How to use specific timer to realize real-time operation?

Applies to:

Platform	*OS Version*	*PAC Utility Version*
WinPAC	*All Versions*	*All Versions*
ViewPAC	*All Versions*	*All Versions*

Which timer is used to realize for Real-Time?
Multimedia Timer is used for Real-Time.
Multimedia Timer functions:

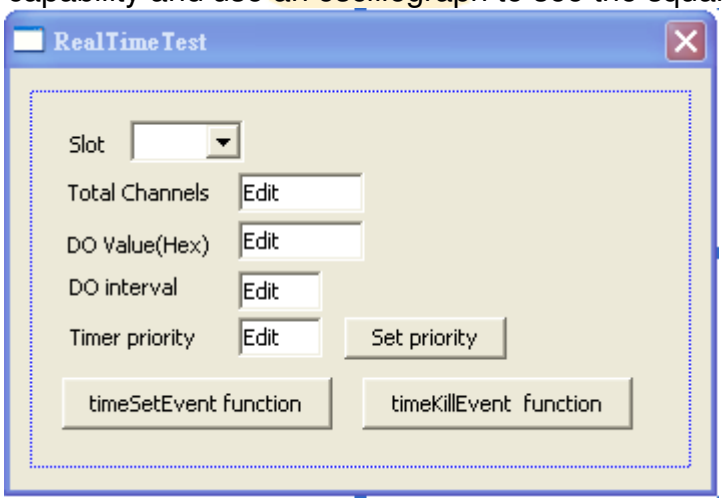
(1).timeBeginPeriod
(2).timeEndPeriod
(3).timeKillEvent
(4).timeSetEvent,
(5).TimeProc

Why choose Multimedia Timer for Real-Time?
Other timer can not adjust the priority so that they can not meet the requirement for Real-Time.

What is the input range of the priority of Multimedia Timer?
The range is 8 to 256.

How to use Multimedia Timer?
We provide three kinds of programming language(C sharp, VB.net, C++) demo programs for users to use the Multimedia Timer.

1. **C++ demo**
   In the demo, an 8K DO module is used to output square wave to test the timing performance of the real time system. Change the timer priority to enhance the real-time capability and use an oscillograph to see the square wave.



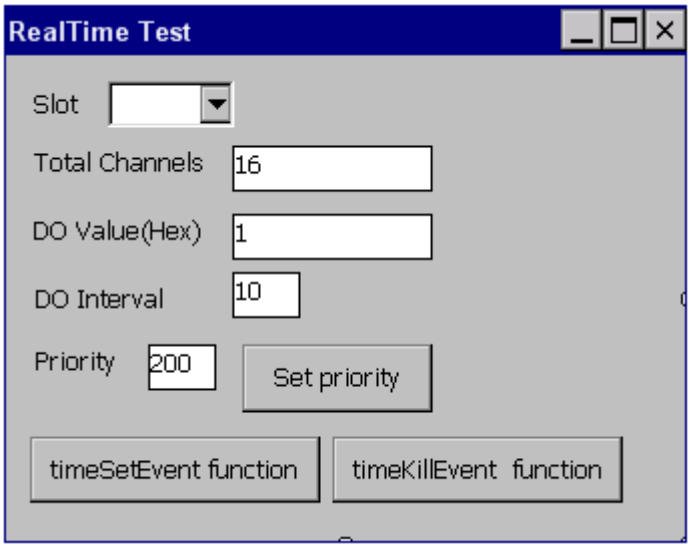
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2. C sharp demo

There is no Multimedia Timer in compact framework; therefore we provide an external "mmtimer.dll" to support Multimedia Timer. In this demo an 8K DO modules is needed to output square wave to test the timing performance.

Change the timer priority to enhance the real-time capability and use oscillograph to see the square wave.

Note: the mmtimer.dll and the executable file need be put in the same folder.

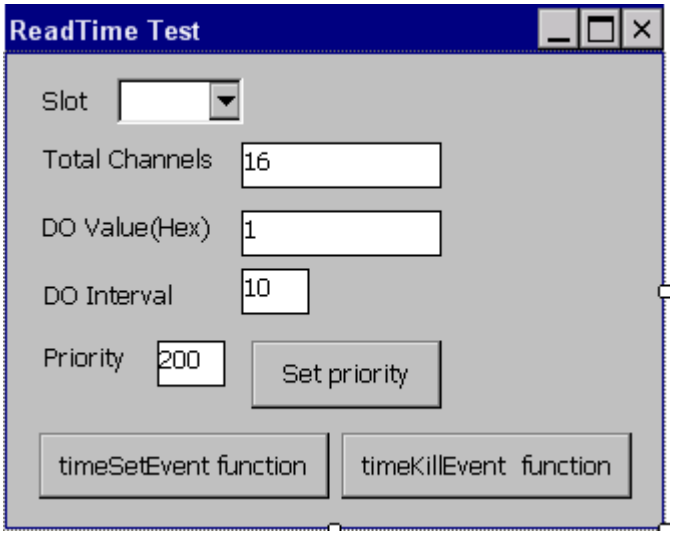


3. VB.net demo

There is no Multimedia Timer in compact framework. We provide an external "mmtimer.dll" to support Multimedia Timer.

Use any 8K DO modules to output square wave to test real time. Change the timer priority to enhance the real-time capability. Use oscillograph to see the square wave.

Note: the mmtimer.dll and the executable file need be put in the same folder.



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Download location

C sharp
http://ftp.icpdas.com/pub/cd/winpac_am335x/vp-x231/demo/pac/c%23/standard/

C++
http://ftp.icpdas.com/pub/cd/winpac_am335x/vp-x231/demo/pac/vc2008/standard/

VB.net
http://ftp.icpdas.com/pub/cd/winpac_am335x/vp-x231/demo/pac/vb.net/standard/

What is Real-Time?
Please refer to the links below for more details.

http://en.wikipedia.org/wiki/Windows_CE

http://blogs.msdn.com/b/mikehall/archive/2005/07/27/443924.aspx

http://msdn.microsoft.com/en-us/library/ms836535.aspx

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