

PRODUCT BRIEF

H Series Processors  
for Ultraportable  
Gaming (H35)

The Intel logo is displayed in white text on a white rectangular background. A small blue square is positioned above the logo. The background of the entire page is a blurred image of a person wearing a headset and playing a game on a laptop with a backlit keyboard.

# 11<sup>TH</sup> Gen H Series for Ultraportable Gaming (H35)

More and more people continue to turn to gaming for entertainment, escape, and socializing with friends & family. This has led to unprecedented demand for enthusiast level gaming laptops. This growing demographic demands a design language that addresses their need for a sleek lifestyle device for work, school, everyday tasks AND gaming. The 11th Gen Intel® Core™ H Series Processors for Ultraportable Gaming builds on the best of what our 11th Gen Intel® Core U-series processors have already delivered, adds more performance to enable this new class of Ultraportable Gaming systems.



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Optimized  
for a higher  
power and  
performance  
range

## i7-11375H Special Edition

11th Gen Intel® Core i7-11375H Special Edition processors are our highest performing silicon utilizing Intel® Turbo Boost Max 3.0, capable of delivering up to 5GHz Turbo frequencies. These Special Edition processors will enable Ultraportable Gaming systems optimized for a higher power and performance range. The Special Edition mark is how you know that you are getting a system that is tuned for great performance.

## Gaming

Ultraportable Gaming systems need to be just that – Ultraportable AND enthusiast level gaming-capable. Starting with a gaming DNA, we utilize the latest PCIe Gen 4 technology, connected right to our CPU to enable the highest bandwidth connection to the latest discrete graphics cards. This delivers competitive-level responsiveness and performance in most popular games. By leveraging a multichip SOC package, we enable our OEM partners to put these CPUs into Ultraportable form factors.





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Upgrade to Intel® Killer™ Wi-Fi 6E (Gig+) so you are ready to benefit from Wi-Fi's most significant advancement in 20 years. Experience unencumbered Wi-Fi gaming with superior connectivity speed, latency, and reliability across new 6 GHz radio frequencies, free of legacy Wi-Fi interference, when available. Maintain ultimate flexibility to leverage best-in-class Wi-Fi 6 (Gig+) functionality, when needed. In addition, Intel® Killer Wi-Fi 6E products help deliver fast, low-latency gaming with the Killer Prioritization Engine that ensures gaming and real-time network traffic are prioritized for optimized performance.

Experience unencumbered Wi-Fi gaming with superior connectivity...




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...and everything else you do

While you may be a gamer, we know that's not all you are. You need a laptop that can go anywhere and do everything you do. The combination of performance and sleek designs these new CPUs go into help you to make your best contribution. Our new processors offer built-in AI acceleration for Ultraportable Gaming laptops. This is uniquely designed to dramatically accelerate the latest AI-enhanced applications and modern workflows. AI powers more immersive collaboration, with neural noise suppression and even video super-resolution for professional videocalls in any environment using the latest low-bandwidth encode and the best Wi-Fi technology for video conferencing<sup>1</sup>. It revolutionizes creative workflows, enabling amazing new photo and video editing capabilities at incredible speeds. Now everyone can collaborate and create like a professional.

...a laptop  
that can go  
anywhere  
and do  
everything.



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Features like integrated Thunderbolt™4<sup>2</sup> at 40 Gbps, delivers the fastest, simplest and most reliable cable solution to any dock, display, or data device. Gamers can create an immersive gaming experience by reducing cable clutter with Thunderbolt docks, monitors or add more storage capacity with speeds up to 3,000 Mb/s to quickly load games and store media libraries. Creators can create and enjoy a clutter-free desktop with color accurate monitors, Thunderbolt docks, low latency audio interfaces and faster storage to spend more time creating and less time working. Thunderbolt 4, with maximum performance of 40 Gbps allows gamers to record, edit and share gameplay videos, screenshots and livestreams on YouTube, Twitch, and Facebook with ease and enables creators to easily edit and archive remarkably vivid photos and beautiful 4K video.

New Intel® Optane™ memory H20 with Solid State Storage delivers performance improvements, responsiveness benefits, and high capacity storage.

Thunderbolt™4<sup>2</sup>  
delivers the  
fastest, simplest  
and most reliable  
cable solution



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## Features

FEATURES <sup>3,4</sup>	BENEFIT
CPU/Memory/Graphics Overclocking	No
Intel® Extreme Tuning Utility (XTU)	No
Intel® Hyper-Threading Technology	Yes
Intel® Smart Cache Technology with Last Level Cache (LLC) sharing between Processor and Graphics	Yes
Intel® Smart Sound Technology	Yes
Intel® Gaussian Neural Accelerator 2.0 (GNA 2.0)	Yes
Intel® Turbo Boost Technology 2.0	Yes
Intel® Turbo Boost Max Technology 3.0	Yes <sup>5</sup>
Intel® Speedshift™ Technology	Yes
Per-core P-states	Yes
Last Level Cache (LLC)	Up to 12M

