits in applications and generate high market interest for such types of product.

As part of the very successful POLA program, these products are fully interoperable with other members' equivalent products, guaranteeing customers access to second source products without having to fully re-qualify the product.

Notes to editors:

Ericsson's standard multimedia content is available at the broadcast room:

www.ericsson.com/broadcast_room

Ericsson is the world's leading provider of technology and services to telecom operators. Ericsson is the leader in 2G, 3G and 4G mobile technologies, and provides support for networks with over 1 billion subscribers and has a leading position in managed services. The company's portfolio comprises of mobile and fixed network infrastructure, telecom services, software, broadband and multimedia solutions for operators, enterprises and the media industry. The Sony Ericsson and ST-Ericsson joint ventures provide consumers with feature-rich personal mobile devices.

Ericsson is advancing its vision of "to be the prime driver in an all-communicating world" through innovation, technology, and sustainable business solutions. Working in 175 countries, more than 75,000 employees generated revenue of SEK 209 billion (USD 32.2 billion) in 2008. Founded in 1876 with the headquarters in Stockholm, Sweden, Ericsson is listed on OMX NASDAQ, Stockholm and NASDAQ New York.

www.ericsson.com

www.ericsson.mobi

www.twitter.com/ericssonpress

FOR FURTHER INFORMATION, PLEASE CONTACT

Patrick Le Fèvre, Marketing Director

Ericsson Power Modules

Phone: +46-10-716 95 07

Reader Inquiry reference:

Reference: E0120(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

Europe: +46-10-716 96 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.

AutoTrack and TurboTrans are trademarks of Texas Instruments Incorporated.