

TRACE to enable faster, affordable innovation in automotive electronics

A project within the EUREKA CATRENE programme

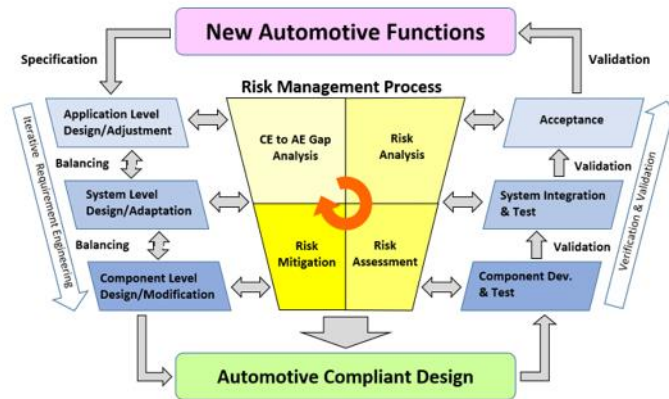
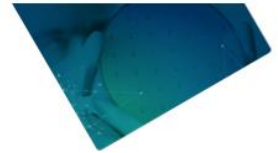
Paris, February 8, 2018 – The EUREKA CATRENE funding programme, managed by AENEAS, today highlights the TRACE project. TRACE aims to develop semiconductor manufacturing processes and tools that will cut costs and speed implementation of innovative electronics in the automotive industry. It seeks to break new ground by adapting low cost, mass production techniques used to produce semiconductor components for consumer electronics (CE) devices with the absolute safety and reliability required for vehicles.

Today's consumers demand the latest technologies not only in their personal electronic devices, but also in their vehicles. Moreover, innovations such as advanced infotainment and navigation systems, internet connectivity, vehicle-to-vehicle and vehicle-to-infrastructure communications, and advanced driver assistance systems (ADAS) offer multiple benefits. They can help improve traffic flow and reduce congestion through sensors and communications that allow for cooperative driving and predictive traffic management.

These innovations are also key to the continued competitiveness and growth of the European automotive industry – an industry which represents 19% of world trade and 11% of European manufacturing jobs, and that grew by 8% CAGR in Q1 in 2017 according to ACEA (European Automobile Manufacturers Association) figures*. Innovation needs to be brought to market quickly, but automotive electronic systems are increasingly complex and quality requirements extremely high. This is making design and manufacture of the necessary semiconductors lengthy and potentially uneconomic. TRACE is addressing this situation by enabling components produced for consumer devices to be used in the automotive domain.

Semiconductors for consumer electronics devices such as tablets and mobile phones do not have to meet rigorous automotive standards on safety, reliability and long-life. Thus, they are quicker and cheaper to design, and they are manufactured in high volumes providing economies of scale. Through its new methods, processes and tools, TRACE will allow adaptation of these consumer electronic semiconductor components and technologies for automotive applications.

Besides covering the necessary modifications and adaptations, the TRACE method will identify ways to verify that the resulting components, technologies and integrated systems are fully safe and reliable for automotive use. Supporting innovation in the European automotive industry, the TRACE project brings together the entire value chain – semiconductor manufacturers, system integrators, OEMs, major automotive companies, SMEs, and research partners. Its key goals are: to allow ground-breaking automotive applications to be developed without the need for automotive grade components; to cut the time required for innovative system integration in automotive applications by as much as three years; and to reduce the cost and time to develop qualified semiconductor components by up to 50% compared to today's dedicated automotive semiconductor development cycles.



Extension of the V-Model by the TRACE-Method through the whole value chain

*Sources: <http://www.acea.be/statistics/> and https://twitter.com/ACEA_EU

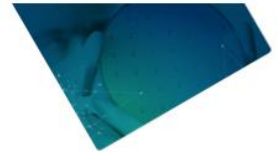
About CATRENE

CATRENE is a EUREKA Cluster, managed by AENEAS, was created in 2008 and focused on micro and nanoelectronics research and innovation, which aims at achieving Technological Leadership for a competitive European ICT industry. It is based on the ambition of European countries, in partnership with European companies, to jointly deliver nano- and microelectronics solutions that respond to the needs of society at large, improve the economic prosperity of Europe and reinforce the ability of its industry to be at the forefront of the global competition.

After 7 years of operation, more than 8 calls and 51 complete and still running projects, CATRENE projects involving SMEs, large corporations, research institutions and universities have, and are, demonstrating great impact on societal challenges while promoting European economic development in this vital area.

About CATRENE: <http://www.catrene.org>

About AENEAS: <https://aeneas-office.org>



About TRACE

TRACE is an RD&I project consortium involving 27 partners from 5 countries, Austria, France, Germany, the Netherlands, Sweden and Portugal.

About TRACE: <https://www.edacentrum.de/trace/>

