IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

JOSHUA BROWN, WILLIAM J. CHARLTON, JR., NICHOLAS LIPINSKI, THEATRICAL CONCEPTS, INC., a California Corporation, TODD WOLVEN, and MELANIE LOYER RUSSELL, on behalf of themselves and all others similarly situated, Plaintiffs, v. INTEL CORPORATION, a Delaware Corporation, Defendant.	C.A. No. **JURY TRIAL DEMANDED**

CLASS ACTION COMPLAINT

INTRODUCTION

1. Plaintiffs are purchasers of Intel Corporation's ("Intel's") Core 13th and 14th Generation Desktop Central Processing Units ("CPUs" or "processors") sold with a defect that causes the processors to call for elevated voltage during idle or light activity periods when installed in personal computers (the "Defect"). The elevated voltage has caused and can still cause catastrophic and permanent damage to the processors that cannot be repaired. Damaged processors suffer from stability issues causing the personal computer and running applications to freeze or crash while performing routine computer tasks and therefore are defective as to their central function.

2. The recommended retail price for the processors (the "Processors") ranges from $675.99 to $294.99.

3. Intel has known since at least late 2022 about chronic stability issues with the Processors, but did not publicly acknowledge the Defect until July 2024. First in secret, then publicly, Intel has released microcode patches to correct the defective software code that causes the Processors to call for elevated voltage (which it now refers to as "Vmin Shift"), but damaged

Processors cannot be repaired. Intel has extended its warranty on Processors purchased as separate components directly from Intel and from Intel-authorized third party resellers but has not agreed to directly replace damaged Processors purchased or leased as part of pre-built ("OEM") systems—a significant percentage of the Processors.

4. Processors bought as part of OEM systems may be outside the warranty period specific to their OEM systems and further, OEM builders may not honor their warranties regarding damaged Processors given that Intel is the responsible party. What is more, removal and replacement of a damaged Processor is likely beyond the ability of the average consumer, even assuming replacement processors could be provided.

5. The final microcode patch released by Intel to prevent further permanent damage to the Processors not only cannot repair the damage already caused by the Defect, but the patch also lowers the performance of the Processors in objective, measurable and discernable ways. Thus, regardless of whether they bought their Processors as separate components, or as part of OEM systems, Plaintiffs and the classes have been left with Processors that are now defective as to their central function or, if they are lucky enough to have escaped permanent damage, processors with lower performance than was promised as the only way to avoid permanent damage.

6. As late as September 2024, Intel was continuing to knowingly provide the Processors to authorized third-party resellers, business bulk purchasers, and OEM builders with the Defect still not remedied, and before it had released any microcode patch to address the Defect.

7. On September 25, 2024, Intel posted on its Intel Community forum that, "[f]ollowing extensive investigation of the Intel® Core™ 13th and 14th Gen desktop processor Vmin Shift Instability issue, Intel can now confirm the root cause diagnosis for the issue."[1]

8. In the same posting, Intel announced a new microcode "0x12B" which "addresses elevated voltage requests by the processor during idle and/or light activity periods." Intel also claimed in the same posting that its internal testing "indicates performance impact is within run-

[1] *See* https://community.intel.com/t5/Blogs/Tech-Innovation/Client/Intel-Core-13th-and-14th-Gen-Desktop-Instability-Root-Cause/post/1633239.

to-run variation."

9. Run-to-run variation is where the performance difference is generally under the margin of error when the same application is run multiple times with the same hardware parameters.

10. However, contrary to Intel's representations, when enthusiast websites began testing the 0x12b microcode, they saw drops in performance "significantly more than Intel claimed in its blog post announcing the update . . . ."[2] and a "performance loss in synthetic benchmarks."[3] Thus, purchasers of the Processors, whether bought through authorized third-parties resellers, directly from Intel, or from an OEM manufacturer in a pre-built OEM system, are faced with a dilemma if their processors are not already damaged: (a) refuse to install microcode 0x12B and risk permanent, irreparable damage to their processors, or (b) install the microcode and accept lower performance than they paid for and reasonably expected when they made their purchase.

11. There is an active secondary market for used processors and personal computers.

12. Plaintiffs and class members are entitled to redress for Intel's knowing sale of the Processors through its authorized third-party resellers, direct bulk purchases, and to OEM builders who then sold and/or leased their OEM systems to businesses and consumers, and for Intel's failure to disclose the known defect in violation of state unfair competition and consumer protection laws.

13. There are hundreds of thousands of Processors in the hands of U.S. consumers and businesses, yet Intel has not instituted a recall of all Processors and has not implemented a direct repair or replacement program for those who have purchased or leased from OEM manufacturers. Plaintiffs accordingly seek damages and equitable relief.

JURISDICTION AND VENUE

14. This Court has personal and subject matter jurisdiction over all parties to and causes of action asserted in this Complaint.

[2] https://www.extremetech.com/computing/latest-intel-0x12b-patch-for-raptor-lake-shown-to-reduce-performance-in
[3] https://wccftech.com/intel-14th-13th-gen-cpus-0x12b-microcode-bios-patch-performance/

15. This Court has subject matter jurisdiction over this action pursuant to the Class Action Fairness Act of 2005 ("CAFA"), 28 U.S.C. § 1332(d), because at least one member of the proposed classes is of diverse citizenship from Defendant Intel, the proposed classes consist of 100 or more members, and the aggregate claims of the members of the proposed classes exceed $5 million, exclusive of interest and costs.

16. This Court has personal jurisdiction over Intel because Intel is a Delaware Corporation, and Intel is therefore subject to general jurisdiction in this State. Additionally, for class members having claims under Intel's limited warranty, that warranty makes Delaware the exclusive jurisdiction for claims arising under or related to the warranty.

17. Venue is proper in the District of Delaware pursuant to 28 U.S.C. §§ 1391(b)(1) because Intel resides in this judicial district. In addition, certain class member assert claims herein under Intel's Limited Warranty and that warranty selects "the state of Delaware, USA or of the federal courts sitting in that state" as the exclusive forum for "any dispute arising under or related to this limited warranty."

APPLICABLE LAW

18. Federal law and the law of the respective states in which the Plaintiffs and class members reside governs their claims herein except for those claims brought by those Plaintiffs and class members who purchased Processors as separate components directly from Intel or from Intel's authorized third-party resellers, in which case, the applicable state law is that of the state of Delaware pursuant to the terms of Intel's Limited Warranties.

PARTIES

I. PLAINTIFFS

a. Box Processor Consumer Plaintiffs

i. Joshua Brown

19. Joshua Brown ("Brown") is a resident of New York, New York who purchased an Intel i9-14900K processor from Intel-authorized third-party reseller Micro Electronics, Inc.

("Micro Center"), on March 20, 2024, for the price of $519.99, not including shipping or sales tax.

20. Brown purchased the i9-14900K primarily for personal, family or household purposes.

21. Brown reasonably expected that the i9-14900K would function normally and in accordance with Intel's specifications and representations.

22. Brown has installed a BIOS update that includes Intel's last Microcode version 0x12B and has experienced reduced performance from the i9-14900K.

23. Brown would not have purchased his Intel i9-14900K at the price he paid had he known of the Defect and the eventual requirement that he install a microcode that reduces performance in order to protect his Processor from catastrophic and permanent damage.

ii. William J. Charlton, Jr.

24. William J. Charlton, Jr. ("Charlton") is a resident of Port Charlotte, Florida who purchased an Intel i9-13900K processor from Intel-authorized third-party reseller Best Buy, on January 13, 2023, for the price of $599.99 not including shipping or sales tax.

25. Charlton purchased the i9-13900K primarily for personal, family or household purposes.

26. Charlton reasonably expected that the i9-13900K would function normally and in accordance with Intel's specifications and representations.

27. After several months, Charlton began to experience stability issues with and crashes with his i9-13900K and contacted Intel for warranty service on August 8, 2024. Intel granted an RMA[4] and Charlton received a replacement i9-14900K (because Intel did not have replacement i9-13900K's in inventory) from Intel on August 23, 2024, after Intel confirmed his first Processor was defective.

28. Charlton has now begun to experience stability issues and crashes with his i9-14900K and has opened up a service ticket with Intel but has not been granted an RMA.

[4] An RMA stands for "Return merchandise authorization" and is a formal approval from a manufacturer or reseller to return a product for repair of exchange.

29. Charlton would not have purchased his Intel i9-14900K at the price he paid had he known of the Defect and the eventual requirement that he install a microcode that reduces performance in order to protect his Processor from catastrophic and permanent damage.

iii. Nicholas Lipinski

30. Nicholas Lipinski ("Lipinski") is a resident of Gouldsboro, Pennsylvania, who purchased an Intel i9-13900K processor from Intel-authorized third-party reseller Micro Electronics, Inc. ("Micro Center") on February 22, 2023, for the price of $529.99 not including sales tax.

31. Lipinski purchased the i9-13900K primarily for personal, family or household purposes.

32. Lipinski reasonably expected that the i9-13900K would function normally and in accordance with Intel's specifications and representations.

33. Several months later, Lipinski began to experience stability issues with and crashes with his i9-13900K. Because he had paid for a separate warranty from Micro Center, Lipinski returned the Processor on August 2, 2024, and received an i9-14900K as a replacement because Micro Center no longer had i9-13900K Processors in stock.

34. Barely a month later, Lipinski again began experiencing similar stability issues and crashes with his *second* Intel Processor, his new i9-14900K, and, on October 15, 2024, Lipinski contacted Intel for warranty service. Intel refused to grant an RMA on Lipinski's i9-14900K, and Lipinski then returned to Micro Center, which again, replaced his i9-14900K with another i9-14900K on October 17, 2024.

35. Lipinski has installed a BIOS update that includes Intel's last Microcode version 0x12B and has experienced reduced performance in his i9-14900K.

36. Lipinski would not have purchased his first Intel i9-14900K at the price he paid had he known of the Defect and the eventual requirement that he install a microcode that reduces performance in order to protect his Processor from catastrophic and permanent damage.

iv. Todd Wolven

37. Todd Wolven ("Wolven") is a resident of Moscow, Idaho who purchased an Intel i9-14900K processor from Intel-authorized third-party reseller ASI Computer Technologies on October 10, 2023, for the price of $579.00, not including shipping or sales tax.

38. Wolven purchased the i9-14900K primarily for personal, family or household purposes.

39. Wolven reasonably expected that the i9-14900K would function normally and in accordance with Intel's specifications and representations.

40. Wolven soon began to experience stability issues with and crashes with his i9-14900K and contacted Intel for warranty service on January 29, 2024. Intel granted an RMA, and Wolven received a replacement i9-14900K from Intel on February 29, 2024, after Intel confirmed his first processor was defective.

41. A few months later, Wolven again began experiencing similar stability issues and crashes with his *second* i9-14900K, and, on August 18, 2024, Wolven contacted Intel for warranty service. Intel granted an RMA of Wolven's second i9-14900K, and Wolven received yet another replacement i9-14900K from Intel on October 5, 2024, after Intel confirmed that his second processor was defective.

42. Wolven has installed a BIOS update that includes Intel's last Microcode version 0x12B and has experienced reduced performance from his i9-14900K.

43. Wolven would not have purchased his first Intel i9-14900K at the price he paid had he known of the Defect and the eventual requirement that he install a microcode that reduces performance in order to protect his processor from catastrophic and permanent damage.

b. Box Processor Business Plaintiff

i. Theatrical Concepts, Inc.

44. Theatrical Concepts, Inc. ("Theatrical") is a corporation organized and existing under the laws of the State of California, with its principal place of business in Agoura Hills, California, that purchased an Intel i9-13900KF processor from Intel-authorized third-party reseller Exxact Corporation, or its affiliates, on September 21, 2023, for the price of $570.00, not including

shipping or sales tax.

45. Theatrical reasonably expected that the i9-13900KF would function normally and in accordance with Intel's specifications and representations.

46. Several months later, the i9-13900KF began to demonstrate stability issues and crashes and Theatrical contacted Intel for warranty service on July 9, 2024. Intel granted an RMA on July 12, 2024, and Theatrical was shipped a replacement i9-13900KF on July 18, 2024, after Intel confirmed the processor was defective.

47. Theatrical has installed a BIOS update that includes Intel's last Microcode version 0x12B and has experienced reduced performance from the i9-13900KF. Theatrical would not have purchased the Intel i9-13900KF at the price it paid had it known of the Defect and the eventual requirement that it install a microcode that reduces performance in order to protect its Processor from catastrophic and permanent damage.

c. OEM System Processor Plaintiff

i. Melanie Loyer Russell

48. Melanie Loyer Russell ("Russell") is a resident of Saint James, Missouri who purchased an Alienware Aurora R16 Gaming Desktop PC containing an Intel i9-14900KF from Dell Marketing LP on February 18, 2024, for the price of $4,298.99, not including sales tax. Russell specifically chose a prebuilt desktop PC containing an Intel 14th Generation Core Processor. The product page for her Alienware Aurora R16 Gaming Desktop PC prominently displayed the "Intel" graphic and the first specification in the product description was "Intel® Core™ i9 14900KF."

49. Russell purchased her Alienware Aurora R16 Gaming Desktop PC containing an Intel i9-14900KF processor for personal, family, and household use.

50. Russell reasonably expected that the i9-14900KF would function normally and in accordance with Intel's specifications and representations.

51. Several months after delivery, Russell began to experience stability issues causing the PC to freeze while performing ordinary and routine computer tasks. These issues are indicative

of premature, unrepairable damage to her Intel i9-14900KF. Russell opened a support ticket with Dell Premium Support on July 31, 2024, but Dell has not agreed to an RMA of either the Alienware Aurora R16 Gaming Desktop PC or the Intel i9-14900KF as of the date of the filing of this Complaint.

52. Russell has not installed a BIOS update that includes Intel's last Microcode version 0x12B.

53. Russell would not have purchased the Alienware Aurora R16 Gaming Desktop PC containing an Intel i9-14900KF at the price she paid had she known of the Defect and the eventual requirement that she install a microcode that reduces performance in order to protect her Intel i9-14900KF from catastrophic and permanent damage.

II. DEFENDANT

54. Intel is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Santa Clara, California. Intel engages in the design, manufacture, and sale of computer products and technologies in the business and consumer markets worldwide.

55. Intel's revenue from the sale of desktop processors was $10.2 billion worldwide in 2023. Intel's only significant competitor in the desktop PC processor space is Advanced Micro Devices, Inc. ("AMD"), with $4.65 billion in worldwide revenue from both its desktop and mobile processor sales in 2023.

FACTS

III. INTEL RAPTOR LAKE PROCESSORS

a. Central Processing Units

56. The Central Processing Unit (CPU) or processor is the "brains" of a personal computer ("PC"). Almost everything a computer does is controlled by its processor. Processors consist of millions of microscopic electrical components embedded on a tiny wafer of silicone. Processors are, however, more than just their component parts; they also include embedded instruction sets designed to perform specific tasks.

57. When a PC runs an application (apart from graphics in most high-end systems), it is running on the processor. Without a processor, a PC will not function.

58. The processor is plugged into a dedicated socket on a large circuit board called a "motherboard" that connects to the other computer components. Like the processors themselves, Intel and AMD design and specify the motherboards for their processors, but, unlike their processors, motherboards are primarily manufactured and branded by third-parties which can customize the design and settings to meet their own particular goals for functionality, performance and cost. The manufacturers are called "Original Design Manufacturers" or "ODMs."

59. A processor's performance is measured in "clock speed" or frequency. Generally, a higher clock speed means a faster processor, running more operations per second. However, running at a higher clock speed generates more heat. The faster the clock speed, the hotter the processor gets. Intel processors are limited to an operating temperature of 100ºC (212ºF). As processors approach their temperature limit, embedded instruction sets in the processor should slow the clock speed down to prevent permanent damage (called "thermal throttling").

60. In PCs, processor temperatures are mitigated by a thermal solution such as an air cooler which is screwed tightly over the processor to transfer heat. Enthusiast PCs now often use water coolers to more efficiently transfer heat away from the processor, enabling the processor to run at even higher clock speeds while keeping temperatures low enough that the processor will not thermal throttle.

61. "Voltage Identification Digital" ("VID") is a digital signal the processor sends to the motherboard to instruct the power converter of the amount of voltage the processor requires.

62. "Vmin" is the minimum voltage the processor needs to operate with stability.

63. "Vcore" or "core voltage" is the main input voltage supplied to the processor. Higher voltage levels are required to obtain higher stable processor frequencies, because faster speeds require more power. A higher core voltage also results in a higher heat output, and greater power consumption by the processor.

64. Like elevated temperatures, elevated voltage can damage a processor, degrading

internal processor components and causing instability. For the Intel® Core™ 13th and 14th Gen desktop processors, the specified maximum operating voltage was 1.72V.[5]

b. PC Game and Multimedia Rendering

65. In 2023, the global market for PC games exceeded $41billion.[6] Modern PC games with cutting-edge 3D graphics are some of the most challenging applications PC's run.

66. The modern era of PC gaming and multimedia began in 1993, when three engineers formed a company, now known as "NVIDIA Corporation" ("Nvidia") to design and build a specialized electronic circuit known as a graphics processing unit ("GPU") for rendering 3D graphics and other kinds of multimedia that would allow PC users to run more graphically complex games and media on their PCs.

67. Almost all enthusiast PCs now include discrete video graphics cards with GPUs to run games and multimedia. This allows for much of the visual data and processes to be "offloaded" from the processor. Nevertheless, processors still play a critical role in running PC games and multimedia at both the desktop and server level, performing a host of functions and feeding the graphics data to the video card from the system's memory.

68. Tools for developing a PC game's core functionality, called a "game engine," can be licensed and used to develop new games. Other types of programs that perform other rendering and ancillary functions can also be licensed and incorporated into new games.

69. Modern 3D graphics programs use internal programs called "shaders" that mathematically calculate light, dark, and color when rendering a 3D scene to the player. To save space and memory, and speed performance, shaders are compressed and are required to be rapidly decompressed by the game engine and then properly compiled when the scene needs to be rendered. Processors handle part of this process of decompression and compiling of shaders.

c. Intel Processor Sales

i. Box Processors

[5] 13th Generation Intel® Core™ and Intel® Core™ 14th Generation Processors Datasheet, Volume 1 of 2 August 2024, p. 186, Doc. No.: 743844, Rev.: 012.

[6] https://80.lv/articles/pc-games-market-significantly-outpaces-console-in-last-year-s-growth/

70. Intel sells processors for desktop computers in three ways. Intel sells processors as separate components through authorized resellers, and consumers and businesses purchase the processors and install them themselves in their PCs. These processors are sold in the famed Intel blue box. The box itself provides indicia that the included processor is authentic and authorized for sale and is covered by Intel's processor warranty. Because the processors are sold in boxes, Intel describes these processors as "Box Processors."

