

NEW VERSION OF THE AVIX RTOS TARGETS ARM CORTEX-M3 BASED MICRO CONTROLLERS

AVIX-RT is proud to announce version 4.0 of its AVIX RTOS which is available in a new port supporting a substantial number of micro controllers based on the advanced ARM Cortex-M3 architecture. The new port, named AVIX for Cortex-M3, is fully ARM CMSIS compliant. Because of this, AVIX for Cortex-M3 supports the following Cortex-M3 based micro controllers:

Atmel - AT91SAM3(U/S)
Energy Micro - EFM32
NXP - LPC17x
ST Micro - STM32F
Texas Instruments - LM3S
Toshiba - TMPM330

Together with the existing ports for the 16-bit Microchip PIC24 and dsPIC controllers and the 32-bit Microchip MIPS based PIC32MX controllers, AVIX supports many of the most advanced controllers available in today's market.

One of the most distinguishing features offered by AVIX is advanced Zero Latency Interrupt handling, available for the Cortex-M3 port also. AVIX never disables interrupts meaning interrupt latency equals that of the hardware platform it is running on. As a result AVIX can deal with extremely high interrupt rates and offers a predictable timing model.

AVIX RAM consumption has always been among the lowest available because of its advanced, software based, interrupt stack. Interrupts place no load on the stacks of individual threads but use a single, dedicated stack instead. For the Cortex-M3 port, this RAM saving feature uses hardware capabilities offered by this platform meaning for this port, the interrupt stack based RAM saving is offered with a performance penalty of zero.

For testing and validation, AVIX comes with Kernel Aware Debugging plug-in components offering a GUI based overview of the AVIX based application. For the Cortex-M3 port a plug-in is available for the KEIL MDK development environment. For the other ports a plug-in is available for the Microchip MPLAB™ development environment. Further testing and validation is supported by AVIX Real Time Thread Activation Tracing, a non-intrusive mechanism showing the activation of threads in real-time on a logic analyzer.

AVIX offers everything you may expect from a modern RTOS like mutexes, semaphores, pipes, timers, message queues, event flags and memory support. All this functionality is accessible through a user friendly and largely type safe API allowing programming errors to be found compile time instead of runtime.

AVIX can be downloaded in a free Demo Distribution from the AVIX-RT website. AVIX is accompanied by a comprehensive user manual.

About AVIX-RT

Headquartered in 's-Hertogenbosch, The Netherlands, AVIX-RT develops and markets the most advanced RTOS for many ARM Cortex-M3 and 16 and 32 bit Microchip micro controllers. For more information, AVIX-RT can be contacted by e-mail: info[at]avix-rt.com or phone: +31 615 285 177, ask for Leon van Snippenberg. Detailed information about AVIX-RT and its products can be found on the AVIX-RT website (www.avix-rt.com)

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