



## ASUS Republic of Gamers Maxes Out Performance at CES 2023

Jan 3 , 2023

Maxed-out performance with 540 Hz Swift Display; the latest silicon from AMD, Intel, and NVIDIA; WiFi 7 technology; and incredible laptop and gaming gear

- **Limitless firepower:** AMD Ryzen™ 9 Zen 4 and 13th Gen Intel® Core™ CPUs; AMD Radeon™ RDNA3 and NVIDIA GeForce RTX™ 40 Series Laptop GPUs
- **Full-blast laptop powerhouses:** ROG Strix SCAR 16 and 18, ROG Strix G16 and G18; ROG Zephyrus G14, G16, and M16; ROG Flow Z13, X13, and X16
- **Faster than fast:** Incredibly fast ROG Swift Pro PG248QP 540 Hz display, and the first ROG 27-inch 1440p ROG Swift OLED PG27AQDM for stunning visuals
- **Incredible ROG gaming gear:** World's 1st quad-band WiFi 7 router, Rapture GT-BE98; Harpe and Hone Ace Aim Lab edition; Azoth; Raikiri Pro; Destrier Ergo

---

**LAS VEGAS, USA, January 3, 2023** — ASUS Republic of Gamers (ROG) today announced a wide range of exclusive performance-focused products during the [For Those Who Dare: Maxed Out](#) virtual launch event for CES 2023. During the event, ROG showcased multiple product premieres, including impressively fast and stunning displays, powerhouse laptops with latest-gen processors and graphics, faster-than-ever routers, and a wide variety of peripherals to complete the most maxed-out gaming setups. This wide array of innovations includes the ROG Swift

Pro PG248QP and ROG Swift OLED PG27AQDM gaming displays; ROG Azoth gaming keyboard; ROG Raikiri Pro PC controller; ROG Destrier Ergo gaming chair; ROG G22CH gaming desktop; and much more.

This year more than ever, ROG is evolving its gaming lineup to drive performance beyond limits. New additions presented during the event include Strix Scar and Strix G series gaming laptops, in 16-, 17-, and 18-inch versions. These gaming powerhouses host up to AMD Ryzen™ 9 Zen 4 and 13th Gen Intel® Core™ processors, liberating more power than ever before for maxed-out performance, and NVIDIA GeForce RTX™ 40 Series Laptop GPUs, working in concert with a MUX Switch and NVIDIA Advanced Optimus to deliver never-before-seen performance on a laptop.

In addition, ROG introduced the new Zephyrus M16 (GU604), with ROG Nebula HDR and AniMe Matrix™ displays, as well as Zephyrus G16 (GU603) and Zephyrus G14 (GA402) — all of which have maxed-out performance and give gamers the competitive edge they need.

On the versatility side, ROG has refreshed the ROG Flow X16 (GV601), Flow X13 (GC33), and Flow Z13 (GZ301) — all of which are compatible with the ROG XG Mobile external GPU for additional firepower. These ultra-versatile, ultra-impressive new laptops come in an ultra-compact format that is built to adapt, delivering the best blend of performance and portability.

During the show, ROG also revealed what the future holds for gamers, with the ROG Swift Pro PG248QP, the world's fastest 540 Hz gaming monitor, redefining smooth gaming experiences; and the ROG Swift OLED PG27AQDM, the first ROG 27-inch 1440p OLED gaming monitor with superfast 240 Hz refresh rate and 0.03 ms response time, for stunning visuals, fast panel, and instant response.

In addition, ROG debuted the world's first quad-band WiFi 7 gaming router, the ROG Rapture GT-BE98, with speeds up to 25,000 Mbps, which is 160% faster with 20% higher peak data rates than the previous generation. ROG also introduced the new ROG Azoth, a 75% gaming keyboard with premium DIY features for those who are more hands-on with their gear. This year, again, ROG and Aim Lab, trainer of millions of FPS gamers around the world, have teamed up to create new peripherals that are raising the bar for esports gaming. This includes the ROG Harpe Ace Aim Lab Edition gaming mouse and ROG Hone Ace Aim Lab Edition gaming mouse pad. And, there is the ROG Raikiri Pro PC Controller, with unlimited customization, plus the versatile ROG Destrier Ergo Gaming Chair.

For those present in Las Vegas, all the on-stage products showcased during the virtual launch event, as well as during the [virtual ASUS CES event](#), and much more, will be available for an exclusive hands-on experience at The Venetian Expo, Meeting Room #3002, on January 4, 2023, from 10:00-18:00; and on January 5-7, from 09:00-18:00.

