



## FAQ / Application Note

### Subject : Enable/Disable Intel Speed Step function

FAQ Document No: S09014

Date: 2009/06/24

Model Name. ESM-945GSE

Rev. A1

Category:  General  H/W  S/W  Others, \_\_\_\_\_

#### Purpose :

Enable/Disable and Test Speed Step function in Windows XP professional.

#### Test environment and condition:

Hardware Configuration :

ESM-945GSE A1

BIOS: S945GSEJ.bin

Memory: 1GB DDR2 SODOMM

O.S. / Software :

Windows XP professional SP2 / XPe SP2 and up

VGA Driver: Version 6.14.10.4926

CPU-Z v1.51 (<http://www.cpuid.com/>)

#### Test Procedure and Results :

##### ● Disable SpeedStep

1, Under Control Panel – open Power Options

Under the Power Schemes pull down menu

To turn Enhanced SpeedStep technology OFF select, “Always On,” power scheme.

2, Right click My Computer and select, “Properties.”

Under the General tab examine the installed processor and speed.

The first speed listed is the specified speed of the processor. The second speed is the current operating speed.

If Enhanced SpeedStep technology is off, then both processor speeds will be equal.

電腦:

Intel(R) Atom(TM)  
CPU N270 @ 1.60GHz  
1.60 GHz, 0.99 GB 的 RAM  
實體位置延伸

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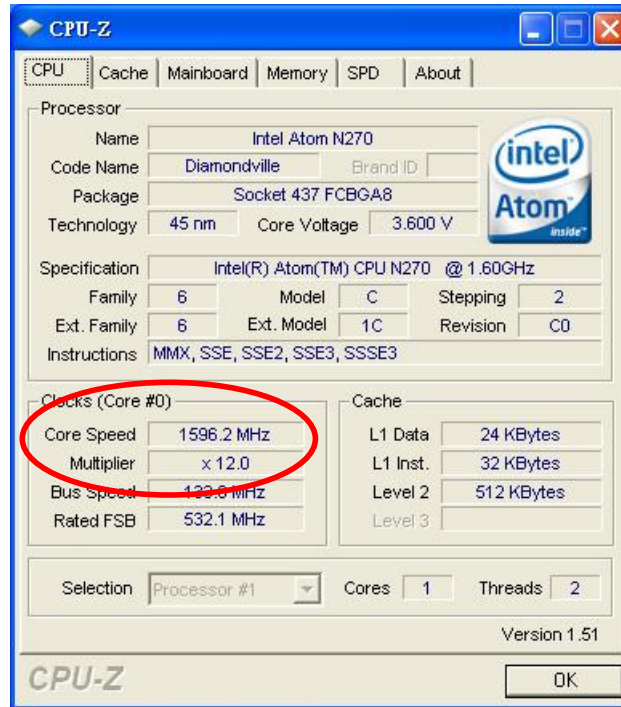
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- 3, Ensure that Windows O.S. is in idle mode.  
(Pres Ctrl + Alt + Delete and select the Performance tab. Verify that CPU usage is 0%.)
- 4, Current operating speed is always equal to the specified speed of the processor even CPU usage is 0%



### ● Enable SpeedStep

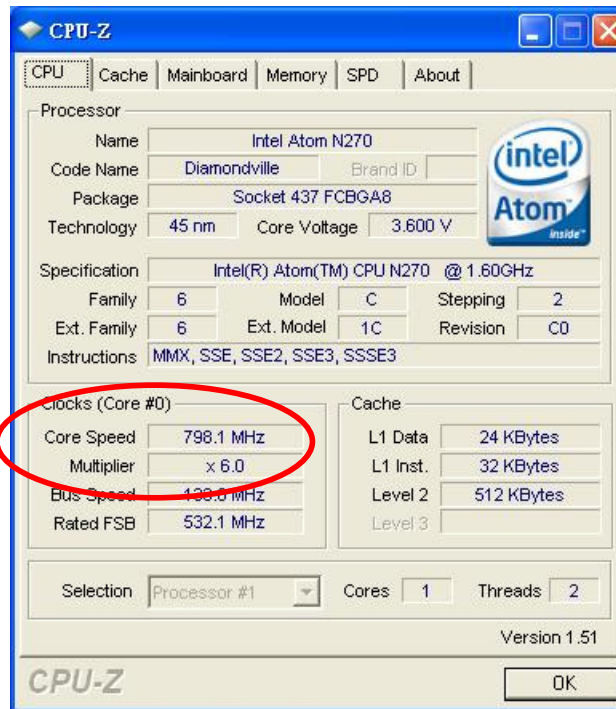
- 1, Under Control Panel – open Power Options  
Under the Power Schemes pull down menu  
To turn Enhanced SpeedStep technology ON select, “Minimal Power Management,” power scheme.  
**(Please shutdown system when you make this modification, then power on system.)**
- 2, Right click My Computer and select, “Properties.”  
Under the General tab examine the installed processor and speed.  
The first speed listed is the specified speed of the processor. The second speed is the current operating speed.  
The second speed will be less then the 1st speed.



3, Ensure that Windows OS is in idle mode.

(Pres Ctrl + Alt + Delete and select the Performance tab. Verify that CPU usage is 0%.

4, This indicates that Enhanced Intel SpeedStep technology has effectively lowered the processor voltage and core frequency,



**Reference :**

Intel SpeedStep technical document

<http://www.intel.com/cd/channel/reseller/apac/zht/products/desktop/processor/processors/core2duo/tech/311044.htm>

Atom Processor N270

<http://ark.intel.com/Product.aspx?id=36331&processor=N270&spec-codes=SLB73>

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