

The CMXTracker*

- Supports Intel 8051, 80151, 80251, 80196 Microcontrollers
- Enhances Debugging of Intel Microcontrollers
- Provides Insight of Application Flow
- Logging is Captured in Real-Time
- Chronological Display of Tasks Execution
- Displays CMX Functions Called and Results
- Single Stepping Per System Tick
- Task Flow Analysis

The CMX CMXTracker* provides the user the ability to log chronologically in real-time, the tasks' execution flow, capturing when a task is executing, the CMX functions called and their parameters, interrupts using CMX functions and the CMX system TICK within the CMX-RTX* real-time multitasking operating system environment, while the user's application code is running.

When the user enables the CMXTracker task, it will send a menu to the screen. The user may then select one of many prompts allowing the user to view the chronologically ordered log, reset the log, resume running of application code and possibly change some aspects of the log, such as "autowake" CMXTracker after a certain number of entries.

CMXTracker allows viewing the log at the beginning or end, paging down or up, viewing the exact execution of the tasks. In addition, viewing what CMX functions were called with their parameters and results returned (such as the message sent or received, event bits set, timed out, etc..) and interrupts, with the CMX system TICK being a "timeline" stamp.

CMXTracker allows the user to "single step" one system TICK, thus allowing normal activity to occur for one system TICK, with CMXTracker resuming after this "single step". The user can also set the desired number of system TICKS that CMXTracker will wait, allowing normal

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Task 1 EXECUTING
Task 1 CXTWATM, TIME PERIOD = 2
Task 2 EXECUTING
>>> CMX Tick <<<
Task 2 CXMSWATM, MBOX # 0, TIME PERIOD = 3
Task 3 EXECUTING
Task 3, CXTCRE, Successful, Task 8
Task 3 CXEWATM, TIME PERIOD = Indefinite
>>> CMX Tick <<<
Task 1 EXECUTING
Task 1 CXTWATM, Timed out
Task 1 CXMSSEND, Successful, MBOX # 0, Mesg à "Hello1"
Task 2 EXECUTING
Task 2 CXMSWATM, Successful, MBOX # 0, Mesg à "Hello1"
>>> CMX Tick <<<
--CYCLIC # 0 CXESIG, Successful, Mode 0, Task 3
Task 3 CXEWATM, Successful, Event bits match = 0x0040
Task 3 CXBFGET, ERROR-> none free, memory block address 0x102C
++INTERRUPT CXMSSEND, Successful, MBOX # 0 Mesg à "Hello2"
Task 3 CXTWATM, TIME PERIOD = 50
Task 2 EXECUTING
Task 2 CXMSGET
Task 2 CXMSGET, Successful, MBOX # 0, Mesg à "Hello2"
>>> CMX Tick <<<
Task 2 CXTTRIG, Successful, Task 8
Task 8 EXECUTING

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activity, before it again resumes. This is a very powerful and helpful feature.

MICROCONTROLLERS SUPPORTED:

8xC196Kx, 8xC196Mx, 8xC196Nx,
8x3x, 8xC5x, 80C51FA/RA/GB/BH/
SLAH/SLAL, 87C51FA/RA/RB/RC/GB/
SLAH/SLAL, 83L51Fx, 87L51Fx,
83C51Rx/Gx/KB/Fx/SLAH/SLAL,
8xC152Jx, 8xC151Sx, 81C51SLAH/
SLAL, 8xC251Sx, 82930A.

DEVELOPMENT PLATFORMS:
PC, SUN PC/Windows, HP Workstation,
RS6000

AVAILABILITY:
Now

CONTACT:
CMX Company
5 Grant St., Suite C
Framingham, MA 01701
Phone: (508) 872-7675
FAX: (508) 620-6828
e-mail: cmx@cmx.com

WWW: <http://www.cmx.com>

For international contacts, see Appendix B.

CMX
COMPANY