## Maxed-out laptop powerhouses

### **ROG Strix SCAR and Strix G; new ROG Strix SCAR 18 (G834): Break all limits**

The new **ROG Strix SCAR 18 (G834)** is designed with esports enthusiasts in mind. It's a gaming powerhouse, transporting the power and comfort of a desktop PC into a laptop powered by top-tier components helping gamers to steal the spotlight with maxed-out performance. Impressively, it's the first-ever ROG laptop to feature an 18-inch Nebula Display, with up to a QHD 240 Hz spec.

The ROG Strix SCAR is also available in 16- or 17-inch models. The 16-inch and 18-inch models are equipped with up to 13th Gen Intel Core i9-13980HX processors with 24 cores and 32 threads. The **ROG Strix SCAR 17** comes with up to an AMD Ryzen 9 Zen 4 processor while the **ROG Strix SCAR 16** offers incredible portability with a 16-inch Mini LED QHD 240 Hz Nebula HDR Display, for stunning visuals.

All Strix models come equipped with up to a NVIDIA GeForce RTX 40 series Laptop GPU with Advanced Optimus, and are designed for high-refresh gaming. Gamers can experience incredible power and maxed-out performance with Conductionaut extreme liquid metal on the CPU, Tri-Fan technology, full-surround vents, and intelligent cooling for the best performance even under heavy workloads.

And there's more. All Strix models are equipped with Dolby Atmos® virtual surround for a crystal-clear soundstage in the heat of battle. Two-Way AI Noise Cancellation filters out background noise for both ingoing and outgoing communications, so everyone's voice comes through loud and clear. In addition, Strix models come with a 64 Wh or 90 Wh battery, plus 100 W Type-C® charging for on-the-go usage. WiFi 6E and an Ethernet port provide cutting-edge networking for minimal lag on both wired and compatible wireless networks. All displays come with Dolby Vision® HDR and NVIDIA G-SYNC® for stunning picture quality without tearing or stuttering. A fast response time assures clear movement so gamers can make pixel-perfect decisions in frenetic firefights. Plus, spacious keyboard layouts make for more comfortable gaming. Aura Sync-compatible per-key RGB lighting on the keyboard and lightbar, as well as customizable armor caps, ensure gamers can flex their own personal style.

### **ROG Zephyrus series: Transcend your reality**

The **ROG Zephyrus G14** is a 14-inch gaming juggernaut that features a vibrant ROG Nebula HDR Mini LED QHD 165 Hz Pantone® Validated display with an exceptional 16:10 aspect ratio. Additional panel options include QHD 165 Hz or FHD 144 Hz versions. Overheating is not a worry with its precision engineered cooling — there's a vapor chamber covering the CPU and GPU, a liquid-metal thermal compound on the CPU, as well as dual 84-blade Arc Flow Fans®. The 76 Wh battery allows gamers to stay active no matter where they are.

All Zephyrus models come with Dolby Atmos speakers, a 3D mic array with multiple modes, and Two-Way AI Noise Cancellation for clear voice communication. The G14 and M16 come with an FHD IR camera, and the G16 comes with an HD 720P IR camera. All models come with Windows Hello support. The displays are Pantone Validated and have Dolby Vision support. Zephyrus models have a 180° ErgoLift hinge to ensure comfort. A wide array of connectivity options include a 100 W USB Type-C port with DisplayPort™ 1.4 and power delivery, PD charging support, and WiFi 6E.

The **ROG Zephyrus G16** comes with up to a 13th Gen Intel Core i9-13900H processor and up to an NVIDIA GeForce RTX 40 series Laptop GPU with a 120 W maximum TGP, MUX Switch, and NVIDIA Advanced Optimus. The **ROG Zephyrus G14** comes with up to an AMD Ryzen 9 Zen 4 CPU and up to an NVIDIA GeForce RTX 40 series Laptop GPU with a 125 W maximum TGP, MUX Switch, and NVIDIA Advanced Optimus. The **ROG Zephyrus M16** comes with up to a 13th Gen Intel Core i9-13900H processor and up to an NVIDIA GeForce RTX 40 series Laptop GPU with a 145 W maximum TGP, MUX Switch, and NVIDIA Advanced Optimus. The G16 and M16 both come with

Thunderbolt™ 4. The M16 and G14 both come with the customizable AniMe Matrix display to fully showcase the user's personality.

