think real-time

INCHRON

Think real-time

CHRONVal

Validation of real-time critical embedded systems

- Design robust system architectures with optimal use of resources
- Identify timing bottlenecks in complex distributed systems
- Determine best- and worst-case end-to-end timings, task suspension times, bus and CPU loads
- Verify the real-time compliance with cutting-edge mathematical algorithms
- Combine the advantages of validation and simulation through integration with chronSim

Success in real-time

think real-time
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Relax – it's in real-time.

chronVal

Real-time validator chronVal

chronVal allows you to validate the real-time performance of the distributed embedded system using mathematical analysis methods. In each phase of the development process you will be sure the current system is real-time compliant. Whether as an architect designing a software and hardware architecture or as a developer implementing functions, with chronVal you can evaluate the system's robustness and detect timing bottlenecks very early.

The integrated design, diagnosis and test tool chronVal enables you to analyze the dynamic behavior of embedded systems' software and bus communication including multi-processor configurations. Complex and distributed systems become transparent since software and hardware architecture are modeled on a descriptive abstract level. The exploration of available system resources with the convenient sensitivity analysis avoids time consuming implementations, integrations and tests.

The latest cutting-edge technology of chronVal delivers precise and meaningful results from complex systems very fast. chronVal displays detailed system information about maximum CPU loads, burst lengths as well as task blocking and suspension times. The Integration with the real-time simulator chronSim allows you to combine the advantages of simulation and validation unfolding in an unmatched detailed real-time view to your system.

chronVal enables development departments to verify the real-time compliance of their embedded systems in every phase of the development process. This results in higher quality, robust systems at lower cost – with the reassuring feeling to have tested all worst-case scenarios.

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