

# **The Intel® Processor Diagnostic Tool Release Notes**

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## 1 Purpose of Intel® Processor Diagnostic Tool

The purpose of the Intel® Processor Diagnostic Tool is to verify the functionality of an Intel® microprocessor. The diagnostic checks for brand identification, verifies the processor operating frequency, tests specific processor features and performs a stress test on the processor.

The diagnostic can be configured to execute in one of two modes, presence test mode or verification mode. Additionally, it can be configured to enable (run) or disable (skip) individual default configurations are used for this mode of operation.

## 2 IPDT Test System Requirements

### Multiprocessor Systems

The Intel® Processor Diagnostic Tool is compatible with multiprocessor systems. It is essential that only one Intel® processor is tested at a time in this system configuration. Intel® Processor Diagnostic Tool does not support multiple processors inserted into a multiprocessor system configuration.

### Motherboard & Processor

It is essential that the motherboard you use to test your processor is fully compatible with your Intel® processor. Consult your motherboard manufacturer's support to ensure the motherboard supports your processor. If you are using an Intel® Motherboard please use this utility [Intel® Processors and Boards Compatibility Tool](#)

### Motherboard BIOS

It is essential that the motherboards BIOS is at the minimum BIOS revision specified to support your Intel® processor. Consult your motherboard manufacturer's support to ensure the BIOS revision is at the correct revision.

### Motherboard Architecture

IPDT is only compatible with motherboards built using Intel® Architecture.

### Over-Clocking

Over-Clocking should be disabled while running Intel® Processor Diagnostic Tool.

### Power Management

Some power management features (e.g. [Intel SpeedStep® technology](#)) throttle or reduce the operating frequency of components within the system. These types of power management features may result in very low tested frequency results. This does not mean that the processor is operating at degraded performance levels. It means that the enabled power management feature is optimizing the efficiency of the processor, either to save power or reduce heat within the system.

We recommend you disable any power management features such as Intel SpeedStep® technology and configure your system to its optimal power management settings, when running Intel® Processor Diagnostic Tool. For instructions on how to disable these power management features, please contact your system manufacturer.

## **Operating Systems**

The Windows® version of the Intel® Processor Diagnostic Tool is compatible with the following operating systems (Please download and install the relevant IPDT installer for your Operating System – 32Bit or 64Bit):

- Windows XP SP3
- Windows Server 2003 SP2
- Windows Vista SP1 or later
- Windows Server 2008 (not supported on Server Core Role)
- Windows 7
- Windows Server 2008 R2 (not supported on Server Core Role)
- Windows 7 SP1
- Windows Server 2008 R2 SP1
- Windows 8
- Windows Server 2012

## 3 Software Required

The following software is required to run IPDT in the Windows® environment and must be installed prior to installing IPDT

### 3.1 IPDT 32 Bit Software Requirements

- The New 2D Rotation test requires that the driver for the specific platform configuration be installed:
  - The Intel(R) Graphics Media Accelerator Driver for Mobile or
  - Intel HD Graphics

<http://www.intel.com/support/graphics/intel915g/sb/CS-011363.htm>
- Microsoft® Visual C++ 2010 SP1 (x86) Runtime Libraries.  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/download/en/details.aspx?id=8328>
- Windows® Installer 3.1 Redistributable (v2).  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/downloads/details.aspx?familyid=889482fc-5f56-4a38-b838-de776fd4138c&displaylang=en>
- Microsoft® .NET Framework Version 4.0 Redistributable Package (x86\_x64).  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/en-us/download/details.aspx?id=17718>
- Java Runtime Environment.  
Click [here](#) to download or copy the following URL into your browser  
<http://www.java.com/en/download/index.jsp>
- *If your Intel Processor supports AVX, your Operating System will also need to support AVX in order to run IPDT AVX test.*  
*Operating System minimum requirements for running IPDT AVX test:*  
*Linux: supported since kernel version 2.6.30, released on June 9, 2009*  
*Microsoft Windows: supported in Windows 7 SP1 and Windows Server 2008 R2 SP1. Hotfix 2517374 available for non-SP1 version of Windows Server 2008 R2.*

## 3.2 IPDT 64 Bit Software Requirements

- The New 2D Rotation test requires that the driver for the specific platform configuration be installed:
  - The Intel(R) Graphics Media Accelerator Driver for Mobile or
  - Intel HD Graphics

<http://www.intel.com/support/graphics/intel915g/sb/CS-011363.htm>
- Microsoft® Visual C++ 2010 SP1 (x86) Runtime Libraries.  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/download/en/details.aspx?id=8328>
- Microsoft® Visual C++ 2010 SP1 (x64) Runtime Libraries.  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/download/en/details.aspx?id=13523>
- Windows® Installer 3.1 Redistributable (v2).  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/downloads/details.aspx?familyid=889482fc-5f56-4a38-b838-de776fd4138c&displaylang=en>
- Microsoft® .NET Framework Version 4.0 Redistributable Package (x86\_x64).  
Click [here](#) to download or copy the following URL into the browser  
<http://www.microsoft.com/en-us/download/details.aspx?id=17718>
- Java Runtime Environment (64Bit).  
Click [here](#) to download or copy the following URL into your browser  
<http://www.java.com/en/download/manual.jsp>  
Select the 64Bit version according to your operating system.

The IPDT Installer program will check for the presence of the above prerequisites on your system. If your system is connected to the internet the prerequisites will be downloaded and installed on your system.

- *If your Intel Processor supports AVX, your Operating System will also need to support AVX in order to run IPDT AVX test.*  
*Operating System minimum requirements for running IPDT AVX test:*  
*Linux: supported since kernel version 2.6.30, released on June 9, 2009*  
*Microsoft Windows: supported in Window 7 SP1 and Windows Server 2008 R2 SP1.*  
*Hotfix 2517374 available for non-SP1 version of Windows Server 2008 R2.*

## 5 Release Notes

| Full Version   | IPDT Version | Installer Version | GUI Version |
|----------------|--------------|-------------------|-------------|
| 1.27.0.0-17-11 | 1.29.0.0.MP  | 17                | 11          |

| Date       | Description                                                                                                                                                                                                                   |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27-June-13 | New Release which includes <ul style="list-style-type: none"><li>• Support for Intel® Core™ 4<sup>th</sup> Generation Processors</li><li>• Added QPI detection</li><li>• Added support for multi-processor platform</li></ul> |
|            |                                                                                                                                                                                                                               |

## 6 Bug Fixes

| Date | Description           |
|------|-----------------------|
|      | No bug fixes required |

## 7 Known Issues

| Description                                                                                                                                                                                                                                                                                                                                | Workaround                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• 2D Test may display a white screen during 2D test if using latest Intel HD Graphics Driver</li><li>• Rotation test disabled by default. Screen may not rotate if using latest Intel HD Graphics Driver</li><li>• QPI may not detect on Intel® Core™ 1<sup>st</sup> Generation Processors</li></ul> | <ul style="list-style-type: none"><li>• Set 2D Test to Disable</li><li>• Set rotation test to Enable if not using latest Intel HD Graphics Driver</li><li>• Ignore failure on Intel® Core™ 1<sup>st</sup> Generation Processors or set QPITest to Disable</li></ul> |

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