The ROG Zephyrus G16 comes with an ROG Nebula Display with a 94% screen-to-body ratio and extended 16:10 aspect ratio, as well as a 90 Wh battery and HDMI® 2.1. The ROG Zephyrus M16 comes with up to a QHD Mini LED 240 Hz, 3 ms ROG Nebula HDR display with G-SYNC and a 92% screen-to-body ratio and 16:10 aspect ratio. It also has ROG Intelligent Cooling™ Tri-fan technology with a full-width heatsink, as well as a large, fast-charging 90 Wh battery with Power Delivery 3.0.

### **ROG Flow X13 (GV302) and ROG XG Mobile (GC33): Built to adapt. Ultra-compact.**

The ROG Flow X13 comes with up to an AMD Ryzen 9 Zen 4 CPU and up to an NVIDIA GeForce RTX 40 series Laptop GPU. It has a 360° convertible design that has four modes: Laptop, Tablet, Tent, and Stand. To unleash additional firepower and offer a desktop-like feel work and gaming station, there is an optional XG Mobile external GPU with an NVIDIA GeForce RTX 40 series Laptop GPU. The liquid metal compound on the CPU and three dedicated exhaust vents ensure maxed-out performance. It also comes with a 75 Wh battery, 100 W USB Type-C fast charging, and a 130 W AC adapter. The ultra-compact 13-inch chassis offers perfect mobility and portability.

The ROG Flow X13 comes with the choice of a QHD 165 Hz Nebula display or an FHD 120 Hz panel that is Pantone Validated and offers Dolby Vision support, scratch-resistant Corning® Gorilla® Glass DXC touchscreen, G-SYNC, and Advanced Optimus technology for stunning visuals. Additional features include an FHD IR camera with Windows Hello, a full-sized 15-inch keyboard for comfortable typing, an expanded touchpad, premium Dolby Atmos sound, and Two-Way AI Noise Cancellation.

### **ROG Flow X16 (GV601): Ultra-versatile. Ultra-impressive.**

The **ROG Flow X16** has a 360° convertible design with four distinct modes: Laptop, Stand, Tent, and Tablet. It includes robust touch support for Tablet mode and stylus support for accurate note-taking and drawing. Gamers can expect world-class performance from the up to 13th Gen Intel Core i9-13900H processor, up to NVIDIA GeForce RTX 40 series Laptop GPU, up to 2 TB PCIe 4.0 x4 SSD storage, and up to 16 GB DDR5-4800 memory with dual upgradeable SO-DIMMs.

Beautiful visuals come from an up to Nebula HDR 1100 nits mini LED display with up to 1,024 individual dimming zones, QHD resolution, 240 Hz refresh rate, 3 ms response time, and extended 16:10 aspect ratio. It also has Pantone Validated color rendering, a 100% DCI-P3 gamut, Dolby Vision HDR, and a next-gen HDMI 2.1 port. There's also a Type-C USB4® port with Thunderbolt 4.

The all-new Tri-Fan system comes with Arc Flow fans. Large skived-fin heatsinks allow for maximum surface area. Additionally, a liquid metal thermal compound is used on the CPU. There are also dust filters for consistent performance and stability.

## **ROG Flow Z13 (GZ301): One device. Infinite play.**

The powerful **ROG Flow Z13 (GZ301)** gaming tablet comes with up to a 13th Gen Intel Core i9-13900H processor and up to an NVIDIA GeForce RTX 40 series Laptop GPU, with G-SYNC and DDS 2.0 support, all in a 13-inch chassis that weighs just 1.1 kg and is 12 mm thick. Gamers can enjoy console gaming power on the go, with multiple viewing angles providing up to 170° of adjustment, as well as support for XG Mobile external GPUs. It also supports mouse and keyboard, controller, and touch inputs.

Gamers can see things clearer with the 13-inch Nebula Display, 16:10 aspect ratio, and 100% DCI-P3 coverage with a QHD 165 Hz panel. There is a scratch-resistant Gorilla Glass DXC touchscreen and FHD IR camera with Windows Hello. When powered on, the Z13 always stays cool. With its 2-in-1 form factor designed to increase airflow efficiency, along with a vapor chamber and liquid metal cooling boosting heat transfer capacity while achieving 0 dB Ambient Cooling, it stays supremely quiet even under full load.

Style and gaming ease are assured with the detachable 15-inch full-size RGB keyboard and USB-C power delivery from a 130 W charger or power bank. The premium Dolby Atmos sound, Hi-Res Audio, smart amp, Two-Way AI Noise Cancellation, and Thunderbolt 4 support provide game-ready sound.