71. Box Processor purchasers building a PC have a choice to build based on either an Intel or an AMD processor. Many main PC components are only compatible with either Intel or AMD processors, so the initial processor manufacturer choice cannot be undone without replacing other significant components. Thus, the initial decision to build either an Intel or AMD system is a decision that determines the entire PC system through its useful life.

ii. Tray Processors

72. Intel also sells its processors in bulk directly to other technology companies for their own use and also to original equipment manufacturer (OEM) system builders (also known as "integrators"). These OEMs (i.e., "Dell," "HP," "Lenovo," etc.) use tray processors to build complete PCs for sale to the public. Because these processors are shipped in trays containing 40 or more processors, these are known as "Tray Processors." Direct purchasers of Tray Processors have direct warranty agreements with Intel.

iii. OEM Processors

73. The purchasers of OEM systems containing Intel processors are not covered by Intel's warranty. Instead, these purchasers have a separate warranty from the OEM that generally covers all system hardware including the processor.

d. Intel's Raptor Lake Processors

74. On September 28, 2022, Intel formally announced its newest processor, code named "Raptor Lake," the 13th Generation of Intel processors designed for PCs. As it had with previous generations of processors, on October 20, 2022, Intel launched its fastest, best-performing processor first, in order to generate excitement and demand among PC enthusiasts and creative

professionals. These processors have model numbers that include the letter "K," indicating they are "unlocked."

75. As described by Intel, "[u]nlocked processors are processors that are unlocked to custom tune the processor settings. If the processor is unlocked, you can adjust the power, voltage, core, memory settings, and other key system values for more performance."[7]

76. On January 3, 2023, Intel announced additional mainstream 13th Generation desktop processors and processors for laptops. These processors are not unlocked.

77. On October 17, 2023, the 14th Generation of Raptor Lake was launched, again, with the fastest, best performing processors first. These processors also have model numbers that end with "K" indicating that they are unlocked. On January 8, 2024, Intel released its mainstream 14th Generation desktop processors and processors for laptops.

78. For simplicity, except where needed, both the 13th Generation and 14th Generation Intel processors will continue to be referred to herein as "Raptor Lake."

79. For Box Processor purchasers, Intel's standard U.S. warranty for Raptor Lake was three-years from the date of purchase for original owners. Intel generally offers a shorter limited warranty with Tray Processors to its direct customers. As described *supra*, OEM purchasers are not covered by the Intel warranty and are instead covered by whatever warranty the OEM provides to direct purchasers.

IV. INTEL'S REPRESENTATIONS REGARDING ITS RAPTOR LAKE PROCESSORS

a. 13th Gen Intel Core S-Series Processors

80. On September 12, 2022, Intel released its official media presentation on its new 13th Gen Intel Core S-Series Processors.

81. Intel specifically mentioned its "engineering optimization to the retail shelf" and "incredible partnerships for product readiness at launch" with OEM and ODM customers, including with the makers of "70+ motherboards."

[7] https://www.intel.com/content/www/us/en/support/articles/000058654/processors.html.

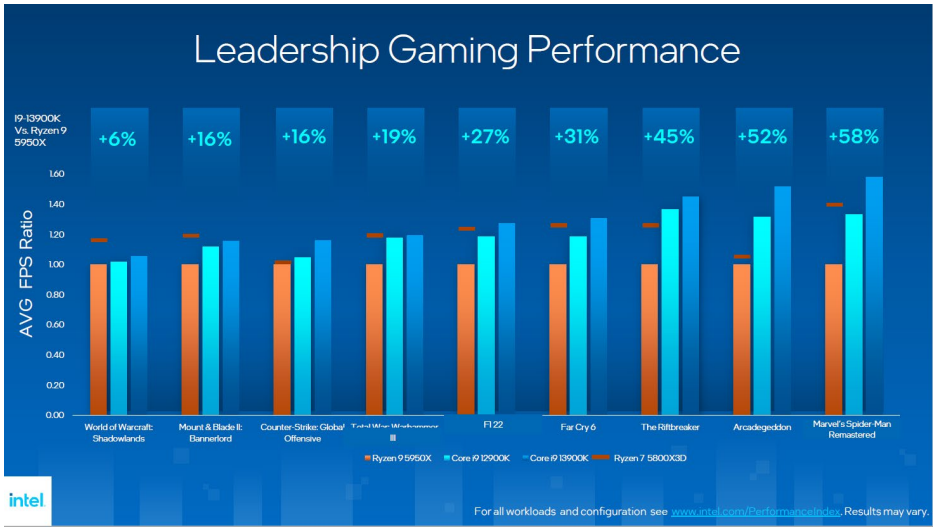
82. Intel claimed that "13th Gen Intel® Core™ Delivers the World's Fastest Desktop Processor" which delivered "World's Best Gaming Experience" with "faster cores and amazing simultaneous gaming, streaming and recording" as well as "Unmatched Overclocking Experience" with "the best experience for everyone – from experts to beginners."

83. Intel based its representations on:

> Claims as of Sept. 7, 2022. Intel Core i9-13900K is the world's fastest desktop processor at 5.8 GHz. World's Best Gaming Experience based on performance and unique features of unlocked 13th Gen Intel Core processors, including in comparison to 12th Gen Intel Core, AMD Ryzen 9 5950X and AMD Ryzen 7 5800X3D. Best overclocking based on enhanced overclocking ability enabled by Intel's comprehensive tools and unique architectural tuning capabilities.

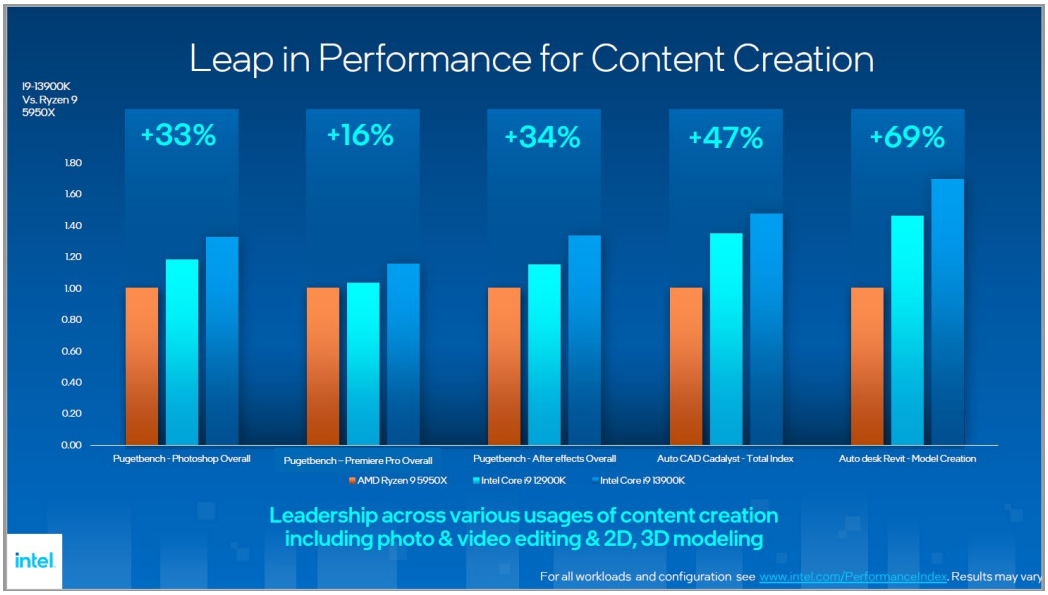
84. Intel promised that its 13th Gen Intel® Core™ i9-13900K would be "delivering up to 15% ST [Singlethread] and 41% MT [Multithread] improvement over its prior generation processors.

85. Intel represented that "13th Gen Desktop Processors: [would be] Unleashing the Ultimate Gaming Platform." Intel went on to claim, "Leadership Gaming Performance" and produced a chart showing improvements in performance in gaming for its new "Intel Core i9-13900K vs Intel Core i9-12900K" in 32 of the most popular PC games in 2023:

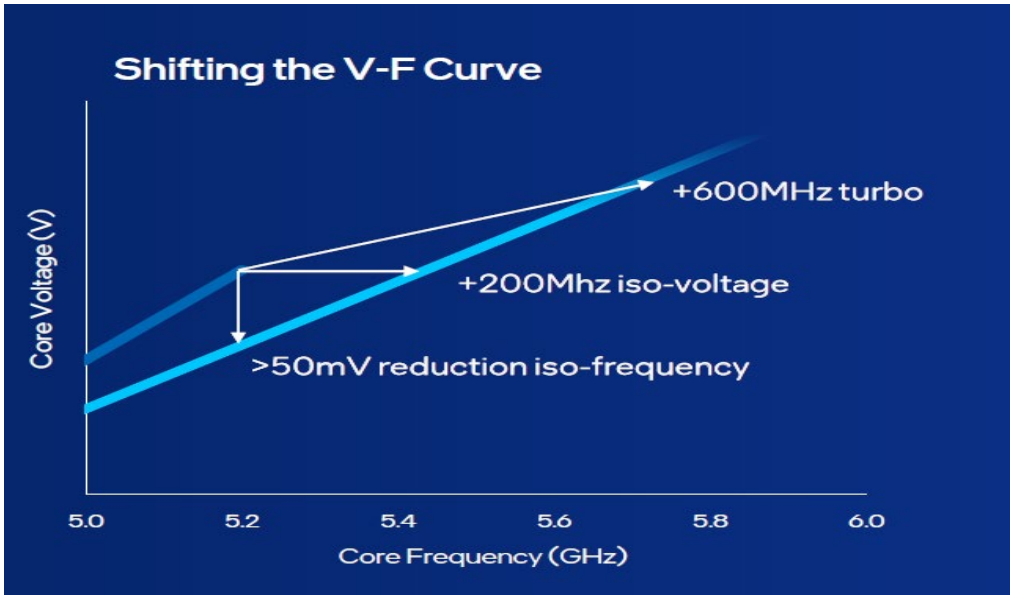


86. Intel further claimed, "Up to 24% Gaming Performance" in "70+ Top Gaming Titles."

87. Intel also represented that its new "Intel Core i9-13900K would achieve specific scores in five applications designed to test and validate PCs and PC components—a 33% improvement in Pugetbench - Photoshop Overall; a 16% improvement in Pugetbench —Premiere Pro Overall; a 34% improvement in Pugetbench – After effects Overall; a 47% improvement in Auto CAD Cadalyst – Total Index; and a 69% improvement in Auto desk Revit – Model Creation:



88. Intel specifically represented that its new Raptor Lake processors would have "the Fastest Performance Core" and would achieve higher performance with a lower "Core Voltage:"



89. Intel also claimed that Raptor Lake processors had "Scalable Performance per Watt," and were able to achieve significantly better Multithread Performance at lower wattages than its prior generation of processors.

90. In January 2023, Intel released its official media presentation on its new 13th Gen Intel Core Mainstream Processors. These processors promised to deliver "next level performance for mainstream gaming and content creation." Intel again claimed, "The Best Gaming Experience" and promised:

- Fast speeds: up to Max Turbo Frequency of 5.8GHz the highest for any desktop processor
- Strong processor performance across a collection of benchmarks and real world Gaming, Productivity, & Content Creation workloads, including in relation to prior generation (12th Gen Intel Core) and competitive processor offerings such as AMD Ryzen 9 5950X and AMD Ryzen 7 5800X3D

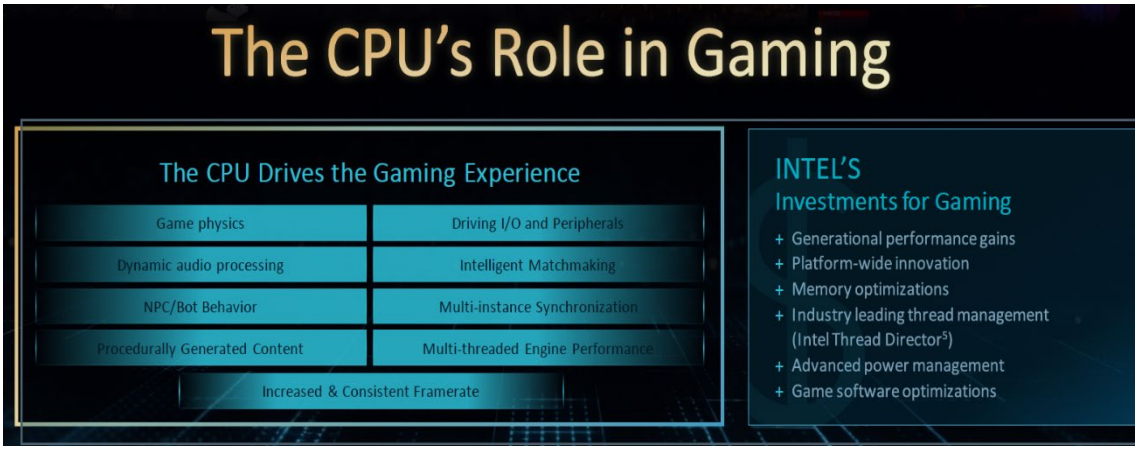
91. Intel went on to promise that its 13th Gen Intel Core Mainstream Processors were "More Energy Efficient," claiming "Up to 34% higher MT [Multithread] performance with the same power" as the previous generation processors.

b. 14th Gen Intel Core S-Series Processors

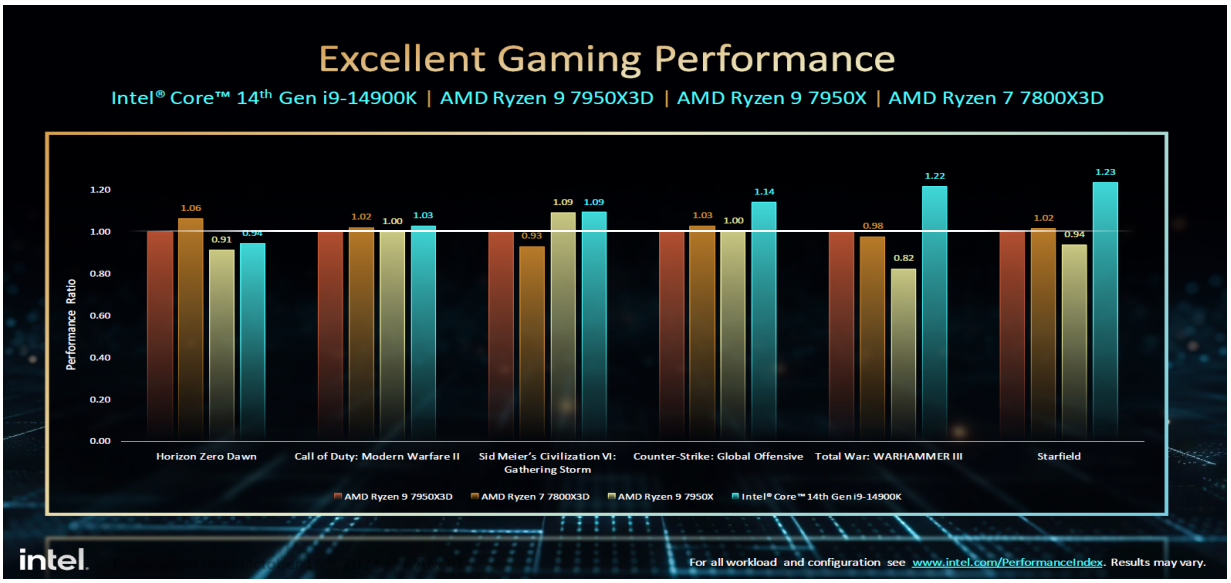
92. On October 16, 2023, Intel released its official media presentation on its new Intel Core 14th Gen S-Series Processors. Intel promised that its new generation processor would be the "World's Fastest Desktop Processor" and would provide the "World's Best Desktop Experience for Enthusiasts" with "faster cores for amazing multi-tasking; gaming, streaming and recording."

93. Intel went on to claim that the new 14th Gen Desktop Processors were "Unleashing the Ultimate Gaming Platform" and that the 14th Gen Desktop Processors utilized "software optimizations focused on gaming applications."

