

## **STMicroelectronics and Politecnico di Milano Build FASTER 3D Graphics Application using FPGAs**

**Geneva, December 11, 2014 -- STMicroelectronics (NYSE: STM)**, a global semiconductor leader serving customers across the spectrum of electronics applications, today announced that it had tested and validated an experimental 3D-graphics application based on ray-tracing technology that had been implemented on an ARM<sup>®</sup>-processor-based test chip attached to a Field-Programmable Gate Array (FPGA). Partially funded by the European Union Seventh Framework Programme (FP7 IC T 287804), the effort for “Facilitating Analysis and Synthesis Technologies For Effective Reconfiguration” (FASTER) was performed as part of a tight R&D cooperation with Politecnico di Milano that also involved Foundation for Research and Technology – Hellas.

FPGAs are special-purpose silicon chips that can be programmed to change their function. These devices can dynamically modify their function during operation to morph between different circuits. Reconfigurable FPGA hardware is often used to deliver greater performance per unit of space, power, and cost, compared with general-purpose central- and graphics-processing units (CPUs and GPUs) for a wide range of embedded applications.

"The Multimedia and Smart Camera markets, in particular, have a high need for added-value functionalities in order to effectively capture their growth potential. A flexible, low-cost system based on reconfigurable hardware can address that need and meet market demands much more effectively than traditional processor-based systems," said Danilo Pau, Senior Member, Institute of Electrical and Electronics Engineers, and Senior Principal Engineer, Senior Member of the Technical Staff, STMicroelectronics. "The technology developed as part of the FASTER project has the potential to boost computational power per silicon area per power consumption while adding a new dimension to embedded systems capabilities."

### **About FASTER**

FP7 IC T 287804 FASTER (Facilitating Analysis and Synthesis Technologies for Effective Reconfiguration) is a multi-national research project partially funded by the European Commission's Seventh Framework Program (FP7) for Research and Technological Development. The commercial partners in the project are: Maxeler Technologies, STMicroelectronics, and Synelixis Solutions. Research & Academic

partners are: Chalmers University of Technology, Foundation for Research and Technology – Hellas, Ghent University, Imperial College London, and Politecnico di Milano. The project started on September 1st, 2011 and ran for 3 years. Please visit <http://www.fp7-faster.eu> for more information.

### **About STMicroelectronics**

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power technologies and multimedia convergence applications. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life. By getting more from technology to get more from life, ST stands for life.augmented. In 2013, the Company's net revenues were \$8.08 billion. Further information on ST can be found at [www.st.com](http://www.st.com).

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