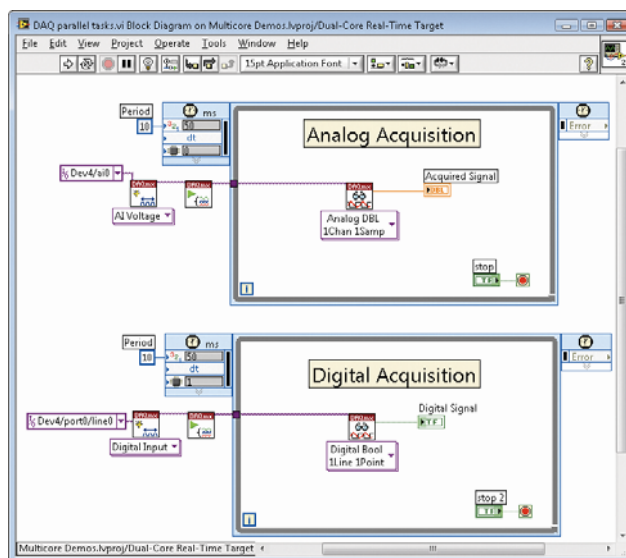


NI LabVIEW 8.5 Real-Time Module for Symmetric Multiprocessing

Extend Determinism to Multicore Systems

The latest version of the National Instruments LabVIEW Real-Time Module adds support for symmetric multiprocessing (SMP) to extend determinism to embedded multicore systems. You now can use the LabVIEW graphical development environment to quickly design parallel embedded real-time applications that take advantage of the performance of multicore processors without sacrificing determinism. Additionally, the NI Real-Time Execution Trace Toolkit makes it possible to debug multithreaded LabVIEW applications on embedded multicore systems. With this new functionality, embedded systems can achieve faster loop rates and process greater data sets to develop high-performance control systems such as hardware-in-the-loop simulations and high-speed motion control systems.

The LabVIEW Real-Time Module extends LabVIEW graphical development to NI and third-party hardware running real-time operating systems and provides interfaces to a wide variety of off-the-shelf I/O to help you quickly develop embedded real-time systems. The LabVIEW Real-Time Module is a part of the LabVIEW embedded platform – a family of National Instruments products including the LabVIEW FPGA Module, LabVIEW PDA Module, LabVIEW Touch Panel Module and the LabVIEW Microprocessor SDK (Software Development Kit) – that provides a complete software programming environment for embedded systems.



New LabVIEW 8.5 Real-Time Module Features

The latest LabVIEW Real-Time Module adds significant new development features to improve the performance and reliability of your embedded real-time systems including:

- Graphical programming of real-time symmetric multiprocessing systems
- Automatic load balancing of parallel tasks across multiple processing cores
- Advanced performance tuning by assigning critical tasks to a dedicated core through processor affinity
- Debugging tools with trace execution of real-time tasks executing on multiple cores
- Increased communication throughput with network-published shared variables

For more information on the LabVIEW Real-Time Module, visit www.ni.com/realtime.

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