

Intel® Chipset Device Software

10.1.19502.8391

Release Notes

May 26th, 2023

Microsoft Windows* 10/11 x86(only for Intel® Atom™ / Celeron®/ Pentium® Processor)

Microsoft Windows* 10/11 x64

Microsoft Windows* Server 2019 x64

Microsoft Windows* Server 2016 x64

Microsoft Windows* Server 2012R2 x64

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.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

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.

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

The Intel® Chipset Device Software may contain design defects or errors described as "known issues" which may cause the product to deviate from expected performance. Current characterized known issues are documented in this update.

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 © 2023, Intel Corporation. All rights reserved.

Revision History

Date	Driver Revision	Description	Build Number
May 26, 2023	10.1.19502.8391	PV	19502.8391
Apr 28, 2023	10.1.19468.8385	PV	19468.8385
Apr 4, 2023	10.1.19457.8379	PV	19457.8379
Jan 20, 2023	10.1.19376.8374	PV	19376.8374
Nov 29, 2022	10.1.19324.8368	PV	19324.8368
Oct 20, 2022	10.1.19284.8351	PV	19284.8351
Oct 15, 2022	10.1. 19279.8347	PV	19279.8347
Aug 19, 2022	10.1.19222.8341	PV	19222.8341
Aug 02, 2022	10.1.19199.8340	PV	19199.8340
July 15, 2022	10.1.19173.8333	PV	19173.8333
Jun 23, 2022	10.1.19159.8331	PV	19159.8331
May 18, 2022	10.1.19086.8319	PV	19086.8319
Mar 31, 2022	10.1.19074.8314	PV	19074.8314
Dec 9, 2021	10.1.18950.8298	PV	18950.8298
Nov 19, 2021	10.1.18942.8292	PV	18942.8292
Nov 9, 2021	10.1.18918.8289	PV	18918.8289
Sep 3, 2021	10.1.18870.8287	PV	18870.8287
Aug 3, 2021	10.1.18838.8284	PV	18838.8284
Aug 3, 2021	10.1.18836.8283	PV	18836.8283
Jun 23, 2021	10.1.18800.8277	PV	18800.8277
Jun 16, 2021	10.1.18793.8276	PV	18793.8276
May 13, 2021	10.1.18739.8272	PV	18739.8272
Mar 29, 2021	10.1.18711.8263	PV	18711.8263
Mar 16, 2021	10.1.18698.8258	PV	18698.8258
Jan 7, 2021	10.1.18634.8254	PV	18634.8254

Intel® Chipset Device Software Support

Driver version	Minor version	Description (supported products)
10.1.50	8	Intel(R) Celeron(R)/Pentium(R) Processor (Alder Lake)
10.1.49	9	13 th Gen Intel® Core™ (Raptor Lake)
10.1.46	3	Intel® 700 Series Chipset Family (Raptor Lake PCH-S)
10.1.45	9	12 th Gen Intel® Core™ (Alder Lake)
10.1.43	5	11 th Gen Intel® Core™ (Tiger Lake)
10.1.42	12	Intel (R) VT-d Registers Intel (R) RAS Registers Intel (R) Mesh 2 PCIe Registers Intel (R) PMON MSM Registers Intel (R) MSM Registers Intel (R) NTB Registers Intel (R) DDRIO Host Config Registers Intel (R) CHA ALL0 Registers Intel (R) CHA ALL1 Registers
10.1.41	5	11 th Gen Intel® Core™ (Rocket Lake)
10.1.37	7	Intel® 600 Series Chipset Family (Alder Lake PCH-S)
10.1.36	7	Intel® 600 Series Chipset Family (Alder Lake PCH-P)
10.1.34	13	Intel® 500 Series Chipset Family (Tiger Lake PCH-H)
10.1.33	5	Intel® 400 Series Chipset Family
10.1.32	3	Intel(R) LPC Controller Intel(R) P2SB Intel(R) PMC Intel(R) SPI (flash) Controller Intel(R) PCI Express Root Port Intel(R) Shared SRAM