94. The 2023 presentation contained a slide highlighting "The CPU's Role in Gaming:"

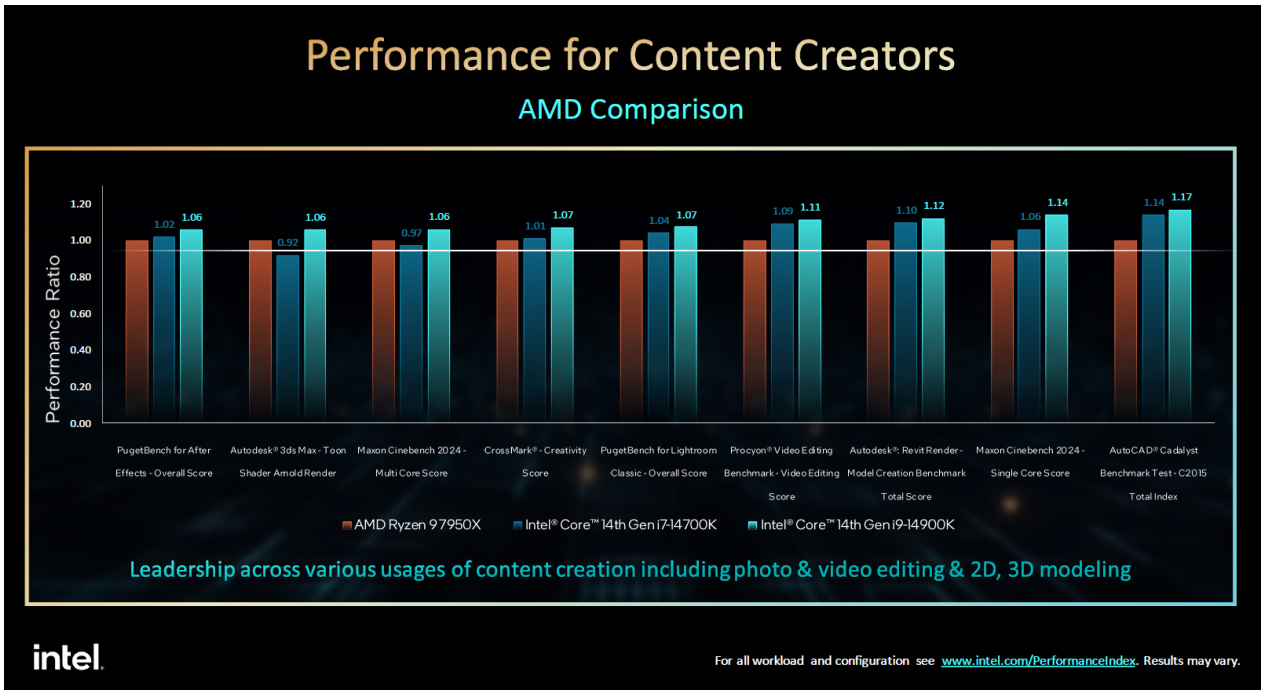


Another slide promised "Excellent Gaming Performance" and touted superior performance compared to competitor processors in six popular PC games:



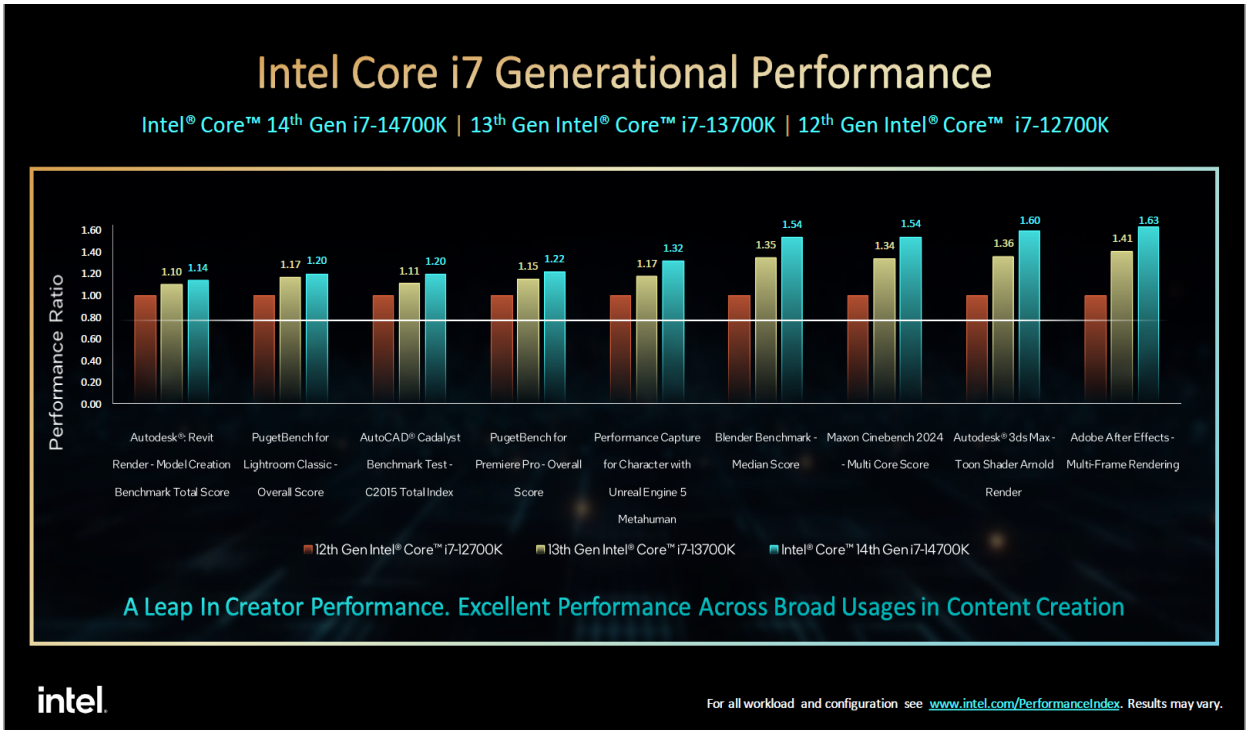
95. Intel also represented that its new Intel Core 14th Gen I9-14900K would achieve specific scores in nine applications designed to test and validate PCs and PC components—1.06 in PugetBench for After Effects – Overall Score; 1.06 in AutoDesk 3ds Max – Toon Shader Amold Render; 1.06 in Maxon Cinebench 2024 – MultiCore Score; 1.1407 in CrossMark – Creativity Score; 1.07 in PugetBench for Light room Classic – Overall Score; 1.11 in Procyon Video Editing Benchmark – Video Editing Score; 1.12 in Autodesk RevitRender – Model Creation Benchmark

Total Score; 1.14 in Maxon Cinebench 2024 – Single Core Score; and 1.17 in AutoCAD Cadalyst Benchmark Test – C2015 Total Index:



96. Significantly, Intel represented that its three generations of Intel Core i7-12700K, 13700K, and 14700K desktop processors (the last two being the Raptor Lake 13th Generation and 14th Generation desktop processors) achieved specific performance scores in nine applications designed to test and validate PCs and PC components—1.10 for 13th Gen. and 1.14 for 14th Gen. in Autodesk Revit Render – ModelCreation Benchmark Total Score; 1.17 for 13th Gen. and 1.20 for 14th Gen. in PugetBench for Lightroom Classic - Overall Score; 1.11 for 13th Gen. and 1.20 for 14th Gen. in AutoCad Cadalyst Benchmark Test – C2015 TotalIndex; 1.15 for 13th Gen. and 1.22 for 14th Gen. for PugetBench for Premier Pro – Overall Score; 1.17 for 13th Gen. and 1.32 for 14th Gen. in Performance Capture for Character with Unreal Engine 5 Metahuman; 1.35 for 13th Gen. and 1.54 for 14th Gen. Blender Benchmark – Median Score; 1.34 for 13th Gen. and 1.54 for 14th Gen. and Maxon Cinebench 2024 – Multi Core Score; 1.36 for 13th Gen. and 1. 60 for 14th Gen. in Autodesk 3dsMax - Toon Shader Arnold Render; and 1.41 for 13th Gen. and 1.63 for 14th

Gen. in Adobe After Effects – Multi-Frame Rendering:



97. Once again, Intel also touted its "Unmatched Ecosystem Breadth & Collaboration" with various OEM and ODM customers and that its 14th Gen Desktop Processors would deliver "up to 23% Better Gaming Performance" vs. the competing AMD processor.

c. Intel Performance Indexes

98. Intel maintains a comprehensive, historic database to support all of its performance claims for its desktop processors on its website at https://edc.intel.com/content/www/us/en/products/performance/benchmarks/desktop/.

99. Support for Intel's performance claims for each one of the different models of 13th Gen Intel Core Desktop Processors can be viewed at https://edc.intel.com/content/www/us/en/products/performance/benchmarks/13th-gen-intel-core-desktop-processors/.

100. Support for Intel's performance claims for each one of the different models of 14th

Gen Intel Core Desktop Processors can be viewed at https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-core-14th-gen-desktop-processors/.

V. THE INTEL RAPTOR LAKE DEFECT

a. The Defect Manifests in Raptor Lake Processors

101. Barely a month after the launch of 13th Gen. Raptor Lake Processors, users on PC enthusiast and gaming internet forums began posting about experiencing instability, PC crashes and video memory crashes with Intel's flagship i9-13900K versions of the Raptor Lake processors while playing computer games or running other types of multimedia applications. Since these users were also running on discrete video graphics cards with more than sufficient memory, this was a strange result. Users reported that their processors performed well when new, but, after a few months, they all began to experience the same errors.

102. On November 24, 2022, a poster on one of the most widely-read internet computer forums,[8] "anandtech.com," authored a post entitled "DEGRADING Raptor lake CPUs," writing in part:

> I noticed some reports about degrading i9 13900K and KF processors.
>
> I experienced this problem myself, when I ran it at 6 GHz, light load (3 threads of Cinebench), at acceptable temperature and non extreme voltage. After only few minutes it crashed, and then it could not run even at stock setting without bumping the voltage a bit.[9]

103. On December 14, 2022, a poster on another widely-read internet computer forum "overclock.net" experimented with an earlier microcode Intel had written onto the poster's i9-13900K and reported that:

> [0x]104 has some strange interaction with Core PLL Voltage Trim, which causes very high temp alerts and strange core temp deltas if you go past 30mv, and at default setting (0.90v), causes core temp to be reported at least 6C below actual

[8] Language in internet forum posts is extremely informal and ungrammatical. Where necessary, the posts have been edited for clarity but can be viewed in their original form at the links provided.
[9] https://forums.anandtech.com/threads/degrading-raptor-lake-cpus.2608723/#post-40897139

ambient temp . . .[10]

104. On January 13, 2023, the employee-moderator of the forum for Intel motherboard ODM, "EVGA Corporation" reported that a new microcode version 0.105 that Intel had provided to be incorporated into EVGA's new BIOS for its Raptor Lake-compatible motherboards had "a lower VID value."[11]

105. Again, VID (Voltage Identification Digital) is the specification for the default voltage for stable operation of the processor. The VID always defines the maximum operating voltage (Vpeak) for the processor. Intel's lowering of VID indicates that it was already aware of the Defect and was trying to address it without saying anything publicly.

106. On July 27, 2023, a user updated his post on the r/intel reddit forum describing how they had exhaustively troubleshooted issues with their PC before focusing on their i9-13900KF and concluded that:

> SOME OF I9-13900's faulty, its like lottery, i did borrow a i9-13900F from my friend and my pc working like charm, I started the RMA process. If you [are] getting like this errors [sic], drop down the CPU CLOCKS from 55 to 50, so you can use it until RMA. Then definitely RMA IT, THERE IS NOTHING YOU CAN DO ABOUT FIX[ing] THE PROBLEM.[12]

107. The poster also helpfully provided links to no less than 15 other internet forum posts describing the same issue with Intel i9-13900 Processors.

108. It is important to note that the r/intel reddit forum is closely monitored by Intel and, when Intel makes announcements to the enthusiast community, it will frequently do so through posts on r/intel. Intel employees are active on r/intel and frequently post and respond to posts there.

109. On August 11, 2023, video game developer "Arc Games" posted on its website regarding players encountering "out of memory" crashes when attempting to run a game called "Remnant 2" on PC, stating that "We have identified an issue on some Intel 13th generation CPU's where upon startup the game will display a message about being out of video memory or the crash

[10] https://www.overclock.net/posts/29093878/
[11] https://forums.evga.com/BIOS-for-Z690-DARK-KNGPN-208-CLASSIFIED-208-13900KS-support-and-more-m3594283.aspx?high=intel+105
[12] https://www.reddit.com/r/intel/comments/12bybl5/something_wrong_with_13900K/

reporter will pop up referencing an issue with decompressing a shader. If you experience this problem, you will likely also see it in other DX12[13] games."[14]

110. On September 25, 2023, a user on Intel's own "community.intel.com" internet forum posted about "very frequent crashes (Windows 11) with apps, games and benches" with his i9-13900K. An Intel moderator responded to the post, insisting that the processor was "working properly." Another poster responded linking to the prior post on the r/intel reddit and asking sensibly:

> Why don't intel just accepts this is something wrong with i9-13900K instead of following the SoP.?
>
> Everyone who bought i9-13900K is suffering in silence. Some don't even know what it is and getting their head burst out... Please do good and help everyone instead of taking long time to check everyone and telling all nonsense reasons even when you have a data of how many i9-13900K has gone wrong? Please at-least publish the data.[15]

111. On or about December 23, 2023, game engine developer "RAD," whose products include a widely-used data compression program for gaming engines called "Oodle," posted an article on its own website entitled "Intel Processor Instability Causing Oodle Decompression Failures" and that it had:

> … become aware of a problem that can cause Oodle Data decompression failures, or crashes in games built with Unreal [gaming engine]. We believe that this is a hardware problem which affects primarily Intel 13900K and 14900K processors, less likely 13700, 14700 and other related processors as well.[16]

112. On February 13, 2024, an anonymous user posted to the Unreal Engine Developer (one of the most popular gaming engines) internet forum reporting that he had reached out directly to Nvidia about issues with '"Out of video memory' and or BSOD [Blue Screen of Death] and

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[13] Microsoft DirectX is a collection of application programming interfaces (APIs) that provide features and handle tasks on the Windows platform related to multimedia and game programming. Direct 12 Ultimate ("DX12") is the latest stable API.

[14] https://www.remnantgame.com/en/news/article/11551423

[15] https://community.intel.com/t5/Processors/i9-13900K-very-frequent-crashes-Windows-11-with-apps-games-and/m-p/1527297#M65490

[16] https://www.radgametools.com/oodleintelold.htm

system crashes. The issue were [sic] only exists in games using and made with Unreal Engine."[17]

113. The user quoted directly from Nvidia's proposed solution as provided to the user:

> If you're getting the out of video memory error when launching The Finals [PC game,], you more than likely need to downclock your CPU. Despite the game saying the issue is with your VRAM, if your PC has an i9-13900K (or KF)[18] CPU, then you need to perform a slight downclock to fix the problem. For some reason, Unreal Engine 5 games seem to have some issues with this particular model (and possibly other 13th-generation Intel CPUs).
>
> We have identified an issue on some Intel 13th generation CPU's where upon startup the game will display a message about being out of video memory or the crash reporter will pop up referencing an issue with decompressing a shader. If you experience this problem, you will likely also see it in other DX12 games.
>
> If your CPU is overclocked, try setting it back to the defaults. If you're not overclocked or that doesn't work, try installing Intel Extreme Tuning Utility:
>
> [Intel® Extreme Tuning Utility (Intel® XTU) 1.0K] (https://Intel 80 Extreme Tuning Utility) and lowering your "Performance Core Ratio" from 55x to 54x.

114. At the same time, similar complaints and reports began to circulate across the Internet on PC enthusiast forums and websites, all pointing the finger at Intel 14900K, 13900K, 14700K, and 13700K processors as the common factor.

115. Other game developers also began posting about the problem on their own websites as they fielded more and more complaints from their customers. On February 22, 2024, Game developer "Fatshark" reported that for players experiencing "data corruption errors … it has been noted that players with the Intel i9 13900K/14900K and Intel i7 13700K/14700K CPUs are prone to these crashes."[19]

b. Intel Finally Publicly Acknowledges the Issues with Raptor Lake Processors

116. On February 23, 2024, the Internet website "Tom's Hardware" reported that

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[17] https://forums.unrealengine.com/t/out-of-video-memory-nvidia-message/1686222

[18] Intel's KF series processors are essentially the same as its K processors, but without the CPU's integrated graphics--an extraneous feature for enthusiasts using a dedicated graphics card in their systems. *See* https://www.corsair.com/us/en/explorer/gamer/corsair-one-gaming-pcs/what-is-the-difference-between-the-k-the-kf-and-the-f-cpus-from intel/#:~:text=The%20KF%20series%20processors%20are,lower%20than%20the%20K%20processors.

[19] https://support.fatshark.se/hc/en-us/articles/360021425793--PC-How-to-Resolve-Data-Corruption-Errors

"[i]ncreasing numbers of users of the [Intel] Core i9-13900K and Core i7-13700K have reported crashes in some of the latest games, usually accompanied by an out of video memory error."[20]

117. Importantly, Tom's Hardware reached out to Intel and received an "official response," "Intel is aware of reports regarding Intel Core 13th and 14th Gen unlocked desktop processors experiencing issues with certain workloads. We're engaged with our partners and are conducting analysis of the reported issues." Thus, no later than February 23, 2024, Intel was finally officially acknowledging that at least some of its Raptor Lake processors were "experiencing issues with certain workloads."

118. On February 27, 2024, Intel provided its first official response to the numerous reports it had received of processor instability. Intel Employee Thomas Hannaford ("Hannaford") posted on the Intel Community Product Support [Internet] Forums "Processors" sub-forum that:

> Intel is aware of reports regarding Intel Core 13th and 14th Gen unlocked desktop processors experiencing issues with certain workloads. We're engaged with our partners and are conducting analysis of the reported issues.
>
> If you are experiencing these issues, please reach out to Intel Customer Support for further assistance in the interim.[21]

119. According to his LinkedIn profile, Hannaford is "Communications Manager at Intel Corporation."

120. On April 6, 2024, Nvidia posted in its own "NVIDIA GeForce Forums," linking to the February 27, 2024 Intel forum post along with the note for its users that "[i]f your system is using an Intel 13th/14th Gen unlocked desktop CPU and is experiencing stability issues/out of memory error messages/crash to desktop while the game is compiling shaders, please consult the following sites for troubleshooting assistance."[22]

121. On April 8, 2024, the website "digitaltrends.com" posted on that "an anonymous

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[20] https://www.tomshardware.com/pc-components/cpus/is-your-intel-core-i9-13900K-crashing-in-games-your-motherboard-bios-settings-may-be-to-blame-other-high-end-intel-cpus-also-affected

[21] https://community.intel.com/t5/Processors/Regarding-Reports-of-13th-14th-Gen-Unlocked-Desktop-Users/td-p/1575863?profile.language=en

[22] https://www.nvidia.com/en-us/geforce/forums/game-ready-drivers/13/540532/geforce-grd-55212-feedback-thread-released-4424/

source in Korea responsible for customer service on Intel CPUs says that customers are returning more than 10 of Intel's 13th-gen and 14th-gen Core i9 CPUs daily" due to the "not enough video memory" error when launching games.[23]

122. On April 9, the website "The Verge" translated a statement Intel made to ZDNet Korea that "Intel is aware of problems that occur when executing certain tasks on 13th and 14th generation core processors for desktop PCs, and is analyzing them with major affiliates."[24]

123. On April 27, 2024, the PC hardware website "Igorslab.de" published an update it had been given by Intel as a "13th and 14th Generation K SKU Processor Instability Issue Update," which sought to place the blame on Intel's motherboard ODM partners:

> Intel® has observed that this issue may be related to out of specification operating conditions resulting in sustained high voltage and frequency during periods of elevated heat.
>
> Analysis of affected processors shows some parts experience shifts in minimum operating voltages which may be related to operation outside of Intel® specified operating conditions.
>
> ….
>
> Intel® requests system and motherboard manufacturers to provide end users with a default BIOS profile that matches Intel® recommended settings.
>
> Intel® strongly recommends customer's default BIOS settings should ensure operation within Intel's recommended settings.
>
> In addition, Intel® strongly recommends motherboard manufacturers to implement warnings for end users alerting them to any unlocked or overclocking feature usage.[25]

c. Intel Continues to Purportedly Search for the Cause of the Issues with Raptor Lake Processors

124. On May 2, 2024, Hannaford posted to the Intel "processor" community forum:

> We are continuing to investigate with our partners the recent user reports of

[23] https://www.digitaltrends.com/computing/intel-core-i9-cpu-crashes-returns/

[24] https://www.theverge.com/2024/4/9/24125036/intel-game-crash-13900K-14900K-fortnite-unreal-engine-investigation

[25] https://www.igorslab.de/en/intel-releases-the-13th-and-14th-generation-k-sku-processor-instability-issue-update/

> instability in certain workloads on these processors.
>
> In the interim, the following BIOS[26] settings are recommended to help maximize stability for currently installed processors while Intel continues investigating root cause:
>
> . . . .
>
> Intel continues to work with its partners to develop appropriate mitigations going forward. And as noted previously, if you are experiencing these issues please reach out to Intel Customer Support for further assistance.[27]

125. On June 14, 2024, the website "guru3d.com" posted that it had learned of an internal Intel document with the title "Enhanced Thermal Velocity Boost (eTVB) May Miscalculate Frequency Limits." The document described "an issue where incorrect frequency limit calculations might allow processors to operate at high frequency states at high temperatures. This issue has been a known concern for some time, potentially leading to unstable performance and possible damage in these CPU models."[28]

126. The same day, Intel issued a statement to tomshardware.com that denied that the internal document reflected that it had solved the root cause of its 13th and 14th Gen. processor crashes:

> Contrary to recent media reports, Intel has not confirmed root cause and is continuing, with its partners, to investigate user reports regarding instability issues on unlocked Intel Core 13th and 14th generation (K/KF/KS) desktop processors … The microcode patch referenced in press reports fixes an eTVB bug discovered by Intel while investigating the instability reports. While this issue is potentially contributing to instability, it is not the root cause.

