

Nvidia Results Beat in Q4 as Gaming, Data Center Growth Jumps

270 words 17 February 2022 14:56 Mist News MISTNW English

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Investing.com -

Nvidia (NASDAQ:NVDA) reported on Wednesday fourth-quarter results topped analysts expectations, led by record growth in its gaming and data center businesses.

Nvidia shares lost 1.20% in after-hours trade following the report.

Nvidia announced earnings per share of \$1.32 on revenue of \$7.64 billion. Analysts polled by Investing.com anticipated EPS of \$1.22 on revenue of \$7.41 billion.

Revenue in its gaming business grew 37% to a record \$3.42 billion for the quarter year-on-year, while its data center revenue also swelled to record of \$3.26 billion, up 71% from a year earlier.

"Gaming, Data Center and Professional Visualization market platforms each achieved record revenue for the quarter and year," the company said.

Nvidia, which announced earlier this month that it would end its pursuit to acquire chipmaker ARM, flagged a charge of \$1.36 billion charge related to the write-off of the prepayment to acquire Arm, expected to be recorded in the first quarter of fiscal 2023.

Looking ahead, the company forecast first-quarter revenue of \$8.1 billion, plus or minus 2%, compared with analysts" estimates of \$7.28 billion.

"We are entering the new year with strong momentum across our businesses and excellent traction with our new software business models with NVIDIA AI, NVIDIA Omniverse and NVIDIA DRIVE. GTC is coming. We will announce many new products, applications and partners for NVIDIA computing," the company said.

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Cars

Jaguar Land Rover partners with US gaming and chip giant Nvidia to develop self-driving technology for its cars from 2025

Ray Massey For Thisismoney.co.uk 1,264 words 16 February 2022 19:30 Mail Online DAMONL English Copyright 2022

- * Companies will jointly develop 'intelligent' autonomous driving features
- * Software will be introduced into new JLR motors from 2025, British brand says

Jaguar Land Rover has struck a deal with US video game processing leader and artificial intelligence proponent Nvidia to put its next generation cars on the road towards self-driving autonomy.

Under the new partnership, experts from both companies will jointly develop intelligent autonomous driving, safety, and connected services for all future and increasingly electric Jaguar and Land Rover vehicles.

As a result, the first new JLR cars in 2025 will have 'Level 2-plus autonomy' – which includes steering and brake support - and a move towards Level 3, which gives the car itself control in limited circumstances, though the driver must take over again if prompted.

Nvidia has built a specialism in high powered graphics processing units for computer gaming and professional use and recently abandoned an attempt to buy UK chip designer Arm.

The 'highly automated and self-driving features' will cover active safety, automated driving and parking systems as well as driver assistance, they said.

But the speed at which they can progress to greater autonomous driving will depend on the legal framework in three years' time, they said.

Inside the vehicle, the hi-tech 'NVIDIA DRIVE' system will deliver artificial intelligence, or AI, features including driver and occupant monitoring, as well as advanced visualisation of what is happening around the vehicle in terms of other vehicles, pedestrians, and cyclists, speed limits and traffic flows.

Nvidia vice president automotive Danny Shapiro told This is Money there are similarities but also key differences to the video gaming world: 'We've created the real world inside the brain of the car.

'The central computer from inside the car takes in data from the surroundings from sensors all around the car.'

It is scanning for other cars, pedestrians, cyclists and other things on the road such as traffic lights and speed limit signs.

'The car makes intelligent decisions moving from A to B and follows the law,' said Mr Shapiro.

'You can think of it as being inside a video game. But it's far different from a video game because there are real lives on the line. We have to deliver our passengers' safety.'

He explained: 'Data needs to be collected and 'trained' to tech the autonomous system how to drive. It gets better and better throughout its life.'

But he said: 'These cars will be capable of doing things we've not even thought of.'

Who are Nvidia?

US tech giant Nvidia is best known to online gamers for its claim to have invented in 1999 'the world's first GPU' or graphics processing unit, which sparked the growth of the PC gaming market and redefined modern

computer graphics, high performance computing and artificial intelligence now used in transport, healthcare and manufacturing.

A 'GPU' is a specialised electronic circuit designed to rapidly manipulate and alter memory to accelerate the creation of images displayed on devices such as mobile phones, personal computers, workstations, and game consoles.

He explained that 'highly automated' cars are able to drive themselves in certain limited circumstances, such as on a motorway, and changing lanes.

Fully autonomous cars are a bigger step and will take an occupant from A to B without a driver ever touching anything.

JLR will roll out the levels of autonomy 'as it is deemed safe for its customers,' said Mr Shapiro.

In relation to video games he stressed: "We don't make the video games, But we do make the software for developers to make the games. We provide all the building blocks."

In the same way, it will work with JLR to create dedicated software for its cars: 'How they develop it will be unique to JLR.'

Jaguar Land Rover will also use the AI technology for in-house training and to create 'real-time physically accurate' simulations of challenges facing cars with self-driving features – such as braking and steering to avoid a 'child running out from between parked cars'.

Like a mobile phone, each car's software can be 'perpetually updated' over the air, meaning they remain always up to date. This 'will enable the delivery of innovative assisted and automated driving services throughout the life of the vehicle via over-the-air software updates.'

The ability of new car owners to add many new apps for services will also create new 'revenue streams' to increase earnings and boost profitability, the firms said.

Bosses made comparison with the smartphone revolution, pointing out how in the early days there were just a few apps to choose from and add to the phone, compared to now when there are thousands. The same set to happen with apps for hi-tech cars in the next phase of the digital revolution, they said.

Francois Dossa, JLR's executive director of technology strategy said: 'Safety is key. We want 100 per cent safety.' He stressed that Nvidia was a partner, not a supplier: 'We're developing this together.'

JLR alone has 1,800 software engineers.

He said it was a 'leapfrog' in automotive technology, noting that 'Level 2-plus into Level 3 autonomy was 'exactly' what they were aiming for: 'We are transforming JLR to become a true global digital powerhouse. We will generate new revenue streams. Profitability is important.'

There are two elements at the heart of the NVIDIA DRIVE automotive software system: DRIVE Orin is the Al 'brain' of the car and runs the Jaguar Land Rover operating System, while DRIVE Hyperion is the 'central nervous system' network that collects and circulates the data from sensors.

However, both companies downplayed the Big Brother aspects of the technology – which monitors driver behaviour and choices - and side-stepped the issue of how such data might be harvested for profit, insisting that 'privacy is something we take very seriously.'

Both firms declined to comment on the cost of the deal.

The companies announced: 'Jaguar Land Rover has formed a multi-year strategic partnership with Nvidia, the leader in artificial intelligence and computing, to jointly develop and deliver next-generation automated driving systems plus Al-enabled services and experiences for its customers.

'Starting in 2025, all new Jaguar and Land Rover vehicles will be built on the NVIDIA DRIVE™ software-defined platform—delivering a wide spectrum of active safety, automated driving and parking systems as well as driver assistance systems'.

Jaguar Land Rover said the collaboration 'will enable the delivery of innovative assisted and automated driving services throughout the life of the vehicle via over-the-air software updates.

'As part of Jaguar Land Rover's Reimagine strategy, the partnership will transform the modern luxury experience for customers starting in 2025'.

Jaguar Land Rover chief executive officer Thierry Bolloré said: 'Jaguar Land Rover will become the creator of the world's most desirable luxury vehicles and services for the most discerning customers. Our long-term strategic partnership with Nvidia will unlock a world of potential for our future vehicles as the business continues its transformation into a truly global, digital powerhouse.'

Jensen Huang, founder and CEO of Nvidia said: 'Next-generation cars will transform automotive into one of the largest and most advanced technology industries. Fleets of software-defined, programmable cars will offer new functionalities and services for the life of the vehicles. We are thrilled to partner with Jaguar Land Rover to reimagine the future of transportation and create the most advanced cars.'

Document DAMONL0020220216ei2g00590

THE WALL STREET JOURNAL

Earnings

Business

Nvidia Posts Record Sales Amid Broad Chip Demand; Graphics chip maker says gaming, data centers and other segments showed strong revenue growth

By Meghan Bobrowsky 648 words 17 February 2022 05:16 The Wall Street Journal Online WSJO English

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Nvidia Corp. posted record quarterly sales across its business and projected a further increase in the current period as it moves on from its failed takeover bid for semiconductor-design specialist Arm Ltd.

The graphics-chip maker on Wednesday said it generated \$7.64 billion in sales in the most recent quarter, up 53% from the year-ago period. It reported \$3 billion in net income, more than double the prior year's figure, and beat Wall Street expectations both on profit and sales.

SHARE YOUR THOUGHTS

What did you find most interesting in Nvidia's quarterly report? Join the conversation below.

Semiconductor companies are seeing strong demand as more goods and services become reliant on chips. The ravenous appetite has triggered a global chip shortage that some executives have estimated could last into 2024 and has had a mixed effect on the industry. It has dented chip sales as customers such as car and computer makers have had to delay selling their wares while they await missing parts, but it also has driven up prices for some semiconductors.

Santa Clara, Calif.-based Nvidia, the U.S.'s largest chip company by market value, said it expects revenue for the current quarter to be roughly \$8.1 billion, ahead of estimates from analysts surveyed by FactSet. Data-center and videogaming sales are expected to be principal drivers of the increase, Nvidia financial chief Colette Kress said on a call with analysts.

Nvidia shares closed up slightly Wednesday at \$265.11 and retreated less than 1% after the company posted its quarterly results.

The company has enjoyed a strong period of revenue growth during the pandemic <u>as videogame</u> <u>consumption increased</u> and more individuals and businesses started using digital services that run on data centers.

Revenue in the quarter advanced 37% from the year-ago period for Nvidia's critical gaming business and increased 71% for it data-centers activities. Car revenue, though, retreated 14% from the year-ago period with supply-chain constraints continuing to weigh on car production and auto makers phasing out some older equipment that uses Nvidia chips.

Nvidia expects automotive revenue to bounce back in the current quarter and gather pace during the second half of the fiscal year, Ms. Kress said.

The chip company earlier on Wednesday said it has struck a partnership with car maker Jaguar Land Rover to work together on software-heavy cars. New vehicles featuring automated-driving systems and other services using artificial intelligence out of the partnership should start appearing in 2025, Nvidia Chief Executive Officer Jensen Huang said on the call.

Nvidia also has seen ups and downs in demand from cryptominers that historically used its video cards to produce digital currencies. The company last year launched a chip dedicated to satisfy the market. Revenue from its cryptocurrency chip was \$24 million in the quarter, up from almost nothing in the year-ago period but down sharply from the \$105 million the device generated in the prior quarter.

Nvidia last week agreed to abandon its acquisition of Arm amid regulatory scrutiny of the transaction.

Nvidia, in September 2020, <u>agreed to buy Arm</u> for \$40 billion from SoftBank Group Corp. in what would have been the chip industry's biggest deal ever. In December, the Federal Trade Commission had sued to block the deal. U.K. officials <u>had also opened a probe</u> into whether the potential acquisition was anticompetitive.

"We gave it our best shot, but the headwinds were too strong, and we could not give regulators the comfort they needed to approve our deal," Mr. Huang said. Nvidia's strategy, he said, wouldn't change.

Write to Meghan Bobrowsky at Meghan.Bobrowsky@wsj.com

Nvidia Posts Record Sales Amid Broad Chip Demand

Document WSJO000020220216ei2g006y1



18:31 EST Nvidia says gaming card availability remains lowSays still has some...

110 words 16 February 2022 Theflyonthewall.com FLYWAL English

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18:31 EST Nvidia says gaming card availability remains lowSays still has some supply constraints across certain parts of the business, especially data center. Expects supply to improve quarter by quarter. Says demand greater than supply. Expects growth in Q1 primarily driven by data center. Sees accelerated growth in data center business. Says arm-based processor still on track. Says numerous arm-based projects currently ongoing in the company. Expects several arm-based CPUs going forward. Says "Grace" chip just the beginning of arm CPUs. Says in early innings of RTX. Comments taken from Q4 earnings conference call.

Document FLYWAL0020220216ei2g01jmt

Wayland v. X.Org for NVIDIA Linux gaming performance on Ubuntu 22.04: Which one reigns supreme?

Jason R. Wilson 393 words 4 February 2022 Wccftech.com NEWAGAE English

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NVIDIA launches their 510 Linux driver series that pairs with the recent XWayland and a modern version of the Wayland compositor. This new compositor is similar to the current GNOME/Mutter packages. Now, NVIDIA and their (X)Wayland venture appear to deliver identical performance to the standard X.Org session.

NVIDIA Wayland support for the upcoming Ubuntu 22.04 LTS release shows hopeful results in benchmark comparisons to Intel and AMD's offerings

The NVIDIA Wayland support with GBM usage has leveled out and seems promising for Linux's approaching Ubuntu 22.04 LTS release. Phoronix offers a few benchmarks results about the NVIDIA 510 driver on Ubuntu 22.04 LTS in its latest state.

Wayland is a protocol that a backend compositor uses to communicate with its clients. It is also a C library implementation of that protocol. Weston is the reference implementation of the Wayland compositor. The platform supports Wayland and Weston. Check the Release Notes for specific versions supported.

NVIDIA documentation

Contemporary Wayland support in KDE Plasma and GNOME Shell has produced positively within the open-source Radeon driver stack. With the newest NVIDIA drivers, Wayland support promises the next generation.

Phoronix benchmark testing utilizes the NVIDIA GeForce RTX 3090. It tests various games and graphical settings while confirming that the games were not hitting any walls on the graphics card. The new NVIDIA 510.47.03 Phoronix used a Linux driver compared to the latest Ubuntu 22.04 LTS daily packages with the most recent (X)Wayland code and the added GNOME Shell 41.3 along with other updated components.

Source: Phoronix

Phoronix tested Linux gaming benchmarks using a combination of native Linux games and Steam Play titles under the GNOME Wayland session. Ubuntu users witnessed a close to identical default performance with the open-source Intel and AMD Radeon graphics drivers. Phoronix followed up with the duplicate games in the GNOME X.Org session to compare the (X)Wayland performance so that users can see the future once the crucial Ubuntu Long Term Support releases. The website states that after testing, it looks hopeful for Ubuntu 22.04 LTS and anticipates that this version will be the standard after its release.

Source: NVIDIA, Phoronix

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Intel Arc A370M Entry-Level Laptop <mark>Gaming</mark> GPU Benchmarked, Performance Close To A NVIDIA GTX 1650 SUPER

Hassan Mujtaba 599 words 4 February 2022 Wccftech.com NEWAGAE English

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Intel's entry-tier Arc A370M graphics card based on the Alchemist Xe-HPG architecture has been benchmarked and shows performance close to the NVIDIA GeForce GTX 1650 SUPER graphics card.

Intel Arc A370M Alchemist Gaming GPU For Entry-Level Laptops Benchmarked, Close To NVIDIA GTX 1650 SUPER Performance

The Intel Arc A370M graphics card was spotted within the <u>SiSoftware Sandra benchmark database</u> by <u>TUM_APISAK</u>. The graphics chip is designed for entry-level laptops and features specifications similar to the desktop-grade Arc A380 <u>which we have seen in countless leaks before</u>. While the GPU would carry the same core configuration, it is likely to feature lower clock speeds and a lower TDP since it is designed for the mobility platform.

The specifications list down the Intel Arc A370M graphics chip to feature 160 EUs but those are not correct since the database is combining the EU count of both the discrete GPU and the integrated UHD 770 GPU. As such, it's 128 EU for the Arc A370M and 32 EUs for the UHD 770 iGPU. The dGPU also features 4 GB GDDR6 memory and runs across a 128-bit bus interface which is not reported by the benchmarking software. Additionally, while a 1.55 GHz clock speed is mentioned, it is hard to tell if this is for the iGPU or the dGPU.

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With that said, the performance numbers for the Intel Arc A370M look pretty decent considering it still needs to get finalized drivers. The graphics card scored 2,399.97 Mpix/s in the GP(GPU) tests & an individual score of 10,612.4, 5,208.4, 250.09, & 27.40 Mpix/s in half, single, double, & quad float GP tests, respectively. This performance level brings the Arc A370M close to the GeForce GTX 1650 SUPER from NVIDIA which scores 2,568.82Mpix/s and faster than AMD's Radeon RX 580, which scores 2292.97 Mpix/s in the same benchmark.

Being on par or faster than the NVIDIA entry-level GeForce GTX 1650/GTX 1660 Series is where we are expecting the Intel Arc DG2-128 GPUs to land in terms of performance. The latter GPUs will be coupled with a range of modern features such as Ray-Tracing and XeSS along with better hardware encoding/decoding algorithms. For more on Intel Arc, head over to our full roundup of the coming graphics lineup here.

Intel Xe-HPG Based Discrete Alchemist GPU Configurations:

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GPU Variant Graphics Card Variant GPU Die
                                                           Execution Units Shading Units
GPU Variant Graphics Card Variant GPU Die Execution Uni (Cores) Memory Capacity Memory Speed Memory Bus TGP Xe-HPG 512EU ARC A780? Alchemist-512EU 512 EUs
                                                                                     4096
           Up To 32/16 GB GDDR6 18 / 16 / 14 Gbps 256-bit ~225W (Desktops)
120-150W (Laptops)
Xe-HPG 384EU ARC A750?
                                            Alchemist-512EU 384 EUs
                                                                                     3072
          Up To 12 GB GDDR6 16 / 14 Gbps 192-bit 150-200W (Desktops)
80-120W (Laptops)
Xe-HPG 256EU ARC A580?
                                            Alchemist-512EU 256 EUs
                                                                                     2048
          Up To 8 GB GDDR6 16 / 14 Gbps 128-bit 60-80W (Laptops) 28EU ARC A380? Alchemist-128EU 128 EUS 1024
Xe-HPG 128EU ARC A380?
                                            Alchemist-128EU 128 EUs
          Up To 6 GB GDDR6
                                    16 / 14 Gbps 96-bit ~75W (Desktops)
          28EU ARC A350? Alchemist-128EU 128 EUS 1024
Up To 4 GB GDDR6 16 / 14 Gbps 64-bit 35-50W (Laptops)
6EU ARC A330? Alchemist-128EU 86 EUS 768
Up To 4 GB GDDR6 16 / 14 Gbps 64-bit ~35W (Laptops)
Xe-HPG 128EU ARC A350?
Xe-HPG 96EU ARC A330?
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Document NEWAGAE020220204ei240002u



MSI Gaming Laptops with up to 12th-gen Intel Core H-Series processors and Nvidia GeForce RTX 3080 Ti Graphics arrive in India

G. S. Vasan 930 words 3 February 2022 Digit HTDIGI English

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India, Feb. 3 -- MSI has brought laptops with Intel chips that are fresh from the oven. Some of them are refreshed with up to Intel's 12th-gen Core i9 H-series processors. The graphics processors in them go up to GeForce RTX 3080Ti. Among the list of goodies, you also get features like CPU Optimizer, Rapid Core Scaling, and Battery Boost 2.0. While the lattermost setting is meant for improved power efficiency, MSI claims the laptops would offer up to 40% gain in performance metrics too. And to spice things up, the company has slapped on the "Meta-ready" logo, which we presume means hardware-equipped for Metaverse. Let's seeother details about these newcomers now.

MSI's 12th-gen Intel laptops: Specs

MSI Stealth series

MSI Stealth GS77-series laptops come with 17.3-inch FHD@360Hz, QHD@240Hz, and UHD@120Hz displays, Dynaudio-designed two speakers plus four woofers setup, up to 12th-gen Intel Core i9-12900H processor, up to 16GB DDR6 Nvidia GeForce RTX 3080 Ti graphics, and up to 64GB of GDDR5 RAM. In terms of connectivity options, you get a USB 3.2 Gen 2 Type-C port, a Thunderbolt 4 port, and two USB 3.2 Gen 2 Type-A ones.

MSI Stealth GS66, meanwhile, is available with a 15.3-inch UHD/QHD/FHD screen, Duo Wave speaker system, a thunderbolt 4 port, USB Type-C port for charging, two USB 3.2 Gen 2 Type-C ports, and an HDMI port. The compute and graphics processors as well as memory options are the same as the GS77.

MSI Raider series

MSI Raider GE76 can be bought in 17-inch screens and GE66 in 15.6-inch ones. They both will be out in varied resolution and refresh rate options. Other common specs among them include up to 12th-gen Intel Core i9 processor, up to Nvidia GeForce RTX 3080 Ti graphics, up to 64GB of DDR5 RAM, Duo Wave speakers from Dynaudio, a USB 3.2 Gen 2 Type-C port, a Thunderbolt 4 port, and two USB 3.2 Gen 2 Type-A ports.

MSI Vector series

MSI Vector GP76 and MSI Vector GP66 series will be available with 17.3-inch QHD@240Hz IPS display and 15.6-inch QHD/FHD screens respectively. Internally, they are housing up to Intel 12th-gen Core i7 processor, up to 8GB GDDR6 Nvidia GeForce RTX 3080 GPU, SteelSeries RGB gaming keyboard, two speakers with Nahimic 3 Audio Enhancement, a USB 3.2 Gen 2 Type-C port, a USB 3.2 Gen 1 Type-A port, an HDMI port, Bluetooth 5.2, and WiFi 6E.

MSI Pulse series

MSI Pulse GL76 has got a 17.3-inch FHD 360Hz IPS screen while Pulse GL66 has a 15.6-inch FHD+ 165Hz IPS screen. Other than this difference, they have both got up to 12th-gen Intel Core i7 CPU along with 6GB DDR6 Nvidia GeForce RTX 3060 GPU, up to 64GB RAM, two stereo speaker units, RGB backlight gaming keyboard, USB 3.2 Gen 1 Type-C ports, USB 3.2 Gen 1 Type-A ports, USB 2.0 Type-A ports, HDMI, Bluetooth 5.2, and WiFi 6.

MSI Crosshair 15 series

MSI Crosshair 15 has got a regular edition and special Crosshair 15 Rainbow Six Extraction variant and both of them are armed with 15.6-inch QHD 165Hz IPS display, Spectrum Backlight keyboards, up to 12th Gen Intel Core i7 processors, up to 64GB of RAM, Nahimic 3 Audio Enhancer backed dual stereo speakers, and connectivity options akin to the other models. The difference is in their GPUs, i.e., an 8GB GDDR6 Nvidia GeForce RTX 3060 GPU on the vanilla edition and RTX 3070 on the Rainbow Six Extraction Edition.

MSI Katana series

MSI Katana GF76 sports a 17.3-inch FHD 144Hz IPS display, while the Katana GF66 laptops flaunt 15.6-inch FHD IPS displays with either 144Hz or 240Hz refresh rate option. Under the hood, there will be up to a 12th-gen Intel Core i7-12700H processor, up to 64GB RAM, and similar audio and connectivity solutions as the MSI Pulse series laptops.

MSI's 12th-gen Intel laptops: Price and Availability

These are the price of the top-end model of each of these series.

Stealth GS77 12UHS: Rs. 4,81,990

Stealth GS77 12UGS: Rs. 3,35,990

Stealth GS66 12UGS: Rs. 3,30,990

Raider GE76 12UHS: Rs. 4,81,990

Raider GE76 12UGS: Rs. 2,85,990

Raider GE66 12UHS: Rs. 4,47,990

Raider GE66 12UGS: Rs. 2,79,990

Vector GP76 12UH: Rs. 2,46,990

Vector GP76 12UGS: Rs. 2,23,990

Vector GP66 12UH: Rs. 2.40.990

Vector GP66 12UGS: Rs. 2,12,990

Pulse GL76 12UEK: Rs. 1.62.990

Pulse GL66 12UEK: Rs. 1,56,990

Crosshair 15 B12UEZ: Rs. 1,56,990

Crosshair 15 Rainbow Six Extraction Edition B12UGZ: Rs. 1,90,990

Katana GF76 12UE: Rs. 1,51,990

Katana GF76 12UD: Rs. 1,28,990

Katana GF66 12UE: Rs. 1,45,990

Katana GF66 12UD: Rs. 1,23,990

Katana GF66 12UC: Rs. 1,11,990

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Document HTDIGI0020220203ei2300031



GADGETS NEWS

MSI launched new Metaverse ready gaming laptop lineup powered by 12th-generation Intel processors, Nvidia RTX 30 series graphics in India: Price, features and other details

1,108 words
3 February 2022
The Times of India
TOI
English
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MSI, the company known for making gaming, creator and business laptops has expanded its gaming laptop portfolio in India. The company has announced the 2022 lineup of gaming laptops under its Stealth, Vector, Katana, Crosshair and Pulse series that it showcased during the CES 2022 earlier this year. The new laptop lineup comes powered with the latest 12th-generation Intel Core H series processoRs and Nvidia RTX 30 series graphics card. The company also says that this new laptop lineup is Meta-ready and capable of offering MetaveRse-compatible performance. MSI new gaming laptop lineup: Price and availabilityThe new 12th-generation gaming laptops from the company starts atRs 1,11,990 and it goes up toRs 4,81,990. The laptops will be available starting February 1 via MSI authorised online and offline retail stores across the country. MSI is also offering \$50 steam wallet code on the purchase of 12th-generation gaming laptops.

Here's the pricing of all the laptops MSI has announced today. ModelCPU + GPUMRPStealth GS77 12UHS12th Gen Intel Core i9 (RTX3080Ti,GDDR6 16GB)Rs 4,81,990.00Stealth GS77 12UGS12th Gen Intel Core i7(RTX3070Ti, GDDR6 8GB)Rs 3,35,990.00Stealth GS66 12UGS12th Gen Intel Core i9(RTX3070Ti, GDDR6 8GB)Rs 3,30,990.00Stealth GS66 12UGS12th Gen Intel Core i7(RTX3070Ti, GDDR6 8GB)Rs 3,13,990.00Raider GE76 12UHS12th Gen Intel Core i9 (RTX3080Ti, GDDR6 16GB)Rs 4,81,990.00Raider GE76 12UGS12th Gen Intel Core i7 (RTX3070Ti, GDDR6 8GB)Rs 2.85.990.00Raider GE66 12UHS12th Gen Intel Core i9 (RTX3080Ti, GDDR6 16GB)Rs 4.47.990.00Raider GE66 12UHSIntel 11th Gen Core i7 (RTX3080Ti, GDDR6 16GB)Rs 4.14,990.00Raider GE66 12UGS12th Gen Intel Core i7 (RTX3070Ti, GDDR6 8GB)Rs 2,79,990.00Vector GP76 12UH12th Gen Intel Core i7 (RTX3080, GDDR6 8GB)Rs 2,46,990.00Vector GP76 12UGS12th Gen Intel Core i7 (RTX3070Ti, GDDR6 8GB)Rs 2,23,990.00Vector GP66 12UH12th Gen Intel Core i7 (RTX3080, GDDR6 8GB)Rs 2,40,990.00Vector GP66 12UGS12th Gen Intel Core i7 (RTX3070Ti, GDDR6 8GB)Rs 2.12.990.00Pulse GL76 12UEK12th Gen Intel Core i7 (RTX3060. GDDR6 6GB)Rs 1.62.990.00Pulse GL66 12UEK12th Gen Intel Core i7 (RTX3060, GDDR6 6GB)Rs 1.56.990.00Crosshair 15 B12UEZ12th Gen Intel Core i7 (RTX3060, GDDR6 6GB)Rs 1.56.990.00Crosshair 15 Rainbow Six Extraction Edition B12UGZ12th Gen Intel Core i7 (RTX3070, GDDR6 8GB)Rs 1,90,990.00Katana GF76 12UE12th Gen Intel Core i7 (RTX3060, GDDR6 6GB)Rs 1,51,990.00MSI Stealth GS77/G66 specificationsOperating SystemWindows 11 HomeWindows 11 Pro (MSI recommends Windows 11 Pro for business.)MemoryDDR5-4800, 2 slots, up to 64GBDDR5-4800, 2 slots, up to 64GBDisplay17.3" UHD (3840x2160), 120 Hz Refresh Rate, 100% Adobe RGB(Typical), IPS-Level panel (Optional)17.3" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel17.3" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel15.6" UHD (3840x2160), 100% Adobe RGB(Typical), IPS-Level panel(Optional)15.6" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel15.6" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel Graphics Up to NVIDIA GeForce RTX 3080 Ti Laptop GPU 16GB GDDR6KeyboardPer-Key RGB gaming keyboard by SteelSeriesAudio2 x 2W Speakers and 4 x 2W Woofers designed by Dynaudio system1 x Audio combo jackNahimic 3 Audio EnhancerHi-Res Audio readyThe Duo Wave speaker designed by Dynaudio system(2x 2W speakers)1 x Audio combo jackNahimic 3 Audio EnhancerHi-Res Audio readyUSB Port1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging),1 x USB 3.2 Gen2 Type-C / DP, 2 x USB 3.2 Gen2 Type-A,1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging),2 x USB 3.2 Gen2 Type-C / DP, 2 x USB 3.2 Gen2 Type-ACard Reader1 x SD Express Memory Card ReaderVideo Output1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging),1 x USB 3.2 Gen2 Type-C / DP, 1 x HDMI (8K@ 60Hz / 4K@ 120Hz)1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging),2 x USB 3.2 Gen2 Type-C / DP, 1 x HDMI (8K@ 60Hz / 4K@ 120Hz)CommunicationIntel Killer Ethernet E3100G (up to 2.5 GbE)Intel Killer Wi-Fi 6E AX1675, Bluetooth v5.2Webcam / MicrophoneIR FHD type (30fps@1080p) / Quadruple MicrophoneSensorFingerprint Reader / Ambient Light SensorFingerprint ReaderBattery4-Cell, Li-Polymer, 99.9WhrPower Adapter240W Slim adapterDimension397.6 (W) x 283.5 (D) x 20.1-20.8 (H) mm358.3 (W) x 248 (D) x 18.3 -19.8 (H) mmWeight2.8 Kg2.1 KgModel NameRaider GE76Raider GE66ProcessorUp to latest 12th Gen Intel Core i9 ProcessorOperating SystemWindows 11 HomeWindows 11 Pro (MSI recommends Windows 11 Pro for business.)MemoryDDR5-4800, 2 slots, up to 64GBDisplay17.3" UHD (3840x2160), 120 Hz Refresh Rate, 100% Adobe RGB(Typical), IPS-Level panel (Optional)17.3" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel17.3" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel 15.6" UHD (3840x2160), 100% Adobe RGB (Typical),

IPS-Level panel(Optional)15.6" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel15.6" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panelGraphicsUp to NVIDIA GeForce RTX 3080 Ti Laptop GPUKeyboardPer-Key RGB gaming keyboard by SteelSeriesAudioThe Duo Wave Woofers + Speakers designed by Dynaudio system(2 x 1W Speakers + 2 x 2W Woofers)1 x Audio combo jackNahimic 3 Audio EnhanceHi-Res Audio readyThe Duo Wave speakers design by Dynaudio system (2x 2W speakers)1 x Audio combo jackNahimic 3 Audio EnhancerHi-Res Audio readyUSB Ports1 x Thunderbolt 4 / DP/ USB Type-C,1 x USB 3.2 Gen2 Type-C / DP1 x USB 3.2 Gen2 Type-A, 2 x USB 3.2 Gen 1 Type-ACard Reader1 x SD Express Memory Card ReaderVideo Output1 x Thunderbolt 4 / DP/ USB Type-C, 1 x Mini DisplayPort1 x USB 3.2 Gen2 Type-C / DP1 x HDMI (8K@ 60Hz / 4K@ 120Hz)CommunicationIntel Killer Ethernet E3100G (up to 2.5 GbE)Intel Killer Wi-Fi 6E AX1675, Bluetooth v5.2WebcamFHD type (30fps@1080p)Battery4-Cell, Li-Polymer, 99.9WhrPower Adapter330W(12UHS) / 280W (12UH / 12UGS)280WDimension397 (W) x 284 (D) x 25.9 (H) mm358 (W) x 267 (D) x 23.4 (H) mmWeight2.9 Kg2.38 Kg

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Document TOI0000020220202ei2300059

NVIDIA Corporation; Patent Issued for Cloud <mark>gaming</mark> system and method of initiating a <mark>gaming session (USPTO 11219824)</mark>

1,306 words 31 January 2022 Internet Weekly News INTWKN 133 English

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2022 JAN 31 (VerticalNews) -- By a News Reporter-Staff News Editor at Internet Weekly News -- NVIDIA Corporation (Santa Clara, California, United States) has been issued patent number 11219824, according to news reporting originating out of Alexandria, Virginia, by VerticalNews editors.

