

Four options extend the base module of TA Tool Suite:

TA.Design

Definition of timing requirements of the application software for complex and highly integrated multi-functional software systems by interactive dynamic visualization.

> TA.Simulation

Model-based simulation of ECU timing behavior and sophisticated graphical and table based evaluations of timing metrics for analyzing system behavior in different levels of detail.

> TA.Optimization

Optimization tool for the distribution and mapping of application software to operating systems and processor models for embedded multi-core systems.

> TA.Inspection

Verification of the timing behavior of application software and of the operating system. This enables third-party trace measurements that have already been recorded to be analyzed in terms of response times, utilization, and other metrics.

Special Functions

Several enhancements support individual project conditions.

> Import/Export Interfaces

TA Tool Suite provides interfaces to the common exchange formats. The options TA.Design, TA.Simulation and TA.Optimization use the system descriptions AUTOSAR and AMALTHEA as data sources. TA.Inspection bases its analysis on trace log measurements from various debugger and profiling providers.

> Processor Models

The precision of the options TA.Simulation and TA.Optimization can be extended with the runtime properties and memory behavior of specific processor derivatives. This enables a detailed analysis of processor effects.

A list of supported processor models is available at www.vector.com/ta-tool-suite.

> Models for Operating Systems

Models for operating systems improve the accuracy of the options TA.Simulation and TA.Optimization by replicating the dynamic scheduler behavior of the corresponding operating system implementations. Currently supported are MICROSAR.OS, Tresos AutoCore and Tresos Safety OS.

> Workflow Editor

The workflow editor is a graphical solution for the description of automated processes within TA Tool Suite and leads to considerable time saving. For example, it summarizes the information from various system descriptions. This allows previously unused data sources to be accessed easily and conveniently. Routine tasks such as creating timing models, starting simulations, trace verifications and creating reports can thus be easily defined and executed.

A direct interface to DaVinci Configurator Pro is also available.

More information: www.vector.com/ta-tool-suite

Information Resource	File Format
System description	AUTOSAR ≥V4.0.3, ASAM MDX, AMALTEA, OSEK OIL, CSV
Trace log measurements	iSYSTEM, Lauterbach, PLS, BTF ≥V1.0, AMALHEA, OT1 ≥VO.2