127. On June 18, 2024, Hannaford again posted to the community Intel forum:

> Intel and its partners are continuing to investigate user reports regarding instability issues on Intel Core 13th and 14th generation (K/KF/KS) desktop processors. We appreciate the Intel community's patience on the matter and will continue to share updates on the investigation as it works towards a conclusion. In the meantime, we're sharing an update on confirmed factors leading to the reported instability

[26] BIOS (Basic Input/Output System) is firmware that tells a computer's operating system how to operate the PC's hardware.

[27] https://community.intel.com/t5/Processors/Updated-Guidance-RE-Reports-of-13th-14th-Gen-Unlocked-Desktop/m-p/1594553

[28] https://www.guru3d.com/story/intel-addresses-instability-in-13th-and-14th-generation-k-sku-processors/

issues and Intel's current guidance to users regarding Intel Core 13th and 14th Generation (K/KF/KS) desktop processors.

Investigation Background and Intel Default Settings Recommendations

Intel analysis has determined a confirmed contributing factor to the instability reports on Intel Core 13th and 14th Gen (K/KF/KS) desktop processors is elevated voltage input to the processor due to previous BIOS settings which allow the processor to operate at turbo frequencies and voltages even while the processor is at a high temperature.

However, in investigating this instability issue Intel did discover a bug in the Enhanced Thermal Velocity Boost (eTVB) algorithm which can impact operating conditions for Intel Core 13th and 14th Gen (K/KF/KS) desktop processors.[29] We have developed a patch for the eTVB bug and are working with our OEM/ODM motherboard partners to roll out the patch as part of BIOS updates ahead of July 19th, 2024. While this eTVB bug is potentially contributing to instability, it is not the root cause of the instability issue.

As Intel and its partners continue working towards a conclusion to the investigation, we want to make sure that all users are clear on the recommended Intel Default power delivery profile settings for Intel Core 13th and 14th Gen (K/KF/KS) desktop processors. Intel also recommends users check their motherboard vendor's website for the latest relevant BIOS updates:

Intel Recommendations: 'Intel Default Settings' Intel strongly recommends these values be applied as BIOS defaults.				
Parameter / Feature	Value			Notes
CEP (Current Excursion Protection)	Enable			
eTVB (Enhanced Thermal Velocity Boost)	Enable			
TVB (Thermal Velocity Boost)	Enable			
TVB Voltage Optimizations	Enable			
ICCMAX Unlimited Bit	Disable			
TjMAX Offset	0			
C-states (Including C1E)	Enable			All c-states should be enabled, including enhanced C-states (C1E)
Power Delivery Profiles: Core i5-13600K/KF, Core i5-14600K/KF				Intel recommends using the 'Performance' Power Delivery Profile if supported by the voltage regulator (VR) and motherboard design.
Parameter / Feature	Baseline*	Performance	Extreme	* Intel does not recommend Baseline power delivery profiles for 13th and 14th Gen K Sku processors unless required for compatibility
ICCMAX	175A	200A	N/A	Refer to 13th Generation Intel® Core™ and Intel® Core™ 14th Generation Processors datasheet: https://cdrdv2.intel.com/v1/dl/getContent/743844?explicitVersion=true PL1 = 125W is standard, PL1=181W is recommended for best performance.
ICCMAX_App	150A	170A		
Power Limit 1 (PL1)	125	181W (See Notes)		
Power Limit 2 (PL2)	143	181W		
Power Delivery Profiles: Core i7-13700K/KF, Core i7-14700K/KF				Intel recommends using the 'Performance' Power Delivery Profile if supported by the voltage regulator (VR) and motherboard design.
Parameter / Feature	Baseline*	Performance	Extreme	* Intel does not recommend Baseline power delivery profiles for 13th and 14th Gen K Sku processors unless required for compatibility
ICCMAX	249A	307A	N/A	Refer to 13th Generation Intel® Core™ and Intel® Core™ 14th Generation Processors datasheet: https://cdrdv2.intel.com/v1/dl/getContent/743844?explicitVersion=true PL1 = 125W is standard, PL1=253W is recommended for best performance.
ICCMAX_App	200A	245A		
Power Limit 1 (PL1)	125W	253W (See Notes)		
Power Limit 2 (PL2)	188W	253W		
Power Delivery Profiles: Core i9-13900K/KF, Core i9-14900K/KF				Intel recommends using the 'Extreme' Power Delivery Profile if supported by the voltage regulator (VR) and motherboard design.
Parameter / Feature	Baseline*	Performance	Extreme	* Intel does not recommend Baseline power delivery profiles for 13th and 14th Gen K Sku processors unless required for compatibility
ICCMAX	249A	307A	400A	ICCMAX must never exceed 400A Refer to 13th Generation Intel® Core™ and Intel® Core™ 14th Generation Processors datasheet: https://cdrdv2.intel.com/v1/dl/getContent/743844?explicitVersion=true PL1 = 125W is standard, PL1=253W is recommended for best performance.
ICCMAX_App	200A	245A	320A	
Power Limit 1 (PL1)	125W	253W (see notes)	253W	
Power Limit 2 (PL2)	188W	253W	253W	
Power Delivery Profiles: Core i9-13900KS, Core i9-14900KS				Intel recommends using the 'Extreme' Power Delivery Profile if supported by the voltage regulator (VR) and motherboard design.
Parameter / Feature	Baseline	Performance	Extreme	
ICCMAX	N/A	307A	400A	ICCMAX must never exceed 400A Refer to 13th Generation Intel® Core™ and Intel® Core™ 14th Generation Processors datasheet: https://cdrdv2.intel.com/v1/dl/getContent/743844?explicitVersion=true
ICCMAX_App		245A	320A	
Power Limit 1 (PL1)		253W	320W	
Power Limit 2 (PL2)		253W	320W	

[29] Emphasis added.

> These recommended Intel Default Settings are developed – based on extensive testing and validation - to ensure optimal stability and reliability for Intel Core 13th and 14th Gen (K/KF/KS) desktop processors. System performance is dependent on configuration and several other factors.
>
> And to be clear, users looking to overclock or utilize higher power delivery settings than recommended can still do so at their own risk as overclocking may void warranty or affect system health (you can learn more at www.intel.com/overclocking).
>
> Next Steps
>
> As we noted earlier, this investigation is not an easy one to conduct and we're grateful for both the support of our partners in conducting the analysis as well as the patience of the Intel community.
>
> In the interim, please reach out to Intel Customer Support if you have questions or concerns regarding your Intel Core 13th or 14th Gen (K/KF/KS) desktop processor.[30]

128. On July 9, 2024, the developers of the video game "Warframe" posted to their internet forum (forums.waframe.com) with the subject line "Instability on recent Intel Processors" The post read:

> While investigating crashes in Warframe we came across a particular series that were not crashing in our code (they were crashing in nvgpucomp64.dll, a component of Nvidia drivers). After aggregating hundreds of reports from helpful players we discovered a pattern: almost all were coming from systems with 13th and 14th generation Intel processors.[31]

129. On or about the same day, game developer Alderon Games Pty Ltd ("Alderon" posted a message from its founder on its website with a post entitled "Intel is selling defective 13-14th Gen CPUs." The post went on to read:

> My team at Alderon Games, working on the multiplayer dinosaur survival game Path of Titans, has been encountering significant problems with Intel CPU stability. These issues, including crashes, instability, and memory corruption, are confined

[30] https://community.intel.com/t5/Processors/June-2024-Guidance-regarding-Intel-Core-13th-and-14th-Gen-K-KF/m-p/1607807

[31] https://forums.warframe.com/topic/1405008-instability-on-recent-intel-processors/

to the 13th and 14th generation processors. Despite all released microcode, BIOS, and firmware updates, the problem remains unresolved.

We have identified failures in five main areas:

- End Customers: Thousands of crashes on Intel CPUs on 13th and 14th Gen CPUs in our crash reporting tools.
- Official Dedicated Game Servers: Experiencing constant crashes, taking entire servers down.
- Development Team: Developers using these CPUs face frequent instability while building and working on the game. It can also cause SSD and memory corruption.
- Game Server Providers: Hosting community servers with persistent crashing issues.
- Benchmarking Tools: Decompression and memory tests unrelated to Path of Titans also fail.

Over the last 3–4 months, we have observed that CPUs initially working well deteriorate over time, eventually failing. The failure rate we have observed from our own testing is nearly 100%, indicating it's only a matter of time before affected CPUs fail. This issue is gaining attention from news outlets and has been noted by Fortnite and RAD Game Tools, which powers decompression behind Unreal Engine.

Users are also receiving misleading error messages about running out of video driver memory, despite having sufficient memory.[32]

d. Intel Announces the Root Cause of the Issue in the Raptor Lake Processors

130. On July 22, 2024, *at least twenty months* after the first public reports of the issue in its processors had begun, and after selling hundreds of thousands of Raptor Lake Processors in the interim, Intel announced on its community forum that it had determined the cause of the instability issues:

> Based on extensive analysis of Intel Core 13th/14th Gen desktop processors returned to us due to instability issues, we have determined that elevated operating voltage is causing instability issues in some 13th/14th Gen desktop processors. Our analysis of returned processors confirms that the elevated operating voltage is stemming from a microcode algorithm resulting in incorrect voltage requests to the processor.

[32] https://alderongames.com/intel-crashes

> Intel is delivering a microcode patch which addresses the root cause of exposure to elevated voltages. We are continuing validation to ensure that scenarios of instability reported to Intel regarding its Core 13th/14th Gen desktop processors are addressed. Intel is currently targeting mid-August for patch release to partners following full validation.
>
> Intel is committed to making sure all customers who have or are currently experiencing instability symptoms on their 13th and/or 14th Gen desktop processors are supported in the exchange process.
>
> To help streamline the support process, Intel's guidance is as follows:
>
> - For users who purchased 13th/14th Gen-powered desktop systems from OEM/System Integrator - please reach out to your system vendor's customer support team for further assistance.
> - For users who purchased boxed 13th/14th Gen desktop processors - please reach out to Intel Customer Support for further assistance.
> - For users who purchased tray 13th/14th Gen desktop processors - please reach out to your place of purchase for further assistance.[33]

131. Also on July 22, Tom's Hardware reported on Intel's announcement, but added critical information that Intel had not included in the public announcement, and which would impact every Intel Raptor Lake processor purchaser:

> The bug causes irreversible degradation of the impacted processors. We're told that the microcode patch will not repair processors already experiencing crashes, but it is expected to prevent issues on processors that aren't currently impacted by the issue. For now, it is unclear if CPUs exposed to excessive voltage have suffered from invisible degradation or damage that hasn't resulted in crashes yet but could lead to errors or crashes in the future.[34]

Intel has never disputed Tom's Hardware's claims.

VI. INTEL REFUSES TO RECALL RAPTOR LAKE PROCESSORS.

a. Intel Discloses the Scope of the Defect

132. On July 26, 2024, the website "The Verge" published Intel's Hannaford's responses

[33] https://community.intel.com/t5/Processors/July-2024-Update-on-Instability-Reports-on-Intel-Core-13th-and/m-p/1617113#M74792

[34] https://www.tomshardware.com/pc-components/cpus/intel-finally-announces-a-solution-for-cpu-crashing-errors-claims-elevated-voltages-are-the-root-cause-fix-coming-by-mid-august

to a series of questions the website propounded.[35] Hannaford confirmed to The Verge that Intel would not halt sales of its Raptor Like Processors or claw back inventory and confirmed that "[i]t will not do a recall, period."

133. For the first time, Hannaford disclosed that *all* "Intel Core 13th and 14th Generation desktop processors with 65W or higher base power – including K/KF/KS and 65W non-K variants – could be affected by the elevated voltages issue." This meant that two dozen processors were potentially affected by the Defect, and that the problem extended far beyond Intel's top-tier enthusiast processors to Intel's mainstream processors, which had been sold to ordinary business and personal desktop computer purchasers in the hundreds of thousands.

134. Hannaford reiterated to The Verge Intel's position that:

> Intel is confident that the microcode patch will be an effective preventative solution for processors already in service, though validation continues to ensure that scenarios of instability reported to Intel regarding its Core 13th/14th Gen desktop processors are addressed.
>
> Intel is investigating options to easily identify affected or at-risk processors on end user systems.

135. The Verge was careful to note that "[a]gain, if your CPU is already damaged, you need to get Intel to replace it, and if Intel won't do so, please let us know." The Verge's headline for the interview was "There is no fix for Intel's crashing 13th and 14th Gen CPUs — any damage is permanent."

b. Intel Extends its Warranty on Box Processors

136. On August 1, 2024, Hannaford posted on the Intel Community forum that:[36]

> Intel is committed to making sure all customers who have or are currently experiencing instability symptoms on their 13th and/or 14th Gen desktop processors are supported in the exchange process. We stand behind our products, and in the coming days we will be sharing more details on two-year extended warranty support for our boxed Intel Core 13th and 14th Gen desktop processors.

[35] https://www.theverge.com/2024/7/26/24206529/intel-13th-14th-gen-crashing-instability-cpu-voltage-q-a
[36] https://community.intel.com/t5/Processors/Intel-Core-13th-14th-Gen-Boxed-Desktop-Processor-Warranty-Update/m-p/1620096

> In the meantime, if you are currently or previously experienced instability symptoms on your Intel Core 13th/14th Gen desktop system:
>
> - For users who purchased systems from OEM/System Integrators – please reach out to your system manufacturer's support team for further assistance.
>
> - For users who purchased a boxed CPU – please reach out to Intel Customer Support for further assistance.

Intel did not indicate that it would proactively contact purchasers to advise them of the potential damage to their processors.

137. On August 5, 2024, Hannaford posted the full details of Intel's warranty extension for its defective Raptor Lake processors:[37]

> Following Intel's earlier announcement regarding two (2) year warranty extension – from date of purchase, up to a maximum of five (5) years - on Intel Core 13th/14th desktop processors, please see below for additional details on the program.
>
> Intel Core 13th/14th Gen Desktop Boxed/Tray CPUs
>
> The following processors are covered by the warranty extension:

Processor Number	
13th Generation Intel® Core™	14th Generation Intel® Core™
i9-13900KS	i9-14900KS
i9-13900K	i9-14900K
i9-13900KF	i9-14900KF
i9-13900F	i9-14900F
i9-13900	i9-14900
i7-13700K	i7-14700K
i7-13700KF	i7-14700KF
i7-13790F	i7-14790F
i7-13700F	i7-14700F
i7-13700	i7-14700
i5-13600K	i5-14600K
i5-13600KF	i5-14600KF

> Warranty extension applies to new & previously purchased processors, if they are one of the Intel Core 13th/14th Gen SKUs listed above. This warranty coverage applies to all customers globally.
>
> Standard warranty process and terms apply – which you can review here:

[37] https://community.intel.com/t5/Processors/Additional-Warranty-Updates-on-Intel-Core-13th-14th-Gen-Desktop/m-p/1620853#M75727

> https://www.intel.com/content/www/us/en/support/articles/000024255/processors.html.
>
> For users who are or have previously experienced instability symptoms on their Intel Core 13th/14th Gen Desktop processors and need to initiate the exchange process:
>
> - Boxed Processors – please contact Intel Customer Support for further assistance.
> - Tray Processors – please contact your place of purchase for further assistance.
> - OEM/System Integrator Intel Core 13th/14th Gen-powered desktop system – please contact your system manufacturer for further assistance.
>
> If customers have experienced these instability symptoms on their 13th and/or 14th Gen desktop processors but were unsuccessful in prior RMAs we ask that they reach out to Intel Customer Support for further assistance and remediation.
>
> We appreciate your patience with this process and will continue to share updates relating to the Intel Core 13th/14th Gen desktop processor instability issue.

Again, Intel did not indicate that it would proactively contact purchasers to advise them of the potential damage to their processors, nor did it indicate what steps it would take, if any, to ensure that OEM/System Integrator customers would receive an exchange of their damaged processors, particularly if the OEM warranty had already expired.

138. On August 7, 2024, The Verge reached out to 15 leading OEM/System Integrators to inquire whether they would pass along Intel's warranty extension to their own customers. Most claimed they would do so, but Intel appears to have done nothing to ensure that the OEMs would honor their unenforceable promises of an informal warranty extension.[38]

139. Further, removal and replacement of a defective processor in a PC is likely beyond the technical ability of the average purchaser of an OEM pre-built PC, even assuming the warranty extension was honored.

140. Intel has not agreed to allow purchasers of OEM pre-built PCs with damaged Processors to obtain warranty replacement through Intel's own customer support.

[38] https://www.theverge.com/2024/8/7/24215440/intel-13th-14th-gen-crash-raptor-lake-integrator-warranty-lenovo-dell-hp-acer-asus

c. Intel Announces a Microcode Patch

141. On August 9, 2024, Intel announced it had begun distributing to its OEM/ODM partners "a new microcode patch (0x129) for its Intel Core 13th/14th Gen desktop processors which will address incorrect voltage requests to the processor that are causing elevated operating voltage."[39] Intel went on to explain that, "[t]his patch is being distributed via BIOS update and will not be available through operating system updates. Intel is working with its partners to ensure timely validation and rollout of the BIOS update for systems currently in service."

142. The procedure to update a PC's BIOS varies among motherboard manufacturers, but, in general, it involves downloading a new BIOS file, extracting the file to a USB drive, restarting the PC and accessing the BIOS settings menu during the PC's initial Power-On Self-Test ("POST") (i.e., before the operating system loads) to load the BIOS from the USB drive. There are settings and commands available in the BIOS menu that can make the PC unable to load the operating system or which will make the PC unstable. In addition, an improper BIOS update due to operator error or a bad data file can render the PC completely inoperable. For this reason, OEM PC makers generally discourage customers from updating the BIOS unless absolutely necessary. Further, because motherboard manufacturers write their own BIOS files and use their own BIOS settings, any new BIOS file, including one with Intel's new microcode patch, had to be validated by the manufacturers to ensure compatibility.