The patent's inventors are D'Mello, Darrin (Santa Clara, CA, US), Vukojevic, Bojan (Santa Clara, CA, US).

This patent was filed on July 26, 2019 and was published online on January 11, 2022.

From the background information supplied by the inventors, news correspondents obtained the following quote: "The primary purpose of a proxy service is to act on behalf of another system, generally either one or more clients, or one or more servers. A forward proxy provides proxy services to one or more clients. When a client desires access to the Internet, it submits a request through the forward proxy, which can allow or deny the request. When allowing the request, the forward proxy passes the request along to a server over the Internet. When the server responds to the request, it responds to the forward proxy, which recognizes the response as directed to the requesting client. The forward proxy is a single point of access and control, which makes it well-suited to enforce security policies on the clients behind the forward proxy.

"Similarly, a reverse proxy provides proxy services to one or more servers. When a client desires access to a server, the request is submitted to the reverse proxy, which accepts requests on behalf of the servers behind it. The reverse proxy then passes the request to the appropriate server and ultimately responds to the client as if the response is from the server itself. The reverse proxy hides the identity of the servers behind it, making it also well suited to provide security.

"A proxy service is generally a process executing on a computing system that sits on the network over which it proxies. A computing system hosting the proxy process is sometimes referred to as a proxy device. For reverse proxies, the proxy service can execute on one of the server computing systems for which it serves as proxy, in addition to whatever processes the server ordinarily runs."

Supplementing the background information on this patent, VerticalNews reporters also obtained the inventors' summary information for this patent: "One aspect provides a computing system. In one embodiment, the system includes: (1) an entry point operable to receive a game session request and generate instructions for establishing a connection between a client and a game server, and (2) a dynamically configurable reverse proxy operable to proxy for the game server and configured to employ the instructions to create a route to a randomly selected port on the game server through which the connection is makeable (i.e. able to be made).

"Another aspect provides a method of initiating a gaming session. In one embodiment, the method includes: (1) receiving a gaming session request originating at a client and assigning a dynamically configurable reverse proxy having an Internet protocol (IP) address, (2) selecting a game server and at least one port thereon for the gaming session, and (3) transmitting the at least one port and the IP address toward the client.

"Yet another aspect provides a gaming cloud gaming system. In one embodiment, the system includes: (1) a plurality of game servers configured to host gaming sessions for a plurality of clients, wherein the gaming sessions respectively employ at least one network connection with a game server of the plurality, (2) a plurality of reverse proxy nodes dynamically configurable to proxy for the plurality of game servers and having respective IP addresses, and (3) a provision manager operable to: (3a) receive a request for a gaming session from a client of the plurality, (3b) assign a reverse proxy node of the plurality to the gaming session and cause the reverse proxy node to randomly select respective ports for the at least one network connection, and (3c) communicate the respective IP address of the reverse proxy node and the respective ports to the client and the respective ports to the game server."

The claims supplied by the inventors are:

"1. A computing system, comprising: an entry point operable to receive a game session request and generate instructions for establishing a connection between a client and a game server, wherein the game server

executes an appropriate game application and renders graphical output, said graphical output streamed to said client over said connection; and a dynamically configurable reverse proxy having an Internet protocol (IP) address operable to proxy for said game server and configured to employ said instructions to create a route to a randomly selected port on said game server through which said connection is established, wherein: said dynamically configurable reverse proxy is configured to select said randomly selected port and communicate said randomly selected port to said entry point; and said instructions are sent by said entry point to said client and include said IP address and said selected port.

- "2. The computing system as recited in claim 1 wherein said route is closed upon termination of said game session.
- "3. The computing system as recited in claim 1 wherein said entry point is operable to initiate said dynamically configurable reverse proxy based on gaming session demand.
- "4. The computing system as recited in claim 1 wherein said instructions include an Internet protocol (IP) address for said client and a quantity and respective types of connections to be made between said client and said game server.
- "5. A method of initiating a gaming session, comprising: receiving a gaming session request originating at a client and assigning a dynamically configurable reverse proxy having an Internet protocol (IP) address; selecting a game server and at least one port thereon for said gaming session, wherein the game server executes an appropriate game application and renders graphical output, said graphical output streamed to said client, wherein said dynamically configurable reverse proxy is configured to select said at least one port and communicate said at least one port to an entry point; and transmitting said at least one port and said IP address toward said client by said entry point.
- "6. The method as recited in claim 5 further comprising forming a route from said dynamically configurable reverse proxy to said at least one port on said game server.
- "7. The method as recited in claim 6 wherein said forming includes opening said at least one port on said dynamically configurable reverse proxy.
- "8. The method as recited in claim 7 further comprising terminating said gaming session and closing said route.
- "9. The method as recited in claim 6 wherein said forming includes generating network address translation (NAT) rules for routing initial packets for said gaming session.
- "10. The method as recited in claim 9 further comprising employing a binary-tree NAT scheme in routing said initial packets based on said at least one port.
- "11. The method as recited in claim 6 wherein said at least one port is randomly chosen upon initiation of said gaming session."

For the URL and additional information on this patent, see: D'Mello, Darrin. Cloud gaming system and method of initiating a gaming session. U.S. Patent Number 11219824, filed July 26, 2019, and published online on January 11, 2022. Patent URL:

http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11219824.PN.&OS=PN/11219824RS=PN/11219824

Keywords for this news article include: Business, Cybersecurity, World Wide Web, Cloud Computing, Internet Protocols, NVIDIA Corporation, Technology Companies, Information Technology, Semiconductor - Specialized Companies.

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Document INTWKN0020220131ei1v0001c



online news

MAINGEAR Launches New NVIDIA GeForce RTX 3050 Desktops, Offering Next-Gen Gaming Features

468 words 31 January 2022 ETMAG.com FMETMA English

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MAINGEAR—an award-winning PC system integrator of custom gaming desktops, notebooks, and workstations—today announced that new NVIDIA GeForce RTX 3050 graphics cards are now available to configure within MAINGEAR's product line of award-winning custom gaming desktop PCs and workstations. Featuring support for real-time ray tracing effects and AI technologies, MAINGEAR PCs equipped with the NVIDIA GeForce RTX 3050 offer gamers next-generation ray-traced graphics and performance comparable to the latest consoles.

Powered by Ampere, the NVIDIA GeForce RTX 3050 features NVIDIA's 2nd gen Ray Tracing Cores and 3rd generation Tensor Cores. Combined with new streaming multiprocessors and high-speed G6 memory, the NVIDIA GeForce RTX 3050 can power the latest and greatest games. NVIDIA RTX on 30 Series GPUs deliver real-time ray tracing effects—including shadows, reflections, and Ambient Occlusion (AO). The groundbreaking NVIDIA DLSS (Deep Learning Super Sampling) 2.0 Al technology utilizes Tensor Core Al processors to boost frame rates while producing sharp, uncompromised visual fidelity comparable to high native resolutions.

"The NVIDIA GeForce RTX 3050 is the perfect GPU for gamers looking to enter the latest era of gaming where ray tracing and AI upscaling have become key features," said Wallace Santos, MAINGEAR CEO. "There's a misconception that PC gaming is all about the super high-end, and this scares away a lot of people—particularly gamers who have historically stuck with consoles. MAINGEAR systems with the NVIDIA GeForce RTX 3050 start as low as \$1599, which offers comparable performance to the latest consoles but with far more customization and functionality."

The NVIDIA GeForce RTX 3050 is available now as a configuration option across multiple MAINGEAR gaming desktops—including PC Gamer's Editor's Choice award-winning F131, PC Mag's Editor's Choice award-winning VYBE, RUSH, R1 | RAZER Edition, and the compact, living room-ready TURBO desktop.

For console and PC gamers looking for entry-level access to next-generation ray-traced graphics and performance, custom MAINGEAR desktops featuring an RTX 3050 and the latest AMD and Intel processors start at \$1599. The VYBE brings MAINGEAR's expertise in crafting the world's most technologically advanced, best performing, and beautifully designed PCs to a gaming desktop with an unprecedented price to performance.

MAINGEAR's full lineup of desktops offer countless customization options, including the latest AMD Ryzen and Intel Core processors, premium Kingston memory, and Gen4 NVMe storage options. These top-end components, paired with MAINGEAR's exclusive APEX hand-crafted water cooling, unlock the performance potential of every MAINGEAR system. Learn more about MAINGEAR's desktops with the NVIDIA GeForce RTX 3050 and other NVIDIA GeForce 30 Series GPUs: https://maingear.com/geforce-rtx-3050-the-ultimate-play.

Document FMETMA0020220130ei1v0001p



International

NVIDIA GeForce Now cloud gaming service comes to LG TVs

208 words
28 January 2022
Indo-Asian News Service
HNIANS
English
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Seoul, Jan 28 (IANS) GeForce NOW, Nvidia's cloud gaming service, is now out of beta for LG Smart TVs.

TV models that are compatible with Nvidia's cloud gaming service include select 2021 and upwards LG 4K OLED, QNED Mini LED, and NanoCell TV models.

GeForce Now, which allows subscribers to stream a selection of games from Nvidia's servers to modern devices like smartphones, tablets, and PCs, first entered beta on limited LG TVs back in November 2021.

Nvidia is giving away six free months of GeForce Now's Priority tier with qualifying purchases of LG TVs between February 1 and March 27.

Nvidia also has a handful of new games coming to its streaming service this week: Mortal Online 2, Daemon X Machina, Metro Exodus Enhanced Edition, Tropico 6, and Assassin's Creed III Deluxe Edition.

Priority membership provides faster access to NVIDIA's servers so there's no waiting for games to start and high-res gameplay at up to 60 frames per second.

GeForce NOW Priority membership is open to all customers who purchase an applicable LG 2021 4K Smart TV model during the promotion period in participating markets.

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Nvidia and Intel make this MSI gaming laptop go zoom, zoom

Lori Grunin 1,306 words 25 January 2022 CNET News.com CNEWSN English

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MSI's top-end 17-inch Raider GE76 gaming laptop comes with state-of-the-art components that let it fly. It's stacked with an Intel Core i9-12900HK CPU and Nvidia GeForce RTX 3080 Ti GPU. That processor is the newest Intel mobile Alder Lake architecture, which splits the cores into performance-optimized and efficiency optimized (like Apple's M1 chips).

And while the RTX 3080 Ti is just a new iteration of Nvidia's top mobile GPU, the MSI shows how well it performs when you push it -- and not even to the max -- in a system that allows it to draw full power.

In other words, the components are performing better than they would on a laptop with a pretty thin-and-light design; those have to compromise on power for the sake of cooling, battery size and AC adapter size. The downside is that the Raider is a lot more traditional. It also lacks Nvidia's Advanced Optimus, which is better at juggling the internal and discrete GPUs than the older version of Optimus used in the Raider GE76.

The laptop's display isn't on the GPU bus, so the battery life is highly dependent on whether you remember to switch into hybrid mode. (In hybrid mode, the rendering and acceleration are performed by the Nvidia GPU and passed over the system bus to the CPU to render to the screen.) That means you have to manually force it to use the discrete graphics -- it can't toggle back and forth intelligently and automatically. MSI does have a utility that automatically switches in and out of "extreme" mode as you launch games.

On the other hand, this isn't really a "laptop" laptop. It's a desktop replacement, so I'm not sure how important a little extra battery life is. It's big and relatively heavy, with one of those mondo power bricks that add another 2 pounds to the carry weight. It's also loud, even in hybrid mode, though it doesn't seem to run particularly hot. (Caveat: I haven't done any overclocking-related testing yet, so it might well turn into a fireball.)

MSI Raider GE76

MSI Raider GE76 Price as reviewed NA (closest configuration is \$3,999) Display 17.3-inch 360Hz PC CPU Intel Core i9-12900HK PC Memory 32GB DDR5-4800 Graphics Nvidia GeForce RTX 3080 Ti Storage 2TB NVMe SSD (with DirectStorage support), SD card reader Ports 4 x USB-A, 1 x USB-C/Thunderbolt, 1 combo audio, 1 x HDMI 2.1, 1 x Mini DisplayPort 1.4 Networking Killer Wi-Fi 6E AX1675, 2.5Gb Killer E3100 Operating system Microsoft Windows 11 Pro (21H2) Weight 6.4 pounds (2.9 kilograms)

The few processor results I've gotten thus far also place it best in class (or close), by a significant margin in some cases. Single-core speed, traditionally Intel's strong point, is also impressive. When you combine all the advances in GPU and CPU in the system, it becomes a powerhouse for video editing.

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The Raider GE76 comes in about seven different configurations that range in price from \$1,599 (with an i7-12700H, RTX 3060 and 1080p 360Hz display) to \$4,199 (i9-12900HK, RTX 3080 Ti and 4K 120Hz display). Our test system configuration isn't available here, but the closest option, with an i9-12900HK, RTX 3080 Ti and 1440p 240Hz display for \$3,999 is actually better; 4K can be overkill for 17 inches and 1080p is OK, but QHD is just right. (\$3,999 converts to approximately £2,970 or AU\$5,600.)

Among the laptop's performance-related perks is support for DirectStorage, Microsoft's programming interface for high-bandwidth SSD file operations in Windows (and the Xbox Series X/S), that, combined with its Samsung SSD and PCle 4 bus, delivers quite a nice score of 2,802 on 3DMark's SSD performance test (we're still building our database of comparison numbers). MSI's also one of the first companies to partner with BlueStacks for its mobile-gaming-on-laptop technology, which lets you play games designed for phones on the laptop as if they were written for the laptop -- a bigger screen, high-power processing, full controller support and more. I haven't yet tried that, but it sounds cool.

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There's a lot to unpack for this laptop which I haven't yet been able to tackle, but I do have a couple of observations that I don't think I'll have a change of opinion on. For one, given the size of the laptop, the touchpad is ludicrously small, and I'm finding it intermittently nonresponsive. For the other, the SteelSeries keyboard feels mushy; quiet, but more like gel than membrane. I do like the laptop's lighting design, but I'm a sucker for a lightbar (as well as underglow).

I'm still only a fraction of the way through my testing, so stay tuned for my upcoming final review.

Performance snapshot

Geekbench 5 (multicore)

Asus ROG Flow X13 with XG Mobile 7,964 Alienware m17 R4 8,214 Asus ROG Strix Scar 15 (G533QS) 8,359 MSI Raider GE76 13,796

Note:

Longer bars indicate better performance

Cinebench R23 CPU (single core)

Alienware m17 R4 1,313 Asus ROG Flow X13 with XG Mobile 1,460 Asus ROG Strix G15 Advantage Edition (G513QY) 1,495 MSI Raider GE76 1,659

Note:

Longer bars indicate better performance

Far Cry 5 (1080p)

Asus ROG Strix G15 Advantage Edition (G513QY) 96 Asus ROG Flow X13 with XG Mobile 109 Alienware m17 R4 138 MSI Raider GE76 151

Note:

NOTE: Longer bars indicate better performance (FPS)

Shadow of the Tomb Raider gaming test (1080p)

Asus ROG Strix G15 Advantage Edition (G513QY) 102 Asus ROG Flow X13 with XG Mobile 111 MSI Raider GE76 126 Alienware m17 R4 129

Note:

Longer bars indicate better performance (FPS)

3DMark Time Spy

Asus ROG Strix G15 Advantage Edition (G513QY) 10,248 Asus ROG Flow X13 with XG Mobile 10,290 Alienware m17 R4 12,145 MSI Raider GE76 12,320

Note:

NOTE: Longer bars indicate better performance

3DMark Fire Strike Ultra

Asus ROG Flow X13 with XG Mobile 7,004 Alienware m17 R4 7,964 Asus ROG Strix G15 Advantage Edition (G513QY) 7,994 MSI Raider GE76 8,171

Note:

Longer bars indicate better performance

3DMark Port Royal

Alienware m17 R4 7,589 MSI Raider GE76 7,975

Note:

Longer bars indicate better performance

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Procyon Video (Premiere Pro)

Asus ROG Strix G15 Advantage Edition (G513QY) 5404 Asus ROG Flow X13 with XG Mobile 5409 Alienware m17 R4 5850 MSI Raider GE76 7051

Note:

Higher scores indicate better performance

SpecViewPerf 2020 SolidWorks (1080p)

MSI Raider GE76 243 Asus ROG Flow X13 w/ XG Mobile 244

Note:

Longer bars indicate better performance (FPS)

Configurations

Alienware m17 r4 Microsoft Windows 10 Home (20H2); 2.4GHz Intel Core i7-10980HK; 32GB DDR4 SDRAM 2,933MHz; 16GB Nvidia GeForce RTX 3080 512GB SSD + 953GB RAID 0 Asus ROG Flow X13 with XG Mobile Microsoft Windows 10 Home (2004); 3.3GHz AMD Ryzen 9 5900HS; 6GB DDR4 SDRAM 4,266MHz; 4GB Nvidia GeForce GTX 1650 (16GB GeForce RTX 3080 mobile in XG Mobile) Asus ROG Strix G15 AMD Advantage Edition Microsoft Windows 10 Home (21H1); 3.3GHz AMD Ryzen 9 5900HX; 16GB DDR4 SDRAM 3,200MHz; 12GB AMD Radeon RX 6800M; 512TB SSD MSI Raider GE76 Microsoft Windows 11 Pro (21H2); 2.9GHz Intel Core i9-12900HK; 32GB DDR5 SDRAM 4,800MHz; 16GB Nvidia GeForce RTX 3080 Ti; 2 x 1TB NVMe SSD

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| Lori Grunin/CNET | | Lori Grunin/CNET | | Lori Grunin/CNET | Document CNEWSN0020220125ei1p00030

Automotive Augmented Reality and Virtual Reality Market is Going to Boom | Bosch, Unity, NVIDIA

922 words 13 January 2022 iCrowdNewswire ICROWDN English

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The Latest Released Automotive Augmented Reality and Virtual Reality Market study has evaluated the future growth potential of Global Automotive Augmented Reality and Virtual Reality Market and provides information and useful stats on market structure and size. The report is intended to provide market intelligence and strategic insights to help decision makers take sound investment decisions and identify potential gaps and growth opportunities. Additionally, the report also identifies and analyses changing dynamics, emerging trends along with essential drivers, challenges, opportunities and restraints in Automotive Augmented Reality and Virtual Reality Market. The study includes market share analysis and profiles of players such as Continental, Unity, Visteon, HARMAN International, NVIDIA, Microsoft, Bosch, HTC, Volkswagen, AutoVRse, DENSO.

If you are a Automotive Augmented Reality and Virtual Reality Market manufacturer and want to verify or understand a policy and regulatory proposal, designing clear explanations of the issues, potential winners and losers, and options for improvement, this article will help you. Understand the model with Impacting Trends.

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https://www.amplemarketreports.com/sample-request/global-automotive-augmented-reality-and-virtual-reality-market-2318374.html

Major Highlights of the Automotive Augmented Reality and Virtual Reality Market report released by Ample Market Research

Market Breakdown by Applications: Passenger Vehicle, Commercial Vehicle

Market Breakdown by Types: AR, VR

Revenue and Sales Estimation – Historical revenue and sales volume are presented and additional data is triangulated with top-down and bottom-up approaches to forecast the full market size and estimate forecast figures for the key regions covered in the report as well as classified and well recognized types and end use industry.

SWOT Analysis on Automotive Augmented Reality and Virtual Reality Market Players

In further player market share analysis, in-depth profiling, product / service and business overview, the study also focuses on BCG matrix, heat map analysis, FPNV positioning along with SWOT analysis to better correlate market competitiveness.

Demand from top notch companies and government agencies is expected to rise as they seek more information on latest scenario. Check Demand Determinants section for more information.

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FIVE FORCES & PESTLE ANALYSIS:

In order to better understand the state of the market, a five forces analysis is conducted which includes the bargaining power of buyers, the bargaining power of suppliers, the threat of new entrants, the threat of substitutes, and the threat of rivalry.

Politics (Political policy and stability as well as trade, fiscal and fiscal policies) Economic (Interest rate, employment or unemployment rate, costs of raw materials and exchange rates) Social (changes in family demographics, education levels, cultural trends, changes in attitude and changes in lifestyles) Technological (Evolution of digital or mobile technology, automation, research and development) Legal (labor law, consumer law, health and safety, international and trade regulations and restrictions) Environmental (climate, recycling procedures, carbon footprint, waste disposal and sustainability)

Book Latest Edition of Global Automotive Augmented Reality and Virtual Reality Market Study @ https://www.amplemarketreports.com/buy-report.html?report=2318374&format=1

Heat map analysis, financial and detailed company profiles over 3 years of key and emerging players: Continental, Unity, Visteon, HARMAN International, NVIDIA, Microsoft, Bosch, HTC, Volkswagen, AutoVRse, DENSO

Geographically, the following regions as well as the national / local markets listed are fully investigated:

- APAC (Japan, China, South Korea, Australia, India, and Rest of APAC; Rest of APAC is further segmented into Malaysia, Singapore, Indonesia, Thailand, New Zealand, Vietnam, and Sri Lanka)
- Europe (Germany, UK, France, Spain, Italy, Russia, Rest of Europe; Rest of Europe is further segmented into Belgium, Denmark, Austria, Norway, Sweden, The Netherlands, Poland, Czech Republic, Slovakia, Hungary, and Romania)
- · North America (U.S., Canada, and Mexico)
- South America (Brazil, Chile, Argentina, Rest of South America)
- MEA (Saudi Arabia, UAE, South Africa)

Some Extracts from Global Automotive Augmented Reality and Virtual Reality Market Study Table of Content

Global Automotive Augmented Reality and Virtual Reality Market Size (Sales) Market Share by Type (Product Category) [AR, VR] in 2020

Automotive Augmented Reality and Virtual Reality Market by Application/End Users [Passenger Vehicle, Commercial Vehicle]

Global Automotive Augmented Reality and Virtual Reality Market Sales and Growth Rate (2015-2025)

Automotive Augmented Reality and Virtual Reality Market Competition by Players/Suppliers, Region, Type and Application

Automotive Augmented Reality and Virtual Reality Market (Volume, Value and Sales Price) table defined for each geographic region defined.

Supply Chain, Sourcing Strategy and Downstream Buyers, Industrial Chain Analysis

......and view more in complete table of Contents

Check it Out Complete Details os Report @

https://www.amplemarketreports.com/report/global-automotive-augmented-reality-and-virtual-reality-market-2318374.html

Thank you for reading this article; Ample Market Research also offers Custom research services providing targeted, comprehensive research tailored to customer goals. Thanks for reading this article; you can also get individual chapter wise section or region wise report like Balkan, China based, North America, Europe or Southeast Asia.

About Author

Ample Market Research provides comprehensive market research services and solutions across various industry verticals and helps businesses perform exceptionally well. Our end goal is to provide quality market research and consulting services to customers and add maximum value to businesses worldwide. We desire to deliver reports that have the perfect concoction of useful data. Our mission is to capture every aspect of the market and offer businesses a document that makes solid grounds for crucial decision making.

Document ICROWDN020220113ei1d000bd



Apple's Loss in Cloud Gaming Could Benefit Nvidia, Amazon, and Microsoft -- Barrons.com

356 words
11 January 2022
20:08
Dow Jones Institutional News
DJDN
English
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Jack Denton

Hand-in-hand with technological disruption comes a fresh list of winners and losers.

As the gaming industry looks to the cloud, Apple's (ticker: AAPL) policies put it at a disadvantage to rivals in Big Tech such as Nvidia (NVDA), Amazon.com (AMZN), and Microsoft (MSFT), according to new analysis.

Cloud gaming is on track to become a \$3 billion industry this year, according to research from data-analytics firm GlobalData -- representing 59% growth from 2021. The sector also has the potential to be far more disruptive within the wider gaming industry if developers can offer cloud-exclusive trending titles, the group said.

Cloud gaming describes video games that are run on remote servers via the internet, and not on the devices on which they're played.

As rivals in Big Tech jockey for position, GlobalData sees Apple at risk of losing out because of its strict policies for the App Store, like taking hefty commissions on most payments.

"Apple is the only big tech company without a gaming service," Rachel Foster Jones, an analyst at GlobalData, wrote in a note Tuesday. "Cloud gaming services will purposely avoid Apple's App Store due to its strict policies and app-approval processes."

If cloud gaming largely bypasses the App Store, GlobalData sees the likes of Nvidia, Amazon, and Microsoft opting for web-based avenues to target iPhone users.

"If successful, Apple will lose control over its customers, and it will be difficult for Apple to launch a competitive gaming service," Jones said. "Apple will therefore struggle to gain a foothold in the cloud gaming space."

As for devices, the most popular platform for cloud gaming is set to be Alphabet's (GOOGL) Android, Jones said.

She added that Samsung Electronics (5930.South Korea), BBK Electronics, Xiaomi (1810.H.K.), and Huawei were all well-positioned if they can partner with gaming providers to take advantage of mobile gaming in 5G.

Write to Jack Denton at jack.denton@dowjones.com

(END) Dow Jones Newswires

January 11, 2022 09:38 ET (14:38 GMT)

Document DJDN000020220111ei1b002jj

AOC AGON line reveals 300 Hz QHD PRO gaming monitor with NVIDIA Reflex support

Jason R. Wilson 430 words 8 January 2022 Wccftech.com NEWAGAE English

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AGON by AOC announces the AGON PRO AG274QGM, a mini LED monitor with superfast speeds thanks to NVIDIA Reflex. The 27" AG274QGM gaming monitor showcases an IPS panel with QHD resolution, 2560 x 1440 pixels display, a staggering 300 Hz refresh rate, NVIDIA G-SYNC ULTIMATE support, and also offers NVIDIA's Reflex Analyzer application suite.