## **Faster-than-fast game-changing displays**

### **ROG Swift Pro PG248QP: World's first 540 Hz gaming monitor**

The **ROG Swift Pro PG248QP** is the world's first 540 Hz gaming monitor. We reached this performance milestone thanks to the new esports TN (E-TN) technology, which offers 60% faster response times than standard TN panels, enabling superfast refresh rates and astounding clarity. It features a new stand design with retractable and locked claws to create a much smaller base footprint to free up more desktop space for pro gamers.

The 24.1-inch FHD (1920 x 1080) monitor with ultrafast 540 Hz (OC) refresh rate is designed for professional gamers and immersive gameplay. The G-SYNC processor includes a built-in NVIDIA Reflex Analyzer that captures end-to-end system latency to deliver the very best gaming experience. Additionally, the built-in ESS DAC provides surround sound, as well as gunshot and footstep enhancements that provide near-zero audio latency.

### **ROG Swift OLED PG27AQDM: 1440p endgame monitor**

The **ROG Swift OLED PG27AQDM** is the first ROG 1440p OLED gaming monitor with a superfast 240 Hz refresh rate and 0.03 ms response time. It comes with an anti-glare micro-texture coating to reduce reflections for a better viewing experience in all lighting conditions, and it offers 1,000 nits peak brightness [\[1\]](#).

The thermal design of the cooling system has been greatly improved to help reduce burn-in. It has a custom heatsink and a new internal layout to improve cooling. Internal airflow has been optimized and the top air vents are larger for improved heat dissipation. Heat is dissipated more evenly across the rear of the monitor. The average temperature is 5% lower compared to other 27-inch OLED gaming monitors. Intelligent voltage optimization ensures consistent luminance for each pixel by controlling the amount of voltage applied to it. ROG worked closely with the panel maker to determine the correlation between OLED brightness, voltage level, and operational temperature. A smart algorithm coded for the panel optimizes voltage based on temperature changes to ensure consistent brightness across the panel.

The ROG Swift OLED PG27AQDM also comes with Uniform Brightness, which keeps the illuminance level even when white windows change dramatically. Plus, new DisplayWidget Center software makes it easy to use a mouse to change system functions and OLED settings via an intuitive interface.

## **Impressive peripherals and routers — fully maxed-out**

### **ROG Rapture GT-BE98: World's first quad-band WiFi 7 gaming router**

**ROG Rapture GT-BE98** is the world's first quad-band WiFi 7 gaming router. Leveraging the full potential of WiFi 7 with 320 MHz channel support in the 6 GHz band, it delivers up to 160% faster speeds than the previous generation. In addition, with 4K QAM modulation that can pack more data into transmissions, peak data rates are up to 20% higher, delivering incredible speeds of up to 25,000 Mbps. Furthermore, two additional revolutionary features, Multi-Link Operation and Multi-RU Puncturing, allow the GT-BE98 to deliver more efficient and reliable wireless connections.

Multi-link operation simultaneously transmits across different bands and channels to increase throughput to the device, lower the latency, and improve reliability. Multi-RU puncturing segments a wide channel bandwidth into smaller units, enabling puncturing to eliminate interference for the remaining bandwidth and increase efficiency.

Gamers can enjoy up to 10X-faster data-transfer speeds for bandwidth-demanding tasks with one 10 Gbps WAN/LAN port and two 10 Gbps LAN ports. In addition, for gamers who live in larger homes, the exclusive ASUS RangeBoost Plus improves signal range and overall coverage. And, ROG-exclusive triple-level game acceleration offers fantastic gaming experiences.

## **ROG and Aim Lab collaboration: Raising the bar for esports gaming**

### **ROG Harpe Ace Aim Lab Edition Gaming Mouse**

ROG and Aim Lab, trainer of millions of FPS gamers around the world, have teamed up to create new peripherals that help players unleash their gaming potential.

The **ROG Harpe Ace Aim Lab Edition** wireless gaming mouse is made for esports athletes and aspiring gaming professionals. Designed for competitive FPS gaming, this ultralight 54-gram mouse has an ambidextrous form factor that was co-developed with esports professionals at Aim Lab, providing optimal palm support and stability for players so they can exert better control through a tight grip. This epic crossover also resulted in the Aim Lab Settings Optimizer, an Aim Lab software feature exclusive to the ROG Harpe Ace, which helps gamers analyze and tailor mouse settings that are optimal to their strengths and performance.