143. Because the patch limited the maximum operating voltage of Raptor Lake processors to 1.55V, testing showed that the patch resulted in lower performance. For example, PCMag.com tested post-patch CPU performance on both the Core i7-14700K and the Core i9-14900K and reported "reduction in performance,"[40] and "PC Guide "saw the performance of multi-core workloads take a big dip" and performance on one benchmark showed "close to a 25% performance loss."[41]

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[39] https://community.intel.com/t5/Processors/Microcode-0x129-Update-for-Intel-Core-13th-and-14th-Gen-Desktop/m-p/1622129#M76014

[40] https://www.pcmag.com/news/intels-raptor-lake-bug-patch-is-here-how-much-does-it-affect-performance

[41] https://www.pcguide.com/news/new-instability-patch-shaves-9000-points-off-cinebench-multi-core-score-in-

d. Intel Confirms the Root Cause Diagnosis of the Defect and Announces the Last Microcode Patch

144. On September 25, 2024, Hannaford posted to the Intel Community Forum declaring that the root cause of the Defect (which it was now calling "Vmin Shift") had been diagnosed and confirmed.[42] The forum post provided that:

> Following extensive investigation of the Intel® Core™ 13th and 14th Gen desktop processor Vmin Shift Instability issue, Intel can now confirm the root cause diagnosis for the issue. This post will cover Intel's understanding of the root cause, as well as additional mitigations and next steps for Intel® Core™ 13th and 14th Gen desktop users.
>
> Vmin Shift Instability Root Cause
>
> Intel® has localized the Vmin Shift Instability issue to a clock tree circuit within the IA core which is particularly vulnerable to reliability aging under elevated voltage and temperature. Intel has observed these conditions can lead to a duty cycle shift of the clocks and observed system instability.
>
> Intel® has identified four (4) operating scenarios that can lead to Vmin shift in affected processors:
>
> 1. Motherboard power delivery settings exceeding Intel power guidance.
>
> a. Mitigation: Intel® Default Settings recommendations for Intel® Core™ 13th and 14th Gen desktop processors.
>
> 2. eTVB Microcode algorithm which was allowing Intel® Core™ 13th and 14th Gen i9 desktop processors to operate at higher performance states even at high temperatures.
>
> a. Mitigation: microcode 0x125 (June 2024) addresses eTVB algorithm issue.
>
> 3. Microcode SVID algorithm requesting high voltages at a frequency and duration which can cause Vmin shift.
>
> a. Mitigation: microcode 0x129 (August 2024) addresses high voltages requested by the processor.
>
> 4. Microcode and BIOS code requesting elevated core voltages which can cause Vmin shift especially during periods of idle and/or light activity.

14900k-tests/

[42] https://community.intel.com/t5/Blogs/Tech-Innovation/Client/Intel-Core-13th-and-14th-Gen-Desktop-Instability-Root-Cause/post/1633446#M40

a. Mitigation: Intel® is releasing microcode 0x12B, which encompasses 0x125 and 0x129 microcode updates, and addresses elevated voltage requests by the processor during idle and/or light activity periods.

Regarding the 0x12B update, Intel® is working with its partners to roll out the relevant BIOS update to the public.

Intel's internal testing comparing 0x12B microcode to 0x125 microcode – on Intel® Core™ i9-14900K with DDR5 5200MT/s memory1 - indicates performance impact is within run-to-run variation (i.e. Cinebench* R23, Speedometer*, WebXPRT4*, Crossmark*). For gaming workloads on Intel® Core™ i9-14900K with DDR5 5600MT/s memory2, performance is also within run-to-run variation (ie. Shadow of the Tomb Raider*, Cyberpunk* 2077, Hitman 3: Dartmoor*, Total War: Warhammer III – Mirrors of Madness*). However, system performance is dependent on configuration and several other factors.

Intel® reaffirms that both Intel® Core™ 13th and 14th Gen mobile processors and future client product families – including the codename Lunar Lake and Arrow Lake families - are unaffected by the Vmin Shift Instability issue. We appreciate our customers' patience throughout the investigation, as well as our partners' support in the analysis and relevant mitigations.

Next Steps

For all Intel® Core™ 13th/14th Gen desktop processor users: the 0x12B microcode update must be loaded via BIOS update and has been distributed to system and motherboard manufacturers to incorporate into their BIOS. Intel is working with its partners to encourage timely validation and rollout of the BIOS update for systems currently in service. This process may take several weeks.

Users can check their system/motherboard manufacturer's website and/or the Intel® Product Compatibility Tool to see the latest BIOS versions for their Intel® Core™ 13th and/or 14th Gen-powered desktop systems: https://compatibleproducts.intel.com/.

Processor: Intel® Core™ i9-14900K, Motherboard: Intel Raptor Lake Reference Board (M40919), Memory: 64GB DDR5 at 5200MT/s, Storage: ADATA* SU360, Graphics: Intel® UHD Graphics 770, Graphics Driver Version: 32.0.101.5768, Display Resolution: 1280x800, Operating System: Windows 11 Pro (version 26100.712).

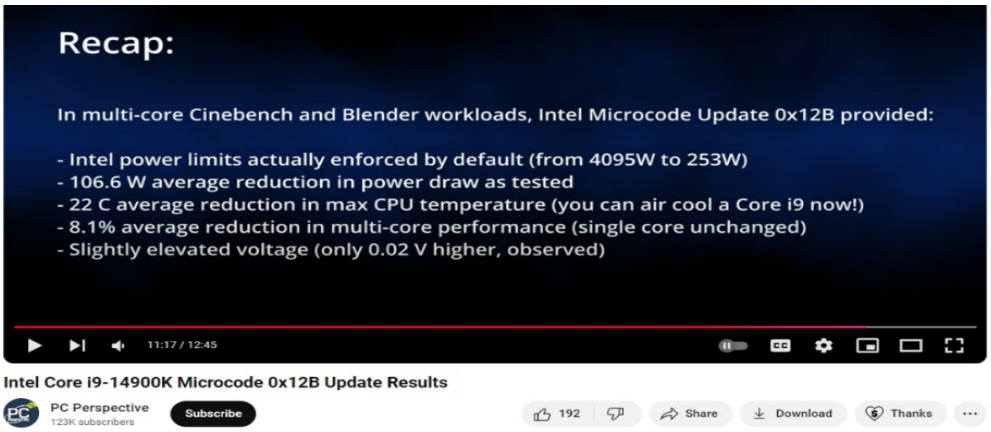
Processor: Intel® Core™ i9-14900K, Mat 5600rd: Intel Raptor Lake Reference Board (RVP SR19), Memory: 32GB DDR5 at 5600MT/s, Storage: Samsung* 990 Pro 1TB, Graphics: MSI* RTX 4090 Suprim X, Graphics Driver Version: NVIDIA* v555.99, Resolution: 1920x1080, Operating System: Windows 11 (version 22631.4169).

To date, no further BIOS updates have been released by Intel.

e. Tests on the Last Microcode Patch Reveal Decreased Performance

145. Intel represented the performance impact of the 0x12B update would be within run-to-run variation on synthetic apps used for PC performance testing. Run-to-run variation is where the performance difference is generally under the margin of error. But this representation was *comparing performance with an earlier 0x125 patch, when the later 0x129 patch had already been shown to result in decreased performance*.

146. One tester's results showed a performance decrease of as much as 6.5% after the newest 0x12B update was applied.[43]



147. Another tester on the www.youtube.com" PC Perspective channel ran a direct comparison between his performance with a processor running without latest microcode patches and then with the patch applied and found a performance decrease of 8.1%.[44]

VII. Intel's Fraud

a. Intel's Omissions:

148. The following processors are hereafter referred to as the "**Class Processors**":

Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF.

149. Intel fraudulently omitted to disclose material facts basic to both the purchase and

[43] https://wccftech.com/intel-14th-13th-gen-cpus-0x12b-microcode-bios-patch-performance/
[44] https://www.youtube.com/watch?v=fCTQLtaBJ9U

warranty service concerning the Class Processors, including information concerning the Defect, in an effort to deceive purchasers as described in this Complaint. At the time of purchase, Intel fraudulently omitted to disclose material matters concerning the known Defect in the Class Processors, including potential permanent damage to the processors. Intel fraudulently concealed from Plaintiffs and members of the proposed classes the Defect in the Class Processors even though Intel knew or should have known that information concerning this Defect was material and central to the marketing and sale of the Class Processors to prospective purchasers, including Plaintiffs and members of the proposed classes.

150. Further, Intel made representations that the Class Processors were fit to be used as processors for desktop PCs and, indeed, offered superior performance to prior generations of Intel processors and current generations of competitor processors.

151. Intel's fraudulent omissions continue with regard to the 0x12B update whereby Intel claims its "internal testing comparing 0x12B microcode to 0x125 microcode – on Intel® Core™ i9-14900K with DDR5 5200MT/s memory1 - indicates performance impact is within run-to-run variation" when the microcode significantly decreases performance when installed in the Class Processors.

b. The Context of the Omissions and the Manner in which they Misled:

152. Material information was fraudulently concealed and/or actively suppressed in order to sell Class Processors to uninformed business purchasers and consumers (including Plaintiffs and members of the proposed classes) premised on affirmations and representations as described in this Complaint.

153. If Plaintiffs and members of the proposed classes had been informed of the defect in their Class Processors, they would not have purchased their processors or would have paid substantially less. If Plaintiffs and members of the proposed classes had been made aware of the Defect in their Class Processors and the attendant ramifications of their respective processors' diminution in value, likelihood of permanent damage and decreased performance, they would not have purchased the Raptor Lake Processor since each class member believed they were purchasing

processors without major defects and were not fully informed of true characteristics and attributes of Class Processors. If Plaintiffs and members of the proposed classes had been informed of the defect during the warranty period, they would have had their defective Class Processors replaced under warranty. Intel's conduct violated the consumer fraud statutes alleged here and deprived Plaintiffs and members of the proposed classes of their warranty remedy.

c. What Intel Obtained Through its Fraud:

154. Material information concerning Class Processors was concealed and/or actively suppressed to protect Intel's corporate profits from loss of sales, purchase refunds, warranty repairs and exchanges, adverse publicity and to limit brand disparagement. Purchasers believed they were obtaining processors as having different attributes than described and purchased and were accordingly deprived of economic value and paid a price premium for their Class Processors. Intel had a uniform policy of not properly disclosing Class Processor defects in order to promote sales and increase profits as described in this Complaint.

155. As a proximate and direct result of Intel's unfair and deceptive trade practices, Plaintiffs and members of the proposed classes purchased Class Processors and sustained an ascertainable loss, including but not limited to financial harm as described in this Complaint.

156. Any applicable statutes of limitations have been tolled by Intel's knowing and active concealment of the defect and the misrepresentations and omissions alleged here. Through no fault or lack of diligence, Plaintiffs and members of the proposed classes were deceived concerning the Defect and could not reasonably discover the latent nature of the Defect.

157. Plaintiffs and members of the proposed class could not reasonably discover the deception with respect to the Defect in the Class Processors prior to experiencing a failure and being informed of the reason for the failure. Within the time period of any applicable statutes of limitations, Plaintiffs and members of the proposed classes could not have discovered through the exercise of reasonable diligence the concealed Defect.

158. Class Processor owners do not possess the requisite technical skills in computer hardware engineering to discern the defects in their processors or the requisite technical skills to

surmise the steps necessary to protect their Class Processors from irreparable damage.

159. Plaintiffs and members of the proposed class did not discover and did not know of any facts that would have caused a reasonable person to suspect that Intel was concealing a latent defect and/or that the Class Processors incorporated a Defect that could cause permanent damage to their processors. The existence of the Defect and risk of permanent damage to the processors was material to Plaintiffs and members of the proposed classes at all relevant times.

160. At all times, Intel is and was under a continuous duty to disclose to Plaintiffs and members of the proposed classes the true standard, quality and grade of the Class Processors and to disclose the Defect and potential risk of permanent damage to their processors.

161. Intel knowingly, actively, and affirmatively concealed the facts alleged in this Complaint including the Defect. Plaintiffs and members of the proposed classes reasonably relied on this knowing, active and affirmative concealment.

162. Intel fraudulently attributed the Defect to other factors and/or exculpating conditions for which they had no responsibility when, in reality, the Defect was due to Intel's design, manufacture, materials and/or workmanship defects.

163. For these reasons, all applicable statutes of limitation have been tolled based on the discovery rule and Intel's fraudulent concealment and it is estopped from relying on any statutes of limitations in defense of this action.

CLASS ACTION ALLEGATIONS

164. Box Processor Consumer Plaintiffs and the Box Processor Business Plaintiff initiate this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of themselves and on behalf of the following national class (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party reseller or directly from Intel

within the United States, or for delivery within the United States (hereinafter the "Box and Tray Processor Class");

165. Box Processor Consumer Plaintiffs initiate this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of themselves and on behalf of the following national Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All individuals that purchased an i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party reseller within the United States, or for delivery within the United States primarily for personal, family or household purposes (hereinafter the "Box Processor Consumer Subclass").

166. Plaintiff Brown initiates this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of himself and on behalf of the following New York Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party or directly from Intel within the state of New York or for delivery within the state of New York primarily for personal, family or household purposes (hereinafter the "New York Box Processor Consumer Subclass").

167. Plaintiff Charlton initiates this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of himself and on behalf of the following Florida Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party or directly from Intel within the state of Florida or for delivery within the state of Florida primarily for personal, family or household purposes (hereinafter the "Florida Box Processor Consumer Subclass").

168. Plaintiff Lipinski initiates this proposed action pursuant to Federal Rules of Civil

Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of himself and on behalf of the following Pennsylvania Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party or directly from Intel within the state of Pennsylvania or for delivery within the state of Pennsylvania primarily for personal, family or household purposes (hereinafter the "Pennsylvania Box Processor Consumer Subclass").

169. Plaintiff Wolven initiates this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of himself and on behalf of the following Idaho Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900of Idaho0K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party or directly from Intel within the state of Idaho or for delivery within the state of Idaho (hereinafter the "Idaho Box and Tray Processor Class").

170. Plaintiff Theatrical initiates this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of itself and on behalf of the following California Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, from an Intel-authorized third-party or directly from Intel within the state of California or for delivery within the state of California (hereinafter the "California Box and Tray Processor Subclass").

171. Plaintiff Russell initiates this proposed action pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2) and 23(b)(3) on behalf of herself and on behalf of the following Missouri Class and Subclass (or any other class and/or subclass authorized by the court) defined as follows:

> All persons or entities that purchased or leased a pre-built desktop personal computer containing an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, within the state of Missouri or for delivery within the state of Missouri (hereinafter the "Missouri OEM Processor Class")

and a subclass consisting of:

> All individuals that purchased or leased a pre-built desktop personal computer containing an Intel i9-14900KS, i9-14900K, i9-14900KF, i9-14900F, i9-14900, i7-14700K, i7-14700KF, i7-14790F, i7-14700F, i7-14700, i5-14600K, i5-14600KF, i9-13900KS, i9-13900K, i9-13900KF, i9-13900F, i9-13900, i7-13700K, i7-13700KF, i7-13790F, i7-13700F, i7-13700, i5-13600K, and i5-13600KF, within the state of Missouri or for delivery within the state of Missouri for personal, family or household purposes (hereinafter the "Missouri OEM Processor Consumer Subclass").

172. Excluded from the Classes are Intel and its subsidiaries and corporate affiliates, officers, directors, employees, assigns, and successors, the court, court staff, Intel's counsel, and all respective immediate family members of the excluded entities described above. Plaintiffs reserve the right to revise the definitions of the proposed class definitions based upon subsequently discovered information and reserve the right to establish additional subclasses where appropriate.

Numerosity of the Class: Federal Rule of Civil Procedure 23(a)(1)

173. The proposed class members are so numerous that individual joinder of all potential members is impracticable under Federal Rules of Civil Procedure 19 or 20. It is estimated there are in excess of 300,000 Class Processors purchased within the United States. Additional information concerning Class Processors will be obtained through discovery from Intel.

Existence of Common Questions of Law and Fact: Federal Rule of Civil Procedures 23(a)(2) and 23(b)(3)

174. Common questions of law and fact exist as to all members of the proposed classes and predominate over any issues solely affecting individual members. The common and predominating questions of law and fact include, but are not limited to:

(a) Whether there is or was a defect in the Class Processors;

(b) Whether the Class Processors contain or contained a design defect and/or a defect in

material, manufacturing and/or workmanship;

(c) Whether the defect presents a risk of permanent damage to the Class Processors;

(d) Whether Intel knew or should have known that the Class Processors were defective;

(e) Whether Intel had a duty to disclose the Defect and/or that the Defect presents or presented a risk of damage to the Class Processors;

(f) Whether Intel intentionally and knowingly falsely misrepresented, concealed, suppressed and/or omitted material facts regarding the Defect in the Class Processors;

(g) Whether Intel negligently or falsely misrepresented or omitted material facts concerning the Defect at the time of purchase;

(h) Whether Intel made material misrepresentations and/or omissions concerning the standard, quality or grade of Class Processors;

((j) Whether Intel breached its express warranties (including but not limited its "Boxed Processors Limited Warranty") in that Class Processors were defective with respect to their design and manufacture, including workmanship and materials;

(k) Whether members of the proposed classes would pay less for a Class Processor if Intel, at the time of purchase, disclosed the Defect;

(l) Whether members of the proposed class would have purchased a Class Processor if Intel, at the time of purchase, disclosed that the only way to avoid catastrophic and permanent damage to the Class Processors, was to install a microcode patch that would reduce performance when compared to unpatched Class Processors;

(m) Whether members of the proposed class would have had their CPUs replaced if Intel had disclosed, prior to the expiration of all relevant warranty periods, the Defect;

(o) Whether Intel actively concealed or omitted material facts from Plaintiffs and members of the proposed class in order to, *inter alia,* sell more Class Processors and/or transfer the costs associated with repair or replacement to Plaintiffs and the class;

(p) Whether Intel committed unfair and deceptive business act practices by failing to inform owners of Class Processors prior to purchase and/or during the post-sale express

warranty period that the Class Processors contained a defect and would fail shortly after the warranty periods;

(q) Whether Intel violated the Delaware Consumer Fraud Act, 6 Del. Code §§ 2511, *et seq.*;

(r) Whether Intel violated the New York Deceptive Acts and Practices Act, N.Y. Gen. Bus. Law § 349;

(s) Whether Intel violated the New York False Advertising Act, N.Y. Gen. Bus. Law § 350

(t) Whether Intel violated the Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. § 501.201, *et seq.*;

(u) Whether Intel violated Pennsylvania's Unfair Trade Practices and Consumer Protection Law, 73 P.S. §§ 201-1, *et seq.*;

(v) Whether Intel violated the Idaho Consumer Protection Act, Idaho Code Ann. §§ 48-601, *et seq.*;

(w) Whether Intel violated the California Unfair Competition Law, Cal. Bus. & Prof. Code §17200, *et seq.*; and

(x) Whether Intel violated the Missouri Merchandising Practices Act, Mo. Rev. Stat. §§ 407.010, *et seq*.