## Power Specifications

PROCESSOR	CTDP DOWN	CTDP UP
i7-11375H	28W	35W
i7-11370H	28W	35W
i7-11300H	28W	35W



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# PCH LP Specifications

**FEATURES**

2<sup>6</sup> x SATA 6Gb/s

Up to 7 PCIe\* Gen 3 Devices across 12 lanes

10 x USB 2<sup>7</sup>

Intel® Smart Sound Technology w/I2S OR  
HAD Solution, Soundwire Interface

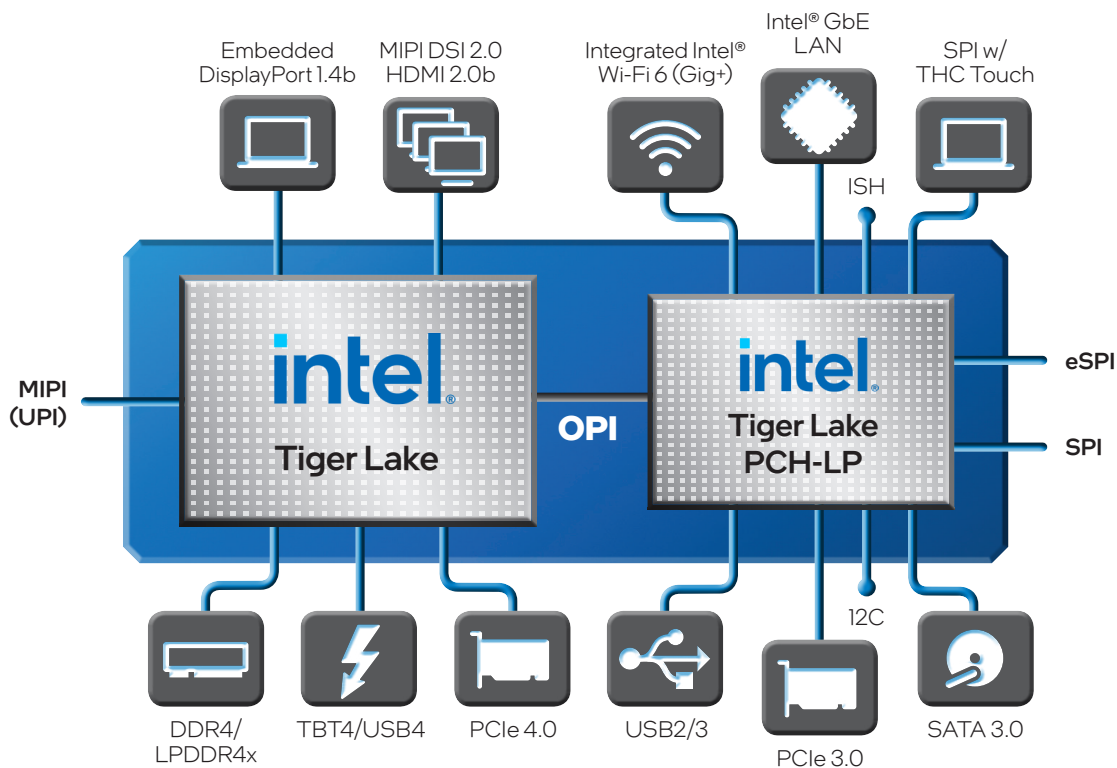
**BENEFIT**

AHCI, RAID, RST 18 (AHCI and RAID), Intel®  
RST for PCIe\* Storage

Boot Guard, Integrated Wi-Fi 6 (Wi-Fi/BT)

6 I2C, 3 UART, SSIC, ISH 5.4

# Block Diagram



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# Features & Benefits

FEATURES	BENEFIT
CPU	10nm SuperFin technology CPU up to 3MB LLC/Core / 14nm PCH
Graphics	Intel® Xe-LP graphics engine, Up to 96EU
Memory	DDR4 up to 3200, LPDDR4/x up to 4266
Imaging	<ul style="list-style-type: none"><li>Enhanced IPU6: 27Mp WF / 13 Mp UF</li><li>4K@60fps HDR video TNR and HDR (SVE only)</li><li>6/4 concurrent cameras (UP4/UP3)</li></ul>
Media, Display, Audio	<ul style="list-style-type: none"><li>2 Multi-Format Codec engines: Up to 8K60 decode &amp; 8K30 encode, AV1 decode &amp; SCC</li><li>4 Simultaneous displays (adding 2nd eDP support and MIPI DSI 2.0)</li><li>2-mic Far Field audio pre-processing</li><li>USB audio offload</li><li>Bluetooth Audio Offload</li><li>MVA (Multiple Voice Assistant)</li><li>Programmable Quad-Core Audio DSP, Soundwire Digital Audio Interface, Intel® GNA 2.0 for</li><li>low-power neural network acceleration</li></ul>
I/O & Connectivity	<ul style="list-style-type: none"><li>Integrated Wi-Fi*/BT (CNVi AC/Wi-Fi 6 support) – Intel® Wi-Fi 6 AX201 (2x2/160 MHz, Gig+)</li><li>New, Discrete Intel® Killer™ Wi-Fi 6E AX1675 (2x2/160 MHz, Gig+)</li></ul>
Storage	Intel® Optane™ H20 memory with Solid State Storage and/or PCIe Gen 4 SSD
Security	Control Flow Enforcement Technology (CET) malware protection

For more information on the new 11th Gen Intel® Core™ mobile processors, visit [www.intel.com/products/mobile/processors](http://www.intel.com/products/mobile/processors).

- 1 Intel Over The Air (OTA) multi-client Wi-Fi testing in consumer home network environment highlighted a major reduction in Counter Strike game latency due to 160 MHz channels and core technology advantages of Wi-Fi 6/6E vs. Wi-Fi 5. Visit [intel.com/performanceindex](http://intel.com/performanceindex) (connectivity) for details.
- 2 As compared to other PC I/O connection technologies including eSATA, USB, and IEEE 1394 Firewire\*. Performance will vary depending on the specific hardware and software used. Must use a Thunderbolt-enabled device.
- 3 Not all features indicated are supported on all skus
- 4 Level of support may vary by SKU
- 5 Only available with i7-11375H
- 6 Enabled with I/O Port Flexibility
- 7 The Total USB2 port availability will also take into account the USB2 port requirement for Integrated Bluetooth® functionality

Intel technologies may require enabled hardware, software or service activation.

No product or component can be absolutely secure.

Your costs and results may vary.

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