

PRESS RELEASE

KRONO-SAFE launches ASTERIOS® Automotive Tool Suite Version 1.0 (AATS V1.0), the first version of its ASTERIOS® platform for the development of deterministic, real-time automotive software components.

MASSY, March 31, 2021 – KRONO-SAFE announces today the launch of a new ASTERIOS® Tool Suite platform dedicated to the development of real-time embedded software for automotive, in compliance with the Timing Model Extension of AUTOSAR Classic Release 4.3 standard.

“Next generation automotive systems require support for safe, predictable and deterministic software execution. The Logical Execution Time (LET) model that builds the foundation of our ASTERIOS® technology is ideally suited to improve the predictability and correctness of automotive time-critical applications, in line with the recent timing extension specifications introduced by AUTOSAR Classic. The new ASTERIOS® Automotive Tool Suite allows our company to deploy its reach beyond the avionics market, into a global market also looking for efficient solutions to deliver dynamic systems that are ultra-reliable, high-performance and deterministic by design, not by iterations. On top of that, our ASTERIOS® Tool Suite is certifiable towards the highest safety standards such as DO178C DAL-A and ISO 26262 ASIL-D”, said Eric Luttermann, KRONO-SAFE’s CEO.

The ASTERIOS® Automotive Tool Suite contains 3 modules: ASTERIOS® ARchitect, a graphical tool for configuring AUTOSAR LET communications, ASTERIOS® Configurator to automatically configure specific modules of an AUTOSAR project including the AUTOSAR OS and RTE modules and ASTERIOS® LIB, the communication library that handles LET communications.

They are specifically aimed at supporting a timing workflow built upon AUTOSAR TIMEX extension specifications and can be plugged into any AUTOSAR compliant process and applications development tools.

The first industrial deployment of AATS is made by APTIV for the development of its **ENOS** Deterministic Software Integration Platform.

“The primary purpose of the AUTOSAR timing extension is to support constructing embedded real-time systems that satisfy given timing requirements and to perform timing analysis and validation of those systems once built up. AATS is the first industrial implementation of this new AUTOSAR concept on the market. We have it today fully supporting AUTOSAR 4.3 specifications and interfacing with Vector’s DaVinci and Vector’s MICROSAR Software Integration Package (SIP) solution on the TriCore AURIX platform”, said Olivier Bermond, VP Engineering at KRONO-SAFE, *“our next steps will be to meet AUTOSAR 4.4 RIPs enhancements, and deliver the full power of our ASTERIOS® LET technology for the development of deterministic automotive applications together with other AUTOSAR partners”.*

About KRONO-SAFE

KRONO-SAFE develops ASTERIOS®, an integrated software tool suite which provides safety-critical Systems Engineering teams with a breakthrough approach to cope with the growing complexity of software integration on single- to multi-core architectures.

KRONO-SAFE, based in Massy, France, south of Paris, was established in 2011, as a spin-off of CEA (French public research organization in Nuclear and Alternative Energies) on the basis of 15 years of research & development on Logical Execution Time (LET) paradigms and deterministic development processes and technologies.

KRONO-SAFE's solutions have since been used in core industries like Aerospace, Defense and Automotive by lead customers like Safran and Aptiv. Visit Krono-Safe.com.



ASTERIOS™ Architect