10.1.31	2	Intel® 400 Series Chipset Family
10.1.30	4	10th Gen Intel® Core™ (Comet Lake)
10.1.29	4	Intel(R) LPC Controller Intel(R) P2SB Intel(R) PMC Intel(R) SPI (flash) Controller Intel(R) PCI Express Root Port Intel(R) Shared SRAM
10.1.28	2	Intel(R) LPC Controller Intel(R) P2SB Intel(R) PMC Intel(R) SPI (flash) Controller Intel(R) PCI Express Root Port Intel(R) Shared SRAM
10.1.27	4	Intel(R) On-Package Platform Controller Hub
10.1.25	6	Intel(R) LPC Controller Intel(R) P2SB Intel(R) PMC Intel(R) SPI (flash) Controller Intel(R) PCI Express Root Port Intel(R) Shared SRAM
10.1.24	6	Mobile 11 th Gen Intel® Core™ processor family
10.1.22	3	Intel® 495 Series Chipset Family
10.1.20	3	10 th Gen Intel® Core™
10.1.16	8	Intel(R) 300 Series Chipset Family
10.1.15	7	Mobile 8 th Gen Intel® Core™ processor family
10.1.14	8	8th Gen Intel(R) Core™
10.1.13	3	Intel(R) Celeron(R)/Pentium(R) Processor

10.1.12	3	Intel(R) 495 Series Chipset family
10.1.11	4	Intel(R) 200 series chipset family
10.1.11	4	Intel(R) 300 series chipset family
10.1.10	5	Intel(R) Xeon(R) processor E3-1200 v6 product family
10.1.10	5	7th Generation Intel(R) Core(TM) processor family
10.1.7	4	6th Generation Intel(R) Core(TM) processor family
10.1.6	2	Intel(R) 100 Series chipset
10.1.6	2	Intel(R) C230 series chipset family
10.1.5	3	7th Generation Intel(R) Core(TM) processor family
10.1.5	3	6th Generation Intel(R) Core(TM) processor family

New Features

Features Added in Build 10.1.19502.8391	
ID	Description
1	[10.1.42.12] Added devices: 347B(PCI Express Root Port B) 347C(PCI Express Root Port C) 347D(PCI Express Root Port D) 347A(PCI Express Root Port A) 347E(NTB PCIe)
Features Added in Build 10.1.19468.8385	
ID	Description
1	None
Features Added in Build 10.1.19376.8374	
ID	Description
1	[10.1.49.9] Changed devices: A74D(PCIe RC 060 (x4) G4)
2	[10.1.49.8] Removed devices: A77D(Crashlog)
Features Added in Build 10.1.19324.8368	
ID	Description
1	None
Features Added in Build 10.1.19284.8351	
ID	Description
1	None
Features Added in Build 10.1. 19279.8347	
ID	Description
1	[10.1.49.7] Added devices: A70D(PCIe RC 010 G5) A72D(PCIe RC 011 G5) A74D(PCIe RC 060 (x4) G4)
Features Added in Build 10.1.19222.8341	
ID	Description
1	[10.1.50.8] Removed devices: 54FC (Supported by Integrated Sensor Hub driver)
Features Added in Build 10.1.19199.8340	
ID	Description
1	[10.1.50.7] made public
2	[10.1.49.6] made public

3	[10.1.46.3] made public
Features Added in Build 10.1.19173.8333	
ID	Description
1	None
Features Added in Build 10.1. 19159.8331	
ID	Description
1	Certified for 22H2.
Features Added in Build 10.1.19086.8319	
ID	Description
1	[10.1.30.4] Updated 10th Gen Intel® Core™ (Comet Lake) support
Features Added in Build 10.1.19074.8314	
ID	Description
1	[10.1.45.9] Updated TypeC/TBT/PEG devices
Features Added in Build 10.1.18950.8298	
ID	Description
1	[10.1.36.6] Remove LPSS devices
Features Added in Build 10.1.18942.8292	
ID	Description
1	None
Features Added in Build 10.1.18918.8289	
ID	Description
1	[10.1.42.10] Moved 3456 (NorthPeak) from 10.1.26 (IceLakeX)
2	[10.1.45.5] Removed 464D (PEG60)
Features Added in Build 10.1.18870.8287	
ID	Description
1	[10.1.37.7] Renamed devices: 7A8A(LPC Controller/eSPI Controller (W790)); Removed devices: 7A89(LPC Controller/eSPI Controller (X699))
Features Added in Build 10.1.18836.8283	
ID	Description
1	[10.1.45.4] Removed devices: 464F(GNA)
Features Added in Build 10.1.18836.8283	
ID	Description