Typicality of Claims or Defenses: Federal Rule of Civil Procedure 23(a)(3)

175. Plaintiffs' claims and defenses are typical of the claims and defenses of the class (or subclass) Plaintiffs seek to represent. Class claims arise out of ownership of Class Processors as defined *supra*. Plaintiffs and the proposed classes sustained damages arising out of the same illegal actions and conduct Intel as described here. Intel has no claims or defenses unique to Plaintiffs or different from the proposed members of the proposed classes.

Adequate Representation: Federal Rule of Civil Procedure 23(a)(4)

176. Plaintiffs currently own their Class Processors and have no conflicting interests with any other proposed class member. The claims of Plaintiffs and members of the proposed class are so interrelated that the interests of members of the proposed class will be fairly and adequately

protected in their absence.

177. Plaintiffs are willing and prepared to serve the proposed classes in a representative capacity with all of the obligations and duties material thereto. Plaintiffs will fairly and adequately protect the interests of the proposed class and have no interests adverse to or in conflict with the interests of the other members of the class.

178. Plaintiffs' interests are co-extensive with and are not antagonistic to those of absent class members. Plaintiffs will undertake to represent and protect the interests of absent class members and will vigorously prosecute this action. Plaintiffs have engaged the services of the undersigned counsel. Plaintiffs' counsel is experienced in complex litigation, will adequately prosecute this action, and will assert and protect the rights of, and otherwise represent, Plaintiffs and absent members of the proposed classes.

Superiority of a Class Action and Predominance of Common Questions: Federal Rule of Civil Procedure 23(b)(3)

179. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy. Plaintiffs know of no difficulty to be encountered in the management of this litigation that would preclude its maintenance as a class action.

180. Maintenance of a class action in one court is the most economical procedural device to litigate the Class Processors claims for Class Processor owners. Prosecution of separate actions by individual members of the proposed class could create risk of inconsistent or varying adjudications with respect to individual members of the class which would establish incompatible standards of conduct for the party opposing the proposed class(es) as recognized by Federal Rule of Civil Procedure 23(b)(1)(A).

181. Prosecution of separate actions by individual members of the class could create risk of adjudications with respect to individual members of the class which would, as a practical matter, be dispositive of the interests of the other members of the class who are not parties to the adjudications or substantially impair or impede their ability to protect their interests as recognized

by Federal Rule of Civil Procedure 23(b)(1)(B).

182. Class action status is warranted under Federal Rule of Civil Procedure 23(b)(3) because questions of law and fact common to members of the class predominate over any questions affecting any individual members and a class action is superior to other available methods for the fair and efficient adjudication of the controversy.

183. The class may also be certified under Rule 23(b)(2) because Intel has acted on grounds generally applicable to the class, thereby making it appropriate to award final injunctive relief or corresponding declaratory relief with respect to the class.

184. There is a substantial likelihood that Intel will oppose this class action and will further act or refuse to act on grounds generally applicable to the classes, thereby making appropriate final injunctive relief or corresponding declaratory relief with respect to the class as a whole impractical as recognized by Federal Rule of Civil Procedure 23(b)(2).

185. The interest of members within the classes in individually controlling the prosecution of separate actions is theoretical and not practical. The classes have a high degree of similarity and are cohesive, and Plaintiffs anticipate no difficulty in the management of this matter as a class action.

186. The nature of notice to the proposed class is contemplated to be by direct mail and/or email upon certification or if such notice is not practicable, by the best notice practicable under the circumstance including, *inter alia*, publication in major newspapers and/or on the internet.

CLAIMS FOR RELIEF

COUNT I

BREACH OF EXPRESS WARRANTY

(6 Del. C. § 2-313)

(ON BEHALF OF THE BOX PROCESSOR CONSUMER PLAINTIFFS, THE BOX PROCESSOR BUSINESS PLAINTIFF AND THE BOX AND TRAY PROCESSOR CLASS)

187. Box Processor Consumer Plaintiffs and the Box Processor Business Plaintiff (hereafter, collectively, the "Box Processor Plaintiffs") incorporate and re-allege each preceding paragraph as though fully set forth here.

188. Box Processor Plaintiffs assert this count on behalf of themselves and on behalf of the Box and Tray Processor Class.

189. Intel provided the Box Processor Plaintiffs and other members of the Box and Tray Processor Class with one or more express warranties. For illustrative purposes, Intel provided: (1) a Limited Warranty for Box Processors which warrants, "the Product will materially conform to Intel's publicly available specifications, and if the Product is properly used and installed, it will be free from material defects in material and workmanship for 3 years from the purchase date."[45] Under express warranties provided to members of the class, Intel promised to repair or replace defective Box Processors at no cost to owners of the Class Processors.

190. Such representations formed the basis of the bargain in Box Processor Plaintiff's and members of the Box and Tray Processor Class's decisions to purchase the Class Processors.

191. Intel also marketed the Class Processors as high quality and reliable and that Intel would stand behind the quality of their products and promptly repair or replace any defective processors. These statements helped conceal the existence of the Defect in Class Processors and its corresponding risk of catastrophic and permanent damage to the Class Processors from the Box Processor Plaintiffs and members of the Box and Tray Processor Class in order to shift the expense of replacement to Plaintiff and class members.

192. The Limited Warranty for Box Processors provides that "the applicable law will be the state of Delaware."

193. Under Delaware law, any affirmation, including those contained in Intel's warranties claiming, "the Product will materially conform to Intel's publicly available specifications, and if the Product is properly used and installed, it will be free from material defects

[45] Later extended to 5 years as alleged *supra*.

in material and workmanship," once made, is part of the agreement unless there is clear affirmative proof that the affirmation has been taken out of the agreement. Del. Code Ann. tit. 6, § 2-313. Consequently, the express warranty and other materials given to the Box Processor Plaintiffs and members of the Box and Tray Processor Class at the time of delivery may be part of the basis of the bargain, even if such materials technically were delivered after the Box Processor Plaintiffs and other members of the Box and Tray Processor Class paid the purchase price.

194. Under the express warranties provided to the Box Processor Plaintiffs and other members of the Box and Tray Processor Class, Intel promised to repair or replace covered components arising out of defects in materials and/or workmanship, including the Defect in Class Processors, at no cost to owners of Class Processors and within a reasonable time. As alleged in this Complaint, Intel breached its express warranties.

195. Intel's express warranties formed the basis of the bargain that was reached when the Box Processor Plaintiffs and other members of the Box and Tray Processor Class purchased their respective Class Processors. Given the latent nature of the Defect in Class Processors, Intel knew or should have known that Class Processor damage would occur outside of the warranty periods.

196. Box Processor Plaintiffs and other members of the Box and Tray Processor Class experienced the Defect in Class Processors within the warranty periods but had no knowledge of the existence of the Defect in Class Processors and the associated risk of permanent damage to their Class Processors, which was known and concealed by Intel. Despite the existence of the express warranties, Intel failed to adequately inform the Box Processor Plaintiffs, and other members of the Box and Tray Processor Class that Class Processors incorporated the Defect and failed to provide a suitable repair or replacement free of charge within a reasonable time.

197. Intel has not suitably repaired or replaced the defective Class Processors free of charge for the Box Processor Plaintiffs and other members of the Box and Tray Processor Class despite the existence of the Defect in Class Processors by releasing the 0x12B microcode update to protect the Class Processors from damage, because, as described *supra*, the update reduces

processor performance when installed in the Class Processors.

198. Intel further breached its express warranties by selling Class Processors that were defective.

199. Class Processors did not materially conform to Intel's publicly available specifications and were not free from material defects in material and workmanship as warranted.

200. Any negation or limitation of Intel's warranty is inoperative to the extent that such construction is unreasonable in the context of the hidden defect in the Class Processors and Intel's misrepresentations with regard to the Defect. Del. Code Ann. tit. 6, § 2-316.

201. Intel was provided with notice of the Defect in Class Processors by numerous complaints made to it as described herein and through their own testing. Affording Intel a reasonable opportunity to cure their breach of written warranties would be unnecessary and futile here because Intel has known of and concealed the Defect in Class Processors and has failed to provide a suitable repair or replacement of the defective Class Processors free of charge within a reasonable time.

202. The Box Processor Plaintiffs provided notice to Intel by requesting replacement of their damaged Class Processors as early as January 29, 2024. Despite this notice, Intel did not cure its breach of express warranties and failed to provide a suitable repair or replacement of all defective processors free of charge within a reasonable time and did not provide a refund of the value of the damaged processors.

203. The limited warranty promising to repair and/or replace and/or refund the value of the processors fails in its essential purpose because the contractual remedy is insufficient to make the Box Processor Plaintiffs and other members of the Box and Tray Processor Class whole in that Intel failed and/or has refused to adequately provide the promised remedies within a reasonable time.

204. Intel knew that Class Processors were inherently defective and did not conform to their warranties and the Box Processor Plaintiffs and other members of the Box and Tray Processor Class were induced to purchase Class Processors under false and/or fraudulent pretenses.

205. Because of the Defect in Class Processors, Class Processors are not reliable, and owners of these CPUs have lost confidence in the ability of Class Processors to perform the function of reliable PC components,

206. Box Processor Plaintiffs and other members of the Box and Tray Processor Class could not have reasonably discovered the Defect in Class Processors.

207. As a direct and proximate result of Intel's breach of express warranties, the Box Processor Plaintiffs and other members of the Box and Tray Processor Class have been damaged in an amount to be determined at trial.

208. Finally, because of Intel's breach of express warranty as set forth in this Complaint, the Box Processor Plaintiffs an and other members of the Box and Tray Processor Class assert, as additional and/or alternative remedies, the revocation of acceptance of goods and the return to the Box Processor Plaintiffs and other members of the Box and Tray Processor Class of the purchase price of all Class Processors currently owned, and for such other incidental and consequential damages as allowed.

COUNT II

VIOLATION OF DELAWARE'S CONSUMER FRAUD ACT ("DCFA")

(6 Del. C. § 2511, *et seq.*)

(ON BEHALF OF THE BOX PROCESSOR CONSUMER PLAINTIFFS, AND THE BOX PROCESSOR CONSUMER SUBCLASS)

209. Box Processor Consumer Plaintiffs incorporate and re–allege each preceding paragraph as though fully set forth here.

210. Box Processor Consumer Plaintiffs assert this count on behalf of themselves and on behalf of members of the national Box Processor Consumer Subclass.

211. The Limited Warranty for Box Processors provides that "the applicable law will be the state of Delaware."

212. Under the DCFA, the "act, use or employment by any person of any deception, fraud, false pretense, false promise, misrepresentation, or the concealment, suppression, or

omission of any material fact with intent that others rely upon such concealment, suppression or omission, in connection with the sale, lease or advertisement of any merchandise, whether or not any person has in fact been misled, deceived or damaged thereby, is an unlawful practice." Del. Code Ann. tit. 6, § 2513.

213. Intel engaged in deceptive acts in violation of the DCFA by willfully failing to disclose and actively concealing the Defect in the Class Processors as described above.

214. The Defect constitutes risk of catastrophic and permanent damage to the Class Processors that triggered Intel's duty to disclose the issue to consumers as set forth above. Intel should have disclosed this information because it was in a superior position to know the true facts related to the Defect, and the Box Processor Consumer Plaintiffs and other members of the Box Processor Consumer Subclass could not reasonably be expected to learn or discover the true facts related to this Defect. Intel, by its conduct, statements, and omissions described above, also knowingly and intentionally concealed from the Box Processor Consumer Plaintiffs and the other members of the Box Processor Consumer Subclass that Class Processors suffer from the Defect (and the costs, risks, and diminished value of the Class Processors as a result of the Defect).

215. Intel further engaged in deceptive acts in violation of the DCFA by falsely representing that the 0x12B update to protect the Class Processors from damage would not reduce Class Processor performance, when, as described above, the microcode update significantly reduces performance.

216. These acts and practices have deceived Box Processor Consumer Plaintiffs and are likely to deceive the public. Intel, by its conduct, statements, and omissions described above, and by knowingly and intentionally concealing from Box Processor Consumer Plaintiffs and the other members of the Consumer Box Processor Subclass: (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that, as described *supra*, the 0x12B update to protect the Class Processors from damage significantly reduces performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above, breached

its duties to disclose these facts, violated the DCFA, and caused injuries to the Box Processor Consumer Plaintiffs and the other members of the Consumer Box Processor Subclass. The omissions and acts of concealment by Intel pertained to information that was material to the Box Processor Consumer Plaintiffs and the other members of the Consumer Box Processor Subclass, as it would have been to all reasonable consumers.

217. Intel's conduct proximately caused injuries to the Box Processor Consumer Plaintiffs and the other members of the Consumer Box Processor Class. Had the Box Processor Consumer Plaintiffs and the other members of the Consumer Box Processor Class known about the Defect in the Class Processors, they would not have purchased the Class Processors, would have paid less for them, or would have avoided the extensive replacement costs associated therewith.

COUNT III

VIOLATION OF THE NEW YORK DECEPTIVE ACTS AND PRACTICES ACT ("GBL § 349")

(N.Y. Gen. Bus. Law § 349)

(ON BEHALF OF PLAINTIFF BROWN AND THE NEW YORK BOX PROCESSOR CONSUMER SUBCLASS)

218. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

219. Plaintiff Brown asserts this count on behalf of himself and on behalf of members of the New York Box Processor Consumer Subclass.

220. Brown and the other members of the New York Box Processor Consumer Subclass are "person[s] . . . injured by reason of any violation" within the meaning of N.Y. Gen. Bus. Law § 349 (h). Intel is a "person, firm, corporation or association" within the meaning of N.Y. Gen. Bus. Law § 349(b).

221. N.Y. Gen. Bus. Law § 349 ("GBL 349") prohibits "[d]eceptive acts or practices in the conduct of any business, trade or commerce." GBL § 349(a).

222. In the course of its business, Intel, directly or through its agents, employees, and/or subsidiaries, violated GBL § 349 by knowingly and intentionally misrepresenting, omitting, concealing, and failing to disclose material facts regarding the Class Processors, including: (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that, as described *supra*, the 0x12B update to protect the Class Processors from damage significantly degrades performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above.

223. Intel had superior access to material facts concerning the nature of the Class Processors and knew that consumers and users such as Plaintiff Brown and other members of the New York Box Processor Consumer Subclass could not have reasonably discovered that the Class Processors had the Defect that could lead to permanent and catastrophic damage to Class Processors.

224. Intel had a duty truthfully to disclose the Defect because it had superior knowledge of the material fact that the Defect existed. Nevertheless, Intel made representations that the Class Processors were fit to be used as processors for PCs and, indeed, offered superior performance.

225. Specifically, by knowingly and intentionally misrepresenting, omitting, concealing, and failing to disclose material facts regarding the Class Processors, including that the existence of the Defect and that the processors were not fit to be used for their intended purpose, as detailed above, Intel engaged in one or more unfair or deceptive business practices prohibited by the GBL § 349, including but not limited to:

a. representing that the Class Processors have characteristics, uses, benefits, and qualities which they do not have;

b. representing that the Class Processors are of a particular standard, quality, and grade when they are not;

c. advertising the Class Processors with the intent not to sell them as advertised; and

d. engaging in any other unconscionable, false, misleading, or deceptive act or practice in the conduct of trade or commerce.

226. Intel's unfair or deceptive acts or practices, including their misrepresentations, concealments, omissions, and suppressions of material facts, as alleged herein, had a tendency or capacity to mislead and create a false impression in consumers' minds and were likely to and, in fact, did deceive reasonable consumers, including Plaintiff Brown and other members of the New York Box Processor Consumer Subclass, about the Defect, the risk of catastrophic and permanent damage to the Class Processors, and the diminished performance of Class Processors following installation of the last microcode update to prevent such damage.

227. The facts regarding the Class Processors that Intel knowingly and intentionally misrepresented, omitted, concealed, and/or failed to disclose would be considered material by a reasonable consumer, and they were, in fact, material to Plaintiff Brown and other members of the New York Box Processor Consumer Subclass, who consider such facts to be important to their purchase decisions with respect to processors.

228. Intel had an ongoing duty to Plaintiff Brown and other members of the New York Box Processor Consumer Subclass to refrain from unfair and deceptive practices under GBL § 349 in the course of its business. Specifically, Intel owed Plaintiffs and other Class members a duty to disclose all the material facts regarding Class Processors, including that such products contained the Defect and were (and are) not fit to be used for their intended purpose, as detailed above, because Intel possessed superior knowledge, intentionally concealed the facts regarding the Class Processors, and/or it made misrepresentations that were rendered misleading because they were contradicted by withheld facts, including that such products contained the Defect, the risk of catastrophic and permanent damage to the Class Processors, and the diminished performance of the last microcode update to prevent such damage and were (and are) not fit to be used for their intended purpose.

229. Had Intel not engaged in the deceptive acts and practices alleged herein, Plaintiff Brown and other members of the New York Box Processor Consumer Subclass would not have

purchased the Class Processors, or would have paid less for them, and, thus, they did not receive the benefit of the bargain and/or suffered out-of-pocket loss.

230. Intel's violations present a continuing harm to Plaintiff Brown and the other members of the New York Box Processor Consumer Subclass, as well as to the general public. Intel's unlawful acts and practices complained of herein affect the public interest.

231. Pursuant to GBL § 349(h), Plaintiff Brown and the other members of the New York Box Processor Consumer Subclass seek actual damages or $50 per purchase, whichever is greater, in addition to discretionary three times actual damages up to $1,000 for Intel's willful and knowing violation of GBL § 349, and an additional civil penalty of $10,000 per elderly person 65 years of age or older because Defendant's conduct was in willful disregard of the rights of elderly persons. GBL § 349-C(2)(b). Plaintiff Brown and the other members of the New York Box Processor Consumer Subclass also seek attorneys' fees, an order enjoining Intel's deceptive conduct, and any other just and proper relief available under the New York GBL.

232. The claim for injunctive relief is appropriate because, among other things, Intel's misconduct is ongoing and bringing multiple suits to recover damages for future harm will not be as plain and speedy as an order from this Court prohibiting Intel from engaging in the misconduct alleged herein.

