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Q: How to use specified timer to realize real-time operation?

Applied to:

Platform	OS version	XPAC utility version
XPAC series	All versions (WinCE6)	Note1

Note1: It doesn't matter with the utility.

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 can not meet the requirement for Real-Time.

What is the input range of the priority of Multimedia Timer?

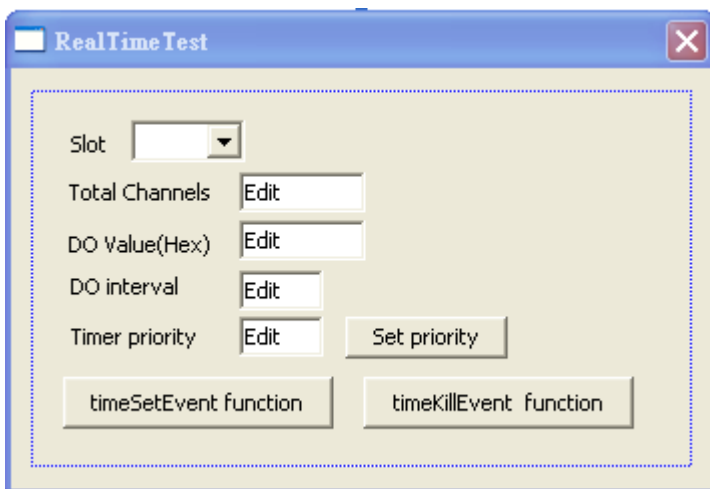
The range is 8 to 256.

How to use Multimedia Timer?

We provide three kinds demo of programming language(C sharp, VB.net, VC++) to teach user to use Multimedia Timer.

1. VC++ demo

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



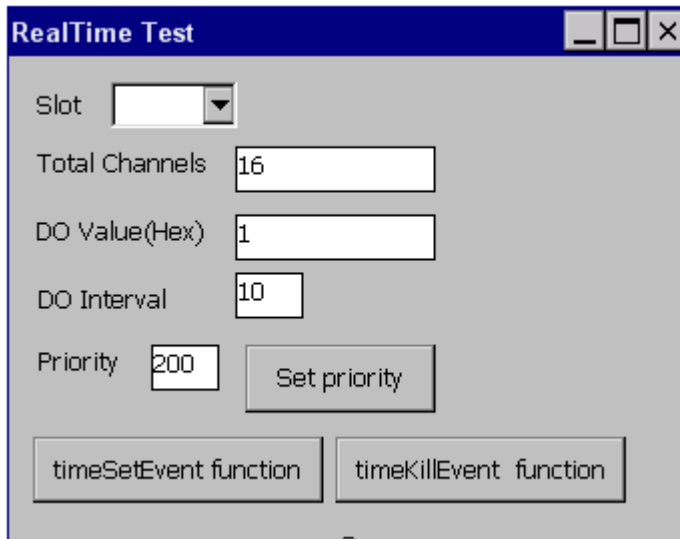
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2. C sharp demo

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 the oscillograph to see the square wave.

Note: Please be sure to put the mmtimer.dll and the executable file in the same folder.

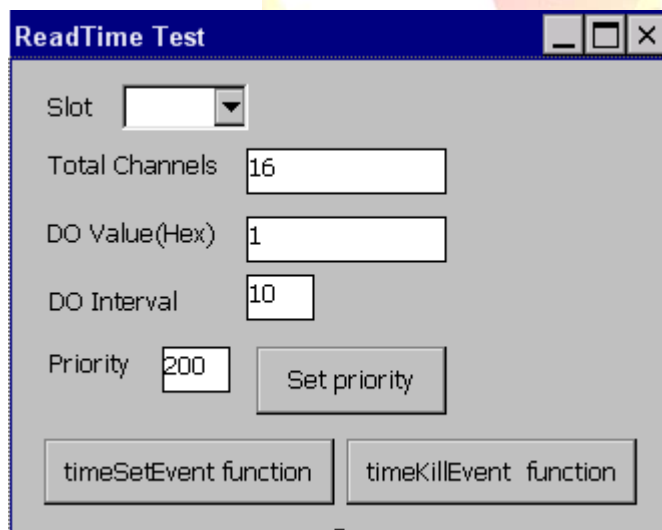


3. VB.net demo

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: Please be sure to put the mmtimer.dll and the executable file in the same folder.



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Location of demo download

C sharp:

http://ftp.icpdas.com/pub/cd/xpac-atom-ce6/demo/xpac/c%23/standard/readtimetest_timesetevent/

VC++:

<http://ftp.icpdas.com/pub/cd/xp-8000-ce6/demo/xpac/vc2008/standard/realtimetest/>

VB.net:

http://ftp.icpdas.com/pub/cd/xp-8000-ce6/demo/xpac/vb.net/standard/readtimetest_timesetevent/

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>

Read-Time API description

<http://msdn.microsoft.com/en-us/library/ee483451%28WinEmbedded.60%29.aspx>