The AGON Pro mini LED gaming display offers an amazing refresh rate and impressive performance with support from NVIDIA technology

Games utilizing NVIDIA's Reflex API reduce the input latency by synchronizing GeForce graphics cards with the system's processors, so users respond faster and locate targets with higher precision. NVIDIA's Reflex Analyzer suite works in tandem with the Reflex supported devices, allowing gamers to see the system's total latency and allows for them to enter games knowing their system is operating at the lowest latency possible.

Click to view image.

AGON PRO AG274QGM caters to premium gaming experiences that all gamers, as well as professional competitive eSports players. This unique gaming display utilizes superior refresh rates of 300 Hz and an amazing 1 ms GtG response time. AG274QGM offers a QHD resolution in its display (2560 x 1440 pixels), an upcoming standard in displays in terms of accessing high framerates and supreme visual fidelity simultaneously.

The wide-gamut IPS panel of the AG274QGM guarantees larger viewing angles and fantastic color accuracy, backed with NVIDIA's patented color calibration. The mini LED backlight of the display captures a wide 576 dimmable zones, enabling the monitor to reach VESA DisplayHDR 1000 certification, offering bright visuals and deep blacks with a highly immersive gaming experience.

With a high refresh rate of 300 Hz, the AG274QGM can be considered a top-speed mini LED monitor. The display is powered with the NVIDIA G-SYNC ULTIMATE technology, enabling gamers benefits such as variable refresh rates, eliminating tearing and stuttering, and reducing input lag when utilizing HDR's high-fidelity features. NVIDIA G-SYNC's module enables variable overdrive, optimizing pixel responsiveness for changes in refresh rates and a ghosting-free experience.

Click to access link.

Lastly, the AG274QGM includes NVIDIA's Reflex Analyzer to detect clicks coming from external inputs, such as a gaming mouse, and calculates the time to the resulting pixels to change on the display. The AG274QGM offers several connectivity options with its four next-gen USB 3.2 ports—one marked in green to signal the integration with the NVIDIA Reflex Analyzer.

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Document NEWAGAE020220108ei180002t



Nvidia Corporation - 'Al Dungeon' Creator Nick Walton Uses Al to Generate Infinite Gaming Storylines

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5 January 2022

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'Al Dungeon' Creator Nick Walton Uses Al to Generate Infinite Gaming Storylines

What started as Nick Walton's college hackathon project grew into <u>Al Dungeon</u>, a popular text adventure game with over 1.5 million users.

Walton is the co-founder and CEO of <u>Latitude</u>, a Utah-based startup that uses AI to create unique gaming storylines.

He spoke with NVIDIA AI Podcast host Noah Kravitz about how natural language processing methods can generate infinite open-ended adventure plots for interactive games like AI Dungeon, which draws an average of 150,000 new players each month.

The Al Podcast 'Al Dungeon' Creator Nick Walton Uses Al to Generate Infinite Gaming St

Key Points From This Episode:

- * In Al Dungeon, players type in their actions or responses to prompts for example, "You're about to enter a world of endless possibilities, where you can do absolutely anything you can imagine ... Will you proceed?" and Al keeps the story going.
- * Unlike other text adventure games that use pre-written content, AI Dungeon offers infinite unique possibilities for each storyline, as the AI adapts and responds to almost any user input.
- * Users can dive into adventures individually or in multiplayer mode, which allows players with distinct characters to take turns interacting with the AI within the same game session. To kick off the story, they can choose from a list of initial prompts or create custom adventures.

Tweetables:

"There's something really compelling here in this ability to have stories that can go anywhere." - Nick Walton [3:30]

In gaming and in the world, AI enables "new experiences that are no longer static and predetermined, but dynamic and alive." - Nick Walton [7:16]

You Might Also Like:

GANTheftAuto: Harrison Kinsley on Al-Generated Gaming Environments

Humans playing games against machines is nothing new, but now computers can develop games for people to play. Programming enthusiast and social media influencer Harrison Kinsley created GANTheftAuto, an Al-based neural network that generates a playable chunk of the classic video game Grand Theft Auto V.

Matt Ginsberg Built a GPU-Powered Crossword Solver to Take on Top Word Nerds

Dr.Fill, the crossword puzzle-playing AI created by Matt Ginsberg - serial entrepreneur, pioneering AI researcher and former research professor - scored higher than any humans earlier this year at the American Crossword Puzzle Tournament.

Maya Ackerman on LyricStudio, an Al-Based Writing Songwriting Assistant

Maya Ackerman is the CEO of WaveAI, a Silicon Valley startup using AI and machine learning to, as the company motto puts it, "unlock new heights of human creative expression." The startup's LyricStudio software is an AI-based lyric and poetry writing assistant.

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Document LCDVP00020220105ei1500bcd



CE Noticias Financieras English

Portaltic.-Razer updates its gaming laptops with the new Blade 14, 15 and 17 with Nvidia RTX 3080 Ti graphics cards

677 words
5 January 2022
CE NoticiasFinancieras
NFINCE
English
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MADRID, 5 (Portaltic/EP) The brand specializing in 'gaming' Razer has unveiled its new products for this year during CES 2022 with the announcement of its new models of laptops 'gaming' Razer Blade 14, 15 and 17, which incorporate features for video games as the new Nvidia graphics units, up to GeForce RTX 3080 Ti. The new family of Razer laptops is equipped with the Windows 11 operating system, plus DDR5 memory, which provides clock speeds of up to 4800MHz, a 50% increase in frequency compared to the previous generation. Teams opt for the use of the new Nvidia GeForce RTX 30 graphics for laptops, which are based on the Ampere architecture, with second-generation RT cores for ray tracing and third-generation Tensor cores for DLSS and AI. The new GeForce RTX 3080 Ti graphics for laptops comes to these devices for the first time, with 16GB of GDDR6 memory, the fastest ever included in a laptop.

Additionally, the new GeForce RTX 3070 Ti is 70 percent faster than the RTX 2070 SUPER notebook graphics and delivers up to 100 frames per second at 1440p resolution. The Razer Blade 14, 15 and 17 notebooks are powered by processors from AMD and Intel. The Blade 14 returns with the latest generation AMD Ryzen 6000 series processors, up to the Ryzen 9 6900HX model. Both the Blade 15 and Blade 17 laptops come equipped with the new 12th generation Intel Core H-Series processors, going up to the Intel Core i9-12900H model with 14 cores, compared to the previous generation with up to eight cores, 12th generation Intel processors feature a new design with a hybrid architecture that combines performance cores with efficient cores. The new generation Intel Core i9 processors feature high-speed frequencies of up to 5.0 GHz. In terms of design, the new Razer Blade uses a CNC-milled aluminum chassis, as well as a redesigned keyboard with slightly larger keys, a slimmer profile hinge design, and rubber feet to create better ventilation ducts. The family's specs are rounded out with a variety of connectivity and input ports, ranging from USB-C to HDMI 2.1, and including a UHS-II SD card reader, keyboards with Razer Chroma RGB technology, front-facing speakers and THX Spatial Audio. BLADE 14 The Razer Blade 14 laptop features the newly implemented MUX switch, which provides a boost in gaming performance by using the GPU unobtrusively to power games on the internal display. The 14-inch device now also features a fingerprint-resistant coating, as well as a 1080p infrared webcam with Windows Hello support. The new Razer Blade 14 laptop has a starting price of £2,199.99, and will be available for pre-order in Q1 2022. BLADE 15 Beyond offering the latest advancements from Nvidia GeForce and Intel, the 2022 Razer Blade 15 features Full HD 360Hz and QHD 240Hz display configurations, as well as the new UHD 144Hz configuration. The new IPS display features improved refresh rates compared to the 60Hz of previous generations, and covers 100% of the DCI-P3 color gamut. The new Razer Blade 15 laptop has a starting price of £2,799.99, and will be available for pre-order from January 25th, and in-store in Q1 2022. BLADE 17 The Blade 17, meanwhile, is geared towards gamers and creators, with advances in both audio and power supply, such as the inclusion of eight speakers in total, compared to the previous four. Razer has given the device an 82Wh internal battery, being 10Wh higher capacity compared to previous generations. It comes with a newly designed 280W GaN charger, in a size comparable to the average 180W power supplies. The new Razer Blade 17 laptop has a starting price of €2,999.99, and will be available for pre-order through from January 25, and in direct purchase in stores during Q1 2022.

Document NFINCE0020220105ei15004dw



PC/ Laptops

CES 2022: Asus ROG Gaming Laptops, Desktops Refreshed With Updated Intel, AMD, Nvidia Hardware

David Delima 1,208 words 5 January 2022 14:05 NDTV NDTVIN English

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Asus ROG Zephyrus Duo 16, Zephyrus G14, Strix SCAR, and Strix G Series laptops have been launched by the company at CES 2022. The new gaming laptops feature updated Intel and AMD processors, along with Nvidia and AMD GPUs, and run on Windows 11. The company also launched Asus Flow Z13 gaming tablet which runs on Windows for portable gaming. It comes with powerful Nvidia RTX graphics, a 4K display with 60Hz refresh rate, and 1TB SSD storage. Asus has also updated the ROG Strix GT15 gaming desktop with updated Intel and Nvidia RTX graphics, and announced a new mechanical keyboard — Asus ROG Strix Flare II Animate. Prices and availability details of most new products are yet to be announced by the company.

Asus ROG Strix G15

Photo Credit: Asus

Asus ROG Strix SCAR, Strix G15, Strix G17 specifications

The new Asus ROG Strix SCAR comes with up to 12th-Gen Intel Core i9-12900H processors, the latest mobile processors from the company. The gaming laptop comes with an Nvidia GeForce RTX 3080 Ti GPU, PCIe 4.0 storage, and DDR5 memory. The laptop will be available in 15-inch and 17-inch models, according to Asus. The 15-inch model will offer customers a choice of three IPS displays — Quad-HD resolution at 120Hz and 165Hz refresh rate and full-HD at 300Hz refresh rate. Meanwhile, the 17-inch model will offer either Quad-HD at 240Hz refresh rate or full-HD at 360Hz refresh rate display options.

Meanwhile, <u>Asus Strix G15</u> and <u>Strix G17</u> are equipped with AMD Ryzen 9 6900HX processors and Nvidia GeForce RTX 3080 Ti GPUs. <u>Asus ROG Strix G15</u> sports a full-HD display with 300Hz refresh rate or Quad-HD resolution at 165Hz refresh rate, while the <u>ROG Strix G17</u> offers a full-HD display at 360Hz refresh rate or Quad-HD resolution with a 240Hz refresh rate. The Strix models are equipped with 90Whr batteries and come with support for 100W charging over USB Type-C, along with Wi-Fi 6E and 2.5G LAN connectivity for improved network performance.

Asus ROG Zephyrus M16 (2022)

Photo Credit: Asus

Asus ROG Zephyrus G14, Zephyrus G15, Zephyrus M16 specifications

Asus has updated its ROG Zephyrus series of gaming laptops for 2022 with the latest AMD processors and GPUs. The updated Asus ROG Zephyrus G14 is equipped with an AMD Ryzen 9 Series processor, paired with AMD Radeon RX 6000S series graphics. The laptop is equipped with 1TB of PCIe SSD storage and DDR5 RAM.

Asus ROG Zephyrus G14 sports the company's ROG Nebula display, offering Quad-HD resolution at 120Hz refresh rate, 100 percent DCI-P3 coverage, and 3ms response time. Asus also unveiled its refreshed ROG Zephyrus G15 and M16 laptops that have been updated with the latest hardware from AMD and Nvidia, along with DDR5 RAM and support for Wi-Fi 6E.

Asus ROG Zephyrus Duo 16 (2022)

Photo Credit: Asus

Asus ROG Zephyrus Duo 16 specifications

Asus has equipped ROG Zephyrus Duo 16 with an AMD Ryzen 9 6980HX processor, along with an Nvidia GeForce RTX 3080 Ti GPU at 150W. The gaming laptop comes with two display options, the first featuring a Quad-HD ROG Nebula HDR display with 512 mini-LED dimming zones, with 165Hz refresh rate and VESA DisplayHDR 1000 certification. The second display option features a BOE Dual Spec panel, which offers switching between 4K resolution at 120Hz and full-HD resolution at 240Hz.

The ROG Zephyrus Duo 16 also features a secondary display, which offers additional control support in games like Dying Light 2, and comes with Asus' NumberPad technology on the trackpad, and the company's Liquid Metal Conductonaut Extreme solution to reduce CPU temperatures by 15 degrees compared to regular thermal paste solutions. The company also states that the ROG Zephyrus Duo 16 fits a 16-inch display into a 15-inch laptop chassis, offering a smaller footprint than the previous generation.

Asus ROG Flow Z13

Photo Credit: Asus

Asus ROG Flow Z13, ROG Flow X13 specifications

Asus also unveiled the ROG Flow Z13, pushing its ROG Flow gaming laptop series into a compact gaming tablet. The new ROG Flow Z13 is a convertible tablet featuring a Surface-like design which is equipped with a 14-core Intel Core i9-12900H processor, paired with an Nvidia GeForce RTX 3050 Ti GPU and LPDDR5 memory at 5,200MHz. Asus ROG Flow Z13 packs 1TB of PCIe SSD storage and comes with support for fast charging over USB Type-C.

The new Asus ROG Flow Z13 gaming tablet comes in two display options with Gorilla Glass protection and offers 500 nits of peak brightness — the first is a 4K display with 60Hz refresh rate and 85 percent DCI-P3 coverage, while the full-HD resolution display offers a 120Hz refresh rate and 100 percent sRGB coverage. Asus ROG Flow Z13 comes with a screen cover keyboard and comes with mouse support and also supports touch input as well as gamepads.

Asus has updated its ROG Flow X13 gaming laptop for 2022 with the latest AMD Ryzen 9 6000 Series processor and an Nvidia GeForce RTX 3050 GPU. Asus ROG Flow Z13 and Rog Flow X13 are both compatible with the company's XG Mobile external GPUs according to Asus, featuring an AMD Radeon RX 6850M XT GPU and additional ports for connectivity.

Asus ROG Strix GT15 specifications

The company's ROG Strix GT15 gaming desktop has also been updated, and this year's model will be powered by an Intel Core i7-12700KF processor, paired with an Nvidia GeForce RTX 3080 GPU and 64GB of DDR4 RAM at 3200MHz. Asus ROG Strix GT15 will also be available in other configurations and will come with an inbuilt carrying handle and a headphone hook, according to the company.

Asus ROG Strix Flare II Animate price, specifications, features

In addition to the gaming laptops, convertible tablet and desktop announced by Asus, the company has also launched the ROG Strix Flare II Animate, a mechanical keyboard which sports a dot-matrix LED display at the top right corner. The Strix Flare II Animate is capable of showing animations and logos or information like battery life and the time of day. The mechanical keyboard comes with an RGB strip at the bottom, and a wrist rest.

Asus ROG Strix Flare II Animate keyboard is equipped with swappable ROG NX switches, while customers can also choose Cherry MX Blue, Brown, or Red switches. features media controls, 8000Hz polling, and come with USB 2.0 passthrough support along with PBT Double-shot keycaps and sound dampening foam, according to the company.

The new Strix Flare II Animate is priced at \$200 (roughly Rs.14.900), while a stripped-down version of the keyboard without swappable keys and the LED lighting will be sold for \$180 (roughly Rs. 13,400), according to the company. What are the best games of 2021? We discuss this on Orbital, the Gadgets 360 podcast. Orbital is available on Spotify, Gaana, JioSaavn, Google Podcasts, Apple Podcasts, Amazon Music and wherever you get your podcasts.

Click here to view video

Document NDTVIN0020220105ei150008p

MSI Shows off Its Powerful Gaming & Creator Lineup at CES 2022: Stealth, Raider, Crosshair, Pulse, Creator Series With Intel Alder Lake & NVIDIA RTX 30 'Ti' Series

Hassan Mujtaba 4,925 words 4 January 2022 Wccftech.com NEWAGAE English

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MSI has introduced its next-gen gaming and creator series laptops powered by Intel's Alder Lake CPUs & NVIDIA GeForce RTX 30 'Ti' GPUs.

MSI 2022 Stealth, Raider, Crosshair, Pulse, Creator 2022 Series Laptops Displayed at CES, Feature Intel Alder Lake CPUs & NVIDIA GeForce RTX 30 'Ti' GPUs

Press Release: MSI, a world-leading gaming and business computing brand, has launched the <u>MSIology:</u> <u>Gameverse</u> virtual event announcing its latest gaming and content creation laptops. The event is available to <u>stream now</u>.

The new lineup features the latest 12th Gen Intel H series processors, up to NVIDIA GeForce RTX 3080 Ti Laptop GPU, and MSI-exclusive thermal solutions, which boosts performance to a whole new level. MSI not only just released the highest-performance laptop in the market but also delivered a series of Meta-Ready laptops to connect users to the Metaverse.

- * Click to view image.

The new MSI laptops boasting the Meta-ready logo are equipped with Intel Core i7 or above processors and NVIDIA® GeForce RTX 3070 Laptop GPUs or above, for anyone who'd like to experience Metaverse-compatible performance.

Hardware & Software Changes:

Phase-Change Liquid Metal Pad: The Secret to MSI's High Performance

MSI proudly announces brand-new exclusive cooling technology: the Phase-Change Liquid Metal Pad. When the computer's heat reaches 58° Celsius (136° F), the Phase-Change Liquid Metal Pad melts and fills the space between the CPU and the thermal block. This phase transition makes the heat transfer more efficient and reliable than traditional thermal pastes and liquid metal solutions. With this new innovative cooling technology, the overall performance increases up to 10%.

The GPUs of the Future

NVIDIA GeForce RTX laptops are based on the revolutionary Ampere architecture, with 2nd generation RT Cores for ray tracing and 3rd generation Tensor Cores for DLSS and AI.

- * Click to view image.

The new GeForce RTX 3080 Ti Laptop GPU brings the flagship 80 Ti class of GPUs to laptops for the first time. Featuring 16GB of the fastest GDDR6 memory ever shipped in a laptop, the RTX 3080 Ti delivers higher performance than the desktop TITAN RTX. The new GeForce RTX 3070 Ti is up to 70% faster than RTX 2070 SUPER laptops and can deliver 100 frames per second at 1440p resolution.

Additionally, the new 4th generation of Max-Q Technologies, with CPU Optimizer, Rapid Core Scaling, and Battery Boost 2.0, further enhance efficiency, performance, and battery life.

Brand New MSI Center Al Technology

Not solely focused on hardware performance, MSI also worked on intelligent technologies for a smoother experience. The latest MSI Center now provides AI modes. The new "Smart Auto" feature will detect which situation you're in, and automatically adjust the system into different modes, resulting in the best experience for your laptop. The "Ambient Silent AI" feature will dynamically balance fan speed based on the surrounding noise and give the highest possible performance while still keeping the laptop quiet.

New & Updated Laptops:

Unleash New Gaming Power

The new gaming laptop lineup features a significant performance improvement over previous models, including up to 30%~45% increase in CPU performance. MSI also brought its signature innovative technologies to the thermal solution, with the exclusive Phase Change Liquid Metal Pad. As efficient as liquid metal but safer and more reliable, Phase Change Liquid Metal Pad allows users to fully unleash the power of the new 12th Gen Intel Processors.

Sleek & Sophisticated - GS77/66 Stealth

The award-winning Stealth GS series is a lightweight powerful laptop for enthusiastic gaming and professional use. GS77 comes with a new "core black" color and a new, more durable, zinc alloy hinge. At less than 0.83" (21mm) for Z height, MSI managed to enlarge the touchpad and keycap size for a precise and comfortable typing experience.

Click to view image.

It is also equipped with 6 speakers for crisp treble and powerful bass. Business gamers will benefit from the webcam lock switch and support of up to 100W PD charging for better security and mobility.

- * Click to view image.

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- * Click to view image.

Ultimate Powerhouse - Raider GE76/66

MSI Raider GE series is a real eye-catcher and keeps the panoramic aurora lighting which creates an alluring sci-fi ambiance. The performance, however, is even more astonishing; with the innovative thermal design by MSI, the Raider GE series can reach up to a total of 220W via MSI OverBoost. The Phase Change Liquid Metal Pad increases 10% of performance, and with displays of up to 4K and Discrete Graphic Mode, gamers will have a fast and smooth experience with the MSI Raider Series.

Click to view image.

*Phase-Change Liquid Metal Pad only available for Raider GE series and Stealth GS77 with Intel® Core i9 processor on configuration for maximized performance.

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Born for Performance - Vector GP76/66

The Vector GP Series represents a new way of thinking about computing; the name "Vector" was born from users' experiences in gaming, engineering, and scientific computing. The newly crowned Vector GP series features MSI-exclusive Cooler Boost 5 Technology and performance that can reach up to 210W.

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Rainbow Six Extraction Edition - Crosshair 15

Crosshair GL series is a collaboration between MSI and Ubisoft. The futuristic design featuring exclusive sci-fi elements is inspired by the tension and unsettling mood of gameplay. It is equipped with Intel® CoreTM i9 processors and Cooler Boost 5 Technology, and the graphic performance is at its maximized level, allowing the Crosshair 15 to stand its mid-tier competitors. Crosshair GL Series comes in three variants: Crosshair 15, Crosshair 17, and the limited-edition Crosshair 15 Rainbow Six Extraction Edition that comes with an exclusive bundle pack.

- * Click to view image.

Pulsating Power-Pulse GL76/66

The MSI Pulse GL76/66 keeps the image designed by Maarten Verhoeven - the titanium power armor inspired by Pulse energy for the Dragon Army to enhance agility and flexibility - but adds Cooler Boost 5 that increases 15% airflow with a 33% reduction in wall thickness.

Click to view image.

Sharpen Your Game - Sword 17/15, Katana GF76/66

The MSI Sword series has a new knight image with the magical immortal force, "Dragon Power", wielding an enchanted immortal sword of victory. This knight character is created by Justin Goby Fields, a famous concept artist from the United States. Both Sword and Katana series are set for gamers with a comfortable key journey at 1.7mm and the Cooler Boost 5 Cooling system.

Bigger and Better Content Creation Machines

MSI's new Creator series is now a bigger family with panels up to 17 inches, and the CPU performance is improved by 45% with the new Vapor Chamber Cooler. MSI also added in new features specifically for creators, such as touch support for MSI Pen, Calman verified True Pixel Display, and collaboration with DTS for rich, immersive surround sound effects.

- * Click to view image.

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- * Click to view image.

New Ways to Create - Creator Z17, Creator Z16P, and Creator M16

The Creator Z17 is the world's first 17-inch laptop to support pen touch, and with a 16:10 screen with thin-bezel design and True Color Technology, the perfect companion for creators. The Creator Z16P has an extra 20% performance boost with Vapor Chamber Cooler, which generates 76% more cooling area, 65% more airflow, and decreases 2°C on surface temperature. With the competitive performance and the CNC-milled aluminum chassis, the Creator Z Series laptops are Studio Laptops for creators, inquisitive professionals, or consumers looking for high-quality, premium products.

Click to view image.

The Creator M16 is a more portable and stylish choice for students or creators with the need for powerful performance. It features QHD+ True Pixel displays with a 180° lay-flat screen and an ultra-light and slim aluminum chassis.

- * Click to view image.

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- * Click to view image.

Appendix – Specifications (You can also find the full specs and pricing in the pictures below by clicking on them to view the high-res images).

- * Click to view image.
- * Click to view image.

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Model Name Stealth GS77
```

Stealth GStealth GS66S66

Processor Up to latest 12th Gen Intel® Core i9-12900H Processor Operating System Windows 11 Home Windows 11 Pro (MSI recommends Windows 11

Pro for business.)

Memory DDR5-4800, 2 slots, up to 64GB

DDR5-4800, 2 slots, up to 64GB

Display * 17.3" UHD (3840x2160), 120 Hz Refresh Rate, 100% Adobe RGB(Typical), IPS-Level panel (Optional) * 17.3" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel * 17.3" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel* 15.6" UHD (3840x2160), 100% Adobe RGB(Typical), IPS-Level panel(Optional) * 15.6" QHD (2560x1440), 240 Hz Refresh Rate, 100% DCI-P3(Typical), IPS-Level panel * 15.6" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel

Graphics Up to

NVIDIA® GeForce RTX 3080 Ti Laptop GPU 16GB GDDR6

Keyboard Per-Key RGB gaming keyboard by SteelSeries

Audio * 2 x 2W Speakers and 4 x 2W Woofers designed by Dynaudio system * 1 x Audio combo jack * Nahimic 3 Audio Enhancer * Hi-Res Audio ready* The Duo Wave speaker designed by Dynaudio system(2x 2W speakers) * 1 x Audio combo jack * Nahimic 3 Audio Enhancer * Hi-Res Audio ready

