FreeRTOS.org™, OpenRTOS™ and SᴀꜰᴇRTOS™ Add Support for Microchip Technology's New 32-bit PIC32 MCU Family

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Key Facts
- **FreeRTOS.org port for Microchip's PIC32 MCU family available for immediate download**
- **Compact, efficient kernel allows application software to take full advantage of the PIC32's performance**
- **Existing ports for Microchip's PIC24 MCU and dsPIC® DSC 16-bit families simplify migration to 32-bit**
- **OpenRTOS provides options for commercial licensing and support**
- **Safety-critical applications supported by SafeRTOS, an IEC 61508 Safety Integrity Level (SIL) 3 certified solution**

FreeRTOS.org™ announces the immediate availability of a port for the new PIC32 family of 32-bit microcontrollers (MCUs) from Microchip Technology Inc. [NASDAQ: MCHP], a leading provider of microcontroller and analogue semiconductors. FreeRTOS.org is a very small footprint, pre-emptive mini real-time kernel that allows engineers to more easily harness the greater performance offered by the new PIC32 family. FreeRTOS.org can be downloaded from www.FreeRTOS.org, and is completely free to use, even in commercial applications, providing a cost-effective solution for low- and high-volume applications. The new port is included in FreeRTOS.org V4.6.1, and will be maintained in subsequent releases.

This support for the new PIC32 family builds on the strong existing partnership between Microchip and FreeRTOS.org, and ensures compatibility with the existing ports for Microchip's 16-bit PIC24 MCUs and dsPIC® DSCs, allowing engineers to migrate quickly and easily to their new 32-bit MCU family. OpenRTOS is available from WITTENSTEIN high integrity systems, and offers the benefits of FreeRTOS.org under a commercial licence. Safety-critical applications can also be supported with WITTENSTEIN's SafeRTOS, an IEC 61508 Safety Integrity Level (SIL) 3 compliant solution based on FreeRTOS.org that provides an ideal solution for a wide range of safety and commercially critical applications. All products are backed by full development and support services.

A pre-configured FreeRTOS.org software demo targeted for use with Microchip's low-cost Explorer 16 development board has also been released, allowing engineers to get a system up and running in minutes. This demo can also be used as a template for user applications, further reducing time to market. The demo project compiles with the new MPLAB® C32 C Compiler, and can be simulated in Microchip's MPLAB Integrated Development Environment version 8.0.

"Microchip's new 32-bit MCU family presents an attractive option for embedded designers, with the industry's best migration and compatibility," said FreeRTOS.org founder Richard Barry. "However, the pure interrupt-driven model does not scale well when designers exploit the high performance of microcontrollers, such as the PIC32, by creating larger and more complex applications. The FreeRTOS.org community helps ensure that a simple and compact Real Time Kernel is available, to make migration as simple and painless as possible."

"The compact footprint of FreeRTOS.org allows our customers to gain maximum benefit from the high performance of the PIC32 family," said Patrick Johnson, director of Microchip's High Performance Microcontroller Division. "It allows powerful application software to remain simple and run efficiently. Additionally, the licensing model of FreeRTOS.org, coupled with the commercial version, OpenRTOS, makes it a compelling solution for our customers."

FreeRTOS.org has a vibrant user base, with more than 1000 copies of the Real Time Kernel downloaded every week from its website. Free forum support is available through an active user community, and commercial support and complete development packages are available from WITTENSTEIN high integrity systems.

http://www.FreeRTOS.org   http://www.SafeRTOS.com   http://www.microchip.com

About FreeRTOS.org
FreeRTOS.org is a portable, open source, mini Real Time Kernel that is free to download and royalty free, even in commercial applications. Ports exist for many different development environments. Free support is provided by an active user community, with commercial support offered by WITTENSTEIN high integrity systems. FreeRTOS.org is licensed under a modified GPL.

About WITTENSTEIN high integrity systems
WITTENSTEIN high integrity systems provide tools and services to the embedded software market. Services range from embedded platform preparation to complete embedded application development, and from concept demonstrators to fully qualified dependable systems. WITTENSTEIN high integrity systems are a proud member of the WITTENSTEIN group of companies where they contribute their software and systems expertise to the growing range of WITTENSTEIN products and services.

About Microchip Technology
Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

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