

# The Intel® Processor Diagnostic Tool Release Notes

## **LEGAL INFORMATION**

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

This document contains information on products in the design phase of development. All products, platforms, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice. All dates specified are target dates, are provided for planning purposes only and are subject to change.

This document contains information on products in the design phase of development. Do not finalize a design with this information. Revised information will be published when the product is available. Verify with your local sales office that you have the latest datasheet before finalizing a design.

Code names featured are used internally within Intel to identify products that are in development and not yet publicly announced for release. Customers, licensees and other third parties are not authorized by Intel to use code names in advertising, promotion or marketing of any product or services and any such use of Intel's internal code names is at the sole risk of the user.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

\*Other names and brands may be claimed as the property of others.

Copyright © 2014, Intel Corporation. All rights reserved.

## TABLE OF CONTENTS

1	Overview .....	4
2	Purpose of Intel® Processor Diagnostic Tool.....	4
3	IPDT Test System Requirements .....	4
4	IPDT Software Requirements.....	6
5	Release Notes.....	7
6	Bug Fixes .....	8
7	Known Issues.....	8

## 1 Overview

Intel® Processor Diagnostic Tool 32bit version 4.1.4.36.W has been updated to include functional and security updates. Intel recommends all users update to the latest version.

## 2 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.

## 3 IPDT Test System Requirements

### **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 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.

In addition, Intel® Turbo Boost Technology 2.0 automatically allows processor cores to run faster than the rated operating frequency if they're operating below power, current, and temperature specification limits. Availability and frequency upside of Intel Turbo Boost Technology 2.0 state depends upon a number of factors including, but not limited to the following: type of workload, number of active cores, estimated current consumption, estimated power consumption, and processor temperature.

## **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 10
- Windows 8.1
- Windows 8
- Windows 7 SP1
- Windows Server 2008 R2 SP1 (not supported on Server Core Role)

## 4 IPDT Software Requirements

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

- Microsoft® .NET Framework Version 4.5.2 Redistributable Package (x86\_x64). Click [here](https://www.microsoft.com/en-us/download/details.aspx?id=42642) to download or copy the following URL into the browser <https://www.microsoft.com/en-us/download/details.aspx?id=42642>

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

- *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:  
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
4.1.4.36.W	4.1.4.36

Date	Description
10-Sept-2019	<p>The 4.1.4.36 release includes:</p> <ul style="list-style-type: none"><li>• The addition of diagnostic module:<ul style="list-style-type: none"><li>○ FrequencyCheck version 1.0.1.32b.W</li></ul></li><li>• Update of diagnostic modules for feature functionality and/or bug fixes.<ul style="list-style-type: none"><li>○ GPUStressW version 1.0.11.32b.W</li><li>○ IMC version 1.0.17.32b.W</li><li>○ IPDT GUI version 4.1.4.36</li></ul></li></ul>
22-July-2019	<p>The 4.1.3.35 release includes:</p> <ul style="list-style-type: none"><li>• The removal of diagnostic modules:<ul style="list-style-type: none"><li>○ CPU Frequency</li><li>○ Temperature</li><li>○ PCH</li><li>○ SPBC</li></ul></li><li>• Removal of redundant and obsolete diagnostic modules.<ul style="list-style-type: none"><li>○ VisCollisions</li></ul></li></ul>

## 6 Bug Fixes

Reference No.	Description
SA ID: INTEL-SA-00268	A potential security vulnerability in the Intel® Processor Diagnostic Tool may allow escalation of privilege, denial of service, or information disclosure. Intel is releasing software updates to mitigate this potential vulnerability. <a href="https://www.intel.com/content/www/us/en/security-center/advisory/intel-sa-00268.html">https://www.intel.com/content/www/us/en/security-center/advisory/intel-sa-00268.html</a> Fix for the following potential vulnerability: Ensure IPDT is at version 4.1.3.35 or newer

## 7 Known Issues

Description	Workaround
Graphics tests may display a white screen during execution	Ensure latest Graphics Drivers are installed
If web installation of .NET452 is necessary as installer prerequisite and the target system has no internet connection, Setup will fail and report "0x80072ee7 – Unspecified Error."	Ensure that PC has active internet connection available for integrated web installation or provide alternate offline .NET redistributable package as indicated in Section 4 above.

*\*Microsoft, Windows and the Windows logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries*

*\*\*\*\*Intel, Intel SpeedStep are a trademark or registered trademark of Intel Corporation or its subsidiaries in the United States and other countries*