```
Type-C (w/ PD Charging), * 2 x USB 3.2 Gen2 Type-C / DP, 2 x USB 3.2 Gen2
Type-A
Card Reader
                    * 1 x SD Express Memory Card Reader
                  * 1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging), * 1 x
Video Output
USB 3.2 Gen2 Type-C / DP, 1 x HDMI (8K@ 60Hz / 4K@ 120Hz) * 1 x Thunderbolt 4 /
DP/ USB Type-C (w/ PD Charging), * 2 x USB 3.2 Gen2 Type-C / DP, 1 x HDMI (8K@
60Hz / 4K@ 120Hz)
                   Intel® Killer Ethernet E3100G (up to 2.5 GbE) Intel® Killer
Communication
Wi-Fi 6E AX1675, Bluetooth v5.2
Webcam / Microphone IR FHD type (30fps@1080p) / Quadruple Microphone
                   Fingerprint Reader / Ambient Light Sensor
                                        Fingerprint Reader
                   4-Cell, Li-Polymer, 99.9Whr
Battery
                   240W Slim adapter
Power Adapter
Dimension
                   15.65"(W) x 11.16"(D) x 0.79"(H)
                                        14.17"(W) x9.65"(D) x0.71"(H)
Weight
                    5.7 lbs
                                        4.63 lbs
* Product specification, functions and appearance may vary by models and differ
from country to country. All specifications are subject to change without
notice.
Model Name
                Raider GE76
                                     Raider GERaider GE66 66
                Up to latest 12th Gen Intel® Core i9 Processor
Operating System Windows 11 Home Windows 11 Pro (MSI recommends Windows 11 Pro
for business.)
                DDR5-4800, 2 slots, up to 64GB
Memory
                 * 17.3" UHD (3840x2160), 120 Hz Refresh Rate, 100% Adobe
Display
RGB(Typical), IPS-Level panel (Optional) * 17.3" OHD (2560x1440), 240 Hz Refresh
Rate, 100% DCI-P3(Typical), IPS-Level panel * 17.3" Full HD (1920x1080), 360 Hz
Refresh Rate, IPS-Level panel* 15.6" UHD (3840x2160), 100% Adobe RGB(Typical),
IPS-Level panel(Optional) * 15.6" QHD (2560x1440), 240 Hz Refresh Rate, 100%
DCI-P3(Typical), IPS-Level panel * 15.6" Full HD (1920x1080), 360 Hz Refresh
Rate, IPS-Level panel
Graphics
                Up to
NVIDIA® GeForce RTX 3080 Ti Laptop GPU
                Per-Key RGB gaming keyboard by SteelSeries
                 * The Duo Wave Woofers + Speakers designed by Dynaudio system *
(2 x 1W Speakers + 2 x 2W Woofers) * 1 x Audio combo jack * Nahimic 3 Audio
Enhance * Hi-Res Audio ready* The Duo Wave speakers design by Dynaudio system
(2x 2W speakers) * 1 x Audio combo jack * Nahimic 3 Audio Enhancer * Hi-Res
Audio ready
                * 1 x Thunderbolt 4 / DP/ USB Type-C, * 1 x USB 3.2 Gen2 Type-C
USB Ports
/ DP * 1 x USB 3.2 Gen2 Type-A, 2 x USB 3.2 Gen 1 Type-A
Card Reader * 1 x SD Express Memory Card Reader
               * 1 x Thunderbolt 4 / DP/ USB Type-C, 1 x Mini DisplayPort * 1
Video Output
x USB 3.2 Gen2 Type-C / DP * 1 x HDMI (8K@ 60Hz / 4K@ 120Hz)
Communication Intel® Killer Ethernet E3100G (up to 2.5 GbE) Intel® Killer
Wi-Fi 6E AX1675, Bluetooth v5.2
                FHD type (30fps@1080p)
Webcam
                4-Cell, Li-Polymer, 99.9Whr
Batterv
Power Adapter 330W(12UHS) / 280W (12UH / 12UGS)
                                     280W
Dimension
                15.63"(W) x 11.18"(D) x 1.02"(H)
                                    14.09"(W) x 10.51"(D) x 0.92"(H)
Weight
                 8.8 lbs
                                     7.25 lbs
* Product specification, functions and appearance may vary by models and differ
from country to country. All specifications are subject to change without
notice.
Model Name
               Vector GP76
                                     Vector GP66VeVector GP66
```

Up to latest 12th Gen Intel® Core i9 Processor

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Operating System Windows 11 Home

DDR4-3200, 2 slots, up to 64GB Memorv

* 17.3" QHD (2560x1440), 240 Hz Refresh Rate, 100% Display

DCI-P3(Typical), IPS-Level panel * 17.3" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel* 15.6" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level

panel * 15.6" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel

Graphics Up to

NVIDIA® GeForce RTX 3080 Laptop GPU 8GB GDDR6

Keyboard Per-Key RGB gaming keyboard by SteelSeries

Audio * 2 x 2W Stereo Speakers * 1 x Audio combo jack * Nahimic 3

Audio Enhance * Hi-Res Audio ready

* 1 x USB 3.2 Gen2 Type-C / DP * 3 x USB 3.2 Gen1 Type-A USB Ports

USB Ports * 1 x USB 3.2 Gen2 Type-C / DP * 3 x USB 3.2 Gen1 Type-A Video Output * 1 x USB 3.2 Gen2 Type-C / DP, 1 x Mini DisplayPort * 1 x HDMI

(8K@60Hz / 4K@120Hz)

Communication Gigabit Ethernet (up to 2.5GbE) Intel® Killer Wi-Fi 6E AX1675,

Bluetooth v5 2

Webcam HD type (30fps@720p) Batterv 4-Cell, Li-Polymer, 65Whr

Power Adapter Up to 280W

15.63"(W) x 11.18"(D) x 1.02"(H) Dimension

14.09"(W) x 10.51"(D) x 0.92"(H)

Weight 7.65 lbs

5.25 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name CROSSHAIR 17 CROSSHAIR CROSSHAIR 1515

Up to latest 12th Gen Intel® Core i9 Processor Processor

Operating System Windows 11 Home

17.3" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel * 15.6" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel * 15.6" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel

Graphics Up to

NVIDIA® GeForce RTX 3070 Ti Laptop GPU 8GB GDDR6 (B12UGSZ)

Keyboard Spectrum Backlight Gaming Keyboard

Audio * 2 x 2W Stereo Speakers * 1 x Audio combo jack * Nahimic 3

Audio Enhancer * Hi-Res Audio ready

* 1 x USB 3.2 Gen1 Type-C * 2 x USB 3.2 Gen1 Type-A * 1 x USB USB Port

2.0 Type-A

Video Output 1x HDMI (4K@60Hz)

Communication Gigabit Ethernet Intel® Wi-Fi 6 AX201 Bluetooth v5.2

HD type (30fps@720p)

Battery 4-Cell, Li-Polymer, 90Whr (B12UGSZ / B12UGZ) 3-Cell,

Li-Polymer, 53.5Whr (B12UEZ)

Power Adapter 240W

15.68"(W) x10.76"(D) x1.07"(H) Dimension

14.13"(W) x10.20"(D) x1.06"(H) Weight. 5.73 lbs

5.07 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name Crosshair 15 Rainbow Six Extraction Edition

Up to latest 12th Gen Intel® Core i9-12900H Processor Processor

Operating System Windows 11 Home

DDR4-3200, 2 slots, up to 64GB

Display 15.6" QHD (2560x1440), 165 Hz Refresh Rate, 100%

DCI-P3(Typical), IPS-Level panel (Optional)

Graphics Up to

NVIDIA® GeForce RTX 3070 Laptop GPU 8GB GDDR6 Keyboard Spectrum Backlight Gaming Keyboard

2 x 2W Stereo Speakers 1 x Audio combo jack Nahimic 3 Audio

Enhancer Hi-Res Audio ready

USB Port 1 x USB 3.2 Gen1 Type-C 2 x USB 3.2 Gen1 Type-A 1 x USB 2.0

Type-A

Video Output 1x HDMI (4K@60Hz)

Communication Gigabit Ethernet Intel® Wi-Fi 6 AX201 Bluetooth v5.2

Webcam HD type (30fps@720p)

Battery 4-Cell, Li-Polymer, 90Whr (B12UGZ) 3-Cell, Li-Polymer, 53.5Whr

(B12UEZ)

Power Adapter 240W

Dimension 14.13"(W) x10.20"(D) x1.06"(H)

Weight 5.07 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name Pulse GL76

Pulse GL66

Processor Up to latest 12th Gen Intel® Core i9-12900H Processor

Operating System Windows 11 Home

Memory DDR4-3200, 2 slots, up to 64GB

Display 17.3" Full HD (1920x1080), 360 Hz Refresh Rate, IPS-Level panel (Optional) 17.3" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel15.6"

Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel

Graphics Up to

NVIDIA® GeForce RTX 3070 Laptop GPU 8GB GDDR6 Keyboard RGB Backlight Gaming Keyboard

Audio * 2 x 2W Stereo Speakers * 1 x Audio combo jack * Nahimic 3

Audio Enhancer * Hi-Res Audio ready

USB Port * 1 x USB 3.2 Gen1 Type-C * 2 x USB 3.2 Gen1 Type-A * 1 x USB

2.0 Type-A

Video Output 1x HDMI (4K@60Hz)

Communication * Gigabit Ethernet * Intel® Wi-Fi 6 AX201 * Bluetooth v5.2

Battery 4-Cell, Li-Polymer, 90Whr (12UGK) 3-Cell, Li-Polymer, 53.5Whr

(12UEK)

Power Adapter 240W

240W

Dimension 15.67"(W) x10.75"(D) x0.95"(H)

14.13"(W) x10.20"(D) x0.94"(H)

Weight 5.73 lbs

4.96 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name SWORD 15

Processor Up to latest 12th Gen Intel® Core i7-12700H Processor

Operating System Windows 11 Home

Memory DDR4-3200, 2 slots, up to 64GB

Display 15.6" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel

Graphics Up to latest

NVIDIA® GeForce RTX 3070 Ti Laptop GPU 8GB GDDR6 Keyboard Blue Backlit Gaming Keyboard

Audio * 2 x 2W Stereo Speakers * 1 x Audio combo jack * Nahimic 3

Audio Enhancer * Hi-Res Audio ready

USB Port * 1 x USB 3.2 Gen1 Type-C * 2 x USB 3.2 Gen1 Type-A * 1 x USB

2.0 Type-A

Video Output 1x HDMI (4K@60Hz)

Communication Gigabit Ethernet / Intel® Wi-Fi 6 AX201 / Bluetooth v5.2

Webcam HD type (30fps@720p)

Battery 3-Cell, Li-Polymer, 53.5Whr Dimension 14.13"(W) x10.20"(D) x0.98"(H)

Weight 4.96 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name KATANA GF76

KATANAKATANA GF66 GF66

Processor Up to latest 12th Gen Intel® Core i7-12700H Processor

Operating System Windows 11 Home

DDR4-3200, 2 slots, up to 64GB

17.3" Full HD (1920x1080),144 Hz Refresh Rate, IPS-Level panel Display

* 15.6" Full HD (1920x1080), 144 Hz Refresh Rate, IPS-Level panel

Graphics Up to latest

NVIDIA® GeForce RTX 3070 Ti Laptop GPU 8GB GDDR6 Keyboard Red Backlit Gaming Keyboard

* 2 x 2W Stereo Speakers * 1 x Audio combo jack * Nahimic 3 Audio

Audio Enhancer * Hi-Res Audio ready

USB Port * 1 x USB 3.2 Gen1 Type-C * 2 x USB 3.2 Gen1 Type-A * 1 x USB

2.0 Type-A

Video Output 1 x HDMI (4K@60Hz)

Communication Gigabit Ethernet / Intel® Wi-Fi 6 AX201 / Bluetooth v5.2

HD type (30fps@720p)

3-Cell, Li-Polymer, 53.5Whr

Power Adapter 240W (12UGS / 12UG / 12UE) / 180W (12UD / 12UC)

15.67"(W) x10.75"(D) x0.99"(H) Dimension

14.13"(W) x10.20"(D) x0.98"(H) 5.73 lbs Weight

4.96 lbs

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name Creator 717

Processor Up to latest 12th Gen Intel® Core i9-12900H Processor Operating System Windows 11 Home Windows 11 Pro (MSI recommends Windows 11

Pro for business.)

Display 17" QHD+ (2560x1600), 16:10, Touchscreen, 165Hz Refresh

Rate, 100% DCI-P3(Typical), IPS-Level panel, Support MSI Pen

Graphics Up to

NVIDIA® GeForce RTX 3080 Ti Laptop GPU 16GB GDDR6 DDR5-4800, 2 slots, up to 64GB

Webcam / Microphone IR FHD type (30fps@1080p) / Quadruple Microphone

Keyboard Per-Key RGB keyboard by SteelSeries Sensor Fingerprint Reader/Ambient Light Sensor Communication Intel® Killer Wi-Fi 6E AX1675, Bluetooth v5.2

4 \times 2W Stereo Speakers by Dynaudio system 1 \times Audio combo Audio

iack

I/O Port 1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging) 1 x Thunderbolt 4 / DP/ USB Type-C 1 x USB 3.2 Gen 2 Type-A 1 x HDMI (8K@ 60Hz / 4K@ 120Hz) 1 x SD Express Memory Card Reader 1 x DC-in

Battery/Adapter 4-Cell, Li-Polymer, 90Whr 240W adaptor Weight/Dimension 5.49 lbs 15.04"(W) x10.24"(D) x0.75"(H)

 * Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name Creator Z16P

Up to latest 12th Gen Intel® Core i9-12900H Processor Processor Windows 11 Home Windows 11 Pro (MSI recommends Windows 11 Operating System

Pro for business.)

16" QHD+ (2560x1600), 16:10, Touchscreen, 165Hz Refresh Display

Rate, 100% DCI-P3(Typical), IPS-Level panel, Support MSI Pen

Up to

NVIDIA® GeForce RTX 3080 Ti Laptop GPU 16GB GDDR6 DDR5-4800, 2 slots, up to 64GB

Webcam / Microphone IR FHD type (30fps@1080p) / Quadruple Microphone

Keyboard Per-Key RGB keyboard by SteelSeries Sensor Fingerprint Reader/Ambient Light Sensor Intel® Killer Wi-Fi 6E AX1675, Bluetooth v5.2 Communication

Audio 4 \times 2W Stereo Speakers by Dynaudio system 1 \times Audio combo

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1 x Thunderbolt 4 / DP/ USB Type-C (w/ PD Charging) 1 x USB 3.2 Gen 2 Type-C/ DP 1 x USB 3.2 Gen 2 Type-A 1 x SD Express Memory Card Reader 1 x DC-in

4-Cell, Li-Polymer, 90Whr 240W adaptor Battery/Adapter Weight/Dimension 5.27 lbs 14.13"(W) x10.08"(D) x0.75"(H)

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice

Model Name Creator Z16

Up to latest 12th Gen Intel® Core i7-12700H Processor Processor

Operating System Windows 11 Home Windows 11 Pro (MSI recommends Windows 11 Pro

for business.)

16" QHD+ (2560x1600), 16:10, Touchscreen, 120Hz Refresh Rate, Display

100% DCI-P3(Typical), IPS-Level panel (Optional)

Graphics Up to

NVIDIA® GeForce RTX 3060 Laptop GPU 6GB GDDR6 Memory DDR5-4800, 2 slots, up to 64GB

IR HD type (30fps@720p) Webcam

MiniLED Per-Key RGB keyboard by SteelSeries Fingerprint Reader Input.

Communication Intel® Killer Wi-Fi 6E AX1675, Bluetooth v5.2

Audio 4 × 2W Stereo Speakers by Dynaudio system 1 × Audio combo jack I/O Port 2 x Thunderbolt 4 / DP/ USB Type-C 2 x USB 3.2 Gen 2 Type-A 1 x

microSD Card Reader 1 × DC-in

Battery/Adapter 4-Cell, Li-Polymer, 90Whr 180W Slim adaptor Weight/Dimension 5.07 lbs 14.13"(W) x10.08"(H) x0.64"(D)

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

Model Name Creator M16

Up to latest 12th Gen Intel® Core i7-12700H Processor Processor

Operating System Windows 11 Home Windows 11 Pro (MSI recommends Windows 11 Pro

for business.)

Display 16" QHD+ (2560x1600), 16:10, Touchscreen, 60Hz Refresh Rate,

100% DCI-P3(Typical), IPS-Level panel (Optional)

Graphics Up to

NVIDIA® GeForce RTX 3060 Laptop GPU 6GB GDDR6 Memory DDR4-3200, 2 slots, up to 32GB

IR HD type (30fps@720p) Webcam

White keyboard with Anti-Ghost key Input

Communication Intel Wi-Fi 6 AX201(2*2 ax), Bluetooth v5.2

2 × 2W Stereo Speakers by Dynaudio system 1 × Audio combo jack

Audio $2 \times 2W$ Stereo Speakers by Dynaudio system 1 \wedge Al I/O Port $2 \times USB$ 3.2 Gen 2 Type-A 1x USB 3.2 Gen1 Type C Battery/Adapter 3-Cell, Li-Polymer, 53Whr 240W Slim adaptor

Weight/Dimension 6.06 lbs 14.13"(W) x10.2"(H) x0.94"(D)

* Product specification, functions and appearance may vary by models and differ from country to country. All specifications are subject to change without notice.

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Novidia Corporation - GeForce NOW Delivers Legendary GeForce Gaming With More Games on More Networks to More Devices

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717 words

4 January 2022

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GeForce NOW Delivers Legendary GeForce Gaming With More Games on More Networks to More Devices

<u>GeForce NOW</u> is kicking off the new year by bringing more games, more devices and more networks to our cloud gaming ecosystem.

The next pair of Electronic Arts games, Battlefield 4 and Battlefield V, is streaming on GeForce NOW.

We're also working closely with a few titans in their respective industries: AT&T and Samsung.

AT&T and NVIDIA have joined forces as collaborators in 5G technical innovation to deliver one of the world's best gaming experiences. To celebrate, a special promotion for certain AT&T 5G subscribers is ongoing.

Going from the small screen to the big screen, look for GeForce NOW to arrive on select Samsung TVs later this year.

Set Foot on the Battlefield

Prepare for impact. Battlefield 4: Premium Edition and Battlefield V: Definitive Edition join the exhilarating collection of Electronic Arts titles streaming from the cloud.

Experience the glorious chaos of all-out war packed with tactical challenges by playing the Battlefield series.

Embrace unrivaled destruction in Battlefield 4: Premium Edition (<u>Steam</u> and <u>Origin</u>). Play across dynamic, interactive battlefield environments that react in real time to your reactions. Trigger a shipwreck, flood the streets for a tactical advantage, or take the edge on massive, chaotic maps with dozens of different vehicles. Plus, take on an intense single-player campaign where you'll need to evacuate critical American VIPs from Shanghai and battle against the odds to get your squad home in times of international crisis.

Experience the ultimate war experience in Battlefield V: Definitive Edition (<u>Steam</u> and <u>Origin</u>). Enter mankind's greatest conflict across land, air and sea and immerse yourself in the hard-fought battles of World War II. With all gameplay content unlocked from the get-go, choose from the complete arsenal of weapons, vehicles and gadgets available to stand out on the battlefield with the complete roster of Elites.

Get locked and loaded to play these games and more from Electronic Arts today on GeForce NOW.

Improved Streaming on 5G

Teaming up as 5G technical innovation collaborators, GeForce NOW is bringing the power of PC gaming to gamers with fast, reliable, secure AT&T 5G with a new offer.

Starting in January, AT&T customers with a 5G device on a 5G unlimited plan or another qualifying unlimited plan can get a six-month GeForce NOW Priority membership at no charge (a \$49.99 value)*. Priority members enjoy an experience of up to 1080p at 60 frames per second, with priority access to GeForce NOW servers and extended session lengths of up to six hours. They also have access to RTX games.

Streaming to Even More TVs, Soon

NVIDIA is collaborating with Samsung to bring GeForce NOW to its Smart TVs. Our cloud gaming service will be added to the Samsung Gaming Hub, a new game-streaming discovery platform that bridges hardware and software to provide a better player experience.

We'll have more announcements later this year, but anticipate the streaming experience being available in Ω 2

This follows last month's beta release of the GeForce NOW app for LG 2021 WebOS Smart TVs. The beta app is available in the LG Content Store for <u>certain 2021 models</u>. Stay tuned for updates as we approach a full release and add support for additional TVs, including 2022 models.

2021 delivered a host of great benefits for members, notably the <u>GeForce NOW RTX 3080 membership</u> with 1440p and 120 FPS gameplay streaming from the cloud.

2022 is sure to deliver, so check back every <u>GFN Thursday</u> as we share news on upcoming game launches, new game releases, service updates and more.

*Subject to change. Restrictions apply. Seeatt.com/gamingfor more details.

* Original Link

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Document LCDVP00020220104ei1400hqx



Samsunggaming hub adds Google Stadia, Nvidia GeForce Now to TVs at CES 2022

David Katzmaier 475 words 3 January 2022 CNET News.com CNEWSN English

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The most popular way to game on a nice TV is with a dedicated console like a <u>PlayStation 5</u> or <u>Xbox Series X</u>, but <u>cloud gaming services</u> -- which stream playable games over the internet, no console required -- are <u>getting better</u> all the time. At <u>CES 2022</u>, Samsung unveiled a new feature on its latest televisions that caters to cloud and console gamers alike.

Dubbed the gaming hub, it's a dedicated section of Samsung's new smart TV menu system launching later this year on <u>select Samsung 2022 smart TVs</u>. The full cloud gaming libraries of <u>Google Stadia</u>, <u>Nvidia GeForce Now</u> and <u>Utomik</u> will be available at launch "with more to follow," according to Samsung's press release. Users will be able to pair third-party controllers to the TV for instant play, no console or other hardware required. The hub will also allow access to YouTube gaming to follow streamers.

Built-in cloud gaming support on smart TVs isn't new. LG supports both <u>Stadia</u> and GeForce Now (<u>currently in beta</u>) on select TVs, Stadia is available on Google TV and Android TV models from TCL, Hisense and others, while select Amazon Fire TVs support <u>Luna</u>. Of course you can always connect a dedicated cloud gaming device, such as a <u>Chromecast with Google TV</u> for Stadia, a <u>Fire TV Stick</u> for Luna or an <u>Nvidia Shield</u> for GeForce Now or Stadia, to any TV.

Samsung's gaming hub also includes buttons that allow quick access to any attached consoles, and Samsung is adding a few new gaming-specific extras to its new TVs. There's a new version of the game bar first introduced last year, with more information available on things like refresh rate or VRR mode. There's also a zoom mode that can expand things like mini-maps and even the ability to pull up a YouTube video alongside a game -- a boon if you get stuck and need a tutorial.

Read more: Samsung Neo QLED TVs promise prettier pictures, better gaming at CES 2022

New for 2022, select TVs will have a 144Hz variable refresh rate -- a feature designed to take advantage of the hastiest video output from high-end PC gaming cards. Note that consoles like the Xbox Series X and Sony PlayStation 5 max out at 120Hz, so they won't take advantage of this feature, and in any case, the extra smoothness should be subtle.

Samsung will roll the gaming hub out to all 2022 TVs later this year, and a representative told CNET via email it would "share details about the roll-out to earlier models at a later date."

Click to view image.

Samsung's new gaming hub for 2022 TVs offers easy access to cloud and console games. | Samsung Document CNEWSN0020220103ei130005o



online news

Nvidia reports record Q3 earnings on strong gaming and data center sales

281 words 29 December 2021 ETMAG.com FMETMA English

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Nvidia reported record revenue of \$7.10 billion for the third quarter ending October 31, 2021. The figure represents a 50 percent increase compared to the same period a year ago, a nine percent increase quarter over quarter, and well above Wall Street expectations of \$6.81 billion.

Earnings per share were \$1.17, compared to the \$1.11 return that analysts were anticipating.

Nvidia said record revenue from its gaming, data center and professional visualization divisions was responsible for its impressive quarter. Gaming accounted for \$3.22 billion of the record haul, an increase of 42 percent year over year. Nvidia's data center business, meanwhile, generated a healthy \$2.94 billion in revenue, up 55 percent from the same period last year.

Shares in Nvidia are up more than nine percent on the news as of writing, and the company's market cap has crossed the \$800 billion mark for the first time.

Looking ahead to the holiday quarter, Nvidia said it expects revenue to be around \$7.4 billion, plus or minus two percent.

As we've seen with others in the gaming space as of late, inventory shortages have proven to be the biggest hurdle to even more impressive numbers.

Scalpers continue to scoop up hardware in droves, reselling items like high-end video cards and game consoles on third-party marketplaces for huge profits. Major retailers aren't helping the matter either, as some insist on continuing to only sell hardware online, making it even easier for scalpers' bots to do their job. Ongoing component shortages and logistics issues only compound the issue.

Document FMETMA0020211229ehct0000v



Nvidia Corporation - Have a Holly, Jolly Gaming Season on GeForce NOW

Nvidia Corporation published this content on 23 Dec 2021 and is solely responsible for the information contained herein. Distributed by PUBT, unedited and unaltered, on 23 Dec 2021 14:21:04 UTC. 836 words

23 December 2021

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Have a Holly, Jolly Gaming Season on GeForce NOW

Happy holidays, members.

This GFN Thursday is packed with winter sales for several games streaming on <u>GeForce NOW</u>, as well as seasonal in-game events. Plus, for those needing a last minute gift for a gamer in their lives, we've got you covered with <u>digital gift cards</u> for Priority memberships.

To top it all off, six new games join the GeForce NOW library this week for some festive fun.

Jingle Bells, Holiday Sales, Events Are on the Way

Whether you made the naughty or nice list this year, there are plenty of games on your wishlist on sale.

Save big on some of PC gaming's best, including The Witcher 3: Wild Hunt GOTY.

Snag some top titles from Square Enix like Guardians of the Galaxy and Life is Strange: True Colors. Dive into great games from Deep Silver like Metro Exodus and Kingdom Come Deliverance. Experience hits from Ubisoft like Far Cry 6 and Assassin's Creed Valhalla. Get your GOG game on playing Cyberpunk 2077 or The Witcher 3: Wild Hunt GOTY.

To catch even more of the games from the GeForce NOW library on sale this holiday season, check out the "Sales and Special Offers" row on the GeForce NOW app.

On top of these winter sales and for a limited time, get the gift of a copy of <u>Crysis Remastered</u> free with the purchase of a six-month Priority <u>membership</u> or the new GeForce NOW RTX 3080 membership. <u>Terms and conditions</u> apply.

Yes, this is really happening.

Also, keep an eye out for holiday-themed in-game events in World of Tanks and more. Get to the tank in the Schwarzenegger Campaign, where you will receive missions from Arnold himself.

With over 1,100 titles streaming on the cloud, including nearly 100 free-to-play options and more coming every week, there's a game for everyone to enjoy this holiday.

The Perfect Gift for a Gamer

The perfect digital stocking stuffer for your favorite gamer.

The perfect last-minute present for a gamer in your life is the gift of PC gaming on any device.

Grab a GeForce NOW Priority membership <u>digital gift card</u>, available in two-, six- or 12-month options. Power up your gamer's GeForce NOW compatible devices with the kick of a full gaming rig, priority access to gaming servers, extended session lengths and RTX ON to take supported games to the next level of rendering quality.

Check out the GeForce NOW membership page for more information on priority benefits.

Gift cards can be redeemed on an existing GeForce NOW account or added to a new one. Existing Founders and Priority members will have the number of months added to their accounts.

Let it Stream, Let it Stream, Let it Stream

No matter if the weather outside is frightful, streaming games is delightful.

GFN Thursday is all about games. It also means taking games to the next level. This week, Far Cry 6 and Bright Memory: Infinite go bigger and bolder with support for RTX ON.

Create your own farm and let the good times grow in Farming Simulator 22.

Plus, this GFN Thursday, enjoy six new games ready to stream from the GeForce NOW library:

- * SCARF (new game launch on Steam and Epic Games Store, Dec. 23)
- * EVE Online (Epic Games Store)
- * Farming Simulator 22 (Steam and Epic Games Store)
- * House Flipper (Steam and Epic Games Store)
- * Second Extinction (Epic Games Store)
- * Tannenberg (Steam and Epic Games Store)

Note: members who purchased the Farming Simulator 22 DLC directly from their website will not be able to access it on GeForce NOW. DLC purchased from the respective supported game store - Steam or Epic Games Store - will be playable.

We make every effort to launch games on GeForce NOW as close to their release as possible, but, in some instances, games may not be available immediately.

Also, keep an eye out for the free Epic Games Store titles that are being given away over the holidays. Like last year, we'll look to add as many of these as we can when we return next year.

Whether you're celebrating the holidays or just looking forward to a weekend full of gaming, tell us what games are bringing you joy on <u>Twitter</u> or in the comments below.

: you're out for holiday break; no work, no school

what game are you streaming on GFN first? 🗠

- NVIDIA GeForce NOW (@NVIDIAGFN) December 20, 2021
- * Original Link

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Document LCDVP00020211223ehcn00ego



LG Ultra Gear Gaming Laptop Revealed With Intel 11th-Gen Core i7 CPU and Nvidia RTX 3080 GPU

Yetnesh Dubey 544 words 22 December 2021 Digit HTDIGI English

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India, Dec. 22 -- TheLG Ultra Gear 17G90Q is the first gaming laptop from the brand ina long time. LG isn't a brand known for making gamer-focused products. They're mostly known for making the thin and light "Gram" series and their value for money TV sets. Beyond that,LG generally focuses on manufacturing home appliances. However, times are changing and now eSports gaming tournaments could very well see sponsorships from LG, the makers of your favourite fridge. Nonetheless, here's everything you need to know about the LG Ultra Gear 17G90Q.

LG Ultra Gear 17G90Q Specs and Features

First and foremost, the LG laptop comes with an Intel 11th Gen Core i7 Tiger Lake processor. Our best guess would be an Intel Core i7-11800H featuring 8-cores and 16-threads along with 4.60GHz max turbo frequency and 24MB Intel smart L3 cache. In terms of GPU, the LG Ultra Gear G17G90Q will feature an Nvidia RTX 3080 Max-Q graphics card. This particular GPU features a massive 16GB GDDR6 of visual memory, which should be enough to handle the ever-increasing requirements of modern AAA gaming. At the time of writing this article, no word is available on the TGP of the GPU.

The LG Ultra Gear 17G90Q features a 17-inch 1080p display with support for up to a 300hz refresh rate. I guess the screen response time would also be close to 1ms as well. In terms of RAM and storage, the laptop features 32GB DDR4 RAM and 1TB SSD storage. Considering how LG packs its products, like the LG Gram 2021, the storage will most likely be upgradable via a second M.2 slot on this gaming laptop.

The LG Ultra Gear 17G90Q also comes equipped with all the necessary ports like a USB Type A, Type C, an RJ45 Ethernet port, an HDMI slot, a microSD port alongside a Thunderbolt port as well. Gaming is power intensive and that's why LG Ultra Gear comes with a massive 93Wh battery. It is a little less than the 99Wh battery that comes with the likes of the MSI GE66 Raider gaming laptop though.

Packing all these components and keeping them cool takes a lot of space hence the LG Ultra Gear 17G90Q is 21.4mm thick, which is slightly thicker than the Alienware X17 which measures 20.99mm. The latter does a great job at keeping its internals cool thanks to four powerful fans and a special thermal paste compound. In terms of weight, the LG Ultra Gear 17G90Q is surprisingly light thanks to an overalls weight of 2.6kg, much lighter than the Alienware X17, another 17-inch laptop with a weight of 3.19kg.

The LG Ultra Gear 17G90Q will hit the shelves in the USA and South Korea in early 2022 with more details coming out soon at the upcoming CES 2022.

Also Read: Would you buy a 42-inch LG OLED TV?

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Document HTDIGI0020211222ehcm00005

NVIDIA Intros Ampere GeForce RTX 2050, GeForce MX570 & Turing MX550 GPUs For Entry-Level Gaming Laptops

Hassan Mujtaba 846 words 17 December 2021 Wccftech.com NEWAGAE English

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NVIDIA has introduced three new GPUs for the laptop segment based on its Turing & Ampere architecture, the GeForce RTX 2050, GeForce MX570 & MX550.

NVIDIA Intros GeForce RTX 2050, GeForce MX570 & GeForce MX550 For Entry-Level Gaming Laptops

The NVIDIA GeForce RTX 2050 GPU is the latest laptop gaming SKU based on the Ampere graphics architecture along with the GeForce MX570 while the GeForce MX550 is based on the Turing architecture. It looks like Turing has officially made a comeback on both <u>desktops and laptops in 2021</u> and there is a good reason given the heated competition from AMD and Intel that's coming next quarter. The NVIDIA RTX 2050 is also a brand new SKU as we haven't seen it on either the desktop or laptop segment before.

Starting with the specifications, the <u>GeForce RTX 2050</u> is based on the GA107 GPU core with 2048 cores which is actually more than the GeForce RTX 2060 laptop variant. It features a boost clock of up to 1477 MHz and has a TGP of up to 45W. The GPU features 4 GB of GDDR6 memory clocked at 14 Gbps but runs across a 64-bit bus interface which provides 112 GB/s bandwidth. The memory sub-system is the major blow to the RTX 2050 but it makes sense since this is not a replacement of the RTX 2060 but a more entry-level option.

NVIDIA GeForce RTX 20 Series Mobility Lineup (Official Specs):