1	[10.1.37.5] made public;
2	[10.1.45.3] made public;
Features Added in Build 10.1.18793.8276	
ID	Description
1	[10.1.43.5] Added PCIe devices
Features Added in Build 10.1.18793.8276	
ID	Description
1	[10.1.5.3] certified for 21H2
2	[10.1.6.2] certified for 21H2
3	[10.1.7.4] certified for 21H2
4	[10.1.9.3] certified for 21H2
5	[10.1.10.5] certified for 21H2
6	[10.1.11.4] certified for 21H2
7	[10.1.12.3] certified for 21H2
8	[10.1.13.3] certified for 21H2
9	[10.1.14.8] certified for 21H2
10	[10.1.15.7] certified for 21H2
11	[10.1.16.8] certified for 21H2
12	[10.1.17.1] certified for 21H2
13	[10.1.20.3] certified for 21H2
14	[10.1.22.3] certified for 21H2
15	[10.1.24.6] certified for 21H2
16	[10.1.25.5] certified for 21H2
17	[10.1.27.4] certified for 21H2
18	[10.1.28.2] certified for 21H2
19	[10.1.29.4] certified for 21H2
20	[10.1.30.3] certified for 21H2
21	[10.1.31.2] certified for 21H2
22	[10.1.32.3] certified for 21H2
23	[10.1.33.3] certified for 21H2
24	[10.1.34.10] certified for 21H2; Fixed DMA exemption list

25	[10.1.41.5] certified for 21H2
26	[10.1.42.8] certified for 21H2
27	[10.1.43.4] certified for 21H2; Fixed DMA exemption list
Features Added in Build 10.1.18739.8272	
ID	Description
1	None
Features Added in Build 10.1.18711.8263	
ID	Description
1	None
Features Added in Build 10.1.18698.8258	
ID	Description
1	[10.1.43.3] made public
Features Added in Build 10.1.18634.8254	
ID	Description
1	[10.1.34.8] made public
Features Added in Build 10.1.18614.8253	
ID	Description
1	[10.1.42.7] Changed platform name to Server_Common;
Features Added in Build 10.1.18593.8250	
ID	Description
1	[10.1.41.5] made public
Features Added in Build 10.1.18460.8229	
ID	Description
1	[10.1.24.5] made public
Features Added in Build 10.1.18412.8219	
ID	Description
1	None
Features Added in Build 10.1.18383.8213	
ID	Description
1	[10.1.12.3] certified for 20h1
2	[10.1.14.8] certified for 20h1

3	[10.1.20.3] certified for 20h1
4	[10.1.22.3] certified for 20h1
5	[10.1.27.4] certified for 20h1
6	[10.1.28.2] certified for 20h1
7	[10.1.30.3] certified for 20h1
8	[10.1.31.2] certified for 20h1
9	[10.1.33.3] certified for 20h1
Features Added in Build 10.1.18340.8203	
ID	Description
1	none
Features Added in Build 10.1.18295.8201	
ID	Description
1	[10.1.28.2] made public
2	[10.1.5.3] certified for 19h2
3	[10.1.10.5] certified for 19h2
4	[10.1.14.8] certified for 19h2
5	[10.1.30.3] added 9B54, and 9B64. Certified for 19h2
Features Added in Build 10.1.18267.8194	
ID	Description
1	[10.1.20.3] added
2	[10.1.22.3] added
Features Added in Build 10.1.18263.8193	
ID	Description
1	[10.1.30.2] Made public, certified.
2	[10.1.31.2] Made public, certified, updated SKUs for LPC Controller devices.
3	[10.1.33.3]Updated SKUs for LPC Controller devices.

