

## The CMXBug\* Debugger

- Supports Intel 8051, 80151, 80251 and 80196 Microcontrollers
- Enhances Debugging of Intel Microcontrollers
- Provides Insight Into RTOS
- Task Time Analysis
- Display RAM and ROM Contents
- Single Stepping Per System Tick
- Change Aspects of CMX-RTX RTOS

The CMX CMXBug\* debugger provides the user the ability to view and modify different aspects of the CMX multi-tasking operating system environment, while the user's application code is running. When the user enables the CMXBug task, it will send a menu to the screen. The user may then select one of many prompts, allowing the user to view and possibly change many aspects of the CMX RTOS environment. When the CMXBug task is running, it prohibits other tasks from running and freezes the task timers and cyclic timers, hence the user may view the "current state" of the CMX RTOS environment.

CMXBug allows the user to "single step" one system TICK, thus allowing normal activity to occur for one system TICK, with CMXBug resuming after this "single step". Another powerful feature allows the user to set the number of system TICKS that CMXBug will wait, allowing normal activity, before it resumes.

CMXBug allows the user access to most of the CMX OS features, such as: Tasks, Cyclic timers, Resources, Mailboxes, Queues, Stacks, the system TICK and TIMESLICE scales, etc. For example, you may view a task which shows: current task state, priority, starting address, events associated with the task, task's stack address, etc. Also you may start a task, wake a task that was waiting on some entity, stop a task. In addition CMXBug allows the user information pertaining to each task percentage of RUNNING time

### Select the desired function

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Enter 1 TASKS
Enter 2 RESOURCES
Enter 3 CYCLIC TIMERS
Enter 4 QUEUES
Enter 5 MAILBOXES
Enter 6 RAM display
Enter 7 STACK information
Enter 8 SYSTEM TICK SCALE
Enter 9 TIME SLICE SCALE
Enter 10 TIME SLICING select
Enter 11 GO and RESUME CMXBug
Enter 12 QUICK GO and RESUME CMXBug
Enter 13 TIME ANALYSIS
Enter 14 TIME ANALYSIS reset
Enter 15 ADDITIONAL TASK functions
Enter 99 EXIT CMXBug
Enter P/p to toggle ECHO mode
Your choice?

```

to the total. This enables the user to obtain an accurate picture of each task, in relation to all tasks, which allows the user powerful insight as to how the processor time is being spent.

### MICROCONTROLLERS SUPPORTED:

8xC196Kx, 8xC196Mx, 8xC196Nx,  
8xC3x, 8xC5x, 80C51FA/RA/GB/BH/  
SLAH/SLAL, 87C51FA/FB/RA/RB/RC/  
GB/SLAH/SLAL, 83L51/FA/FB/FC,  
87L51/FA/FB/FC, 8xL5x, 83C51RA/RB/  
RC/GB/KB/FA/FB/FC/SLAH/SLAL,  
8xC152Jx, 8xC151Sx, 81C51SLAH/  
SLAL, 8xC251Sx, 82930A

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

AVAILABILITY:  
Now

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