

## CES 2020: Intel Expands Project Athena Innovation Program with First Chromebooks

Intel's Commitment with the PC Ecosystem to Enable Advanced Laptops and Chromebooks with New Experiences and Next-Generation Technologies

Jan 6, 2020 — At CES 2020, Intel shared significant updates to its laptop innovation program codenamed “Project Athena,” including an expanded partnership with Google that has produced the first two Project Athena-verified Chromebooks: the ASUS Chromebook Flip (C436) and the Samsung Galaxy Chromebook.



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*ASUS Chromebook Flip C436 is elegantly designed with a 14-inch NanoEdge display, 85% screen-to-body ratio and a 13-inch magnesium alloy chassis. Equipped with a 10th Gen Intel Core processor, it offers omnidirectional quad speakers for an exceptional audio experience, USI stylus compatibility and integrated fingerprint sensor.*

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*Samsung Galaxy Chromebook is an ultra-light, 9.9mm thin 2-in-1 with a 13.3-inch AMOLED touch screen display that delivers 4KUHD resolution, slim 3.9mm bezel, built-in intelligent pen solution, and is built from durable aluminum. Available in fiesta red and mercury gray, the Chromebook is powered by a 10th Gen Intel Core processor.*

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Since its debut in 2019, Intel has verified 25 laptop designs against the program's first specification and key experience targets. The company expects to verify approximately 50 more device designs across Windows and Chrome OS this year, and Intel also announced that the program will deliver a target specification for the emerging dual-screen laptop category.

Project Athena is an innovation program designed to deliver a new class of advanced laptops. The program is rooted in insights about people and how they use their devices and charts a course to deliver the best laptop experiences for those people, leveraging the technological strengths of Intel's PC platform engineering and long-held ecosystem partnerships. To be verified, device designs are co-engineered, tuned and tested with Intel to show they've met or surpassed the program's experiential and technology requirements spanning battery life, responsiveness, instant wake, connectivity and more.



## Key Experience Indicators: A Fundamental Departure from Today's Lab Benchmarks

Where industry-standard benchmarks don't always reflect real-world usages, Intel's metrics, called Key Experience Indicators (KEIs), are designed to test and measure experiences under realistic conditions – how people use their PC on an average, intensive day and based on out-of-the-box system configurations. In 2019, Intel's first-edition KEIs set the technical foundation to make the laptop's most essential experiences – instant wake<sup>1</sup>, exceptional responsiveness on the go, and worry-free battery life<sup>2,3,4</sup> – consistent and dependable. In year two, Intel intends to perfect those essential experiences, promising to deliver even better designs with snappier responsiveness on battery, longer real-world battery life and fast charging.

All KEIs are measured by one set of real-world-representative conditions: running multiple apps simultaneously, with multiple tabs open on the browser, while connected to the network, at a screen brightness of 250 nits along with out-of-the-box hardware and software configurations. System designs are also evaluated under these conditions while on battery and while plugged in to evaluate experience consistency across both scenarios.

## About the First Target Specification

Announced at Computex 2019, the first target specification was designed to provide the technical foundation necessary to bring new laptop experiences to life, measured by KEIs. Required technologies span six key areas of innovation. Highlights include:

1. **Ready to go before you are:** Modern Connected Standby and Lucid Sleep features implement fast wake with a simple lid-lift, push of a button or quick fingerprint recognition.
2. **Performance and Responsiveness:** Intel® Core™ i5 or i7 processors, Intel® Core™ vPro™ i5 or i7 processors with Intel® Dynamic Tuning Technology, ≥8GB DRAM dual channel mode and ≥265GB NVMe SSD, including Intel® Optane™ memory H10 options.

3. **Adaptive Intelligence:** Features such as far-field voice services and support for OpenVINO™. Designs based on 10th Gen Intel® Core™ processors codenamed “Ice Lake” bring broad scale intelligent performance to the laptop with Intel® Deep Learning Boost.
4. **Battery Life:** Fast-charging capabilities over USB Type C, integration and optimization of low-power components, co-engineering support for power efficiency, along with platform optimization.
5. **Connectivity:** A fast and persistent connection with Intel® Wi-Fi 6 (Gig+) and optional Gigabit LTE. Connect to billions of USB Type C devices with Thunderbolt™ 3, the fastest and most versatile port available<sup>5</sup>.
6. **Form Factor:** Touch display, precision touchpads and more in sleek, thin-and-light and 2 in 1 designs with narrow bezels for a more immersive experience.

## About Intel

Intel (NASDAQ: INTC), a leader in the semiconductor industry, is shaping the data-centric future with computing and communications technology that is the foundation of the world's innovations. The company's engineering expertise is helping address the world's greatest challenges as well as helping secure, power and connect billions of devices and the infrastructure of the smart, connected world – from the cloud to the network to the edge and everything in between. Find more information about Intel at [newsroom.intel.com](https://newsroom.intel.com) and [intel.com](https://intel.com).

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<sup>1</sup> From button press, lid open, or voice, to display on and ready for authentication

<sup>2</sup> Testing as of 30 September 2019. For systems with FHD displays. Simulated to replicate typical scenario on wireless web browsing workload: shipped HW/SW configuration running multiple background applications and open web pages; on 802.11 wireless Internet connection, DC battery power, and 250nit screen brightness

<sup>3</sup> Testing as of 30 September 2019. For systems with FHD displays. Simulated to replicate in-transit local video FHD playback scenario: 150nit screen brightness, in airplane mode

<sup>4</sup> For systems with Full HD (FHD) displays, when used for wireless web browsing. When powered off, from OEM default shutdown level

<sup>5</sup> As compared to other PC I/O connection technologies as of September 9, 2019, including eSATA, USB, and IEEE 1394 Firewire\*. Performance will vary depending on the specific hardware and software used. Must use a Thunderbolt-enabled device.

<sup>6</sup> Verification process: Intel's design verification process ensures that certain product specifications for user experience are included. Intel does not guarantee specific performance of any system. Actual performance will vary with use, system configurations, and settings