```
Graphics Card Name NVIDIA GeForce RTX 2050
                                                        NVIDIA GeForce RTX 2060
         NVIDIA GeForce RTX 2070
                                              NVIDIA GeForce RTX 2080
GPU Core
                   GA107
                                                        TU106
         TU106
                                              TU104
Process Node
                   8nm
                                                        12nm FFN
        12nm FFN
                                              12nm FFN
CUDA Cores
                                                        1920 CUDA Cores
                   2048 CUDA Cores
        2304 CUDA Cores
                                              2944 CUDA Cores
                   TBA
                                                        960 MHz
Base Clock
        1215 MHz (Laptop) 885 MHz (Max-Q)
                                            1380 MHz (Laptop) 735 MHz (Max-Q)
Boost Clock
                   1477 MHz (Laptop) 1155 MHz (Max-Q) 1560 MHz (Laptop) 1185 MHz
(Max-Q) 1440 MHz (Laptop) 1185 MHz (Max-Q) 1095 MHz (Laptop) 1590 MHz (Max-Q)
RTX-Ops
                   TRD
                                                        26T
         31-38T
                                              37-53T
Gigarays/s
                   TBD
                                                        3.5
         4 - 5
                                              5-7
                   4 GB GDDR6
VRAM
                                                        6 GB GDDR6
         8 GB GDDR6
                                              8 GB GDDR6
Memory Bus
                   64-bit
                                                        192-bit
         256-bit
                                              256-bit
Memory Clock
                   14 Gbps (Laptop)
                                                        14 Gbps (Laptop)
         14 Gbps (Laptop) 14 Gbps (Max-Q)
                                             14 Gbps (Laptop) 14 Gbps (Max-Q)
Memory Bandwidth
                   112 GB/s
                                                        336 GB/s
         448 GB/s
                                              448 GB/s
TDP
                   30 - 45W
                                                        80 - 90 W
         80-115W
                                              80 - 150 W +
```

Click to view image.

Moving over to the <u>GeForce MX570</u> and <u>MX550</u>, NVIDIA isn't providing detailed specifications but it looks like the MX570 is based on a totally new Ampere GPU SKU, the GA107 while the MX550 uses the Turing TU117 GPU. The GA107 die is already shipping in RTX 3050 laptop SKUs and since the MX series is always the most entry-level die, this would be the most cut-down configuration of the GA107 GPU core.

The GeForce RTX 2050 and MX500 series laptop GPUs support all the latest features such as ray tracing, NVIDIA DLSS, Reflex, and Broadcast, among others. They also work seamlessly with Optimus & are a perfect solution for providing longer battery times with more horsepower over a standard iGPU.

The NVIDIA GeForce RTX 2050 and the GeForce MX570 / MX550 GPUs are expected to ship in entry-level laptops by Spring 2022.

NVIDIA GeForce MX Series GPU Family Specifications:

GPU Name Memory Bus	GPU Architecture	CUDA Cores	GPU Clock	Memory Speed
-		20402	TBA - TBA MHz	ТВА
64-bit?	Ampere GA107	2048?	TBA - TBA MHZ	TBA
		00400	ED 7 1500 MII-	ED 3
	Turing TU117	2048?	TBA - 1500 MHz	TBA
64-bit?		E60 0060	5.40	10 01 0000
	Turing TU117	768-896?	540 - TBA MHz	10 Gbps GDDR6
64-bit				
	Turing TU117	768-896?	TBA - TBA MHz	10 Gbps GDDR6 7 Gbps
GDDR5 64-bit				
	Pascal GP107	640	1354-1468 MHz	7 Gbps GDDR5
64-bit				
GeForce MX 350	Pascal GP107	640	746-937 MHz	7 Gbps GDDR5
64-bit	15W			
GeForce MX 330	Pascal GP108	384	1531-1594 MHz	6/7 Gbps GDDR5
64-bit	25W			
GeForce MX 310	Pascal GP108	256	1341-1379 MHz	6/7 Gbps GDDR5
64-bit	25W			
GeForce MX 250	Pascal GP108	384	1518-1582 MHz	6/7 Gbps GDDR5
64-bit	25W			
GeForce MX 250	Pascal GP108	384	937-1038 MHz	6 Gbps GDDR5
64-bit	10.5W			-
GeForce MX 230	Pascal GP108	256	1518-1531 MHz	6/7 Gbps GDDR5
64-bit	25W			•
GeForce MX 150	Pascal GP108	384	1468-1531 MHz	6 Gbps GDDR5
64-bit	25W			1
GeForce MX 150	Pascal GP108	384	937-1038 MHz	5 Gbps GDDR5
64-bit				
GeForce MX 130		384	1122-1242 MHz	6 Gbps GDDR5
64-bit		001	1100 1010 1110	c cape caare
	Maxwell GM108	256	963-993 MHz	1.8 Gbps DDR3
64-bit		200	505 555 FIIIZ	1.0 Cape abito
0 1 201 0	± 0 11			

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Nvidia Corporation - Get the Best of Cloud Gaming With GeForce NOW RTX 3080 Memberships Available Instantly

Nvidia Corporation published this content on 16 Dec 2021 and is solely responsible for the information contained herein. Distributed by PUBT, unedited and unaltered, on 16 Dec 2021 14:23:25 UTC.

1.124 words

16 December 2021

Public Companies News and Documents via PUBT

LCDVP

English

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Get the Best of Cloud Gaming With GeForce NOW RTX 3080 Memberships Available Instantly

The future of cloud gaming is available NOW, for everyone, with preorders closing and GeForce NOW RTX 3080 memberships moving to instant access. Gamers can sign up for a six-month GeForce NOW RTX 3080 membership and instantly stream the next generation of cloud gaming, starting today.

Snag the NVIDIA SHIELD TV or SHIELD TV Pro for \$20 off and stream PC games to the biggest screen in the home at up to 4K HDR resolution.

Participate in a unique cloud-based DAF Drive, powered by GeForce NOW and Euro Truck Simulator 2.

And check out the four new titles joining the ever-expanding GeForce NOW library this week.

RTX 3080 Memberships Available Instantly

The next generation of cloud gaming is ready and waiting.

Make the leap to the newest generation of cloud gaming instantly. <u>GeForce NOW RTX 3080 memberships</u> are available today for instant access. Preorders poof, be gone!

The new tier of service transforms nearly any device into a gaming rig capable of streaming at up to 1440p resolution and 120 frames per second on PCs, native 1440p or 1600p at 120 FPS on Macs, and 4K HDR at 60 FPS on SHIELD TV, with ultra-low latency that rivals many local gaming experiences. On top of this, the membership comes with the longest gaming session length - clocking in at eight hours - as well as full control to customize in-game graphics settings, and RTX ON rendering environments in cinematic quality in supported games.

Level up your gaming experience to enjoy the GeForce NOW library of over 1,100 games with the boost of a six-month RTX 3080 membership streaming across your devices for \$99.99. Founders receive 10 percent off the subscription price and can upgrade with no risk to their "Founders for Life" benefits.

For more information, check out our membership FAQ.

The Deal With SHIELD

The GeForce NOW experience goes legendary, playing in 4K HDR exclusively on the NVIDIA SHIELD - which is available with a sweet deal this holiday season.

Grab a controller and stream PC gaming at up to 4K with GeForce NOW on SHIELD TV.

Just in time for the holidays, give the gift of great entertainment at a discounted price. Starting Dec. 13 in select regions, get \$20 (\$30 CAD, €25, £20) off SHIELD TV and SHIELD TV Pro. But hurry, this offer ends soon! And in the U.S., get six months of Peacock Premium as an added bonus, to enrich the entertainment experience.

With the new GeForce NOW RTX 3080 membership, PC gamers everywhere can stream with 4K resolution and HDR on the SHIELD TV, bringing PC gaming to the biggest screen in the house. Connect to Steam, Epic Games Store and more to play from your library, find new games or check out the 100+ free-to-play titles included with a GeForce NOW membership.

Customize play even further with your preferred gaming controller by connecting SHIELD TV with Xbox One, Series X, PlayStation DualSense or DualShock 4 and Scuf controllers and bring your gaming sessions to life with immersive 7.1 surround sound.

Roll On Into the Ride and Drive

Push the pedal to the metal driving the 2021 DAF XF, available in Euro Truck Simulator 2.

GeForce NOW is powering up new experiences with SCS Software by supporting a unique <u>DAF Drive</u> experience. It adds the New Generation DAF XF to the popular game <u>Euro Truck Simulator 2</u> and gives everyone the opportunity to <u>take a virtual test drive</u> through a short and scenic route, streaming with GeForce NOW. Take the wheel of one of the DAF Truck vehicles, instantly, on the <u>DAF virtual experience website</u>.

Coming in tow is a free in-game content update to the full Euro Truck Simulator 2 game, which brings the 2021 DAF XF to players. Ride in style as you travel across Europe in the newest truck, test your skill and speed, deliver cargo and become king of the road, streaming on the cloud.

Moar Gamez Now & Later, Plz

The only way to survive the Rundown is by working together.

Late last week a pair of games got big GeForce NOW announcements, GTFO and ARC Raiders.

GTFO is now out of early access. Jump on into this extreme cooperative horror shooter that requires stealth, strategy and teamwork to survive a deadly, underground prison.

ARC Raiders, a free-to-play cooperative third-person shooter from Embark Studios, is coming to GeForce NOW in 2022. In the game, which will be available on Steam and Epic Games Store, you and your squad of Raiders will unite to resist the onslaught of ARC - a ruthless mechanized threat descending from space.

Plus, slide on into the weekend with a pack of four new titles ready to stream from the GeForce NOW library today:

- * The Crackpet Show (new game launch on Steam, Dec. 16)
- * One Hand Clapping (leaving early access on Steam and Epic Games Store, Dec. 14)
- * FOREWARNED (Steam)
- * Inscryption (Steam and Epic Games Store)

We make every effort to launch games on GeForce NOW as close to their release as possible, but, in some instances, games may not be available immediately.

Grab a Gift for a Gamer

Looking to spoil a gamer or yourself this holiday season?

<u>Digital gift cards</u> for GeForce NOW <u>Priority memberships</u> are available in two-, six- or 12-month options. Make your favorite player happy by powering up their GeForce NOW compatible devices with the kick of a full gaming rig, priority access to gaming servers, extended session lengths and RTX ON for supported games.

Gift cards can be redeemed on an existing GeForce NOW account or added to a new one. Existing Founders and Priority members will have the number of months added to their accounts.

As your weekend gaming session kicks off, we've got a question for you:

what game on GFN to be played in 4K HDR on a big screen?

and yes, you're allowed to put a top 3-5 if needed

- NVIDIA GeForce NOW (@NVIDIAGFN) December 15, 2021

Shout at us on Twitter or in the comments below.

* Original Link

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Document LCDVP00020211216ehcg00gfr



The best gaming laptops could get even better according to new Nvidia RTX 3080 Ti leak

Matt Hanson
379 words
15 December 2021
TechRadar
TECHR
English
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New leak suggests Nvidia is bringing its high-end RTX 3080 Ti graphics card to laptops. Could we see it at CES 2022?

It looks like gaming laptops could get a major powerup in 2022, as new rumors suggest that Nvidia could be making a mobile version of its powerful RTX 3080 Ti GPU.

The latest rumors come from the launch of the AIDA64 diagnostic and benchmark software. On the <u>tool's website</u>, FinalWire, the company behind the software, explains that the new 6.60 version of AIDA64 has been released with support for Intel's new <u>Alder Lake</u> CPUs, as well as the company's upcoming <u>Raptor Lake</u> processors.

However, the company also let slip that the new version also supports "GeForce RTX 3080 Ti Laptop" devices. What's interesting about this is that Nvidia has yet to announce an RTX 3080 Ti laptop GPU. Could this mention be a mistake, or a hint at what's to come?

How likely is it?

While Nvidia hasn't announced the RTX 3080 Ti laptop GPU, it's looking increasingly likely that an announcement is imminent. There's been a steady stream of RTX 3080 Ti laptop rumors swirling for a good few months now. There's been benchmark leaks, references spotted in various lists, and even leaks from laptop manufacturers.

This latest leak, then, adds more fuel to the fire, and makes us even more convinced that RTX 3080 Ti gaming laptops are coming.

It also makes sense. Currently, Nvidia's laptop GPUs top out at the RTX 3080, while its desktop GPUs include the more powerful RTX 3080 Ti and RTX 3090. By bringing the RTX 3080 Ti (in some form) to laptops, Nvidia could bring a hefty upgrade to gaming laptops.

Not only that, but it'll bring more choice – at the moment RTX 3080 gaming laptops are highly in demand, so an influx of new RTX 3080 Ti-toting laptops should give consumers more options.

And, while the mention of GeForce RTX 3080 Ti Laptop devices by FinalWire could just be an error, this is a team that doesn't usually publish false information by accident.

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Document TECHR00020211215ehcf0015v



Nvidia GeForce Now turns MacBooks into gaming laptops

Matt Hanson
473 words
9 December 2021
TechRadar
TECHR
English
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Nvidia GeForce Now runs even better on Macs, including the new MacBook Pros, making gaming on Apple's laptops finally a thing you might want to do.

Nvidia GeForce Now has just got a major update that makes it run even better on Macs, potentially turning any MacBook into a gaming laptop.

<u>GeForce Now</u> is Nvidia's cloud streaming service, which allows you to play games hosted on a remote PC on almost any device either through a web browser, or via the GeForce Now app. We've been incredibly impressed with the service, including the <u>new RTX 3080 subscription tier</u>, which allows you to play modern games with advanced graphical effects such as ray tracing on devices that usually wouldn't be able to run those games – such as smartphones, older laptops and Chromebooks. All you need is an internet connection.

The GeForce Now app is also available for Macs, delivering games that wouldn't normally run on Apple's hardware, and the new 2.0.36 update brings improvements for Mac gamers.

Crucially, GeForce Now will now run games in the correct aspect ratio for Apple's excellent <u>MacBook Pro 14-inch (2021)</u> and <u>MacBook Pro 16-inch (2021)</u> devices.

Pretty much all MacBooks, including the MacBook Air (M1, 2020), can now run games at 1600p, with a powerful Nvidia RTX 3080 GPU effectively powering them if people subscribe to the new RTX 3080 subscription tier, which costs \$99.99 / £89.89 (around AU\$140) for six months.

There's also a cheaper 'priority' tier for \$49.99/£44.99 (around AU\$70) which offers resolutions up to 1080p, as well as a free tier with less powerful hardware and a game session limit of one hour.

This means you can play games like <u>Cyberpunk 2077</u> with ray tracing effects on a MacBook – something you can't usually do. As MacBooks use a slightly different aspect ratio and resolution compared to gaming laptops, this new update should make games look even better on Apple's devices.

Smoother Ubisoft gaming

There's also good news for people who play a lot of Ubisoft games such as <u>Far Cry 6</u> and <u>Assassin's Creed: Valhalla</u>, as you can now link your Ubisoft Connect account to GeForce Now, like you can also do with Steam.

This means you don't have to log in to individual Ubisoft games when launching them through GeForce Now. This will make launching Ubisoft games a lot smoother, and is certainly a welcome change.

Another nice thing about GeForce Now is that all games are kept updated, so you won't be faced with a big download when you want to play, unlike when gaming on your own PC.

MacBook running Far Cry 6 using GeForce Now (Nvidia / Ubisoft)

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NVIDIA Next-Gen Gaming GPUs, GeForce RTX 40 'Ada Lovelace' Series, Launching in 2022 & Will Utilize TSMC's 5nm Process Node

Hassan Mujtaba 995 words 30 November 2021 Wccftech.com NEWAGAE English

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NVIDIA's next-generation GeForce RTX 40 series gaming graphics cards based on the Ada Lovelace GPU architecture are being prepped for a major 2022 launch. In its latest report, DigiTimes states that partners including Taiwan factories that are partners with NVIDIA are getting ready for a major GPU refresh next year in the form of the GeForce RTX 40 series.

NVIDIA Partners at Taiwan Prep For Major GeForce RTX 40 'Ada Lovelace' Series GPU Launch in 2022, Gaming GPUs To Utilize TSMC's 5nm Process Node

We have already heard about the possibility of NVIDIA utilizing TSMC's 5nm process node for its next-generation gaming GPUs codenamed Ada Lovelace from <u>reliable leakers</u> but this time, the information comes from directly within the Taiwanese based factories where these GPUs will be made. While the DigiTimes article is behind a paywall, a snippet of the information was revealed by RetiredEnginner (@chiakokhua) over at Twitter.

"Nvidia's biennial GPU refresh coming in 2022, riding on metaverse and gaming. Following H100, based on Hopper architecture, using TSMC's 5nm + CoWoS, aimed at datacenter/AI, gaming GPU RTX40 series, based on Ada Lovelace architecture, will also tap TSMC's 5nm..."

- RetiredEngineer® (@chiakokhua) November 30, 2021

The NVIDIA Ada Lovelace GPUs will power the next-generation GeForce RTX 40 graphics cards that will go head-on with AMD's RDNA 3 based Radeon RX 7000 series graphics cards. There's still some speculation regarding the use of MCM by NVIDIA. The Hopper GPU, which is primarily aimed at the Datacenter & AI segment, is allegedly taping out soon and will feature an MCM CoWoS architecture. NVIDIA won't be using an MCM design on its Ada Lovelace GPUs so they will keep the traditional monolithic design. The Ada Lovelace GPUs are expected to bring in a series of key innovations, architecturally.

NVIDIA GeForce RTX 4090 Graphics Card - Ada Lovelace Powered AD102 Flagship GPU

Based upon previous rumors, there have been whispers that NVIDIA would utilize TSMC's N5 (5nm) process node for its Ada Lovelace GPUs. This includes the AD102 SKU too which will be an entirely monolithic design. In his latest tweet which talks about the specific GPU configurations, the AD102 GPU is said to feature a clock speed as high as 2.5 GHz (2.3 GHz average boost). The specific tweet states that the GPU clock for Ada Lovelace 'AD102' could be 2.3 GHz or greater so let's take that as a baseline and previously leaked specifications to figure out where the performance should land.

The NVIDIA AD102 "ADA GPU" appears to have 18432 CUDA Cores based on the preliminary specs (which can change), housed within 144 SM units. This is almost twice the cores present in Ampere which was already a massive step up from Turing. A 2.3-2.5 GHz clock speed would give us up to 85 to 92 TFLOPs of compute performance (FP32). This is more than twice the FP32 performance of the existing RTX 3090 which packs 36 TFLOPs of FP32 compute power.

Click to view image.

The 150% performance jump looks huge but one should remember that NVIDIA already gave a big jump in FP32 numbers this generation with Ampere. The Ampere GA102 GPU (RTX 3090) offers 36 TFLOPs while the Turing TU102 GPU (RTX 2080 Ti) offered 13 TFLOPs. That's over a 150% increase in FP32 Flops but the real-world gaming performance increase for the RTX 3090 averaged at around 50-60% faster over the RTX 2080 Ti. So one thing we shouldn't forget is that Flops don't equal GPU gaming performance these days. Furthermore, we don't know if 2.3-2.5 GHz is the average boost or the peak boost with the former meaning that there could be even higher compute potential for AD102.

Aside from that, the leaker also states that the NVIDIA GeForce RTX 40 flagship would retain a 384-bit bus interface, similar to the RTX 3090. What's interesting is though that the leaker mentions G6X which means that NVIDIA won't be moving to a new memory standard until after Ada Lovelace and utilize the higher

pin-speeds of G6X of 21 Gbps for its next-generation cards before we see a newer standard (e.g. GDDR7). The card will feature 24 GB of memory so we can either expect single-sided 16Gb DRAM or dual-sided 8Gb DRAM modules.

Click to view image.

NVIDIA CUDA GPU (RUMORED) Preliminary:

GPU	TU102	GA102	AD102
Architecture	Turing	Ampere	Ada Lovelace
Process	TSMC 12nm NFF	Samsung 8nm	5nm
Graphics Processing Clusters (GPC)	6	7	12
Texture Processing Clusters (TPC)	36	42	72
Streaming Multiprocessors (SM)	72	84	144
CUDA Cores	4608	10752	18432
Theoretical TFLOPs	16.1	37.6	~90 TFLOPs?
Memory Type	GDDR6	GDDR6X	GDDR6X
Memory Bus	384-bit	384-bit	384-bit
Memory Capacity	11 GB (2080 Ti)	24 GB (3090)	24 GB (4090?)
Flagship SKU	RTX 2080 Ti	RTX 3090	RTX 4090?
TGP	250W	350W	450-650W?
Release	Sep. 2018	Sept. 20	2022 (TBC)

The NVIDIA Ada Lovelace GPUs will power the next-generation GeForce RTX 40 graphics cards that will go head-on with AMD's RDNA 3 based Radeon RX 7000 series graphics cards. There's still some speculation regarding the use of MCM by NVIDIA. The Hopper GPU, which is primarily aimed at the Datacenter & AI segment, is allegedly taping out soon and will feature an MCM architecture. NVIDIA won't be using an MCM design on its Ada Lovelace GPUs so they will keep the traditional monolithic design.

Which next-generation GPUs are you looking forward to the most?

- * AMD RDNA 3 (Navi 3X Radeon RX GPUs)
- * NVIDIA Ada Lovelace (GeForce RTX GPUs)
- * Intel ARC Alchemist (ARC Graphics Cards)

View Results

Click to view image.

Document NEWAGAE020211130ehbu0002t



Linux gaming takes a big step forward with full Nvidia DLSS support in Proton

Darren Allan
265 words
26 November 2021
TechRadar
TECHR
English
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Plus the latest version of Proton offers improved compatibility with anti-cheat software.

The latest version of <u>Proton</u> comes with full support for <u>Nvidia DLSS</u>, among other benefits such as better compatibility with anti-cheat software.

For the uninitiated, Proton is the compatibility layer which allows Windows games to be played under Valve's SteamOS operating system, and version 6.3-8 delivers official support for DLSS in DX11 and DX12 games. This follows Nvidia making its frame rate boosting tech <u>available for Vulkan titles earlier in the year</u> (meaning the likes of Doom Eternal got the benefit of DLSS).

With this wider DirectX support, a ton of titles are now eligible for the DLSS treatment running under Linux via Proton – but obviously, there are only a limited amount of games that support DLSS (the devs have to bake it in), and at this stage, Linux gamers still need to tweak a couple of parameters manually as <u>Gaming on Linux</u>, which spotted this, explains.

Other goodies include a host of freshly compatible Windows games for Proton, and among those are some big-name new releases such as <u>Deathloop</u>, <u>Age of Empires IV</u> and <u>Marvel's Guardians of the Galaxy</u> (note that the latter is for AMD graphics cards only).

Furthermore, a couple of initial games which use the BattlEye anti-cheat system have been announced as fully working under Proton, namely Mount & Blade II: Bannerlord and ARK: Survival Evolved.

Marvel's Guardians of the Galaxy supports DLSS (Square Enix)

Document TECHR00020211126ehbg000xg



LG to bring NVIDIA GeForce NOW cloud gaming to webOS smart TVs

AnimationXpress Team
Distributed by Contify.com
367 words
23 November 2021
AnimationXpress
ATANIX
English
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LG Electronics (LG) announced a partnership with NVIDIA to be the first TV manufacturer to develop a Smart TV app of GeForce NOW, the premier cloud game-streaming service for LG TVs running webOS. Boasting large screen sizes, lifelike picture quality and high refresh rates, LG's OLED TVs are a perfect match for GeForce NOW. Currently available on NVIDIA SHIELD, Windows PC, macOS, Chrome OS, Android and Safari browser for iPhone and iPad, GeForce NOW allows gamers to start playing on their LG TVs and continue on nearly any device they own.

The app will be available in beta starting this week in the LG Content Store on select 2021 LG 4K OLED, QNED Mini LED and NanoCell TV models in 80 markets. The app will enable LG TV owners with compatible TVs to instantly enjoy over 35 free-to-play games with just a compatible controller, no additional hardware required.

Games include Rocket League and Destiny 2 plus hit titles such as Marvel's Guardians of the Galaxy and Crysis Remastered Trilogy, all playable at up to 1080p resolution and 60 frames per second. GeForce NOW Priority members get access to the most advanced platform for ray tracing and AI technologies, streaming from NVIDIA RTX-powered servers in data centers worldwide for the most responsive gameplay and gorgeous, high-quality graphics.

The powerful combination of GeForce NOW and LG OLED TV will mean immersive gaming at its finest. LG OLED's self-lit pixels ensure the most vibrant colors and deepest blacks to make in-game environments and characters more realistic than ever. LG TVs also deliver ultra-fast one millisecond response time and super-low input lag for smoother visuals, better control and a key advantage over the competition.

"LG customers are expecting the best when it comes to gaming on a large screen. Partnering with NVIDIA to bring GeForce NOW to LG TV owners is a sign of our commitment to deliver the best gaming experience on LG TVs running webOS," said LG Electronics Home Entertainment Company senior VP of corporate business strategy Lee Sang-woo.

Document ATANIX0020211123ehbn0000f



Nvidia RTX gaming laptop prices plummeting on Newegg – but sale ends soon

John Loeffler 735 words 21 November 2021 TechRadar TECHR English

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Newegg's Black Friday deals on RTX gaming laptops are dropping prices to some of the lowest we've seen all year.

Newegg is rolling out its <u>Black Friday gaming laptop deals</u> in earnest and some Nvidia RTX gaming laptops are dropping to the lowest prices we've seen this year, like this deal on the <u>MSI GL66 Pulse with RTX 3060 GPU for just \$1,099</u> after instant savings and rebate offer. Or, you can get this <u>MSI GP66 Leopard for \$1,799</u> with instant savings and rebate offer, a \$500 savings.

With <u>Black Friday deals</u> rolling out in earnest this week, these are some of the best prices on RTX gaming laptops we're likely to see, so don't be afraid to jump on one of these deals if you see something you like – they aren't likely to get much lower.

You'll have to hurry though, many of these offers end in a few hours, so you'll have to move fast if you want to get them at these prices.

(Not in the US? Scroll down for deals in your region).

Today's best Newegg RTX gaming laptop Black Friday deals

toCheeeek

Gigabyte Aero 15 OLED YD, 15.6-inch 4K AMOLED, Intel i7-11800H, Nvidia RTX 3080, 16GB RAM, 1TB SSD | \$2,999 \$1,899 at Newegg (Instant savings and rebate)

Save \$1,100 - Right off the bat, you're saving \$800 with this Gigabyte Aero 15 OLED, but with an additional mail-in rebate offer, you can save another \$300, bringing the total savings to \$1,100. This is definitely one of the best Black Friday gaming laptop deals we've seen, but it ends early tomorrow morning, so you need to move on it soon if you want to save big on this beast.

toCheeeek

MSI GL66 Pulse, Intel i7-11800H, Nvidia RTX 3060, 16GB RAM, 512GB SSD + 1TB HDD | \$1,499 \$1,099 at Newegg (Instant savings and rebate offer)

Save \$400 - Save \$300 right off the top on this MSI GL66 Pulse gaming laptop and get an extra \$100 back with a mail-in rebate offer, making this excellent midrange RTX 3060 gaming laptop almost as cheap as a last-gen budget gaming laptop. You'll have to move fast though, this deal ends early tomorrow morning.

toCheeeek

MSI GP66 Leopard, Intel i7-11800H, Nvidia RTX 3080, 16GB RAM, 1TB NVMe SSD | \$2,299 \$1,799 at Newegg (Instant savings and rebate offer)

Save \$500 - Save \$400 instantly on this MSI GP66 Leopard gaming laptop and get an \$100 back with a mail-in rebate offer. Featuring an RTX 3080 GPU and a 240Hz FHD (1080p) display, the visuals on this gaming laptop are going to be some of the best you're going to find anywhere. You'll have to move fast though, this deal ends early tomorrow morning.

toCheeeek

Gigabyte G5 MD, Intel i5-11400H, Nvidia RTX 3050 Ti, 16GB RAM, 512GB SSD | \$1,199 \$849 at Newegg (Instant savings and rebate offer)

Save \$350 - Getting RTX 30-series graphics on a gaming laptop for less than \$1,000 is a tall order, but with this RTX 3050 Ti gaming laptop from Gigabyte at Newegg, you can get one for less than \$850, making it one of the best gaming laptop Black Friday deals we've seen so far. You'll have to hurry though, this deal ends early tomorrow morning.

toCheeeek

Acer Nitro 5, AMD Ryzen 7 5800H, Nvidia RTX 3050 Ti, 16GB RAM, 512GB SSD | \$1,149 \$1,069 at Newegg

Save \$80 - If you're looking for the power and performance of an AMD Ryzen CPU and Nvidia RTX GPU, this Acer Nitro 5 is one of the better configurations we've seen, especially at this price. If you want to grab it though, you'll need to move quick, as this deal ends early tomorrow morning.

More RTX gaming laptop deals

No matter where you live, you'll find all the lowest prices for RTX gaming laptops from around the web right here, with offers available in your region.

More Black Friday deals

* Check out the best Black Friday gaming laptop deals on the best gaming laptops around

RTX gaming laptops against a green background and a TechRadar Don't Miss badge (Future)

Document TECHR00020211121ehbl001e1



Nvidia reports record quarterly revenue on strong gaming and data centre sales

devz123@gmail.com(Dev Kundaliya) 572 words 19 November 2021 Computing CMPTNG English

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Revenue touched a new quarterly record of \$7.1 billion amid the continuing worldwide chip shortage

Nvidia has posted <u>another quarter of record revenues</u>, beating analyst's expectations, as the <u>pandemic boosted demand</u> for videogames and services offered by data centres.

The company posted record revenue in its gaming, data centre and professional visualisation businesses.

Nvidia's revenue touched a new quarterly record of \$7.1 billion (£5.2 billion), up 50.3 per cent compared to the same period last year and a nine per cent increase quarter-on-quarter. Wall Street expectations were \$6.8 billion (about £5 billion).

Data centre revenues of \$2.9 billion (£2.2 billion) also surpassed expectations, up 54.5 per cent year-on-year on strong demand for artificial intelligence chips.

Nvidia chief financial officer Colette Kress said the record increase in data centre revenue was mainly driven by sales of Ampere architecture products, which are used for cloud computing and other workloads like natural language processing.

The gaming division recorded revenues of \$3.22 billion (£2.4 billion), up 42 per cent YoY and beating analyst's expectations of \$3.18 billion (about £2.35 billion).

Nvidia said the increase was primarily due to increased sales of its GeForce consumer graphics processors, although supply remained limited.

Nvidia's gaming graphics chips now have software that prevents them from being used for cryptocurrency mining. The company said it sold \$105 million-worth (£78 million) of cryptocurrency-specific graphics cards, down from \$266 million (£197 million) in the previous guarter.

"The third quarter was outstanding, with record revenue," Nvidia CEO Jensen Huang said.

"Demand for Nvidia AI is surging, driven by hyperscale and cloud scale-out, and broadening adoption by more than 25,000 companies. Nvidia RTX has reinvented computer graphics with ray tracing and AI, and is the ideal upgrade for the large, growing market of gamers and creators, as well as designers and professionals building home workstations."

Nvidia expects to record revenues of \$7.4 billion (£5.5 billion) in Q4, representing 47.9 per cent YoY growth.

