

# Innovation awards

## *Innovation awards recognise major advances in 3D TV and electric vehicle projects*

*Both CATRENE and the ENIAC JU presented innovation awards in 2011. The winner of the CATRENE award was TritonZ, a smaller project on 3D TV which has produced substantial results including a new world standard for high speed digital interfacing. The ENIAC JU award went to E<sup>3</sup>Car for a series of breakthroughs which included a world record in semiconductor performance with a 35% increase in energy efficiency in electric vehicles, improving performance and increasing range.*

The criteria for the CATRENE Innovation award are well established, covering project objectives, management, level of innovation, exploitation potential and market impact as well as the overall benefits for Europe. TritonZ involved only six partners but they are leaders in their domains and already exploiting the outcomes of the project in both consumer and professional markets – including TV broadcast, machine vision, health-care imaging and video surveillance.

While 3D display technology is well advanced with a wide range of products already available, TritonZ focused on image capture and transmission which have both been less well treated. The result was the successful development of

higher frame-rate image capture capabilities beyond high definition, a new world standard – CoaXPress – for video transmission and an extensive 3D vision processing library.

CoaXPress is a particular achievement, offering an asymmetric high speed point-to-point serial communication standard for the transmission of both video and still images over single and multiple coaxial cables that was approved by world standards bodies in March 2011. It provides a downlink of up to 6.25 GB/s per cable for video, images and data with a 20 MB/s uplink for communications and control.

“Applications are expected in machine-vision cameras for high-end applications and TV broadcast with the potential for a single lens 3D camera,” said project leader Klaas Jan Damstra of Grass Valley Nederland.

### **Driving eMobility in Europe**

The first ENIAC JU projects are only now about to finish, making 2011 the ideal moment to launch the first ENIAC JU innovation award. “The criteria are similar to CATRENE,” explained Executive Director Andreas Wild. “Our funding is from both the EU and Member States, with votes for the award from the public authorities and JU experts.”



*K.-J. Damstra, Project Leader TritonZ*

E<sup>3</sup>Car involved 33 partners from 11 countries with a total budget of €44.15 million. Public funding came from the national funding authorities and the ENIAC JU. The project created a series of world-class technology and device innovations including 400 V insulated gate bipolar transistors in trench field stop technology with highest intrinsic efficiency enabling optimal charging and discharging of the batterie.

“We generated 28 innovative demonstrators driven by car manufacturers, their systems suppliers and semiconductor vendors in co-operation with universities and research institutes,” said project coordinator Reiner John of Infineon Technologies. “The supply chain partners are ideally positioned to develop holistic approaches towards energy efficient and affordable electric vehicles, from research-based approaches to demonstration and to manufacturing capabilities.”



*R. John, Project Coordinator E<sup>3</sup>Car*

“The project obtained a 35% increase in energy efficiency so that it is now possible to drive further at less cost with increased reliability,” concluded Wild. Several of the innovations at component and sub-system level will already be in production by the end of 2012, contributing to the growth of eMobility in Europe.

### *More information:*

CATRENE TritonZ project:  
<http://www.grassvalley.com/>

ENIAC JU project E<sup>3</sup>Car:  
<http://www.e3car.eu/>



*2011 Innovation Award Trophies*

