



STMicroelectronics and Velox Semiconductor to Launch GaN Schottky Diodes for Power Applications

Laptop, consumer, and industrial power-supply applications will benefit from lower costs and smaller Power Factor Correction circuits

Geneva and Somerset, NJ – November 13, 2006 – STMicroelectronics (NYSE: STM) and Velox Semiconductor Corporation today announced an agreement to jointly introduce GaN (Gallium nitride) Schottky diodes into the market, with a long term goal of establishing both companies as dual-source suppliers of the devices. GaN-based diodes will enable the design and production of Switch Mode Power Supplies (SMPS) for computers, consumer applications, and industrial products that are smaller, more efficient, and lower cost.

ST and Velox offer complementary skills that will accelerate the development of the critical technologies – increasing the likelihood of success, leveraging the capital costs required, and increasing the quantity and quality of product offerings available. Velox has developed 600-volt GaN Schottky diodes and the diodes are in the final stages of development before transition to production. ST will help complete the development, perform product qualification, and will market and distribute the diodes.

In the first phase of the agreement, ST will test and qualify all the devices, and will use its worldwide distribution system to market and distribute GaN Schottky diodes under the Velox brand name. In the second phase Velox and ST will be full dual sources. Velox is licensing its production technology for the devices to ST to enable second-source manufacturing; both companies are working together to synchronize manufacturing and quality systems. These synchronization efforts may delay the start of the production originally planned by Velox, though the resulting delay will ensure an agile and consistent supply of GaN devices.

“Both companies believe that the GaN devices will provide one of the best trade-offs for the 600-volt power device market in the medium term,” said Ricardo de Sa EARP, General Manager, Application Specific Discretes Division, STMicroelectronics. “The deal with Velox enables ST to introduce a new and fast-growing product line, quickly, and with the minimum of R&D and capital investment.”

“Our agreement with ST will help Velox to answer our customers’ needs for reliability of supply, and will enable faster qualification at a larger number of customers,” said Thomas Hierl, CEO of Velox Semiconductor. “Combining ST’s manufacturing, reliability and quality expertise with Velox GaN technology will create a true dual-source supply for GaN devices.”

GaN is a wide bandgap semiconductor material, currently used typically in optoelectronic applications, and in high-power and high-frequency devices. In SMPS applications it enables

the implementation of higher frequency power-factor correction circuits which offer benefits in efficiency, product size, low noise, smaller heatsink requirements, and higher yield.

The use of a GaN device provides many advantages for the user, including reduced switching losses in both the diode and the MOSFET, elimination of active snubber components due to there being no voltage overshoot at turn-off, increased efficiency, and improved temperature performance.

The reduction in switching losses in GaN devices can be applied in a number of ways to optimize the user's circuit design; by increasing efficiency, reducing heatsink requirements, or reducing the current rating of the transistor. The operating frequency can be increased to allow the use of smaller passive components, or to achieve acoustic requirements. The absence of high frequency oscillation at turn-off reduces RFI filter requirements.

About Velox Semiconductor

VELOX Semiconductor is a vertically integrated manufacturer of Gallium Nitride (GaN) transistors and diodes. The leading edge GaN based technology developed by the Company allows significant improvements in the cost, size and efficiency of power supplies potentially resulting in increased portability. Velox's mission is to provide reliable, cost effective GaN devices to the power supply industry enabling its customers to reduce cost, size and improve efficiency of their systems. It is a privately owned company located in Somerset, NJ. More information from www.veloxsemi.com.

About STMicroelectronics

STMicroelectronics is a global leader in developing and delivering semiconductor solutions across the spectrum of microelectronics applications. An unrivalled combination of silicon and system expertise, manufacturing strength, Intellectual Property (IP) portfolio and strategic partners positions the Company at the forefront of System-on-Chip (SoC) technology and its products play a key role in enabling today's convergence markets. The Company's shares are traded on the New York Stock Exchange, on Euronext Paris and on the Milan Stock Exchange. In 2005, the Company's net revenues were \$8.88 billion and net earnings were \$266 million. Further information on ST can be found at www.st.com.

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