However, despite record quarterly sales and revenue, not everything is going well for Nvidia.

The company's planned \$40 billion (£30 billion) deal to acquire British chip designer Arm has hit a regulatory wall in the UK, where government has <u>ordered an in-depth review</u>.

The inquiry will take around six months, following which the government could approve the deal, block it, or allow it to pass with certain undertakings.

Nvidia said it would work with the government to address concerns. It said a phase 2 probe would allow it to show how the deal would help strengthen Arm and encourage competition.

The US chipmaker agreed to buy Arm from Softbank in September 2020, triggering a backlash from rivals, politicians and customers. Nvidia is itself an Arm licensee, prompting fears that it could give itself preferential treatment. Other licensees are concerned that the acquisition could impact Arm's position as a neutral supplier.

The deal also needs to get through regulators in both the USA and China before it is finalised.

In the company's filing Wednesday, Kress said the US Federal Trade Commission had expressed concerns about the deal and that Nvidia was in talks with the regulator to address those concerns.

To view photo, click here.

Document CMPTNG0020211120ehbj00004



online news
LG To Bring NVIDIA GeForce NOW Cloud Gaming To webOS Smart TVs

365 words 19 November 2021 ETMAG.com FMETMA English

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LG Electronics (LG) announced a partnership with NVIDIA to be the first TV manufacturer to develop a Smart TV app of GeForce NOW, the premier cloud game-streaming service, for LG TVs running webOS. Boasting large screen sizes, lifelike picture quality and high refresh rates, LG's OLED TVs are a perfect match for GeForce NOW. Currently available on NVIDIA SHIELD, Windows PC, macOS, Chrome OS, Android and Safari browser for iPhone and iPad, GeForce NOW allows gamers to start playing on their LG TVs and continue on nearly any device they own.

The app will be available in beta starting this week in the LG Content Store on select 2021 LG 4K OLED, QNED Mini LED and NanoCell TV models in 80 markets. The app will enable LG TV owners with compatible TVs to instantly enjoy over 35 free-to-play games with just a compatible controller, no additional hardware required. Games include Rocket League and Destiny 2 plus hit titles such as Marvel's Guardians of the Galaxy and Crysis Remastered Trilogy, all playable at up to 1080p resolution and 60 frames per second. GeForce NOW Priority members get access to the most advanced platform for ray tracing and Al technologies, streaming from NVIDIA RTX-powered servers in data centers worldwide for the most responsive gameplay and gorgeous, high-quality graphics.

The powerful combination of GeForce NOW and LG OLED TV will mean immersive gaming at its finest. LG OLED's self-lit pixels ensure the most vibrant colors and deepest blacks to make in-game environments and characters more realistic than ever. LG TVs also deliver ultra-fast 1 millisecond response time and super-low input lag for smoother visuals, better control and a key advantage over the competition.

"LG customers are expecting the best when it comes to gaming on a large screen," said Lee Sang-woo, senior vice president of corporate business strategy at LG Electronics Home Entertainment Company. "Partnering with NVIDIA to bring GeForce NOW to LG TV owners is a sign of our commitment to deliver the best gaming experience on LG TVs running webOS."

Document FMETMA0020211119ehbj00007

NASDAQ OMX' | GlobeNewswire

Simplicity Esports Signs Equipment Loan to Purchase New PCs with NVIDIA 3090 GPUs for Gaming and Cryptocurrency Mining in its Esports Gaming Centers

536 words 19 November 2021 19:59 GlobeNewswire PZON English

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Simplicity Esports Signs Equipment Loan to Purchase New PCs with NVIDIA 3090 GPUs for Gaming and Cryptocurrency Mining in its Esports Gaming Centers

The \$400,000 loan is funded by two accredited investors and will be used to purchase 80 PCs.

Boca Raton, Florida, Nov. 19, 2021 (GLOBE NEWSWIRE) -- Simplicity Esports and Gaming Company (OTCQB:WINR) ("Simplicity Esports") announced that it has signed an equipment loan that will be used to purchase 80 new PCs. The loan is secured by the PCs, has a 10% interest rate, and is payable in 60 monthly installments of principal and interest.

Roman Franklin, CEO of Simplicity Esports, stated, "I am thrilled to continue upgrading our existing gaming stations across our footprint of esports gaming centers. NVIDIA 3090 graphics cards provide a best in class gaming experience for our customers, and are highly effective for mining cryptocurrencies, such as Ethereum. Based on current prices of Ethereum, the 3090's should generate over \$20,000 per month in gross revenue. We intend to continue upgrading the existing 450 gaming systems in our corporate owned gaming centers that currently include Xbox consoles, and PCs with 1660 Super, 2060, 2060 Super, and 2080 graphics cards."

Simplicity Esports intends to list its common stock and warrants on The NASDAQ Capital Market. There is no guarantee that the open listing application will be approved by The Nasdaq Capital Market.

About Simplicity Esports and Gaming Company:

Simplicity Esports and Gaming Company (WINR) owns 17 esports gaming centers, and is the franchisor for 16 esports gaming centers that give the public an opportunity to experience gaming and esports in competitive and casual social settings, regardless of skill or experience. Simplicity Esports also owns a Riot Games League of Legends franchise and top Brazilian esports organization, Flamengo Esports. Simplicity and Flamengo branded teams compete in popular games such as League of Legends(R), FreeFire(R), Wild Rift(R), and Heroes of the Storm(R). Simplicity Esports is also in the process of designing, minting, and selling non-fungible tokens (NFTs) for the esports and gaming industries. Simplicity Esports also organizes and hosts various in-person events and play from home, online tournaments.

 $\label{eq:free} FreeFire(R) \ , \ Heroes \ of \ the \ Storm(R) \ , \ League \ of \ Legends(R) \ , \ and \ Wild \ Rift(R) \ are \ registered \ trademarks \ of \ their \ respective \ owners.$

Forward-Looking Statements:

This press release contains statements that constitute "forward-looking statements." Forward-looking statements are subject to numerous conditions, many of which are beyond Simplicity Esports' control, including those set forth in the Risk Factors section of Simplicity Esports' Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on August 30, 2021 and our subsequent SEC filings, as amended or updated from time to time. Copies of Simplicity Esports' filings with the SEC are available on the SEC's website at www.sec.gov. Simplicity Esports undertakes no obligation to update these statements for revisions or changes after the date of this release, except as required by law.

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Document PZON000020211119ehbj00052



PC/ Laptops

ViewSonic Elite XG270Q <mark>Gaming</mark> Monitor With 165Hz Refresh Rate, Nvidia G-Sync Support Launched in India

Satvik Khare 403 words 16 November 2021 17:24 NDTV NDTVIN English

Copyright. 2021. NDTV Convergence Ltd., New Delhi, India.

ViewSonic on Tuesday launched the ViewSonic Elite XG270Q gaming monitor in India. It sports a 27-inch quad-HD IPS LED display with a 16:9 aspect ratio, a 165Hz refresh rate, 1ms of response time, and a blue light filter. The ViewSonic Elite XG270Q also has Nvidia G-Sync compatible drivers and gets HDR400 support. The newly launched gaming monitor also has a hook for mounting headphones and comes with a special anchor to route the mouse wire. ViewSonic Elite XG270Q has a viewing angle of 178-degrees horizontally and vertically.

ViewSonic Elite XG270Q price in India

The ViewSonic Elite XG270Q is <u>priced</u> at Rs. 50,999. However, it is <u>listed</u> on Amazon for Rs. 49,775. The <u>ViewSonic</u> gaming monitor is available in a sole Black colour option but it gets RGB accent and ambient lighting. The e-commerce giant is offering the ViewSonic Elite XG270Q gaming monitor at an EMI starting at Rs. 2,343.

ViewSonic Elite XG270Q specifications, features

The ViewSonic Elite XG270Q gaming monitor features a 27-inch quad-HD (2,560x1,440 pixels) IPS LED bezel-less display with 16.7 million colours, a 165Hz refresh rate, 95 percent DCI - P3 colour gamut, a 16:9 aspect ratio, and a 1,000:1 contrast ratio. The gaming monitor also has Nvidia G-Sync compatibility as well as HDR400 support. The ViewSonic monitor has a 178-degrees viewing angle, horizontally and vertically.

Connectivity options on the ViewSonic Elite XG270Q include a 3.5mm headphone jack, two HDMI 2.0 ports, a display port, three USB Type-A ports, and a USB Type-B port. Players can hang their headphones on the dedicated mount. It also has a special anchor for routing the mouse wire. It has a 100x100mm VESA mount that tilt, swivel, pivot, and can be adjusted for height.

The ViewSonic Elite XG270Q measures 614x571.6x265mm and weighs 7.9 kilograms with the stand. Without it, the gaming monitor measures 614x370x68mm and weighs 4.6 kilograms. Is Red Notice more (or less) than the sum of its leads: Dwayne Johnson, Ryan Reynolds, and Gal Gadot? We discuss this on Orbital, the Gadgets 360 podcast. Orbital is available on Spotify, Gaana, JioSaavn, Google Podcasts, Apple Podcasts, Amazon Music and wherever you get your podcasts.

Click here to view video

Document NDTVIN0020211117ehbg0000y



The Best Prebuilt <mark>Gaming</mark> PC Black Friday Deals (2021): Top Early AMD RX 6000 & NVIDIA RTX 3000 Gaming PCs Savings Found by Retail Egg

475 words 14 November 2021 21:15 Business Wire BWR English

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Early Black Friday prebuilt gaming PC deals are underway. Compare the top early Black Friday VR-ready gaming computer discounts listed below.

BOSTON--(BUSINESS WIRE) -- November 14, 2021--

Early Black Friday prebuilt gaming computer deals for 2021 have arrived. Find the top offers on full tower gaming PCs, micro & small form factor desktops, and more. Check out the latest deals by clicking the links below.

Best Prebuilt Gaming PC Deals:

- -- Save up to 33% on a wide range of pre-built gaming desktops at Walmart
 - save on Alienware, Lenovo, Dell, HP, and MSI pre-built gaming PCs with powerful Core i7 processors.
 - -- Save up to \$815 on best-selling iBUYPOWER prebuilt gaming desktop PCs at Walmart.com get the latest deals on iBUYPOWER PCs with high-end AMD Ryzen processors.
 - -- Save up to \$315 on Pre-Built CyberPowerPC Xtreme Gaming PCs at Walmart featuring Intel Core i5 processors, NVIDIA GeForce GTX GPUs, DDR4 RAM, & SSD storage.
 - -- Save up to \$100 on HP prebuilt gaming desktop PCs at HP.com check live prices on HP ENVY, HP OMEN, HP Pavilion & HP Slim gaming PCs, and All-in-Ones.
 - -- Save on Dell Alienware prebuilt gaming PCs at Dell.com get the best deals on gaming PCs from Dell and Alienware.
 - -- Save on prebuilt gaming PCs from iBUYPOWER, SkyTech, CyberPowerPC & more at Amazon.
- -- Save up to \$150 on NZXT custom gaming PCs and cases at NZXT.com. Best Gaming Laptop Deals:
 - -- Save up to 46% on high-performance gaming laptops from MSI, Razer, ASUS, Lenovo, Acer & HP at

Walmart.

- -- Save up to \$200 on top-rated HP gaming laptops at HP.com experience the convenience of power and portability with HP's OMEN series 15 & 17-inch gaming laptops.
- -- Save on a wide range of Razer gaming laptops at Razer.com get the best deals on Razer Blade Stealth 13, Blade 14, Blade 15 & Blade 17 gaming laptops equipped with Intel 11th gen CPUs.

- -- Save up to 34% on Dell gaming laptops at Dell.com click the link for the latest deals on a wide selection of gaming laptops.
- -- Save up to 30% on a wide range of Razer gaming keyboards, mice, headsets & laptops at Walmart.

Want some more deals? We recommend checking Walmart's Black Friday deals and Amazon's Black Friday page for hundreds of more deals at the moment. Retail Egg earns commissions from purchases made using the links provided.

About Retail Egg: Retail Egg shares e-commerce deals news. As an Amazon Associate and affiliate Retail Egg earns from qualifying purchases.

View source version on businesswire.com: https://www.businesswire.com/news/home/20211114005112/en/

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Document BWR0000020211114ehbe0004c



MSI will outfit its gaming PCs with Intel's 12th-gen CPUs and Nvidia's RTX 30-series

Allisa James
378 words
9 November 2021
TechRadar
TECHR
English
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MSI's upcoming gaming PC lineup will be using the power of Intel's Alder Lake CPUs and Nvidia's RTX 30-series GPUs.

MSI is best known for its wide assortment of gaming laptops, and it's looking to beef up its gaming PCs with Intel 12th Gen Alder Lake processors and Nvidia GeForce RTX 30-series graphics cards.

MSI revealed three new gaming PCs: MEG Aegis Ti5 12th, MEG Trident X 12th, and Aegis RS 12th.

The MEG Aegis Ti5 12th is MSI's flagship PC, as it runs on an Intel Core i9-12900K and Nvidia RTX 3090 as well as features MSI's Silent Storm Cooling 4 system. The MEG Trident X 12th uses an Intel Core i7-12700K and an Nvidia RTX 3090, with an emphasis on cooling thanks to the Silent Storm 3 cooling system and enlarged heatsink it packs. Finally, the Aegis RS 12th is a pre-build that's meant for easy upgrading with the potential to use up to an Intel i9-12900K and up to an Nvidia RTX 3090.

The desktops all ship with Windows 11, meaning that they have access to the new gaming features like Direct Storage and Auto HDR. Though MSI unveiled the full build details, no pricing or availability has been shared as of now.

Analysis: Why Intel Alder Lake?

MSI has clearly outfitted this new line of desktops with some premium hardware, as both Intel Alder Lake and Nvidia Ampere are some of the best components on the market.

In particular, using Alder Lake processors is a stroke of genius thanks to the big.LITTLE architecture powering them. This tech features a mix of performance and efficiency cores to better manage power usage but also improve performance. This means that for more intensive activities, such as gaming, Alder Lake will be using Golden Cove cores while lower priority tasks and apps will use less powerful Gracemont cores instead.

The chips themselves are built with the Intel 7 process, are 13% better in gaming performance than previous-gen chips, and support DDR5.

Via Windows Central

MSI lucky Dragon and Godzilla with mystery graphics card (Future)

Document TECHR00020211109ehb90018k



Nvidia Corporation - NVIDIA Opens New Portals into Digital Twins With Expanded Omniverse Ecosystem and Capabilities

Nvidia Corporation published this content on 09 Nov 2021 and is solely responsible for the information contained herein. Distributed by PUBT, unedited and unaltered, on 09 Nov 2021 09:01:33 UTC.

1.300 words

9 November 2021

Public Companies News and Documents via PUBT

LCDVP

English

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NVIDIA Opens New Portals into Digital Twins With Expanded Omniverse Ecosystem and Capabilities

The realm of virtual worlds takes a major leap forward today with the introduction of new features and partners for NVIDIA Omniverse - speeding the internet's evolution from ordinary 2D into a dazzling world that bursts alive in 3D.

Omniverse - a platform that serves as the connective tissue for physically accurate 3D virtual worlds - is gaining new features such as AR, VR and multi-GPU rendering, as well as integrations for infrastructure and industrial digital-twin applications with software from Bentley Systems and Esri.

Omniverse enables engineers and designers to build physically accurate digital twins of buildings and products, or create massive, true-to-reality simulation environments for training robots or autonomous vehicles before they're deployed in the physical world.

Since its open beta launch in December, Omniverse has been downloaded by more than 70,000 individual creators. It's also being used by professionals at over 700 companies, including BMW Group, CannonDesign, Epigraph, Ericsson, architectural firms HKS and KPF, <u>Lockheed Martin</u> and Sony Pictures Animation.

New Omniverse Technologies and Features

New capabilities launched today for Omniverse include:

- * Omniverse Avatar, a technology platform which connects NVIDIA technologies in speech AI, computer vision, natural language understanding, recommendation engines and simulation technologies to generate interactive AI avatars.
- * Omniverse Replicator, a powerful engine that generates synthetic data for training deep neural networks.

In addition, there are several new features within Omniverse, including:

- * NVIDIA CloudXR, an enterprise-class immersive streaming framework, has been integrated into Omniverse Million Stream Omniverse Allowing users to interactively stream Omniverse experiences to their mobile AR and VR devices.
- * Omniverse VR introduces the world's first full-image, real-time ray-traced VR enabling developers to build their own VR-capable tools on the platform, and end users to enjoy VR capabilities directly.
- * Omniverse XR Remote provides AR capabilities and virtual cameras, enabling designers to view their assets fully ray traced through iOS and Android devices.
- * Omniverse Farm lets teams use multiple workstations or servers together to power jobs like rendering, synthetic data generation or file conversion.
- * Omniverse Showroom, available as an app in Omniverse Open Beta, lets nontechnical users play with Omniverse tech demos that showcase the platform's real-time physics and rendering technologies.

Bentley Systems, Esri Connect to Omniverse for Industrial Digital-Twin Applications

Bentley Systems, the infrastructure engineering software company, is announcing early access availability of Bentley iTwin for NVIDIA Omniverse, which will enable next-generation, physically accurate 4D visualization and construction simulation of infrastructure digital twins for the global infrastructure engineering industry.

With Bentley iTwin for NVIDIA Omniverse, iTwin users have the ability to virtually explore massive, physically accurate industrial plants and offshore structures as if they're walking through them in real time.

Esri, a leading urban design mapping software company, is bringing to Omniverse the Esri ArcGIS CityEngine application, connecting the millions of ArcGIS ecosystem users to the Omniverse platform. Teams will be able to conveniently provide full 3D city models and geographic context with real-time photorealism, unlocking new opportunities to build massive digital twin environments for industries like robotics, autonomous vehicles, retail or telco.

Omniverse Ecosystem Expands

The NVIDIA Omniverse ecosystem continues to grow with new extensions and Omniverse Connectors - live-link plugins to industry 3D design tools being built by a range of partners. Among them are Daz3D, e-on software's PlantFactory, PlantCatalog and VUE, Radical, Reallusion, Replica, Style3D, and TwinBru. Other partners are building support for Universal Scene Description, the "HTML of 3D worlds" and the foundation of the platform, as a first step to connecting to Omniverse, including Adobe Substance 3D, Clo Virtual FashionGolaem, Maxon, Notch, and Wacom.

Omniverse Enterprise Now Generally Available

Omniverse Enterprise has moved to general availability starting today. The platform allows global 3D design teams working across multiple software suites to collaborate in real time, in a shared virtual space, from any device

Omniverse Enterprise provides flexible deployment, from small workgroups to globally distributed teams through a subscription that includes full NVIDIA Enterprise Support services.

Leaders from a variety of industries have been using and evaluating Omniverse.

CannonDesign, a global architecture, engineering and consulting practice, is using Omniverse to speed up collaborative design.

"With NVIDIA Omniverse, we can iterate rapidly and recreate the realism we get when photographing physical scale models to explore design, iterate and amplify our clients' voices during the design process," said Hilda Espinal, chief technology officer and senior vice president at CannonDesign. "As we continue to explore Omniverse, we have high expectations on broadening accessibility, cost savings and enhanced user and consumer experiences. We're very excited to finally arrive at a point where headaches and associated waste in dealing with software interoperability are becoming a thing of the past and we can much more naturally and effortlessly collaborate."

Sony Pictures Animation is exploring NVIDIA Omniverse Enterprise to enable its artists to collaborate on a single scene from anywhere.

"Sony Pictures Animation has always pushed the boundaries of creativity, in both our storytelling and our visuals. NVIDIA Omniverse will provide an exciting foundation for continued innovation toward that goal," said Yiotis Katsambas, executive director of Technology at Sony Pictures Animation. "Omniverse will give our artists the ability to explore complex environments during the story and visual development process - regardless of their physical location - enabling our studio to collaborate seamlessly in ways that were previously impossible."

Epigraph, a product visualization company, is using NVIDIA Omniverse to speed its workflows.

"Working with brands like Yamaha, EGO and Restoration Hardware requires Epigraph to produce incredibly accurate and compelling digital experiences at light speed," said Caleb Dermyer, co-founder of Epigraph. "NVIDIA Omniverse has proven the power of real-time, path-traced visualization so we can go from customer concept to live product experiences in record time."

<u>Ericsson</u>, a leading telecommunications company, is using the Omniverse platform to create a digital twin that simulates and visualizes signal propagation to accelerate feature development and insights in 5G networks.

Availability and Pricing

NVIDIA Omniverse platform for individuals is available for free download at nvidia.com/omniverse. The NVIDIA Omniverse Enterprise solution is available worldwide through global computer makers BOXX Technologies, Dell Technologies, HP, Lenovo and Gupermicro, and distribution partners Arrow, Carahsoft Page 73 of 181 © 2022 Factiva, Inc. All rights reserved.

<u>Technology Corp</u>, <u>ELSA</u>, <u>Ingram-China</u>, <u>Leadtek</u>, <u>OCS</u>, <u>PNY</u> and <u>SB C&S</u>. Customers can purchase Omniverse Enterprise subscriptions directly from these resellers or via their preferred business partners.

For customers interested in a trial program, Omniverse Enterprise is available in two forms to new users at no charge for up to 30 days. For those wanting to run the evaluation on their own infrastructure, an Omniverse Enterprise 30-day evaluation is available upon application on NVIDIA.com. Partners may also lead customer proofs of concept through their own demo/POC centers using a not-for-resale license delivered to them by NVIDIA.

A complete list of partners as well as information on pricing is available on the <u>Omniverse Enterprise</u> <u>webpage</u>.

Register for free to learn more about NVIDIA Omniverse during <u>NVIDIA GTC</u>, taking place online through Nov. 11. Watch NVIDIA founder and CEO <u>Jensen Huang's GTC keynote address</u> streaming on Nov. 9 and in replay. Check out NVIDIA <u>Omniverse Developer Day</u> and the <u>User Group</u>.

Disclaimer

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Document LCDVP00020211109ehb9005hb



Nvidia RTX 3080 Ti GPU spotted in a leaked gaming laptop benchmark

Jess Weatherbed
338 words
8 November 2021
TechRadar
TECHR
English
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The latest flagship laptop graphics card from team Green might be on the horizon thanks to a Geekbench leak

We reported a couple of weeks ago that Nvidia looks set to release an RTX 3080 Ti laptop graphics card, and thanks to a fresh Geekbench leak there's further weight to add to that speculation.

<u>VideoCardz</u> reports that an unspecified HP Omen laptop is equipped with an Intel 12th Gen Alder Lake CPU alongside <u>Nvidia GeForce RTX 3080 Ti Laptop</u> GPU. Some of these also listed 'Nvidia Graphics Device' for the driver name which doesn't give us much to work with, but given this is all unconfirmed information anyway, try not to take anything as gospel. Much like the mobile RTX 3080, the RTX 3080 Ti looks like it will ship with 16GB of VRAM.

Speculation about higher-end notebook GPUs from Nvidia has been flying around for quite some time now, although previous leaks suggested that an RTX 3080 Super was planned rather than the current Ti allocation. Naming conventions aside, the SKU for this model of the mobile GPU seemingly confirms that it will feature 58 Compute Units, each carrying 128 CUDA cores.

After some basic maths, we can assume that the RTX 3080 Ti mobile will have 7,424 CUDA cores over the 6,144 featured in the mobile RTX 3080, though 256 CUDAs appear to have been disabled for this variant. The Vulcan score is a fairly impressive 90,114 points, which actually sets it below the standard RTX 3080 laptop GPU average score of 91,130, but we expect this number will change after drivers have been finalized and everything has been fine-tuned.

If we have to hazard a guess, an announcement around CES 2022 looks likely, so take things with a pinch of salt for now and hopefully, we'll have confirmation on potential performance by January.

Nvidia logo on a dark background (Konstantin Savusia / Shutterstock)

Document TECHR00020211108ehb80018m

Virtual Reality in Gaming Market is Going to Boom with Nvidia Corporation, Google LLC, Samsung Group

1,331 words 3 November 2021 iCrowdNewswire ICROWDN English

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Global Virtual Reality in Gaming Market Research Report with Opportunities and Strategies to Boost Growth-COVID-19 Impact and Recovery, Covid 19 Outbreak Impact research report added by Report Ocean, is an in-depth analysis of market characteristics, size and growth, segmentation, regional and country breakdowns, competitive landscape, market shares, trends and strategies for this market. It traces the market's historic and forecast market growth by geography. It places the market within the context of the wider Virtual Reality in Gaming market, and compares it with other markets., market definition, regional market opportunity, sales and revenue by region, manufacturing cost analysis, Industrial Chain, market effect factors analysis, Virtual Reality in Gaming market size forecast, market data & Graphs and Statistics, Tables, Bar &Pie Charts, and many more for business intelligence. Get complete Report (Including Full TOC, 100+ Tables & Figures, and Chart).

- In-depth Analysis Pre & Post COVID-19 Market Outbreak Impact Analysis & Situation by Region

Download Free Sample Copy of 'Virtual Reality in Gaming market' Report @

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Key Segments Studied in the Global Virtual Reality in Gaming Market

Based on the Virtual Reality in Gaming market development status, competitive landscape and development model in different regions of the world, this report is dedicated to providing niche markets, potential risks and comprehensive competitive strategy analysis in different fields. From the competitive advantages of different types of products and services, the development opportunities and consumption characteristics and structure analysis of the downstream application fields are all analyzed in detail. To Boost Growth during the epidemic era, this report analyzes in detail for the potential risks and opportunities which can be focused on.

Key players in the global Virtual Reality in Gaming market covered in Chapter 5:

Nvidia CorporationGoogle LLC Samsung Group Facebook Technologies, LLC. Magic Leap, Inc. Oculus VR Firsthand Technology Inc. Microsoft Corporation HTC Corporation NextVR, Inc. Sony Corporation Apple Inc. Unity Technologies

In Chapter 6, on the basis of types, the Virtual Reality in Gaming market from 2015 to 2025 is primarily split into:

Hardware Software

In Chapter 7, on the basis of applications, the Virtual Reality in Gaming market from 2015 to 2025 covers:

PC Stand-alone Console Cartridges Premium Mobile

Our market research provides vital intelligence on market size, business trends, industry structure, market share, and market forecasts that are essential to developing business plans and strategy.

A combination of factors, including COVID-19 containment situation, end-use market recovery & Recovery Timeline of 2020/ 2021

covid-19 scenario

Market Behavior/ Level of Risk and Opportunity

End Industry Behavior/ Opportunity Assessment

Expected Industry Recovery Timeline

Business Impact Horizon

Opening of Economy by Q3 2020

xx

xx

xx

xx

Recovery – Opening of Economy extended till Q4 2020 / Q1 2021

xx

xx

xx

Under COVID-19 Outbreak Impact Analysis:

We analyzed industry trends in the context of COVID-19. We analyzed the impact of COVID-19 on the product industry chain based on the upstream and downstream markets. We analyze the impact of COVID-19 on various regions and major countries.

The impact of COVID-19 on the future development of the industry is pointed out.

Study Explore:

Market Behavior/ Level of Risk and Opportunity End Industry Behavior/ Opportunity Assessment Expected Industry Recovery Timeline

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Each study, more than 100+ pages, is packed with tables, charts and insightful narrative including coverage on:

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Countries: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Hong Kong, India, Indonesia, Ireland, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Nigeria, Norway, Peru, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, UAE, UK, USA, Venezuela, Vietnam

In-Depth Qualitative COVID 19 Outbreak Impact Analysis Include Identification And Investigation Of The Following Aspects: Market Structure, Growth Drivers, Restraints and Challenges, Emerging Product Trends & Market Opportunities, Porter's Fiver Forces. The report also inspects the financial standing of the leading companies, which includes gross profit, revenue generation, sales volume, sales revenue, manufacturing cost, individual growth rate, and other financial ratios. The report basically gives information about the Market trends, growth factors, limitations, opportunities, challenges, future forecasts, and details about all the key market players.

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Key questions answered: Study Explore COVID 19 Outbreak Impact Analysis

The study objectives of this report are:

To study and analyze the global market size (value & volume) by company, key regions/countries, products and application, history data, and forecast to 2025. To understand the structure of market by identifying its various subsegments. To share detailed information about the key factors influencing the growth of the market (growth potential, opportunities, drivers, industry-specific challenges and risks). Focuses on the key global manufacturers, to define, describe and analyze the sales volume, value, market share, market competition landscape, SWOT analysis and development plans in next few years. To analyze the growth trends, future prospects, and their contribution to the total market. To project the value and volume of submarkets, with respect to key regions (along with their respective key countries). To analyze competitive developments such as expansions, agreements, new product launches, and acquisitions in the market. To strategically profile the key players and comprehensively analyze their growth strategies.

The Study Explore COVID 19 Outbreak Impact Analysis

What should be entry strategies, countermeasures to economic impact, and marketing channels? What are market dynamics? What are challenges and opportunities? What is economic impact on market? What is current market status? What's market competition in this industry, both company, and country wise? What's market analysis by taking applications and types in consideration?

