

## **Press Release**

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### **IXYS Introduces New Discrete 600V XPT IGBTs**

Milpitas, Ca. and Biel, Switzerland. February 9, 2011 – IXYS Corporation (NASDAQ: IXYS) is pleased to announce the expansion of its benchmark XPT IGBT product line with new 600V discrete additions. These new discrete IGBTs are tailored to address market demands for highly rugged, low loss semiconductor devices that offer the ability to be easily configured in parallel. The featured devices demonstrate superior performance and exceptional ruggedness in applications such as power inverters, uninterruptible power supplies, motor drives, switch mode power supplies, power factor correction circuits, battery chargers, welding machines, and lamp ballasts.

Initial release of these new discrete XPT IGBTs will include devices that are available with current ratings from 100A to 210A. Developed using IXYS' extreme light PT (XPT) design platform, these new devices feature excellent electrical characteristics which include low typical  $V_{cesat}$  as low as 1.8V, low typical current fall times ( $t_{fi}$  as low as 42ns), and low typical turn-off energy per pulse values ( $E_{off}$  as low as 0.33mJ). In addition, they demonstrate exceptional ruggedness during switching and under short circuit conditions, establishing a new benchmark in device ruggedness. This is achieved through a 10us short circuit safe operating area (SCSOA), dynamic avalanche ratings, and a square reverse bias safe operating area (RBSOA) rated up to the device's blocking voltage. Furthermore, these devices feature an extended forward bias safe operating area (FBSOA), allowing for a "wider operating window" as dictated by the power limitations of the device, resulting in improved ruggedness and reliability.

IXYS' XPT IGBTs are available in two distinctive speed classifications: the B3 and C3 Classes respectively. The B3 and C3 speed classifications offer designers a more flexible approach to device selection regarding critical requirements such as switching frequency, saturation voltage, and cost. B3-Class devices feature an excellent balance between conduction and switching losses and are optimized for hard switching frequencies from 10 kHz to 30 kHz. C3-Class devices are optimized for minimal switching losses and are recommended for hard switching frequencies from 20 kHz to 60 kHz.

The featured devices are also available with IXYS' Sonic-FRD<sup>TM</sup> and HiPerFRED<sup>TM</sup> anti-parallel ultra-fast diodes (Sonic-FRD<sup>TM</sup> – Suffix H1, i.e., IXXK100N60C3H1) (HiPerFRED<sup>TM</sup> - Suffix D1, i.e. IXXH50N60C3D1). The combination of XPT IGBT and

IXYS' Sonic-FRD™ or HiPerFRED™ result in an optimal match for reduced turn-off losses. Furthermore, the soft recovery characteristics of the Sonic-FRD™ and HiPerFRED™ diode allow the XPT IGBT to be switched on at very high di/dt's regardless of low current and temperature conditions and provide excellent EMI performance despite the level of the switched current. Additional features include a maximum operating temperature of 175 degrees Centigrade and a positive forward voltage coefficient, which enables parallel operation, allowing designers the ability to utilize multiple XPT discrete devices in parallel to achieve the desired high current requirements of their application.

Both co-packed and non co-packed versions are available in industry standard discrete packages (i.e., TO-247, TO-264, etc.). Initial device offerings include part numbers: IXXH100N60B3, IXXK100N60B3H1, IXXH50N60C3, IXXH50N60C3D1, IXXK100N60C3H1, and IXXH100N60C3. Additional product line offerings are in process, including new current and package options that will be made available in the near future.

Additional product information may be obtained by visiting IXYS website at <http://www.ixys.com>, or by contacting the company directly.

### **About IXYS Corporation**

IXYS Corporation makes and markets technology-driven products to improve power conversion efficiency, generate solar and wind power and provide efficient motor control for industrial applications. IXYS offers a diversified product base that addresses worldwide needs for power control, electrical efficiency, renewable energy, telecommunications, medical devices, electronic displays and RF power.

### **Safe Harbor Statement**

Any statements contained in this press release that are not statements of historical fact, including the performance, features and suitability of products for various applications, may be deemed to be forward-looking statements. There are a number of important factors that could cause the results of IXYS to differ materially from those indicated by these forward-looking statements, including, among others, risks detailed from time to time in the Company's SEC reports, including its Form 10-Q for the fiscal quarter ended December 30, 2010. The Company undertakes no obligation to publicly release the results of any revisions to these forward-looking statements.