Intel® Performance Maximizer Version 1.0.4

Hotfix Release for Intel® Core™ X-series Processors (Cascade Lake) and 9th Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake) Update

Release Notes

February 2020

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Revision History

Table 1. Revision History

Package Definition	Intel® Performance Maximizer Software Package Revision	Release Date
Hotfix Release for Intel® Core™ X-series Processors (Cascade Lake) and 9th Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake) Update	1.0.4.1362	February 2020
Production Release for Intel® Core™ X-series Processors (Cascade Lake) and 9th Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake) Update	1.0.3.1217	December 2019
Production Release for 9th Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake)	1.0.1.602	May 2019

1 Introduction

This is the information for validated platforms. For a complete list of supported hardware and operating systems, please contact your Intel representative.

Note: Unless otherwise stated, the Intel® Performance Maximizer application displays the all-core active processor core turbo frequency.

1.1 Supported Operating Systems

This package supports the following Operating System (OS):

- Microsoft Windows 10 x64 Edition Version 1909 (November 2019 Update)
- Microsoft Windows 10 x64 Edition Version 1809 (October 2018 Update)

1.2 Supported Hardware

Table 2. Client CPU Brand Strings

CPU Brand Strings	Chipset
Intel(R) Core(TM) i5-9600K CPU @ 3.70GHz	Intel Z390
Intel(R) Core(TM) i5-9600KF CPU @ 3.70GHz	Intel Z390
Intel(R) Core(TM) i7-9700K CPU @ 3.60GHz	Intel Z390
Intel(R) Core(TM) i7-9700KF CPU @ 3.60GHz	Intel Z390
Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz	Intel Z390
Intel(R) Core(TM) i9-9900KF CPU @ 3.60GHz	Intel Z390
Intel(R) Core(TM) i9-9900KS CPU @ 4.00GHz	Intel Z390

Table 3. HEDT CPU Brand Strings

CPU Brand Strings	Chipset
Intel(R) Core(TM) i9-10980XE CPU @ 3.00GHz	Intel X299
Intel(R) Core(TM) i9-10940X CPU @ 3.30GHz	Intel X299
Intel(R) Core(TM) i9-10920X CPU @ 3.50GHz	Intel X299
Intel(R) Core(TM) i9-10900X CPU @ 3.70GHz	Intel X299

2 Configuration Guide

2.1 Minimum Requirements

- 8 GB RAM
- 16 GB free space on non-removable GPT drive
- Supported OS (see section 1.1)
- Supported CPU (see section 1.2)
- Supported chipset (see section 1.2)

2.2 BIOS Setup Guide

- Processor Core Overclocking must be enabled
- All processor cores must be enabled
- Intel® Hyper-Threading Technology (Intel® HT Technology), if supported on the processor, must be enabled
- Intel® Turbo Boost Technology 2.0 mode must be enabled
- Boot mode must be UEFI
- Enhanced Intel SpeedStep® Technology must be enabled
- Intel® Watchdog Timer Driver (Intel® WDT) must be enabled
- Refer to any additional recommendations/limitations in the *Known Issues* (section 4 table 3)

3 Changes in this Release

3.1 What's New

- Intel® Performance Maximizer installer is now contained in a self-extracting .zip file
- Adjusted testing algorithm to get better overclocked performance on some X299 motherboards

3.2 Bug Fixes

- Fixed issue causing spurious warning messages to be displayed during testing
- Fixed issue preventing "Quick Retest" feature from working on X299 systems
- Added workarounds to prevent some X299 motherboards from overriding this application's overclocking programming

4 Known Issues in this Release

Table 4. Known Issues

Reference No:	Description	Impact	Workaround
1	Some BIOS configurations may prevent Intel® Performance Maximizer from achieving the maximum processor core overclocking performance.	The system may not be overclockable using Intel® Performance Maximizer, the test run may be interrupted, or the maximum processor core overclocking performance may be reduced.	Recommend to reset BIOS to default values or update BIOS to latest version and re-run Intel® Performance Maximizer tests. Additionally, disable any BIOS overclocking optimizations if they are enabled by default.
2	Intel® Performance Maximizer data is sometimes not readable in Windows OS on systems with Intel® Optane™ Technology enabled.	Intel® Performance Maximizer may not be able to overclock the system.	Rerun the Intel® Performance Maximizer tests.
3	Other installed overclocking applications may interfere with Intel® Performance Maximizer.	The overclocked result may be overwritten.	Uninstall other overclocking applications before using Intel® Performance Maximizer.
4	Programmed frequency results can vary when I rerun Intel® Performance Maximizer.	The system may show a variation in performance or the maximum processor core overclocking performance may be change if the utility is re-run	This behavior can be attributed to the specific conditions present when the system is characterized. Thermal, power and sometimes code execution order may result in run to run variations potentially including reductions in frequency below a stock setting if a system power or thermal limit is reached.
5	Some system power plans may interfere with Intel® Performance Maximizer results	The maximum processor core overclocking performance may not be reached.	Change the system's power plan to High Performance.