Intel® Performance Maximizer
Version 1.0.6

Production Release for 10th Generation Intel® Core™ i9/i7/i5 Processors (Comet Lake)

Release Notes

July 2020
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## Revision History

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<th>Package Definition</th>
<th>Intel® Performance Maximizer Software Package Revision</th>
<th>Release Date</th>
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<tr>
<td>Production Release for 10(^{th}) Generation Intel® Core™ i9/i7/i5 Processors (Comet Lake)</td>
<td>1.0.6.1790</td>
<td>July 2020</td>
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<tr>
<td>Internal Release for 10(^{th}) Generation Intel® Core™ i9/i7/i5 Processors (Comet Lake)</td>
<td>1.0.5.1584</td>
<td>April 2020</td>
</tr>
<tr>
<td>Hotfix Release for Intel® Core™ X-series X-processors (Cascade Lake) and 9(^{th}) Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake) Update</td>
<td>1.0.4.1362</td>
<td>February 2020</td>
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<tr>
<td>Production Release for Intel® Core™ X-series X-processors (Cascade Lake) and 9(^{th}) Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake) Update</td>
<td>1.0.3.1217</td>
<td>December 2019</td>
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<tr>
<td>Production Release for 9(^{th}) Generation Intel® Core™ i9/i7/i5 Processors (Coffee Lake)</td>
<td>1.0.1.602</td>
<td>May 2019</td>
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</table>
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 2004 (May 2020 Update)
- 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

<table>
<thead>
<tr>
<th>CPU Brand Strings</th>
<th>Chipset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel(R) Core(TM) i5-10600K CPU @ 4.10GHz</td>
<td>Intel Z490</td>
</tr>
<tr>
<td>Intel(R) Core(TM) i5-10600KF CPU @ 4.10GHz</td>
<td>Intel Z490</td>
</tr>
<tr>
<td>Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz</td>
<td>Intel Z490</td>
</tr>
<tr>
<td>Intel(R) Core(TM) i7-10700KF CPU @ 3.80GHz</td>
<td>Intel Z490</td>
</tr>
<tr>
<td>Intel(R) Core(TM) i9-10900K CPU @ 3.70GHz</td>
<td>Intel Z490</td>
</tr>
<tr>
<td>Intel(R) Core(TM) i9-10900KF CPU @ 3.70GHz</td>
<td>Intel Z490</td>
</tr>
</tbody>
</table>
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 now supports 10th Generation Intel® Core™ i9/i7/i5 (Comet Lake) Processors

3.2 Bug Fixes

- Intel® Performance Maximizer will no longer become stuck in a loop if hyperthreading is disabled on the system
- Intel® Performance Maximizer now consistently displays quick re-testing results
- Intel® Performance Maximizer will now properly display the EULA when the system is set to high contrast mode
- The user can now use the keyboard to select Continue once Intel® Performance Maximizer has booted back to Windows OS after finishing testing
- Fixed issue that caused Energy Efficient Turbo to sometimes cap overclocking in Windows
- Fixed issue that caused some machines to start testing at unrealistically low voltages, which resulted in increased testing time.
- Fixed many issues with non-English localization
## 4 Known Issues in this Release

<table>
<thead>
<tr>
<th>Reference No:</th>
<th>Description</th>
<th>Impact</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Some BIOS configurations may interfere with Intel® Performance Maximizer or prevent it from achieving the maximum processor core overclocking performance.</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>2</td>
<td>Intel® Performance Maximizer data is sometimes not readable in Windows OS on systems with Intel® Optane™ Technology enabled.</td>
<td>Intel® Performance Maximizer may not be able to overclock the system.</td>
<td>Rerun the Intel® Performance Maximizer tests.</td>
</tr>
<tr>
<td>3</td>
<td>Other installed overclocking applications may interfere with Intel® Performance Maximizer.</td>
<td>The overclocked result may be overwritten.</td>
<td>Uninstall other overclocking applications before using Intel® Performance Maximizer.</td>
</tr>
<tr>
<td>4</td>
<td>Programmed frequency results can vary when I rerun Intel® Performance Maximizer.</td>
<td>The system may show a variation in performance or the maximum processor core overclocking performance may be change if the utility is rerun.</td>
<td>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.</td>
</tr>
<tr>
<td>5</td>
<td>Some system power plans may interfere with Intel® Performance Maximizer results</td>
<td>The maximum processor core overclocking performance may not be reached.</td>
<td>Change the system’s power plan to High Performance.</td>
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<tr>
<td>6</td>
<td>Certain motherboard/hard drive combinations interact in a way that prevents Intel® Performance Maximizer tests from loading properly.</td>
<td>Intel® Performance Maximizer will not complete testing, and reports an “Installation Error” in Windows after attempting to run tests.</td>
<td>Recommend to reinstall, and choose a different hard drive when creating the Intel® Performance Maximizer partition.</td>
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</tbody>
</table>