The mouse also provides tri-mode connectivity with unmatched flexibility with wired USB, low-latency 2.4 GHz RF, plus Bluetooth® mode to pair up to three devices. The ROG SpeedNova wireless technology ensures low-latency, reliable wireless performance, and optimized energy efficiency in the 2.4 GHz RF mode. Frequently used mouse settings can be adjusted directly by pressing different combinations of mouse buttons, making it perfect for calibrations on-the-go. ROG Micro Switches guarantee a 70-million-click lifespan and controlled, consistent click-feel. Additionally, the mouse comes with a set of anti-slip mouse grip tapes to assure grip and to add a bit of flair.

### **ROG Hone Ace Aim Lab Edition Gaming Mouse Pad**

The **ROG Hone Ace Aim Lab Edition** is a large-sized gaming mouse pad designed to work with the Aim Lab X ROG 360 task to help FPS players improve flicking accuracy and consistent crosshair placement. The Hone Ace has a hybrid cloth surface that offers optimal friction, a water-, oil- and dust-repellent protective nano-coating, and a soft nonslip rubber base with the right amount of cushioning for gaming comfort.

Both the ROG Harpe Ace Aim Lab Edition and the ROG Hone Ace Aim Lab Edition, along with the ROG Falchion Ace 65% gaming keyboard, are now part of ROG's Ace collection, a new lineup geared towards bringing the best out of esports players everywhere.

### **ROG Azoth Gaming Keyboard: When gaming keyboard meets DIY keyboard**

The **ROG Azoth Gaming Keyboard** is a 75% wireless gaming keyboard bristling with premium DIY features. Gamers can enjoy unprecedented typing experiences with the included silicone-gasket mount design and three-layer dampening, hot swappable, factory pre-lubed ROG NX mechanical switches, ROG keyboard stabilizers, ROG PBT doubleshot keycaps, and bundled switch lube kit. ROG Azoth also has an OLED display with intuitive controls, versatile tri-mode connectivity with SpeedNova wireless technology in 2.4 GHz mode and supports MacOS. Gamers can use Bluetooth to connect and switch between three devices at a time, and the ROG SpeedNova wireless technology provides up to 2,000+ hours of low-latency gameplay in 2.4 GHz RF wireless mode (OLED and RGB off). Alternatively, the keyboard can be used via wired USB. Two pairs of keyboard feet of different heights provide up to three tilt positions.

### **ROG Raikiri Pro PC Controller: Unlimited customization**

The first-ever Xbox® certified tri-mode controller, the **ROG Raikiri Pro PC Controller**, gives gamers the versatility to connect via Bluetooth, 2.4 GHz RF, or wired USB — making the Raikiri Pro perfect for gaming on PCs, laptops, and next-gen Xbox consoles. The ROG Raikiri Pro puts all the commands and customization options gamers need right in their hands. Gamers can personalize their Raikiri Pro with custom images, text, or animations on its built-in OLED display. Or, they can use it to show charging status, microphone mute, and profile indicators. Two buttons at the top of the Raikiri Pro allow users to switch between controller profiles while in the middle of a game. Furthermore, four left and right rear buttons can be programmed for in-game commands such as hotkeys or joystick sensitivity toggles. Gamers can even adjust vibrations, dead zones, and other settings via the Armoury Crate app. What's more, physical trigger locks let gamers set the amount of travel for both left and right triggers. It also has a built-in ESS DAC for immersive audio, plus a 3.5 mm headset jack and a mute button.

### **ROG Destrier Ergo Gaming Chair: Ergonomic, built for all scenarios**

The **ROG Destrier Ergo Gaming Chair** is an all-new, all-enveloping cradle that's styled with the futuristic aesthetic of a cyborg, and engineered with exceptional levels of adjustability to ensure maximum comfort during play. Constructed with a strong aluminum frame, breathable mesh, and comfortable PU foam, it provides sublime support and comfort. It features head and lumbar support with luxurious PU armrests that have a special elevation mode just for mobile gaming. There's even a detachable acoustic panel that shields gamers from distractions for enthralling gaming immersion.

### **Compact gaming desktop with concentrated power**

#### **ROG G22CH: Full firepower in a small chassis**

The ROG Strix G22CH features a compact 10-liter design that allows for incredible component compatibility without increasing its footprint. This airflow-optimized design can support either an air- or liquid-cooling system, with both options fitting easily into this compact chassis. Users can game and stream at the same time with confidence, thanks to the incredible power of a 13th Gen Intel Core i9 processor and the latest NVIDIA RTX GPU. Featuring an intuitive tool-free design, maintenance and upgradeability are a breeze for all the major components, despite its slender size. Robust software support includes Aura Sync, Two-Way AI Noise Cancelation, and Dolby Atmos immersive sound.