CMX-TINY+™ for dsPIC™

CMX-Tiny+ RTOS Minimizes RAM Usage for the dsPIC!

The CMX-Tiny+ real time multi-tasking operating system is an extremely "lean and mean" kernel that provides an optimized, small footprint solution for the dsPIC series of processors. This specially designed RTOS allows the user to develop application code that is run under an RTOS and yet only use the onboard RAM that the processor provides! CMX-Tiny+ does not need any external RAM, regardless of whether the processor can support the use of external RAM or not.

CMX-Tiny+'s code size is so small that it allows the processor's onboard FLASH to support both the user's application code and the CMX-Tiny+ code, in most cases. This unique RTOS, based on a scaled down version of the popular CMX-RTX™, retains most of the power of CMX-RTX as well as the more frequently used functions. CMX-Tiny+, a truly preemptive RTOS, also provides support for cooperative scheduling, if desired. CMX-Tiny+ also is fully backward compatible with CMX-Scheduler™ and also is integrated with the CMX-MicroNet™ TCP/IP stack for those applications requiring networking connectivity.

CMX-Tiny+ Specifications for the dsPIC:

All CMX Functions:	2304 bytes
CMX Initialize Module:	249 bytes
CMX Assembly Module:	570 bytes
RAM, Each Task Control Block:	13 bytes
FLASH, Each Task Control Block:	6 bytes

Min. Context Switch: 71 cycles (starting a task)
121 cycles (resuming a task)

NOTE:
CMX Functions are contained in a library, thus reducing code size, if not referenced.

CMX-Tiny+ Features

- ♦ **Extremely Small FLASH/RAM Footprint**
- ♦ **Truly Preemptive RTOS**
- ♦ **Low Power mode supported**
- ♦ **Full Source Code With Every Purchase**
- ♦ **Free Technical Support and Updates**
- ♦ **Low, Economical Pricing**
- ♦ **No Royalties on Shipped Products**
- ♦ **Backward Compatible with CMX-Scheduler**
- ♦ **Integrated with CMX-MicroNet for Optional Networking Connectivity**

A Partial Listing of CMX-Tiny+ Functionality

- • Task Management
- • Message Management
- • System Management
- • Event Management
- • Resource Management
- • Timer Management