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Key Points Covered in Virtual Reality in Gaming Market Report:

Global Virtual Reality in Gaming Market Research Report

Section 1: Global Virtual Reality in Gaming Industry Overview

Section 2: Global Economic Impact on Virtual Reality in Gaming Industry

Section 3: Global Market Competition by Industry Producers

Section 4: Global Productions, Revenue (Value), according to Regions

Section 5: Global Supplies (Production), Consumption, Export, Import, geographically

Section 6: Global Productions, Revenue (Value), Price Trend, Product Type

Section 7: Global Market Analysis, on the basis of Application

Section 8: Virtual Reality in Gaming Market Pricing Analysis

Section 9: Market Chain, Sourcing Strategy, and Downstream Buyers

Section 10: Strategies and key policies by Distributors/Suppliers/Traders

Section 11: Key Marketing Strategy Analysis, by Market Vendors

Section 12: Market Effect Factors Analysis

Section 13: Global Virtual Reality in Gaming Market Forecast

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Document ICROWDN020211103ehb3000gy



Nvidia RTX 3080 Ti GPU could be coming to supercharge gaming laptops

Darren Allan
253 words
30 October 2021
TechRadar
TECHR
English
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Nvidia has been rumored to be making a beefed up RTX 3080 mobile GPU for a while now.

Nvidia could be readying an RTX 3080 Ti laptop graphics card if the rumor mill is to be believed.

Speculation about higher-end notebook GPUs from Nvidia has been flying around for quite some time now, although previous leaks from a few months or so back pointed to the possibility of an RTX 3080 Super model (plus 3070 Super for that matter).

This fresh spillage has pinned the Ti label, rather than Super branding, on the purportedly incoming RTX 3080 variant, with the theory being that this product will be based on Nvidia's GA103 GPU (GN20-E8), as noted in a tweet from Matthew Smith which VideoCardz spotted (Smith is the keeper of TechPowerUp's GPU database).

it seems the RTX 3080 Ti Mobile will use the GA103 chip. October 30, 2021

See more

The leak, as VideoCardz explains, actually originates from somebody posting on a PCI Device ID database with the handle 'Faintsnow' who is presumed to work for a graphics card maker. Faintsnow added the details of the GPU and confirmed that it'll be the 'GeForce RTX 3080 Ti Laptop GPU' when questioned on what Nvidia's name for this graphics solution would be.

No other details are provided here, so the info imparted is admittedly thin on the ground.

Press shot of an Nvidia chip (Nvidia)

Document TECHR00020211030ehau000p2



Will an AORUS NVIDIA GeForce RTX 30-series card and a G-SYNC monitor improve your gaming experience

Sponsored 2,210 words 29 October 2021 Digit HTDIGI English

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India, Oct. 29 -- The Indian gaming landscape has seen a sea change over the past five years. With mobile internet penetration having broken world records and with every Tom, Dick and Harry owning a smartphone these days, it's no wonder that mobile gaming took off faster than PC or console gaming. 94% of the gamers in India can be classified as Mobile Gamers, 9% are PC gamers and console gamers bring in the rear with 4%. Obviously, there's a bit of overlap here. The interesting aspect is that a lot of the upcoming PC gamers are those upgrading from being just mobile gamers. When you realise that a gaming PC with a powerful NVIDIA RTX graphics card, a superb high-refresh rate monitor offers you a more enriching gaming experience, it's but obvious to want to build a gaming PC for oneself.

And where there are more gamers, there are also more streamers, shoutcasters, memeing maestros and other forms of content creators. Some of these tasks can be easily done on a smartphone such as making memes. But for streamers and shoutcasters, a good PC that can run the game and handle the streaming software simultaneously, is of utmost importance. Playing on a PC that stutters while gaming is no fun, and trying to shoutcast for a game which is stuttering on your PC makes for an equally unpleasant experience. So the need for good hardware is accepted by all, gamers and streamers alike.

2020 was a huge year for gamers and content creators in India. If you were to sort out the list of top streamers across the globe by views, then 6 of the top 10 streamers in the world are from India. That's how big the Indian gaming community is. Another interesting fact about these six streamers is that most of them were or are professional eSports gamers. Most of them started out in the midst of the PUBG craze but have since then upgraded to PC gaming.

Speaking of eSports, we've seen a lot of major events coming to India. 2019 alone saw not one but three major gaming tournaments of international repute held in India. The prize pool for eSports titles went up by 180% in 2019 and it's only going to climb higher. So the Indian eSports community is growing at an exponential rate and more gamers are realising the importance of getting the right hardware for the video games that they play. They understand that a good PC with a powerful graphics card and processor coupled with the appropriate amount of memory is required to game properly. They understand that a powerful gaming PC needs to be paired with a capable gaming monitor that can render all the frames coming from the graphics card in time. They understand that a high refresh-rate monitor coupled with a gaming PC will give them the upper hand in an eSports title. Essentially, they understand that frames win games.

NVIDIA GEFORCE RTX graphics cards have several unique features that not only enhance the visual fidelity of video games but also reduce the overall system latency and make games feel more responsive. And you don't need to be an eSports professional to realise how much latency matters to gamers. NVIDIA Reflex is one of the newest technologies to be introduced by NVIDIA for the benefit of gamers. Here's how it helps.

NVIDIA Reflex to the rescue

Game developers have to account for a wide assortment of hardware combinations when building PC games. There's little chance that gamers are all running the exact same configuration using the exact same set of PC components bought from the exact same set of brands. So when you have to factor in so many different combinations, you can't really optimise your game for every combination out there. As a result, you'll end up giving little leeways. These leeways then have other impacts, one of them being higher system latency.

This is where NVIDIA Reflex comes into the picture. NVIDIA Reflex is a collection of technologies which help gamers and game developers measure system latency and take appropriate actions to improve the same. Getting your hardware to talk to each other in the right fashion is NVIDIA Reflex's job. Here are all the technologies within NVIDIA Reflex at a glance:

NVIDIA Reflex SDK - A software development kit for game developers to implement a low-latency mode and other features within their video games. These include - Reflex Low Latency Mode, Low Latency Boost,

Reflex Low Latency Mode UI, In-Game Latency stats, and Reflex Latency Analyzer Flash Indicator. Apex Legends, Call of Duty: Black Ops Cold War, Call of Duty: Modern Warfare, Call of Duty: Warzone, CRSED F.O.A.D., Destiny 2, Enlisted, Fortnite, Kovaak 2.0, Mordhau, Rainbow Six: Siege, Valorant and Warface are the games that have currently incorporated it.

NVIDIA Reflex Low Latency Mode - Boosts responsiveness by getting the CPU and GPU to work in an optimal fashion so that the GPU does not have waste time while pushing out frames to the display.

Low Latency Boost - Overrides the power saving feature within the GPU to allow the GPU to run at higher clocks, especially with CPU-bound games.

Reflex Low Latency Mode UI - A graphical in-game overlay that provides gamers stats such as Render Latency, Game to Render Latency, Client FPS and Game Latency.

Reflex Latency Analyzer Flash Indicator - A flashing box that can be placed anywhere on the screen. This box flashes in response to your mouse clicks and provides a clear and very visible indicator that can be used to measure latency.

NVIDIA Reflex Latency Analyzer - A feature in select 360 Hz G-SYNC gaming monitors that enables measuring end-to-end system latency.

How does NVIDIA Reflex help?

To understand this, we need to look at the entire process that each action has to undergo before you see the reaction within the game. It starts with the moment you press the left-click button on your mouse to the time your in-game character shoots their weapon.

End-to-End System Latency - This is the total time taken per frame from the very first input given via a keyboard or mouse to the final output seen on your monitor.

Peripheral Latency - Time delay resulting from the hardware and firmware within the mouse.

PC Latency - Time involved by all components of the PC to react to your action and then send out the proper response via the GPU.

Game Latency - Latency within the game engine when it updates positions of various animate and inanimate objects within the frame which is then sent to the graphics API runtime.

Render Latency - Once the graphics API receives the updates from the game engine, it will send the same into the GPU render queue. Render latency involves the delay within the render queue and the actual render process within the GPU.

Display Latency - The time taken when the GPU is feeding each ready frame to the display, line-by-line as per the refresh rate of the display. Which will then be processed by the monitor and then each pixel is activated to the corresponding value from the frame.

All of the above work together in a linear fashion with some amount of parallelism. To better visualise the same, we can take a look at the render pipeline of a typical game. Here we're looking at four simultaneous frames of a video game being processed across different stages of the render pipeline.

It should be understood that not every frame requires a human input to be generated which is why even if you are not moving within a game, the entire game continues to run and the display continues to be updated.

The very first frame is 'Frame 4' followed by 'Frame 3', 'Frame 2' and 'Frame 1'. Let's look at the CPU, Render Queue and GPU timelines. We can see that there's plenty of time delay between the processing of two subsequent frames at the CPU level which means that the CPU is making quick work of whatever frames are assigned to it. The CPU then puts frames that it is done processing into the render queue. The render queue then feeds the GPU. At both these stages, we see there's no waiting time between two subsequent frames. This tells us that the workload is GPU bound i.e. the GPU is the bottleneck. And this is where NVIDIA Reflex comes into the picture.

NVIDIA Reflex empties the Render Queue and the game is able to time the CPU workload so that it keeps pace with the GPU. This way the CPU doesn't run off ahead of the GPU. Another benefit of delaying the CPU work is that peripheral inputs can be sampled at the very last moment. So that leads to a reduction of peripheral latency as well. Overall, you experience very low latency and that improves your gameplay experience. Here are some benchmark numbers from NVIDIA to showcase the impact of NVIDIA Relfex.

It can be seen that the impact varies across different video games and depends on how the game developers implement NVIDIA Reflex SDK. Certain games such as Valorant show significant improvement that could aid eSports professionals to gain an advantage over the competition.

Now if you were to take the enormous latency reduction made possible with NVIDIA REFLEX and pair that with a high-refresh rate monitor, then you can get even better latency reduction. Here's a simple graph showcasing the amount of latency reduction you can get by pairing an NVIDIA(R) GeForce(R) RTX graphics card that's capable of dishing out high framerates in modern games, with a high refresh-rate NVIDIA G-SYNC monitor. You stand to reduce latency by up to 60%.

We understand that some concepts are better explained with a video, so here's a video to help you understand how NVIDIA Reflex works with a practical example.

Now that you've understood how NVIDIA Reflex helps gamers, let's look at where you can upgrade your gaming experience.

UPGRADE WITH AORUS

You now know how a PC powered by the latest NVIDIA(R) GeForce(R) RTX graphics card can really improve your overall gaming experience. However, the graphics card is but one of the many components that make up a gaming PC. Aside from the graphics card, you also have the processor, motherboard, RAM, storage, power supply and cooling. Sure you can head to any store and grab one of each and there's a good chance that you'll end up with a functional PC but is it the most optimal way of going about it? Will such a PC play the games that you want to play at the right resolution and provide enough FPS for a smooth gaming experience? Will the cooling be sufficient to ensure none of the components keep hitting their thermal limits? Is the monitor good enough to make the most of the graphics card's prowess? There are many such concerns that need to be addressed when you're considering building a gaming PC. An easy way to tackle this concern is by simply getting a gaming PC that has been configured by experts who will pick the right hardware as per your requirements. They'll even assemble the entire system and ensure that all the hardware is functioning properly.

#UpgradeWithAorus is an initiative conceived by GIGABYTE to help gamers find the right hardware. Under the #UpgradeWithAorus initiative, GIGABYTE has partnered with several well-known PC hardware stores across India and launched an promotion campaign - 'AORUS Gamer Days' to provide gamers with some exiting exclusive bundle offers where gamers can get Paytm vouchers up to INR 10,000. One can avail these offers here.

But what if you are a streamer? You need a much beefier CPU to handle streaming and gaming at the same time and having a powerful NVIDIA(R) GeForce(R) RTX GPU to make use of NVENC for encoding your streams will make your streams seem even better. Worry not, AORUS Gamer Days campaign has some offers for you as well.

GIGABYTE AORUS has worked with streamers and gaming influencers in the recent past where they have created some unique builds with NVIDIA(R) GeForce(R) RTX GPUs. You can check out the latest Creator Build they had build for Techno Gamer -

https://upgradewithaorus.com/streamer-build/streamer.php?s=techno.

No matter which popular game you're into, there will always be a #UpgradeWithAorus build powered by the latest NVIDIA(R) GeForce(R) RTX graphics card to provide you the best possible experience. Over the next couple of weeks, as part of the AORUS Gamer Days, you can reach out to any of the following online stores to grab an #UpgradeWithAorus exclusive bundle and get cashbacks.

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Document HTDIGI0020211029ehat0005n



Technology

Nvidia Geforce Now turns a Phone box into the world's smallest gaming arcade, bringing cloud gaming hits the high street

By, James Ide 621 words 29 October 2021 21:28 Mirror.co.uk MIRUK English © 2021 Mirror Group Ltd

Gaming on the go hits the high street with the world's smallest gaming arcade created in an old school phonebox by Nvidia

It's official we are living in the future, with old school phoneboxes making way for compact arcades that utilise the latest streaming and cloud-based technology to bring AAA gaming to the high street.

Gaming on the go has become more popular than ever with many leaps being made in our devices processing power, network performance and streaming technology.

To cater for this growing trend, graphics card manufacturer Nvidia is bringing its own cloud gaming service GeForce Now to the UK High Street, in the form of the World's Smallest Gaming Arcade.

Nvidia has repurposed a classic red phone box, originally introduced in 1936, as a gaming space allowing gamers can enjoy thousands of their favourite games with the same high-tech experience found on a top-of-the-range gaming PC without a top-of-the-range PC, or pricetag.

With phone boxes in the UK largely unneeded thanks to the proliferation of mobile phones, many sit unused and left to decay. More than 5,000 have been turned into new spaces to benefit the community.

This classic phone box was converted the World's Smallest Gaming Arcade , in Exchange Square, Manchester.

Nvidia says that Brits are increasingly likely to get stuck into gaming in places such as on the loo, during a family dinner and even at their own wedding with the average gamer spending 572 hours every year online.

A spokesperson for Nvidia said: "Gaming is a hugely popular and positive past-time, and The World's Smallest Gaming Arcade means that people can get their daily gaming fix when they're not at home and without impacting things like work and social life."

Why NVIDIA has created a positive space for people to game that won't get them into trouble

- 1,000 UK gamers were polled for the by Nvidia and their research showed that:
- * 34% of gamers admit they would rather skip a meal than miss out on completing a level on their favourite game
- * 73% of Brits have admitted to gaming during work hours with one in 10 skipping a work meeting so they could crack the next level of a game
- * 44% have sneaked into the toilet at work to play a game
- * 43% of gamers said they have blown out friends in order to play games

The World's Smallest Gaming Arcade is powered by Nvidia's GeForce Now service and 5G networks which offer faster connection and ultra-low latency for gaming.

Once inside the World's Smallest Gaming Arcade, gamers play on a tablet with a gamepad while their drinks are kept cool in the integrated mini-fridge.

GeForce Now is one of several gaming streaming services vying for gamers attention and allows access to over 2000 games including your own library, and services including Steam and Epic Games Store.

Offering AAA games including New World, Apex Legends, Hitman 3 and the upcoming , and new titles are added every Thursday.

Featuring all the latest of Nvidia's graphical enhancements, like Ray Tracing and DLSS streamed directly to your device. The service is compatible with Windows PC, Mac OS and Android, and browsers like Chrome, Safari and Edge.

The best part is you can join Geforce Now for free or if you already have an account you can upgrade your membership for faster access to cloud gaming servers and extended gameplay sessions.

Nvidia Geforce Now is available from Nvidia's website.

Document MIRUK00020211029ehat004k4



Daily

Nvidia Gets a Price Target Boost. Bitcoin's Impact on Gaming May Be Ending.

By Jack Denton 617 words 25 October 2021 18:49 Barron's Online BON English

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The impact of Bitcoin mining on Nvidia's gaming business may be slowing, prompting investment bank Piper Sandler to turn more bullish on the stock.

Analysts at the bank raised their target price for Nvidia (ticker: NVDA) from \$225 to \$260 Monday. Nvidia stock was around 1% higher in the U.S. premarket, after closing at \$227.26 Friday. The shares have climbed more than 73% in 2021. The analysts cited a "more constructive" view on Nvidia's gaming business as the reason for their more bullish outlook.

In a note, Piper Sandler's Harsh Kumar and Matthew Farrell outlined how more graphics processing units (GPUs) could flow to the critical gaming market, which has been disrupted in the past by GPUs being scooped up by cryptocurrency miners.

GPUs are computer chips with applications in gaming machines. They can also be used to power Bitcoin mining devices, which are energy-intensive computers rewarded with cryptocurrency for solving complex mathematical problems. Higher Bitcoin prices increase the incentives for cryptocurrency mining.

Kumar and Farrell's research scraped eBay (EBAY) for data on the selling price of GPUs in the secondary market as a premium to the manufacturer's suggested retail price (MSRP).

They found that the relationship between Bitcoin prices and the premiums for GPUs in the secondary market was decoupling—particularly for Nvidia's chips. In the past, when Bitcoin prices spiked, the value of GPUs sold on the likes of eBay similarly rose, indicating that the chips were headed for cryptomining and commanded lofty premiums for those in the gaming market.

GPUs are selling for between 1.5x and 2.5x MSRP in secondary markets, the analysts found—but that is far below the 2x to 3.75x MSRP range the units were selling at when Bitcoin prices were at similar highs in May.

The analysts found that a recent rise in Bitcoin prices has done little to affect the price dynamics for Nvidia GPUs in the secondary market. They said this may represent the relationship fading between Bitcoin and GPU prices, which would leave more GPUs to be sold for gaming purposes—where demand for the units is high and supply is tight, especially heading into the holiday season.

"For Nvidia specifically, the impact of cryptocurrency on the gaming business has been a hang-up for some investors," Kumar and Farrell said. With supply of GPUs limited, more GPUs heading to the crypto sector than the gaming sector—as indicated by premiums in the secondary market—have the potential to damage Nvidia's market share in gaming, which is a core business.

"If the decoupling does occur, we feel the gaming GPUs will be able to meet true gaming demand, instead of potentially being allocated to cryptomining," the team at Piper Sandler said.

While the price of Bitcoin and other cryptocurrencies has skyrocketed over the past year—Bitcoin has jumped more than 380% in the last 12 months—many investors remain skeptical about the long-term outlook for cryptos. Cryptocurrencies have also proved to be extremely volatile, with intense price swings day-to-day.

"If the decoupling were to persist, we feel it would be a positive over the long-term, as it eliminates unwanted noise to the core business," the analysts added.

Nvidia stock hit a record intraday high Friday above \$231, and analysts including Kumar and Farrell are bullish on the technology company's earnings, which are due to be released in November.

Write to Jack Denton at jack.denton@dowjones.com

Nvidia Gets a Price Target Boost. Bitcoin's Impact on Gaming May Be Ending.

Document BON0000020211025ehap00105

Threadripper Pro Goes Gaming With Nvidia's RTX 3080 Cloud Gaming Plan

Aaron Klotz
446 words
21 October 2021
Tom's Hardware
TOMHA
English
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AMD has announced that Nvidia will be using AMD's Threadripper Pro CPUs in its new RTX 3080 powered Superpod gaming servers.

Hot on the heels of Nvidia's new RTX 3080 Cloud Gaming announcement, AMD has revealed that its Ryzen Threadripper Pro processors will be powering Nvidia's new RTX 3080 Superpods. Threadripper Pro will give Nvidia the CPU horsepower and PCIe bandwidth it needs to help drive the 39,200 TFLOPS of gaming performance each Superpod server will provide.

AMD did not specify which Threadripper Pro CPUs would be used in Nvidia's Superpods, however, we assume the servers will be equipped with AMD's latest Threadripper Pro products based on the Zen 2 architecture. AMD's Zen 3 based Threadripper CPUs are still in development.

"The Ryzen Threadripper Pro lineup was designed to offer users incredible performance and unrivaled bandwidth and sets the industry standard for extreme computing performance across a range of use cases, including the rapidly-growing cloud gaming space," said Chris Kilburn, corporate vice president and general manager of the client component business at AMD said in a statement. "Working with Nvidia, it is clear that the expansive feature set of Ryzen Threadripper Pro is the perfect platform to power their next-generation cloud gaming experience."

Despite being an architecture behind, the current Zen 2 Threadripper products are no slouch, and still one of the <u>best CPUs</u> for heavy multi-core workloads. The top tier 3995WX comes with 64 cores, 128 threads, and a clock speed of up to 4.2GHz, along with 128 lanes of PCIe Gen 4 bandwidth and 8 memory channels. The 128 lanes and 8 memory channels, in particular, is a trait found in all Zen 2 Threadripper processors.

The vast amount of memory and PCIe bandwidth will arguably be the more important features for Nvidia's Superpods. With all that bandwidth, Nvidia can power multiple RTX 3080 virtual machines off of one Threadripper CPU without sacrificing memory or PCIe bandwidth.

With further optimizations from Nvidia, we expect the Threadripper Pro CPUs to perform even better to ensure each cloud gaming server meets the 120 fps target consistently.

Nvidia's new RTX 3080 cloud gaming plan will start at \$99.99 once released and give you the best cloud gaming experience Nvidia can provide right now. Each gaming instance will come with RTX 3080 graphics and run at a very low latency of 56 ms at 120 fps. Plus, there are more benefits like built-in G-Sync support (tusable on static refresh rate displays) and 1440P support.

Ryzen Threadripper Pro Processor (AMD)

Document TOMHA00020211022ehal00004



AMD Stock Gets a Boost From Nvidia's New Cloud-Gaming Membership -- Barrons.com

408 words
21 October 2021
22:32
Dow Jones Institutional News
DJDN
English
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Connor Smith

Shares of Advanced Micro Devices jumped on Thursday after Nvidia unveiled a new high-end cloud videogame-streaming offering that will be powered by AMD central processing units.

Nvidia (ticker: NVDA) said its GeForce NOW RTX 3080 cloud-gaming membership will charge \$99.99 for six months, and allow users to stream games at up-to-1440p resolution at 120 frames per second on PCs and Macs. The companies said AMD's (AMD) Ryzen Threadripper PRO processors will help support over 39 petaflops of graphics performance. Preorders for the GeForce NOW RTX 3080 memberships will be open to all gamers next week, pending availability, Nvidia said.

"AMD Ryzen Threadripper PRO Processors provide the best CPU, memory, and [input/output] performance for our gaming workload for this generation, helping to deliver a massive leap in performance for gamers," Phil Eisler, vice president and general manager of GeForce NOW at Nvidia, said in a statement.

AMD stock is up 1.6% to \$118.24 in Thursday afternoon trading while Nvidia stock is up 1.9% to \$225.14.

Cloud services like GeForce Now, where users connect via the internet to Nvidia's gaming servers, are still a bit of a niche within the videogame business. Amazon.com (AMZN), Google's parent Alphabet (GOOGL), and Microsoft (MSFT) have all invested in the space utilizing their cloud-computing infrastructure. Nvidia's offering promises high-end performance for consumers who don't want to shell out for high-end graphics cards.

Aside from the Nvidia announcement, Susquehanna analyst Christopher Rolland wrote in a note Thursday that he expects AMD to meet or exceed analyst expectations when it reports third-quarter results on Tuesday. He thinks solid results will be driven primarily by AMD's server business. That said, he thinks a slowing PC market could prevent the company from raising its full-year sales guidance, a departure from recent quarters.

"We would expect additional supply and market-share gains to help AMD exceed industry trends," Rolland wrote. "Our checks show a continued slowdown into year-end, and this narrative will be a focus for investors as we await Intel's commentary." Intel is holding an earnings conference call at 5 p.m. ET on Thursday.

Write to Connor Smith at connor.smith@barrons.com

(END) Dow Jones Newswires

October 21, 2021 13:02 ET (17:02 GMT)

Document DJDN000020211021ehal0040g



Nvidia's top gaming cards are hard to buy, but now you can rent them remotely

445 words 21 October 2021 17:50 MarketWatch MRKWC English

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Cloud-gaming service gives gamers a path to 3080 performance as in-demand cards are either unavailable or selling for enormous mark-ups for a second straight holiday shopping season

Nvidia Corp. Nvidia Corp. has come up with a way of supplying customers with high-performance gaming cards amid a global chip shortage and supply-chain issues: Sell it as a service.

On Thursday, Nvidia NVDA announced that its GeForce Now cloud-gaming platform now delivered similar performance to its RTX 3080-series of gaming cards due to its new SuperPod supercomputer.

The 3080-performance memberships cost \$99.99 for six months, while 2080-performance memberships are available for \$49.99 for six months. Preorders for the 3080-platform start on Oct. 21 and will be available sometime in November, Nvidia said.

The upgrade comes in advance of the holiday season, the second consecutive fourth quarter in which chip shortages and supply-chain issues have made Nvidia's popular 3080 gaming cards either hard to come by or only available at exorbitant prices well higher than the suggested starting retail price of \$699.99.

Read: Amazon videogame exec on the success of 'New World' and why everyone is chasing Roblox

For example, RTX 3080 Ti gaming cards that have a list price starting at \$1,199.00 on Best Buy and online retailers like Newegg are listed as being sold out, and were priced up to double the list price when they had been available.

Advanced Micro Devices Inc. AMD also offers popular gaming cards, but is helping its competitor's efforts with its Ryzen Threadripper Pro processors, which are being used in the SuperPod, according to an AMD announcement Thursday morning.

The 3080-service is directed at "core or mainstream gamers," not so much for professional gamers who rely on the fastest possible performance to make a living due to "latency," or delays due to internet connectivity. Latency for the cloud-platform service is about 56 milliseconds, while the latency for a physical 3080-card installed directly on a gamer's rig is about half of that, an Nvidia representative said.

Read: People are still playing a lot of videogames, but how much?

Nvidia first released its 3080-series of gaming chips more than a year ago, and announced a budget version of the 30-series card as well as a new line of gaming laptops with 3080 chips back in January. Even that budget card, the RTX 3060 that Nvidia lists for \$329, has limited availability on Amazon.com Inc. AMZN but at no price lower than \$750.

Document MRKWC00020211021ehal00209



online news

Alphacool Unveils Eisblock Aurora Acryl GPX for MSI Radeon RX 6700 XT Gaming X and Eisblock ES Acetal GPX for NVIDIA Quadro RTX A6000 GPU

246 words 15 October 2021 ETMAG.com FMETMA English

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The Alphacool Eisblock Aurora acrylic GPX water cooler with backplate is now also available for MSI Radeon RX 6700 XT Gaming X graphics cards.

More performance! Voltage converters and V-RAM is now cooled much better and more effectively with liquid cooling. This is due to the components being brought closer to the cooler through the use of thinner, yet more powerful Thermal pads. The reduction of the thickness of the nickel-plated copper block to 5.5mm and the constant optimisation of the water flow within the heat sink promise a significant increase in performance. In addition to performance, design also plays an important role. The addressable digital RGB LEDs are embedded directly in the cooling block and give the cooler its very own visual touch. Also new to the range is the ES Acetal GPX-N Quadro RTX A6000 Eisblock from Alphacool's ENTERPRISE SOLUTIONS series. The acetal water cooler with aluminium backplate for PNY RTX A6000 graphics cards is specially designed for use in narrow server cases. In order to save space in width and height, the connections have been moved to the rear, which also enables easier tubing runs within the server rack. Despite the compact design, this acetal water cooler has the same performance features as the coolers in the Eisblock Aurora acrylic series.

Document FMETMA0020211015ehaf0000v



NVIDIA Corporation; Patent Issued for Graphical fiducial marker identification suitable for augmented reality, virtual reality, and robotics (USPTO 11113819)

2,616 words 27 September 2021 Journal of Engineering JOENG 6869 English

