



# ASSESSMENT OF REAL-TIME

REQUIREMENTS FOR EMBEDDED SYSTEMS

- Model and simulate the dynamic real-time behavior of embedded systems
- Define and verify critical real-time requirements
- Monitor real-time performance and quality in all development phases
- Improve collaboration by sharing timing models
- Combine the benefits of simulation and validation through integration with chronVAL



**CHRONSIM**™

# SIMULATION OF REAL-TIME



## CHRONSIM™

chronSIM enables you to assess the real-time requirements of a distributed embedded system in all phases of the development process. You methodically address dynamic behavior issues from the earliest requirements phases to the system integration process. By continuously monitoring the fulfillment of the real-time requirements, you gain an early indication of the robustness and real-time capabilities of the system under development, thus reducing expensive real-time problems later on.

In a model-based approach, chronSIM enables you to model and simulate the dynamic real-time behavior of your system. Processors and communication buses, scheduling and stimuli are described in timing models using either the intuitive GUI or with C code. By sharing and virtually integrating these timing models with project partners, you will improve system understanding and collaboration between OEM and suppliers.

The intuitive visualization of processes and communications accompanied by the accentuated

display of real-time requirements statuses gives you deep insight into the dynamic system behavior. At the same time it provides clear indicators for performance bottlenecks and integration challenges – important data for sophisticated project risk management.

Supplemented by the ability to import and export data and models from various formats, chronSIM easily integrates with existing development processes and environments. Extensive HTML reporting and batch processing enable automated analysis and archiving of results. The add-on module chronEST covers target code execution time prediction and chronBUS extends the INCHRON Tool-Suite with residual bus simulation and analysis capabilities. chronSIM – your tool to master the complexity of networked embedded systems.

| REAL-TIME SIMULATOR |

THINK REAL-TIME

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