COUNT V

VIOLATION OF THE NEW YORK FALSE ADVERTISING ACT ("New York FAA")

(N.Y. Gen. Bus. Law § 350)

(ON BEHALF OF PLAINTIFF BROWN AND THE NEW YORK BOX PROCESSOR CONSUMER SUBCLASS)

233. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

234. Plaintiff Brown asserts this count on behalf of himself and on behalf of other members of the New York Box Processor Consumer Subclass.

235. Intel was and is engaged in "conduct of business, trade or commerce" within the

meaning of N.Y. Gen. Bus. Law § 350.

236. The New York False Advertising Act ("New York FAA") prohibits "[f]alse advertising in the conduct of any business, trade or commerce." N.Y. Gen. Bus. Law § 350. False advertising includes "advertising, including labeling, of a commodity . . . if such advertising is misleading in a material respect," taking into account "the extent to which the advertising fails to reveal facts material in the light of . . . representations [made] with respect to the commodity." N.Y. Gen. Bus. Law § 350-a(1).

237. Intel had a duty to disclose the Defect in Class Processors because it had superior—indeed exclusive—knowledge of material facts including: (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that, as described *supra*, the 0x12B update to protect the Class Processors from damage significantly reduces performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above.

238. Nevertheless, Intel made representations that Class Processors were fit to be used as processors for desktop PCs and, indeed, offered superior performance.

239. Intel caused to be made or disseminated through New York, through advertising, marketing, and/or other publications, statements that were untrue or misleading, and which were known, or which by the exercise of reasonable care should have been known to Intel, to be untrue and misleading to consumers, including Plaintiff Brown and other members of the New York Box Processor Consumer Subclass.

240. In the course of its business, Intel, directly or through their agents, employees, and/or subsidiaries, violated the New York FAA by knowingly and intentionally misrepresenting, omitting, concealing, and/or failing to disclose material facts regarding the Class Processors, including (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that the 0x12B update to protect the Class Processors from damage significantly reduces performance in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed

above.

241. The Class Processors are not fit for their intended use because the Defect may cause catastrophic and permanent damage to the processor through ordinary and reasonably anticipated use.

242. Specifically, by knowingly and intentionally misrepresenting, omitting, concealing, and failing to disclose material facts regarding the Class Processors, including: (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above, Intel engaged in one or more unfair or deceptive acts or practices in the conduct of trade or commerce in violation of the New York FAA.

243. Intel's unfair or deceptive acts or practices, including its misrepresentations, concealments, omissions, and/or suppressions of material facts, as alleged herein, had a tendency or capacity to mislead and create a false impression in consumers' minds and were likely to and, in fact, did deceive reasonable consumers, including Plaintiff Brown and other members of the New York Box Processor Consumer Subclass, about the Class Processors that contained the Defect and were (and are) not fit to be used for their intended purpose, as detailed above.

244. The facts regarding the Class Processors that Intel knowingly and intentionally misrepresented, omitted, concealed, and failed to disclose would be considered material by a reasonable consumer, and they were, in fact, material to Plaintiff Brown and other members of the New York Box Processor Consumer Subclass, who consider such facts to be important to their purchasing decisions with respect to processors.

245. Plaintiff Brown and other members of the New York Box Processor Consumer Subclass had no way of reasonably discerning that Intel's representations were false and misleading or otherwise learning the facts that Intel had concealed or failed to disclose.

246. Intel had an ongoing duty to Plaintiff Brown and other members of the New York

Box Processor Consumer Subclass to refrain from false advertising under N.Y. Gen. Bus. Law § 350 in the conduct of their business. Specifically, under N.Y. Gen. Bus. Law § 350-a, Intel was prohibited from failing to disclose all the material facts regarding the Class Processors in its "advertising, including labeling" so as not to render such advertising "misleading in a material respect" including that such products contained the Defect and were (and are) not fit to be used for their intended purpose, as detailed above, intentionally concealed the facts regarding Class Processors, and/or Intel made misrepresentations that were rendered misleading because they were contradicted by withheld facts, including that such products contained the Defect and were (and are) not fit to be used for their intended purpose.

247. Plaintiff Brown and other members of the New York Box Processor Consumer Subclass were aggrieved by Intel's violations of the New York FAA because they suffered ascertainable loss and actual damages as a direct and proximate result of Intel's knowing and intentional misrepresentations, omissions, concealments, and failures to disclose material facts regarding the Class Processor, including: (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will and did lead to permanent and catastrophic damage to the Class Processors; (iii) that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above.

248. Specifically, Plaintiff Brown and other members of the New York Box Processor Consumer Subclass purchased Class Processors in reliance on Intel's misrepresentations, omissions, concealments, and/or failures to disclose material facts regarding Class Processors. Had Intel not engaged in the deceptive acts and practices alleged herein, Plaintiffs and Class members would not have purchased the Class Processors, and, thus, they did not receive the benefit of the bargain and/or suffered out-of-pocket loss.

249. Intel's violations present a continuing risk to Plaintiff Brown and other members of the New York Box Processor Consumer Subclass, as well as to the general public. Intel's unlawful acts and practices complained of herein affect the public interest.

250. As a result of Intel's violations of the New York FAA, as alleged herein, Plaintiff Brown and other members of the New York Box Processor Consumer Subclass seek to recover their actual damages or $500, whichever is greater. Because Intel acted willfully or knowingly, Plaintiff Brown and other members of the New York Box Processor Consumer Subclass are entitled to recover three times actual damages, up to $10,000. Plaintiff Brown and other members of the New York Box Processor Consumer Subclass seek an additional civil penalty of $10,000 per elderly person sixty-five years of age or older because Defendants' conduct was in willful disregard of the rights of elderly persons. N.Y. Gen. Bus. Law § 349-C(2)(b). Plaintiff Brown and other members of the New York Box Processor Consumer Subclass also seek an order enjoining Defendants' false advertising, attorneys' fees, and other relief that this Court deems just and appropriate.

251. The claim for injunctive relief is appropriate because, among other things, Intel's misconduct is ongoing and bringing multiple suits to recover damages for future harm will not be as plain and speedy as an order from this Court prohibiting Intel from engaging in the misconduct alleged herein.

COUNT VI

VIOLATION OF THE FLORIDA DECEPTIVE AND UNFAIR TRADE PRACTICES ACT ("FDUTPA")

(Fla. Stat. § 501.201, *et seq.*)

(ON BEHALF OF PLAINTIFF CHARLTON AND THE FLORIDA BOX PROCESSOR CONSUMER SUBCLASS)

252. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

253. Plaintiff Charlton asserts this count on behalf of himself and on behalf of members of the Florida Box Processor Consumer Subclass.

254. Plaintiff Charlton and the other members of the Florida Box Processor Consumer Subclass are "consumers," under Fla. Stat. §501.203.

255. Intel advertised, offered, or sold goods or services in Florida and engaged in trade or commerce directly or indirectly affecting the people of Florida.

256. Intel engaged in unconscionable, unfair, and deceptive acts and practices in the conduct of trade and commerce, in violation of Fla. Stat. § 501.204(1) by knowingly and intentionally misrepresenting, omitting, concealing, and failing to disclose material facts regarding the Class Processors, including (i) the Defect in the Class Processors; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that, as described *supra*, the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above.

257. Intel's representations and omissions were material because they were likely to deceive reasonable consumers.

258. Had Intel disclosed to Plaintiff Charlton and the other members of the Florida Box Processor Consumer Subclass material facts, including but not limited to, that: (i) the Class Processors contained the Defect; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, as detailed above, Intel would have been unable to sell as many Class Processors as it did or at the price such processors were sold.

259. Intel represented that its Class Processors were superior in speed and performed better than other processors on the market and Plaintiff Charlton and the other members of the Florida Box Processor Consumer Subclass acted reasonably in relying on Intel's misrepresentations and omissions, the truth of which they could not have discovered.

260. As a direct and proximate result of Intel's deceptive acts and practices, Plaintiff Charlton and the other members of the Florida Box Processor Consumer Subclass have suffered and will continue to suffer injury, ascertainable losses of money or property, and monetary and

non-monetary damages, including from not receiving the benefit of their bargain in purchasing the Class Processors, and increased time and expense in dealing with catastrophic and permanently damaged Class Processors.

261. Plaintiff Charlton and the other members of the Florida Box Processor Consumer Subclass seek all monetary and non-monetary relief allowed by law, including actual or nominal damages under Fla. Stat. § 501.21; declaratory and injunctive relief; reasonable attorneys' fees and costs, under Fla. Stat. § 501.2105(1); and any other relief that is just and proper.

262. The claim for injunctive relief is appropriate because, among other things, Intel's misconduct is ongoing and bringing multiple suits to recover damages for future harm will not be as plain and speedy as an order from this Court prohibiting Intel from engaging in the misconduct alleged herein.

COUNT VII

VIOLATION OF THE PENNSYLVANIA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION LAW ("PENNSYLVANIA CPL")

(73 P.S. §§ 201-1, *et seq.*)

(ON BEHALF OF PLAINTIFF LIPINSKI AND THE PENNSYLVANIA BOX PROCESSOR CONSUMER SUBCLASS)

263. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

264. Plaintiff Lipinski asserts this count on behalf of himself and other members of the Pennsylvania Box Processor Consumer Subclass.

265. Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass purchased the Class Processors primarily for personal, family or household purposes within the meaning of 73 P.S.§ 201-9.2.

266. All of the acts complained of herein were perpetrated by Intel in the course of trade or commerce within the meaning of 73 P.S. § 201-2(3).

267. The Pennsylvania Unfair Trade Practices and Consumer Protection Law

("Pennsylvania CPL") prohibits unfair or deceptive acts or practices, including "[e]ngaging in any other fraudulent or deceptive conduct which creates a likelihood of confusion or misunderstanding." 73 P.S. § 201-2(4).

268. Intel engaged in unlawful trade practices including selling the Class Processors with the Defect as described herein, and by engaging in other fraudulent or deceptive conduct which creates a likelihood of confusion or of misunderstanding.

269. In the course of its business, Intel willfully failed to disclose and actively concealed the Defect as discussed herein and otherwise engaged in activities with a tendency or capacity to deceive. Intel also engaged in unlawful trade practices by employing deception, deceptive acts or practices, misrepresentations, or concealment, suppression, or omission of any material fact with intent that others rely upon such concealment, suppression, or omission, in connection with the sale of the Class Processors.

270. Intel knew of the Defect in the Class Processors and knew that the Defect would cause catastrophic and permanent damage to the Class Processors which would cause them not to perform as advertised, including being unable to perform routine computing tasks and rendering PCs inoperable. Despite this knowledge, Intel concealed all of that information.

271. In the course of Intel's business, it willfully failed to disclose and actively concealed the Defect.

272. Intel's unfair or deceptive acts or practices were likely to and did in fact deceive reasonable consumers, including Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass, about the true functionality of the Class Processors, the quality of the Intel brand, and the true value of the Class Processors. Intel knew or should have known that its conduct violated the Pennsylvania CPL.

273. Intel owed a duty to disclose the Defect to Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass because Intel possessed superior and exclusive knowledge regarding the Defect. Rather than disclose the defect, Intel engaged in unfair and deceptive trade practices in order to sell additional Box Processors and avoid the cost of recalling the Class

Processors and refunding the purchase price.

274. Intel also made misleading representations by falsely representing that the 0x12B update to protect the Class Processors from damage would not reduce CPU performance, when, as described *supra*, the microcode update significantly decreases performance when installed in the Class Processors.

275. Intel's unfair and deceptive practices and/or material omissions regarding the Defect were intended to mislead consumers and misled Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass.

276. At all relevant times, Intel's unfair and deceptive acts or practices and/or omissions regarding the Defect were material to Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass. When Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass purchased their Class Processors, they had the reasonable expectation that the processor would be free from defects and would be free from defects that could cause catastrophic and permanent damage to the Class Processors and that Intel's microcode updates would not significantly decrease performance when installed in the Class Processors. Had Intel disclosed the Defect, Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass would not have purchased the Class Processors or would have paid less for them.

277. Intel's unlawful acts and practices affect the public interest and trade and commerce in the Commonwealth of Pennsylvania and were in bad faith.

278. As a direct and proximate result of Intel's violations of the Pennsylvania CPL, Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass have suffered actual damages and/or injury in fact, including, having paid more for Class Processors than they otherwise would have, received a processor worth less than the one they bargained and paid for, paid for replacements, and are left with Class Processors of diminished value and utility.

279. Intel is liable to Plaintiff Lipinski and the Pennsylvania Box Processor Consumer Subclass for treble their actual damages or $100, whichever is greater, and attorneys' fees and costs. 73 Pa. Cons. Stat. § 201-9.2(a). Plaintiff Lipinski and the Pennsylvania Box Processor

Consumer Subclass are also entitled to an award of punitive damages given that Defendant's conduct was malicious, wanton, willful, oppressive, or exhibited a reckless indifference to the rights of others.

COUNT VIII

VIOLATION OF THE IDAHO CONSUMER PROTECTION ACT ("ICPA")

(Idaho Code Ann. § 48-601, *et seq.*)

(ON BEHALF OF PLAINTIFF WOLVEN AND THE IDAHO BOX AND TRAY PROCESSOR SUBCLASS)

280. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

281. Plaintiff Wolven asserts this count on behalf of himself and other members of the Idaho Box and Tray Processor Subclass.

282. Intel engages in trade and commerce in the state of Idaho by offering services and products for sale within the state.

283. Idaho Code § 48-608 provides:

> Any person who purchases or leases goods or services and thereby suffers any ascertainable loss of money or property, real or personal, as a result of the use or employment by another person of a method, act or practice declared unlawful by this chapter, may treat any agreement incident thereto as voidable or, in the alternative, may bring an action to recover actual damages or one thousand dollars ($1,000), whichever is the greater.

284. Under the ICPA," engaging in any act or practice that is otherwise misleading, false, or deceptive to the consumer" are "unfair or deceptive acts or practices in the conduct of any trade or commerce" and is "declared to be unlawful." Idaho Code Ann. § 48-603.

285. Wolven and the other members of the Idaho Box and Tray Processor Subclass have contractual relationships with Intel.

286. Intel engaged in misleading, false, and deceptive acts in violation of the ICPA by willfully failing to disclose and actively concealing the Defect in the Class Processors as described *supra*.

287. The Defect constitutes the risk of catastrophic and permanent damage to the Class Processors that triggered Intel's duty to disclose the issue to consumers as set forth *supra*. Intel should have disclosed this information because it was in a superior position to know the true facts related to the Defect, and Wolven and other members of the Idaho Box and Tray Processor Subclass could not reasonably be expected to learn or discover the true facts related to this Defect. Intel, by its conduct, statements, and omissions described above, also knowingly and intentionally concealed from Wolven and the other members of the Idaho Box and Tray Processor Subclass that Class Processors suffer from the Defect (and the costs, risks, and diminished value of the Class Processors as a result of the Defect).

288. Intel also engaged in deceptive acts in violation of the ICPA by falsely representing that the 0x12B update to protect the Class Processors from damage would not significantly decrease performance when installed in the Class Processors, when, as described *supra*, the microcode update significantly decreases processor performance when installed in the Class Processors.

289. These acts and practices have deceived Wolven and are likely to deceive Idaho purchasers. Intel, by its conduct, statements, and omissions described above, and by knowingly and intentionally concealing from Wolven and the other members of the Idaho Box and Tray Processor Subclass that the Class Processors suffer from the Defect (and the costs, risks, and diminished value of the Class Processors as a result of the Defect), breached its duties to disclose these facts, violated the ICPA, and caused injuries to Wolven and the other members of the Idaho Box and Tray Processor Subclass. The omissions and acts of concealment by Intel pertained to information that was material to Wolven and the other members of the Idaho Box and Tray Processor Subclass, as it would have been to all reasonable consumers.

290. Had Wolven and the other members of the Idaho Box and Tray Processor Subclass known about the Defect in the Class Processors, they would not have purchased the Class Processors, would have paid less for them, or would have avoided the replacement costs associated therewith.

291. Intel's unlawful practices proximately caused ascertainable loss to Wolven and the other members of the Idaho Box and Tray Processor Subclass, who would not have purchased their Class Processors or would have paid less for them had they been apprised of the Defect prior to their purchase and, thus, they did not receive the benefit of the bargain and/or suffered out-of-pocket loss. An undamaged processor with an updated microcode to prevent damage delivers less performance that Intel promised at the time of purchase and a damaged processor delivers no performance when called upon to perform routine computer task.

292. Wolven and the other members of the Idaho Box and Tray Processor Subclass therefore treat any agreement with Intel relating to the Class Processors as voidable, are entitled to actual damages, and also seek restitution, and "an order enjoining the use or employment of methods, acts or practices declared unlawful under this chapter and any other appropriate relief which the court in its discretion may deem just and necessary. Wolven and the other members of the Idaho Box and Tray Processor Subclass also seek an award of punitive damages and such equitable relief as the Court deems necessary or proper due to Intel's repeated or flagrant violations of the ICPA. Idaho Code ann. § 48-608.

COUNT IX

VIOLATION OF THE CALIFORNIA UNFAIR COMPETITION LAW ("CALIFORNIA UCL")

(Cal Bus. & Prof. Code § 17200 et seq.)

(ON BEHALF OF PLAINTIFF THEATRICAL AND THE CALIFORNIA BOX AND TRAY PROCESSOR SUBCLASS)

293. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

294. Plaintiff Theatrical asserts this count on behalf of itself and on behalf of other members of the California Box and Tray Processor Subclass.

295. The California Business & Professions Code § 17200 et seq. (hereinafter "UCL") prohibits "any unlawful, unfair or fraudulent business act or practice."

296. Intel violated the UCL by engaging in unlawful, unfair and fraudulent business acts or practices.

297. In violation of the UCL, Intel employed unfair, unlawful, and deceptive acts or practices, fraud, false pretense, misrepresentations, or concealment, suppression, or omission of a material fact with intent that others rely upon such concealment, suppression, or omission, in connection with the sale of Class Processors. Intel knowingly concealed, suppressed and/or omitted material facts concerning: (i) that the Class Processors contained the Defect; (ii) that the Defect could, did, and will lead to permanent and catastrophic damage to the Class Processors; (iii) that, as described *supra*, the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and (iv) that the Class Processors were (and are) not fit to be used for their intended purpose, which directly caused harm to Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass.

298. Intel actively suppressed the fact of the Defect's existence in Class Processors and that it presents a risk of catastrophic, permanent damage to the Class Processors because of materials, workmanship, design and/or manufacturing defects; that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose. Intel therefore employed unfair, unlawful, and fraudulent business practices to deny repair or replacement of the defective Class Processors within a reasonable time in violation of the UCL.