Installer update

Changes in Installer version 3.1.7.147	
ID	Description

1	Adapted to SAC requirement
Changes in Installer version 3.1.7.145	
ID	Description
1	Avoid HW Id confliction.
Changes in Installer version 3.1.7.143	
ID	Description
1	none
Changes in Installer version 3.1.7.131	
ID	Description
1	none
Changes in Installer version 3.1.7.130	
ID	Description
1	none
Changes in Installer version 3.1.7.128	
ID	Description
1	MUP3.0 support
Changes in installer version 3.1.7.127	
ID	Description
1	Make extension infs install by installer - change logic to install many infs for single HWID with restriction: inf files must be from different folders.
Changes in Installer version 3.1.7.121	
ID	Description
1	Removed supported platform list from readme
2	Programs and Features (ARP) entry for Chipset INF will always have English product name. Before name was localized during installation and looked bad when OS changed display language.
Changes in Installer version 3.1.7.120	
ID	Description
1	Readme.txt shows Package version and Installer version
Changes in Installer version 3.1.7.118	
ID	Description
1	Update MUP.xml file with error code 350 mapped to REBOOT_UPDATE_PENDING
Changes in Installer version 3.1.7.117	

ID	Description
1	Added Fix for CVE-2019-14596
Changes in Installer version 3.1.7.107	
ID	Description
1	Added -ignoreId switch
2	Updates in custom action logging
Changes in Installer version 3.1.7.100	
ID	Description
1	fixed NDA readme file installed by Public package, now Public package installs correct readme file.
Changes in Installer version 3.1.7.99	
ID	Description
1	Fixed “the messy code is displayed during install chipset on Arabic OS”
Changes in Installer version 3.1.7.98	
ID	Description
1	CSVer.dll removed from package
2	Security fixes
3	MUP extract and extract functions fixed
4	Added Add Remove Programs entry function
5	Added uninstall functionality, does not uninstall drivers – only package contents (license, readme, registry keys, AddRemove programs entry)
6	Installation fails with known error code on unsupported platform
Changes in Installer version 3.1.7.90	
ID	Description
1	MUP packages have DriverFiles folder complying to MUP path requirements - \production\<os_name>-<os_arch> Also supports Windows10S requirement (raw driver files in package)
2	Supports Windows10S requirement (raw driver files in package)
3	MUP 2.4.5 compliant
4	Please note WiX framework used to build installer got updated to 3.11.1 which contains security fixes
Changes in Installer Version 3.1.7.89	
ID	Description

1	<p>Tweaked previous fix implementation for: Thunderbolt [TBT] power flow issue while re-applying PCIe controller inbox – added devcon disable/enable functionality</p> <p>Before inf installation devcon is used to:</p> <ul style="list-style-type: none"> - disable root TBT devices (device IDs as found in table in HSD – device parent must not be a TBT device), - task is scheduled in Task Scheduler, - task runs on OS startup and uses devcon to enable the same root TBT device, then the task removes itself. <p>–devcon switch, usage example –devcon c:\tools\devcon.exe</p> <p>Note: without an externally supplied devcon the function won't work.</p>
---	--

Changes in Installer Version 3.1.7.88

ID	Description
1	<p>Thunderbolt [TBT] power flow issue while re-applying PCIe controller inbox – added devcon disable/enable functionality</p> <ul style="list-style-type: none"> - Before inf installation devcon is used to disable TBT devices , then a task is scheduled in Task Scheduler; task runs on OS startup and uses devcon to enable the same devices twice with timeout in-between, then the task removes itself. - –devcon switch, usage example –devcon c:\tools\devcon.exe without an externally supplied devcon the function won't work - –devcontimeout switch, usage example –devcontimeout 10 sets how long to wait in seconds in-between enables

Changes in Installer Version 3.1.7.86

ID	Description
1	<p>Added –exclude switch</p> <ul style="list-style-type: none"> - ‘–exclude usb’ will not install any inf file that has USB in it's name