



Intel® Dynamic Tuning Technology (Intel® DTT), Client Version 8.7

8.7.10401.16510 Win10 20H1 PV Release

Release Notes

August 2020



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Revision History

Package Definition	Intel® Dynamic Tuning Technology Software Package Revision	Release Date
WHQL Version (Win10 R5/19H1/19H2/20H1))	8.7.10401.16510	August, 2020
WHQL Version (Win10 R5/19H1/19H2/20H1))	8.7.10400.15556	July, 2020

Intended Audience

The target audiences for the release notes are OEM/ODM platform thermal and hardware engineers, BIOS and system software engineers, component ingredient (WiFi PSM, WWAN, NVMe Storage, Camera) procurement and design engineers.



1 Introduction

1.1 Supported Operating Systems

This package supports following Operating Systems.

- Microsoft Windows* 10 x64 Edition RS5
- Microsoft Windows* 10 x64 Edition 19H1
- Microsoft Windows* 10 x64 Edition 19H2
- Microsoft Windows* 10 x64 Edition 20H1

Note: This is the information for validated platforms at ingredient level. For a complete list of supported hardware and operating systems, please refer to platform BKC or contact your Intel representative.

1.2 Supported Hardware

- Tiger Lake Platforms

Note: This version of Intel® DTT only supports Intel Mobile Platforms. This is the information for validated platforms. For a complete list of supported hardware and operating systems, please contact your Intel representative.

1.3 Supported BIOS

Please refer to the BKC to get the latest version.

1.4 Supported EC

Please refer to the BKC to get the latest version.

1.5 Supported Intel® Graphics Driver

Please refer to the BKC to get the latest version.



1.6 Supported Collaterals

- Intel® Dynamic Tuning Technology 8.x BIOS Specification#626708
- 2020 Intel® Dynamic Tuning Configuration Guide#618762
- Intel® Dynamic Tuning Feature Enabling Guide#572349
- Intel® Dynamic Tuning De-commissioning LPM, CMP, cTDP Policies Technical Advisory#598735
- Intel® Dynamic Tuning Decommissioning IA-P/T State GFX P State Control Technical Advisory WW13, 2019#610760
- MBT (Mobility Boost Technology) (aka Dynamic EPP): Intel® Mobility Boost Technology Feature Enabling Best Known Method (#620394)
- DPT (Dynamic Prefetch Technology) (aka HW Prefetcher): Intel® Dynamic Hardware Prefetch Enabling User Guide (#626036)
- ML-DTT (Machine Learning-Dynamic Tuning Technology) (SoC Workload condition in AP): Tiger Lake Platform Intel® Machine Learning-Dynamic Tuning Technology (ML-DTT) SoC Workload Condition in AP Policy User Guide (#618577)



2 *Installation and Configuration Guide*

2.1 Intel® Dynamic Tuning Technology 8.x Software Stack Installation Guide

2.1.1 BIOS Setup Guide

Please make sure Intel® Dynamic Tuning Technology is enabled in your BIOS setup menu.

- 1) Reboot the system and enter BIOS setup screen.
- 2) Go to "Intel Advanced Menu".
- 3) Enter "Power & Performance", then "CPU – Power Management Control" page.
 - a. Make sure "Intel(R) SpeedStep(tm)" is enabled.
 - b. Make sure "Turbo Mode" is enabled.
- 4) Enter "Thermal Configuration ", then "Intel(R) Dynamic Tuning Configuration" page.
 - a. Enable "Intel(R) Dynamic Tuning".
 - b. Most everything will be pre-configured, so change settings as desired.
- 5) Save and Exit.



2.1.2 Intel® Dynamic Tuning Technology Software Stack Installation

1. Install the Chipset and Graphic driver.
2. Unzip the Intel® Dynamic Tuning Technology package from BKC.
3. Run the single self-extracting executable (Dtt_8.7.10200.15556_Install.exe) from within the folder. This will install Intel® Dynamic Tuning Technology 8.x software that is needed on production systems. Any utilities including testing / debug tools for OEMs use will not be installed in this operation.
4. ICSS Installation
 - a. Run the ICSS_8.7.10400.15556_Install.exe from the ICSS folder to install Intel® User Awareness Service Lite Package

2.1.3 Driver Behavioral Considerations

- Windows service Wudfpf.sys is not loaded in the beginning sometimes might cause DTT device INT3400 unable to be loaded at the first time. Windows will try to load the driver again once Wudfpf.sys is loaded. There will be a warning event (ID: 219) found in event viewer, WUDFRd failed to load DTT device. If the driver is installed successfully, the message could be ignored.
- If you are considering upgrading the Intel® DTT driver on systems out in the field to 8.5.10103.7263 or newer and also want to make policy configuration changes then there are a couple of situations where extra care should be taken to ensure the upgrade works as desired.
 - You want to upgrade the driver on systems that were originally configured using any version of 8.3, 8.4, or 8.5 and the policy configuration for the system is not being updated in any way alongside or after the driver upgrade, via Windows Update or otherwise:
 - No extra care will be required since 8.5.10103.7263 or newer is backwards compatible with older policy configuration data.
 - You want to upgrade the policy configuration on systems that were originally configured using version 8.4.11000.6436 --OR-- using any version of 8.3, 8.4, or 8.5 where the name of the INT3400 device is something other than "IETM".
 - Follow these steps in order to ensure that proper configuration transition is achieved when upgrading the Intel® DTT driver with policy configuration changes:
 - i. Upgrade the driver on the desired system to the new version (8.5.10103.7263 or newer).
 - ii. Export the configuration without any changes made.
 - iii. Include the exported configuration into the BIOS of the system.
 - iv. Make any desired policy configuration changes in the Configuration Tool as desired and export when finished.



- v. Include the exported configuration with changes into the BIOS of the system.



3 *Tools Support*

Table 1. Tool Support

Feature	Description
Intel® Dynamic Tuning Technology Configuration Tool	<p>Intel® Dynamic Tuning Technology Configuration Tool is provided to monitor and test Intel® Dynamic Tuning Technology 8.x functionality for OEMs development / system validation use.</p> <p>After installing the Intel® Dynamic Tuning Technology 8.x software stack, the user can run the tool and observe the policies, participants and temperature changes. Capture all the settings as one file.</p> <p>Note: This package doesn't contain non-production use files. The tool is not included in the package, please contact your Intel representative to get it. (Kit ID : 1000115)</p>



4 Feature Set – New to this Release

- ICSS installer will no longer uninstall DTT base drivers



5 *Issues – Fixed in this Release*

Table 2. Fixed Issues

Reference No:	Description
SENSING-193	<p>ICSS installer will no longer uninstall DTT base drivers</p> <p><u>Root Cause:</u> While removing ICSS, DTT inf was detected and removed DTT instead of ICSS. Instead of DTT inf ICSS inf need to be selected and uninstalled</p> <p><u>Solution:</u> Did code changes to make sure to detect ICSS inf and remove ICSS, not DTT.</p>
16011631850	<p>DTT installer was not digitally signed in the previous version.</p> <p><u>Root Cause:</u> Due to older signing certificate in build deploy pipeline</p> <p><u>Solution:</u> DTT installer has been digitally signed in this version</p>



6 *Issues – Known in this Release*

Table 3. Known Issues

Reference No:	Description	Impact	Workaround
NA			