299. Intel's unfair, unlawful and fraudulent business practices were likely to deceive a reasonable customer. Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass had no reasonable way to know that Class Processors incorporated the defect, and that Class Processors were defective in materials, workmanship, design, and/or manufacture and posed a corresponding risk of catastrophic, permanent damage or that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their

intended purpose. Intel possessed superior knowledge as to the quality and characteristics of Class Processors, including the Defect in the Class Processors and its associated risk of catastrophic, permanent damage, and any reasonable consumer would have relied on Intel's misrepresentations and omissions as did Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass.

300. Intel intentionally and knowingly misrepresented and omitted facts concerning the Defect in Class Processors and its associated risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose with the intent to mislead Plaintiff Theatrical and the other members of the California Box and Tray Processor Subclass. Intel knew, or should have known, that Class Processors possessed the Defect and exposes purchasers to a corresponding risk of catastrophic, permanent damage.

301. Intel owed a duty to disclose the Defect in Class Processors and its corresponding risk of catastrophic, permanent damage to Plaintiff Theatrical and the other members of the California Box and Tray Processor Subclass because Intel possessed superior knowledge concerning the defect and the corresponding risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose. Intel also owed a duty to disclose the Defect in Class Processors because Intel made partial representations concerning the risk to the Class Processors and thus owed a duty to reveal the complete truth to Plaintiff Theatrical and members of the California Box and Tray Processor Subclass. Intel had a duty to disclose any information relating to the quality, functionality and reliability of Class Processors because they consistently marketed Class Processors as reliable.

302. Once Intel made representations to the public concerning Clas Processor quality, functionality and reliability, Intel was under a duty to disclose these omitted facts, because where

one does speak, one must speak the whole truth and not conceal any facts which materially qualify facts stated. One who volunteers information must be truthful, and the telling of a half-truth calculated to deceive is fraud. Rather than disclose the Defect in Class Processors, Intel engaged in unfair, unlawful, and fraudulent business practices in order to sell additional Class Processors and avoid the cost of repair or replacement of Class Processors and/or the damaged Class Processors.

303. Intel's unfair, unlawful, and fraudulent acts or practices, affirmative misrepresentations and/or material omissions concerning the Defect in Class Processors were intended to mislead purchasers and misled Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass.

304. At all relevant times, Intel's unfair and deceptive acts or practices, affirmative misrepresentations and/or omissions concerning the Defect in Class Processors, and its corresponding risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose, were material to Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass. When Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass purchased their Class Processors, they reasonably relied on the reasonable expectation that Class Processors would be free from defects that pose an unavoidable risk of catastrophic, permanent damage and that any updates to the Class Processors microcode would not significantly decrease performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose.

305. Had Intel disclosed that Class Processors incorporated the Defect and/or pose an unavoidable risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors; and that the Class Processors were (and are) not fit to be used for their intended purpose, Plaintiff Theatrical and members of the California Box and Tray Processor Subclass

would not have purchased the Class Processors or would have paid less.

306. Intel owed a continuous duty to Plaintiff Theatrical and other members of the California Box and Tray Processor Subclass to refrain from unfair, unlawful, and fraudulent practices under the UCL and to disclose the Defect in Class Processors and associated risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors and that the Class Processors were (and are) not fit to be used for their intended purpose. Intel's unfair, unlawful, and fraudulent acts or practices, affirmative misrepresentations and/or material omissions concerning the Defect in Class Processors and corresponding risk of catastrophic, permanent damage are substantially injurious to purchasers.

307. As a result of Intel's knowing, intentional concealment and/or omission of the Defect in Class Processors and associated risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors and that the Class Processors were (and are) not fit to be used for their intended purpose, in violation of the UCL, Plaintiff Theatrical and members of the California Box and Tray Processor Class suffered damages to be determined at trial. Owners of Class Processors also suffered an ascertainable loss in the form of, inter alia, out-of- pocket costs for repair or replacement of the defective Class Processor, loss of the benefit of the bargain and diminished value of their vehicles as a result of Intel's unfair, unlawful, and fraudulent acts and practices in the course of its business.

308. Intel knowingly and willfully engaged in the unfair, unlawful, and fraudulent business practices alleged in this Complaint. Intel unconscionably marketed Class Processors to uninformed purchasers in order to maximize profits by selling additional Class Processors incorporating the undisclosed Defect in Class Processors and corresponding risk of catastrophic, permanent damage and that the 0x12B update to protect the Class Processors from damage significantly decreases performance when installed in the Class Processors and that the Class Processors were (and are) not fit to be used for their intended purpose. Intel continued to

manufacture and sell defective Class Processors in California.

309. These unfair, unlawful, and fraudulent acts and practices harmed and continue to harm Plaintiff Theatrical and members of the California Box and Tray Processor Subclass, have negatively affected the public interest, and present a continuing risk of catastrophic, permanent damage to Plaintiff Theatrical and members of the California Box and Tray Processor Subclass.

310. Plaintiff Theatrical and members of the California Box and Tray Processor Class seek an order enjoining Intel's unfair, unlawful, and fraudulent practices and award costs, attorneys' fees and restitution, disgorgement of funds and any other just and proper relief available under the UCL and California law.

COUNT X

FRAUD BY OMISSION OR FRAUDULENT CONCEALMENT

(ON BEHALF OF ALL PLAINTIFFS, THE BOX AND TRAY PROCESSOR CLASS, AND THE TENNESSEE OEM PROCESSOR CLASS)

311. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

312. Plaintiffs assert this count on behalf of themselves and other members of the Box and Tray Processor Class and the Tennessee OEM Processor Class alleged herein.

313. The common law of Delaware applies to this count on behalf of the Box and Tray Processor Class.

314. The common law of Tennessee applies to this count on behalf of the Tennessee OEM Processor Class.

315. Intel intentionally and knowingly concealed, suppressed, and/or omitted material facts including the standard, quality, or grade of the Class Processors and the fact that the Class Processors contain a Defect and corresponding risk of catastrophic and permanent damage, with the intent that Plaintiffs and members of the Classes rely on these omissions. As a direct result of this fraudulent conduct, Plaintiffs and members of the Classes have suffered actual damages.

316. Intel knew (at the time of sale and thereafter) that the Class Processors incorporated

the Defect, concealed the Defect in the Class Processors in the hope that it could avoid having to repair or replace the Class Processors. To date, Intel has not provided Plaintiffs and members of the Classes with a suitable repair or remedy for the Defect in the Class Processors.

317. Intel owed a duty to disclose the Defect in the Class Processors and its corresponding risk of catastrophic, permanent damage to Plaintiffs and members of the Classes because Intel possessed superior and exclusive knowledge concerning the defect. Intel had a duty to disclose any information relating to the quality, functionality, and reliability of the Class Processors because they consistently marketed the Class Processors as superior, particularly for PC gaming and other demanding applications.

318. Intel also owed a duty to disclose that, as described *supra*, the 0x12B update to protect the Class Processors from damage would significantly decrease performance when installed in the Class Processors.

319. Once Intel made representations to the public concerning quality, functionality, and reliability, and performance they were under a duty to disclose these omitted facts, because where one does speak, one must speak the whole truth and not conceal any facts which materially qualify facts stated. One who volunteers information must be truthful, and the telling of a half-truth calculated to deceive is fraud. Rather than disclose the Defect in Class Processors, Intel intentionally and knowingly concealed, suppressed, and/or omitted material facts including the standard, quality, or grade of the Class Processors, the presence of the Defect in the Class Processors and corresponding risk of catastrophic, permanent damage, and the need to install the microcode that reduces performance to prevent catastrophic and permanent damage, to sell additional Class Processors and avoid the cost of repair or replacement.

320. The Defect in Class Processors is material to Plaintiffs and members of the Classes because Plaintiffs and members of the Classes had a reasonable expectation that the Class Processors would not contain a defect, such as the Defect in the Class Processors, that leads to replacement costs. No reasonable consumer expects a processor to contain a concealed defect in design, manufacture, materials, or workmanship, such as the Defect in the Class Processors, that

will lead to hundreds of dollars in replacement costs after causing catastrophic damage to the processor.

321. Plaintiffs and members of the Classes would not have purchased Class Processors or OEM PCs built with Class Processors but for Intel's omissions and concealment of material facts concerning the nature and quality of Class Processors and existence of the Defect in Class Processors and corresponding risk of catastrophic and permanent damage or would have paid less for Class Processors OEM PCs built with Class Processors. Intel knew their concealment and suppression of material facts was false and misleading and knew the effect of concealing those material facts. Intel knew their concealment and suppression of the Defect in the Class Processors would lead to the sale of more Class Processors and would discourage Plaintiffs and members of the Classes from seeking replacement of Class Processors during the applicable warranty periods. Intel intended to induce Plaintiffs and members of the Classes into purchasing the Class Processors and to discourage them from seeking replacement of the Class Processors in order to decrease costs and increase profits.

322. Intel acted with malice, oppression, and fraud. Plaintiffs and members of the Classes reasonably relied upon Intel's knowing concealment and omissions. As a direct and proximate result of Intel's omissions and active concealment of material facts concerning the Defect in Class Processors and associated risk of catastrophic, permanent damage, Plaintiffs and members of the Classes suffered actual damages in an amount to be determined at trial.

COUNT XI

NEGLIGENT MISREPRESENTATION

(ON BEHALF OF ALL PLAINTIFFS, THE BOX AND TRAY PROCESSOR CLASS AND THE TENNESSEE OEM PROCESSOR CLASS)

323. Plaintiffs incorporate and re-allege each preceding paragraph as though fully set forth here.

324. Plaintiffs assert this count on behalf of themselves and other members of the Box and Tray Processor Class and the Tennessee OEM Processor Class alleged herein.

325. The common law of Delaware applies to this count on behalf of the Box and Tray Processor Class.

326. The common law of Tennessee applies to this count on behalf of the Tennessee OEM Processor Class.

327. Intel owed a duty to disclose the Defect in the Class Processors and its corresponding risk of catastrophic, permanent damage to Plaintiffs and members of the Classes because Intel possessed superior and exclusive knowledge concerning the Defect in the Class Processors and the risks to the Class Processors associated with it. Intel also made partial disclosures concerning the Class Processors while knowing the Class Processors possessed the Defect and failed to disclose its existence and its corresponding risk of catastrophic, permanent damage.

328. Intel negligently misrepresented and omitted material facts including the standard, quality, grade and performance of the Class Processors and the fact that the Class Processors were defective and were subject to catastrophic and permanent damage. Intel also negligently misrepresented and omitted material facts with respect to the 0x12B update, including that, as described *supra*, it significantly decreases performance when installed in the Class Processors. As a direct result of Intel's negligent conduct, Plaintiffs and members of the Classes suffered actual damages.

329. As a result of Intel's failure to disclose the material fact that the Class Processors were defective and were subject to catastrophic and permanent damage, Plaintiffs and members of the Classes are required to spend hundreds of dollars to replace the Class Processors or sell their Class Processors at a substantial loss. The fact that the Class Processors may suffer catastrophic and permanent damage due to the undisclosed defect is material because no reasonable consumer expects that they will have to spend hundreds of dollars for replacement of a processor before the end of the useful life of the processor, and because Plaintiffs and members of the Classes had a reasonable expectation that the Class Processors would not suffer from catastrophic and permanent damage.

330. Plaintiffs and members of the Classes would not have purchased the Class Processors but for Intel's negligent omissions of material facts concerning the nature and quality of the Class Processors and existence of the Defect in the Class Processors or would have paid less for the Class Processors. Plaintiffs and members of the Classes justifiably relied upon Intel's negligent false representations and omissions of material facts.

331. As a direct and proximate result of Intel's negligent false representations and omissions of material facts concerning the standard, quality, or grade of the Class Processors, and/or the Defect in Class Processors, Plaintiffs and members of the Classes suffered an ascertainable loss and actual damages in an amount to be determined at trial.

COUNT XII

VIOLATION OF THE MISSOURI MERCHANDISING PRACTICES ACT ("MMPA")

(Mo. Rev. Stat. §§ 407.010, *et seq.)*

(ON BEHALF OF PLAINTIFF RUSSELL AND THE MISSOURI OEM PROCESSOR CONSUMER SUBCLASS)

332. Plaintiff Russell incorporates and re-alleges each preceding paragraph as though fully set forth here.

333. Plaintiff Russell asserts this count on behalf of herself and other members of the Missouri OEM Processor Consumer Subclass.

334. The MMPA provides that, "[t]he act use, or employment by any person of any deception, fraud, false pretense, false promise, misrepresentation, unfair practice, or the concealment, suppression, or omission of any material fact in connection with the sale or advertisement of any merchandise . . . is declared to be an unlawful practice." Mo. Rev. Stat.§ 407.020.1.

335. The MMPA defines an "unfair practice" as conduct that (1) offends public policy; (2) is unethical, oppressive, and unscrupulous; (3) causes a risk of substantial injury to consumers; (4) was not in good faith; (5) is unconscionable; or (6) is unlawful.15 Mo. C.S.R. § 60-8.

336. Under the MMPA, "merchandise" is defined as "any objects . . . or services." Mo.

Rev. Stat. § 407.020.4.

337. The MMPA authorizes both private causes of action and class actions. Mo. Rev. Stat.§ 407.25.1-2.

338. Plaintiff Russell and the other Missouri OEM Processor Consumer Subclass members purchased "merchandise" in "trade" or "commerce" under Mo. Rev. Stat. § 407.010 when they purchased a pre-built desktop personal computer containing a Class Processor for personal, family, and/or household purposes.

339. Intel's conduct, described above, in purposefully marketing and selling the Class Processors with the Defect, was unfair and deceptive.

340. When Intel marketed the Class Processors with the Defect, it misrepresented the Class Processors' capabilities and suitability for desktop PC processor use and omitted material facts from Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass, including the presence of the Defect and the fact that consumers risked catastrophic permanent damage to their Class Processors as a result of the defect.

341. Intel's omissions were material and deceptive. Reasonable consumers consider a processors' propensity not to develop catastrophic permanent damage that renders their desktop computers unable to perform common computer tasks to be a material aspect of their decision whether to buy a particular pre-built desktop personal computer.

342. Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass suffered an ascertainable loss in that they paid for pre-built desktop PCs that contained Class Processors that could be catastrophically and permanently damaged by the Defect, which would render their computers unusable. Indeed, Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass paid a premium for pre-built desktop personal computers that contained Intel's highest-performing desktop processors. A damaged processor cannot be depended on to reliably run common applications and perform routine computer tasks. A damaged processor cannot be repaired and must be replaced. Competing brands of processors are incompatible with Plaintiff Russell's and members of the Missouri OEM Processor Consumer

Subclass's pre-built desktop personal computers.

343. Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass would not have purchased their pre-build desktop PCs containing the Class Processors, or would have paid less for them, and, thus, they did not receive the benefit of the bargain and/or suffered out-of-pocket loss.

344. Any act declared unlawful under the MMPA violates the statute even if "after the sale, advertisement or solicitation." Mo. Ann. Stat. § 407.020.

345. Intel's fraudulent representations that "Intel's internal testing comparing 0x12B microcode to 0x125 microcode – on Intel® Core™ i9-14900K with DDR5 5200MT/s memory1 - indicates performance impact is within run-to-run variation" was also a "false promise," Mo. Ann. Stat. § 407.020, because, as described *supra*¸the microcode update significantly decreases performance when installed in the Class Processors.

346. Plaintiff Russell and the other members of the Missouri OEM Processor Consumer Subclass acted as reasonable consumers in relying on Intel's representation that the microcode update would not decrease performance, in light of all circumstances, particularly since it is the only purported method to prevent catastrophic permanent damage to Class Processors.

347. Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass who have avoided damage to their processor as a result of the Defect (or who have valid warranty claims for replacement from third-parties) have nevertheless suffered ascertainable loss in that they must accept degraded performance from their processors in order to avoid catastrophic permanent damage to their existing or replaced processor when they paid for their pre-built personal desktop computers with the expectation that their Class Processors would deliver all of the performance Intel promised.

348. Intel's violations of the MMPA were willful and knowing.

349. Plaintiff Russell and members of the Missouri OEM Processor Consumer Subclass are entitled to relief under Mo. Rev. Stat. § 407.025, including, but not limited to, injunctive and declaratory relief, actual damages, punitive damages, and attorneys' fees and costs.

350. The claim for injunctive relief is appropriate because, among other things, Intel's misconduct is ongoing and bringing multiple suits to recover damages for future harm will not be as plain and speedy as an order from this Court prohibiting Intel from engaging in the misconduct alleged herein.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs, on behalf of themselves and all others similarly situated, respectfully request that this Court enter judgment against Intel and in favor of Plaintiffs and the respective class and award the following relief:

A. An order certifying this action as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure, declaring Plaintiffs as the representative of the Classes and Subclasses describe herein, and Plaintiffs' Counsel as counsel for the Classes and Subclasses described herein;

B. An order awarding declaratory relief and enjoining Intel from continuing the unlawful, deceptive, fraudulent, harmful, and unfair business conduct and practices alleged in this Complaint;

C. Injunctive and equitable relief in the form of a comprehensive program to repair or replace the Class Processors, and/or buyback all Class Processors, and to fully reimburse and make whole all members of the Classes and Subclasses described herein for all costs and economic losses;

D. A declaration that Intel is financially responsible for all class notice and the administration of class relief;

E. An order awarding costs, restitution, disgorgement, punitive damages, treble damages, and exemplary damages under applicable law, and compensatory damages for economic loss, overpayment damages, and out-of-pocket costs in an amount to be determined at trial;

F. An order awarding any applicable statutory and civil penalties;

G. An order requiring Intel to pay both pre- and post-judgment interest on any amounts awarded;

H. An award of costs, expenses, and attorneys' fees as permitted by law; and,

I. Such other or further relief as the Court may deem appropriate, just, and equitable.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs and all classes alleged herein demand a trial by jury of any and all issues in this action so triable of right.

Dated: November 15, 2024

Respectfully submitted,

COOCH AND TAYLOR, P.A.

By: */s/ R. Grant Dick IV*

Carmella P. Keener (No. 2810)
R. Grant Dick IV (No. 5123)
Dean R. Roland (No. 6459)
The Brandywine Building
1000 N. West Street, Suite 1500
Wilmington, DE 19801
T 302.984.3800
F 302.984.3939
ckeener@coochtaylor.com
gdick@coochtaylor.com
droland@coochtaylor.com

Darren T. Kaplan
(*To be admitted Pro Hac Vice*)
KAPLAN GORE LLP
346 Westbury Ave. Suite 200
Carle Place, NY 11514
T. 212.999.7370
F. 404.5373320
dkaplan@kaplangore.com

Attorneys for Plaintiff