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2021 SEP 27 (VerticalNews) -- By a News Reporter-Staff News Editor at Journal of Engineering -- A patent by the inventors D'Souza, Joy (San Jose, CA, US), Milovanovic, Vukasin (Santa Clara, CA, US), Min, Jianyuan (Santa Clara, CA, US), Pereira, Rochelle (San Mateo, CA, US), filed on January 15, 2019, was published online on September 7, 2021, according to news reporting originating from Alexandria, Virginia, by VerticalNews correspondents.

Patent number 11113819 is assigned to NVIDIA Corporation (Santa Clara, California, United States).

The following quote was obtained by the news editors from the background information supplied by the inventors: "Fiducial markers, such as AprilTags, ARTags, ARToolkit, ARToolkitPlus, RUNE-Tags, reacTIVision, QR codes, and the like, have been used in virtual reality, augmented reality, robotics, and other technology areas for localization of objects (e.g., robot-to-robot localization), identification of objects, detecting positions of objects, detecting orientations of objects, testing of virtual reality headsets, tracking objects in an environment, Simultaneous Localization and Mapping (SLAM) algorithm evaluation, camera calibration, and other uses. Typically, fiducial markers are deployed as patterns of graphical data in a pre-determined arrangement within a polygon, each pattern being uniquely mapped to a corresponding data record (user account, unit, product, message, etc.). In order to use fiducial markers for these purposes, specialized algorithms are used to detect and identify the fiducial markers in a scene or environment.

"Some conventional approaches to detecting fiducial markers have relied on graph-based image segmentation algorithms to identify lines within an input image and combine them into polygons. These approaches resulted in an overwhelming number of identified polygons (e.g., quadrilaterals), thereby creating a drain on computing resources when filtering the polygons to identify actual fiducial markers in the image. Further, some conventional approaches use segmentation to identify boundaries in an image, and then analyze each of the pixels along the boundaries to determine corners of polygons. However, analyzing each of the pixels along the boundaries is inefficient, and results in significant computing, time, and energy costs.

"As described above, each of these conventional methods results in a significant drain on computing and energy resources. This is exacerbated by their reliance on central processing units (CPUs) to identify fiducial markers. For example, due to the processing limitations of CPUs, these conventional approaches may be capable of operating at a frame rate of thirty frames per second (fps) with input images having a resolution of 640 x 480 (e.g., 480p), but may only be capable of operating at a frame rate of ten fps for input images with a resolution of 1920 x 1080 (e.g., 1080p), for example. Such low frame rates may not support the functionality required for many uses of fiducial markers, especially as the resolution of input images continues to increase (e.g., to 3840 x 2160 (e.g., 4k), 7680 x 4320 (e.g., 8k), or greater)."

In addition to the background information obtained for this patent, VerticalNews journalists also obtained the inventors' summary information for this patent: "Embodiments of the present disclosure relate to graphical fiducial marker identification. More specifically, systems and methods are disclosed that use computer vision processing, implemented at least partly on a graphics processing unit (GPU) in some examples, to identify fiducial markers using image data that is representative of environments that include fiducial markers.

"In contrast to conventional systems, such as those described above, present systems may implement filtering and segmentation for input images to identify boundaries within the input images. By identifying boundaries in this way, the drawbacks of conventional approaches related to identifying a large number of quadrilaterals or other polygons in the input image are significantly reduced. In addition, and in some examples in parallel with the image thresholding and segmentation processes, the present systems may implement corner detection for identifying pixels that correspond to corners of objects in the input image. The identified corners are then filtered such that only corners within a threshold distance to one of the boundaries within the input image remain. By identifying and filtering the corners in this way, only a small number of pixels may be required for detecting and processing polygons in the input image, thereby drastically reducing the computing cost for identification of fiducial markers.

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"In addition, in further contrast to conventional systems, the present systems may implement at least some of the processes on a GPU(s). In doing so, the efficiency of performing the processes is increased, especially when two or more processes are executed in parallel (e.g., image thresholding, image segmentation, and/or corner detection). Further, due to the offloading of some of the processing to a GPU(s), only a small amount of processing may be required of a central processing unit(s) (CPU), thus increasing the overall efficiency and effectiveness of the system, while also reducing computing and energy requirements. For example, the processes described herein may enable the system to perform effectively at higher image resolutions (e.g., 1080p, 4k, etc.), such as by effectively identifying fiducial markers within input images at a frame rate of thirty frames per second (fps) or greater."

The claims supplied by the inventors are:

- "1. A method comprising: receiving image data representative of an image; converting the image data from a higher dimensional color space to a converted image in a lower dimensional color space; identifying first pixels corresponding to boundaries in the converted image; detecting second pixels that represent candidate corner points; determining a set of the candidate corner points that are within a threshold pixel distance to at least one of the boundaries based at least in part on comparing the first pixels to the second pixels; analyzing the set of the candidate corner points to determine a subset of the candidate corner points representative of corners of at least one polygon; and applying at least one filter to the at least one polygon to identify a polygon of the at least one polygon as corresponding to a fiducial marker boundary of a fiducial marker.
- "2. The method of claim 1, wherein the converting the image data to the converted image comprises at least one of global thresholding or adaptive thresholding.
- "3. The method of claim 1, wherein the identifying the first pixels corresponding to the boundaries comprises: identifying first consecutive clusters of a first color of pixels and second consecutive clusters of a second color of pixels in the converted color image; and determining the first pixels corresponding to the boundaries based at least in part on identifying where at least one of the first consecutive clusters and at least one of the second consecutive clusters extend adjacent to one another.
- "4. The method of claim 1, wherein the fiducial marker is one of an AprilTag, an ARTag, an ARToolkit fiducial marker, or an ARToolkitPlus fiducial marker.
- "5. The method of claim 1, wherein at least one of the detecting the second pixels in the image that represent the candidate corner points, the converting the image data to the converted image, the identifying the first pixels corresponding to the boundaries in the converted image, or the determining the set of the candidate corner points that are within the threshold pixels distance to the at least one of the boundaries is performed by a graphics processing unit (GPU).
- "6. The method of claim 1, wherein the converting the image data to the converted image comprises: converting the image data to grayscale image data representative of a grayscale version of the image; and thresholding the grayscale image data to generate binary image data representative of a binary version of the image, wherein the converted image is the binary version of the image.
- "7. The method of claim 1, wherein the identifying the first pixels corresponding to the boundaries in the converted image is performed in parallel with the detecting the second pixels in the image that represent the candidate corner points.
- "8. The method of claim 1, wherein the analyzing the set of the candidate corner points to determine the subset of the candidate corner points representative of the corners of the at least one polygon comprises: determining members of the set of the candidate corner points that are associated with a same boundary ID; generating edges extending between the members of the set of the candidate corner points; computing angles formed by adjacent edges of the edges; and identifying the members of the set of the candidate corner points associated with a set of the angles of least magnitude as the subset of the candidate corner points.
- "9. The method of claim 1, wherein the applying the at least one filter to the at least one polygon comprises: decoding pixel values within the at least one polygon to generate pixel data representative of the at least one polygon; comparing the pixel data to fiducial marker data representative of fiducial markers; and determining, based at least in part on the comparing, whether any of the at least one polygon correspond to any of the fiducial markers.
- "10. A method comprising: receiving data representative of boundaries in a first image and associated boundary identifiers (IDs) for the boundaries; determining pixels in at least one of the first image or a second image that represent candidate corner points within a threshold pixel distance to at least one of the boundaries; for each boundary of the boundaries: determining, based at least in part on the boundary IDs, a set of the candidate corner points that are associated with a same boundary ID; generating edges extending between members of the set of the candidate corner points; computing angles formed by adjacent edges of Page 92 of 181 © 2022 Factiva, Inc. All rights reserved.

the edges; and identifying a subset of the set of the candidate corner points associated with a set of the angles of least magnitude as corners of a quadrilateral; and applying at least one filter to the quadrilateral to determine whether the quadrilateral corresponds to a fiducial marker boundary of a fiducial marker.

- "11. The method of claim 10, wherein at least a first portion of the method is executed on a central processing unit (CPU) and a second portion of the method is executed on a graphics processing unit (GPU).
- "12. The method of claim 10, wherein the applying the at least one filter to the quadrilateral comprises: decoding pixel values within the quadrilateral to determine pixel data representative of the quadrilateral; comparing the pixel data to fiducial marker data representative of fiducial markers; and determining, based at least in part on the comparing, whether the quadrilateral corresponds to any of the fiducial markers.
- "13. The method of claim 10, wherein the generating the edges extending between the members of the set of the candidate corner points comprises, for each member of the members: generating a first edge extending from the member toward a first adjacent member of the members; and generating a second edge extending from the member toward a second adjacent member of the members.
- "14. The method of claim 10, wherein: based at least in part on the generating the edges, a first edge extends from a first member of the members of the candidate corner points toward a second member of the members adjacent the first member; based at least in part on the generating the edges, a second edge extends from the first member of the members of the candidate corner points toward a third of the members adjacent the first member; the first edge and the second edge are included in the adjacent edges; and the computing the angles formed by the adjacent edges of the edges includes computing an angle formed by the first edge and the second edge.
- "15. The method of claim 10, wherein the fiducial marker is one of an AprilTag, an ARTag, an ARToolkit fiducial marker, or an ARToolkitPlus fiducial marker.
- "16. A method comprising: determining, by one or more graphics processing units (GPUs), first pixels in an image that represent candidate corner points; determining, by the one or more GPUs, second pixels in the image that represent boundaries in the image; determining, by the one or more GPUs, a set of the candidate corner points corresponding to the first pixels that are within a threshold pixel distance from one or more of the second pixels corresponding to the boundaries; copying, by the one or more GPUs, the set of the candidate corner points from GPU memory to central processing unit (CPU) memory, the CPU memory associated with one or more CPUs; for each boundary of the boundaries: determining, by the one or more CPUs, a subset of the set of the candidate corner points that are associated with a same boundary of the at least one boundary; generating, by the one or more CPUs, edges extending between members of the subset of the set of the candidate corner points; computing, by the one or more CPUs, angles formed by adjacent edges of the edges; and identifying, by the one or more CPUs, the candidate corner points from the subset of the set of the candidate corner points associated with a set of the angles of least magnitude as corners of a quadrilateral; and determining, by the one or more CPUs, whether the quadrilateral corresponds to a fiducial marker boundary of a fiducial marker.
- "17. The method of claim 16, wherein the determining whether the quadrilateral corresponds to the fiducial marker boundary of the fiducial marker comprises: decoding pixel values within the quadrilateral to determine pixel data representative of the quadrilateral; comparing the pixel data to fiducial marker data representative of fiducial markers; and determining, based at least in part on the comparing, whether the quadrilateral corresponds to any of the fiducial markers.
- "18. The method of claim 16, wherein the generating the edges extending between the members of the subset of the set of the candidate corner points comprises, for each member of the members: generating a first edge extending from the member toward a first adjacent member of the members; and generating a second edge extending from the member toward a second adjacent member of the members.
- "19. The method of claim 16, wherein: based at least in part on the generating the edges, a first edge extends from a first member of the members of the candidate corner points toward a second member of the members adjacent the first member; based at least in part on the generating the edges, a second edge extends from the first member of the members of the candidate corner points toward a third of the members adjacent the first member; the first edge and the second edge are included in the adjacent edges; and the computing the angles formed by the adjacent edges of the edges includes computing an angle formed by the first edge and the second edge.
- "20. The method of claim 16, wherein the fiducial marker is one of an AprilTag, an ARTag, an ARToolkit fiducial marker, or an ARToolkitPlus fiducial marker."

URL and more information on this patent, see: D'Souza, Joy. Graphical fiducial marker identification suitable for augmented reality, virtual reality, and robotics. U.S. Patent Number 11113819, filed January 15, 2019, and published online on September 7, 2021. Patent URL:

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http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l =50&s1=11113819.PN.&OS=PN/11113819RS=PN/11113819

Keywords for this news article include: Business, Robotics, Machine Learning, NVIDIA Corporation, Technology Companies, Emerging Technologies.

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Document JOENG00020210927eh9r001a6

Finally, an affordable gaming PC with an Nvidia RTX 3070 included

Ian Morris
735 words
23 September 2021
T3
SMLIV
English
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I am seriously tempted by this super-affordable gaming PC

I'll be honest with you, 12 months ago I thought "I'll buy an RTX 3000 series card when they come out, it seems like a great time to swap out my Titan Xp" and, if you're a PC gamer like me you know the rest. A year on an reliable stock of almost all RTX 3000 series cards is impossible to track down.

Then our friends at <u>PC Gamer</u> casually dropped a link to this <u>CCL Computers machine</u> that features not only an RTX 3070 but a reasonable spec in general. The best bit is the price, which at just £1,199.99 strikes me as an absolute bargain.

Obviously the "build it yourself" crowd will be yelling at me, and honestly I'm all in on self-build computers. And indeed, it's sort of tempting to move the best bits off this machine and into perhaps a different case, with some upgraded components – more on that later. But when I look at it, the Horizon 5 actually looks kind of great. I'd even tolerate the side window, something I'm absolutely opposed to in PC builds.

Of course some people prefer something portable, check out our <u>best gaming laptops</u> guide if you need some quidance on that.

toCheeeek

Horizon 5 RTX 3070 | Now £1,199.99 at CCL Computers

For just £1,199.99 (two grand to its friends) you can own this perfectly capable gaming PC. With plenty of decent components and loads of power it would make a very high percentage of gamers very happy indeed. If you're miserable about the lack of GPUs, PS5s and Xbox Series X then this is the tonic. Great looking machine, at a reasonable price.

Firstly, right now you could probably pay nearly that price just to get an RTX 3070 on the scalperweb. This machine will easily give you flawless 1080p gaming in AAA titles, and I dare say you could push it to 1440p if you're an idiot ultrawide gamer like I am. The Ryzen 5 5600X is also a great choice. At 3.7 GHz with a 4.6GHz boost and 6 cores/12 threads, it's more than capable for most tasks.

Of course, there are some compromises here, but they're really tiny and shouldn't deter you at all. Firstly, it's 16GB of RAM, which you might find some people argue is a bit low. For gaming it should be fine, most games don't need that much to work well. I suspect that the RAM might not be the absolute fastest, although it does run at 3200MHz in dual channel. You could add more RAM easily, if you need it it's Kingston Fury so another matched pair won't be hard to get.

Then there's a modest 1TB drive for storage. That's not dreadful, in fact my boot drive is a quarter of that currently, but I opted for a Samsung drive that's probably far quicker than really makes much difference. Adding in some additional storage will be essential for game libraries, but that won't be difficult.

Even the motherboard, a B450 Tomahawk Max is great. I'm a massive fan of MSI, and my last AMD machine was built on one of its boards, which has been flawless. It's not a PCI-e Gen 4 board, but I don't see that as being a major issue for most users. The biggest issue will be the single m.2 slot, which means you won't be able to add more ultra-fast NVMe storage without removing what's there. However extra game storage can easily be shunted to a good quality SATA SSD and your most played game can live on the boot drive - bear in mind that the SATA 5 and 6 ports will be disabled because the m.2 slot uses those channels, this caught me out with my build.

The power supply is also an 80 Plus Bronze, rated for 750W. Again, no major issues here but if you already had a good PSU you could swap it and gain some modularity, as the included Cougar VTE X2 doesn't support it.

Horizon 5 RTX 3070 (CCL Computers)

Wccf Talks Gaming Official Podcast – NVIDIA GeForce Leaks & Activision-Blizzard Attack Employee's Rights

Chris Wray 1,694 words 23 September 2021 Wccftech.com NEWAGAE English

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Here at Wccftech, we not only write about games, but we also talk about them too. This is the official Wccf Talks Gaming Podcast archive. Feel free to bookmark this page as we'll be posting all our weekly gaming podcasts here and if you miss one? Well, you'll be able to find them quickly here along with links to the audio-only version for those who want to hear, but not see us.

NVIDIA GeForce Leaks & Activision-Blizzard Attack Employee's Rights [Episode 52]

Click to access link.

PlayStation 5 Reveals the Future and Epic vs Apple [Episode 51]

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China Cracking Down on Games & Sony Have Huge Announcements Coming? [Episode 50]

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Gamescom, Halo Infinite's Poor Look and Games Congestion in Early 2022 [Episode 49]

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Studio Consolidation Con and is Platform Exclusivity Good or Bad [Episode 48]

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Activision Gets Sued, Steam Deck Expectations, And Battlefield Portal Is Looking Good [Episode 47]

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Sony Buying Studios, Kojima And Xbox? Switch OLED, and Assassins Creed As A Service [Episode 46]

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Kojima Streaming Game, Dead Space Revival, BF2042, AND FSR [Episode 45]

Click to access link.

E3 2021 Part 2 - Microsoft Makes its Mark, Challenging Sony? [Episode 44]

Click to access link.

E3 2021 Part 1 - A Brand New Label Enters the Scene [Episode 43]

Click to access link.

Koch Media comes out flying with a brand new publishing label, and a stacked line-up of games, making its mark on E3.

Sony DOES Actually Like Cross Gen, Deep Silver, Take 2, and overall E3 2021 Expectations [Episode 42]

Click to access link.

Gearing up for E3 2021 and we've got some juicy topics ahead of it. Turns out Sony isn't as against the idea of cross-generation games as we originally were led to believe. Deep Silver isn't planning anything big for E3 but 2K Games has some pretty substantial leaks ahead of the show.

Deep Silver showing nothing

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2K leak

PS5 Cross-gen

Microsoft And Sony Exclusives, Ubisoft Shifting To More FREEmium Titles [Episode 41]

Click to access link.

Microsoft has essentially come out and made it clear that Starfield is MS Exclusive title. Sony is working on over 25 first-party titles including new IPs. Ubisoft is putting the annual releases on ice in favor of Premium Free To Play experiences.

Audio Only available on Anchor.fm

Netflix Is Game On, And Timesplitters Is Back Baby! [Episode 40]

Click to access link.

We're seeing Netflix join into the gaming revolution more and more. Microsoft continues to do what they do. Take-Two has new games coming. Timesplitters is coming back, hoping for TS2 and not Future Perfect. And we're still playing games.

- 1) Netflix to move into more games get-into-games-even-more/
- 2) Microsoft quick recap https://wccftech.com/starfield-nowhere-near-done-2022-release/ & https://wccftech.com/the-outer-worlds-taken-over-microsoft-take-two-surprise/
- 3) Take Two Announced Games
- 4) TIMESPLITTERS!

Audio Only available at Anchor.FM

Microsoft Expands PC Gaming, Metro Exodus EE Talks, Kotick Cuts His Salary? [Episode 39]

Click to access link.

Microsoft on PC gaming - possibly reducing fees to 12%, Activision Blizzard: Kotick cutting salary & bonus - Toys for Bob moved to COD, The Persistence - Keith, and Alessio talk about Ray Tracing, and other similar things.

What games are we playin'?

Audio-Only available at Anchor.fm

More Remakes, Sony Wants Diversity, and Battlefield [Episode 38]

Click to access link.

The team goes on and on about more Remakes because that seems to be all we can do anymore, Companies keep buying other companies in an attempt to become Conglom-O, Sony wants more diversity in games, Battlefield prepares to try again but will they do anything about cheaters? Oh and early E3 rumors!

Listen to the audio-only version at Anchor.fm

Industry Kerfufles And New Games Flooding The Market Soon [Episode 37]

Click to access link.

Chris and Keith complain about dumb things in the industry and talk about the wave of new games coming by year's end due to delays from COVID.

Audio only at Anchor.FM

Diablo 2 Hands-On, Sony, Delays, And Age of Empires 4 [Episode 36]

Click to access link.

Alessio Talks hands-on with Diablo 2, We all talk about Sony and their boneheaded remakes and shutdowns. Delays hit Deathloop again, but is it something sinister this time? Age of Empires 4 catches criticism for looking like a free-to-play mobile game.

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Audio only on Anchor.fm

More Delays, Goodbye PS3 and Vita Store, Alan Wake 2? Yes Please [Episode 35]

Click to access link.

Chris takes the piss out of WB over Lego delay, Sony closing PS3 & Vita stores, MLB coming to Xbox Live, Outriders issues, Alan Wake 2 is coming - EGS exclusive!

Audio Only: Anchor.FM

Surprise Publisher Ranks, Xbox Trying To Buy Discord, And More Games To Film [Episode 34]

Click to access link.

Audio Only:

https://anchor.fm/wccftech/episodes/Surprise-Publisher-Ranks--Xbox-Trying-To-Buy-Discord--And-More-Games-To-Film-Episode-34-etsaan

The latest Metacritic publisher rankings were a bit surprising. Microsoft continues to buy up everything in the gaming world, And we're entering the golden age of games to film!

The rest of these exist, so bear with me as I get them all sorted.

Talking Xbox Series S Hand-On And Another Cyberpunk 2077 Delay [Episode 19]

Click to access link.

New console talks from Dave, Battle Royal Vampire Masguerade, LoL single-player game

Has Facebook Killed Oculus [Episode 18]

Click to access link.

New console talks from Dave, Battle Royal Vampire Masguerade, LoL single-player game

Facebook makes some boneheaded decisions around Oculus and Stadia executives have some seriously hot takes when it comes to streamers

Microsoft Is Holding Bethesda Tight And GAMESTOP Is Still In The Game [Episode 17]

Click to access link.

Phil Spencer of Microsoft has made some pretty condemning statements regarding whether non-Xbox platforms will get future Bethesda releases, but they're doing their part to help keep GAMESTOP afloat.

CD Project Red Crunching And Baldur's Gate 3 Impressions [Episode 16]

Click to access link.

Audio Only Version: Audio Podcast Episode 16

CD Project Red has entered last-minute crunch on Cyberpunk 2077, and Chris gives us the rundown on Baldur's Gate 3 and much more.

What does the Bethesda buyout mean for gamers? [Episode 15]

Click to access link.

The unthinkable has happened: Microsoft suddenly announced the acquisition of Bethesda Softworks, or more precisely its parent company Zenimax

PS5 Pricing and Availability Reveal [Episode 14]

Click to access link.

Audio Only: Audio Podcast Episode 14

Just like we said, this is all about the pricing and availability of the Playstation 5 and our thoughts around it!

Our Reaction To Xbox Series S And Pricing [Episode 13]

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Click to access link.

Audio only: Audio Podcast Episode 13

The Xbox Series S and Xbox Series X are all out in the open now, we know when they're coming and how much they're going to cost. Are we in? or ar we out?

NVIDIA pushes PC Gaming Forward and Are Nintendo Anti-consumer? [Episode 12]

Click to access link.

Audio Only: https://anchor.fm/wccftech/episodes/N...

NVIDIA pushing the envelope in PC Gaming, Nintendo lays out new announcements (Chris thinks they're anti-consumer), Preorder raffles WHAT?! Oh, and we talk about the current games we're playing.

Gamescom Flopped And Sony Loves PC [Episode 11]

Click to access link.

Audio Only: Audio Podcast Episode 11

Gamescom has come and gone and many didn't realize it happened. Sony is falling in love with additional sales they're seeing thanks to PC releases of first-party titles, a trend to continue?

DC Universe B Team Games and MS Flight Simulator [Episode 10]

Click to access link.

Audio Only: Audio Podcast Episode 10

We discuss the latest in the DC Universe games announced at DC FanDome and Chris Breaks down his time with MS Flight Simulator.

EPIC Vs The World Wccf Talks Gaming Ep 9

Click to access link.

Audio Only: Audio Podcast 9

Total War Saga: Troy for free, killing expectations and EPIC takes on Google and Apple in suit over fees. https://wccftech.com/epic-games-apple...

What's Up With PS5 Marvel Avengers Spider-Man Exclusivity - Wccf Talks Gaming Ep 8

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What's Up With PS5 Marvel Avengers Spider-Man Exclusivity Wccf Talks Gaming Ep 8 https://wccftech.com/marvels-avengers...

Xbox Fails To Steal The Show - Wccf Talks Gaming Episode 7

Click to access link.

Audio Only: Audio Podcast Episode 7

Audio Only on Anchor.fm https://anchor.fm/wccftech/episodes/X... Fable, Forza, and More 1st and 3rd Parties Seemingly Xbox Series X Console Exclusives

Ghost of Tsushima, Death Stranding and Halo 3 PC, & Ubisoft Forward - Wccf Talks Gaming Ep 6

Click to access link.

Audio Only: Audio Podcast Episode 6

Star Wars Squadrons, Cyberpunk 2077, And Marvel's Avengers [Episode 5]

Click to access link.

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Sony Finally Shows Off The PS5 [Episode 4]

Click to access link.

Audio only listeners https://anchor.fm/wccftech/episodes/S...

Sony finally pulled the curtains back and revealed the Playstation 5 and a ton of games, we talk through our thoughts and highlights in this episode of Wccf Talks Gaming

PS5 Prepares For Reveal & What's Up With Backwards Compatibility [Episode 3]

Click to access link.

Audio Only Version on Anchor.fm https://anchor.fm/wccftech/episodes/P...

Epic Gets Unreal, Megatexture Revival, and Ghosts of Tsushima Swan Song [Episode 2]

Click to access link.

Audio Only: Audio Podcast Episode 2

Xbox Shows Out, PS5 Is MIA, And Nintendo? More Like NintenDough! [Episode 1]

Click to access link.

Audio Only: Audio Podcast Episode 1

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Document NEWAGAE020210923eh9n000m9



online news
HyperX Pulsefire Haste Gaming Mouse Now Compatible with NVIDIA Reflex

328 words 23 September 2021 ETMAG.com FMETMA English

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HyperX, the gaming peripherals team at HP Inc. and brand leader in gaming and esports, today announced the HyperX Pulsefire Haste gaming mouse is now compatible with NVIDIA Reflex. NVIDIA Reflex measures system latency - giving gamers an accurate measure of their system's responsiveness.

The NVIDIA Reflex Analyzer is a system latency measure tool in new NVIDIA G-SYNC Reflex displays. The tool detects clicks coming from the mouse and then measures the time it takes for the resulting pixel to change on screen. Now with Reflex, gamers can start a match with confidence, knowing their system is operating exactly as it should be.

The Pulsefire Haste utilizes an ultra-light honeycomb hex shell design that offers quicker movements and increased ventilation. The mouse features six programmable buttons and onboard memory and uses TTC Golden micro dustproof switches rated for up to 60 million clicks. The Pulsefire Haste is built with low-friction, pure virgin-grade PTFE skates for effortless glide movement and utilizes HyperFlex USB cable designed to reduce tension and resistance.

"We are thrilled to have compatibility with NVIDIA's Reflex technology in their new G-SYNC monitors. This enables instantaneous latency analysis giving gamers full confidence in the capabilities of responsiveness of their systems," said Jennifer Ishii, mouse business manager, HyperX. "We hope to continue to meet the ever-changing needs of gamers at all levels, including those looking for a lightweight, multi-platform compatible mouse designed for top gaming performance."

The HyperX Pulsefire Haste is built for elite gamers looking to gain every fraction of a second possible, designed to meet the needs of gamers looking for an ultra-light weight mouse. The mouse now supports NVIDIA Reflex, giving competitive gamers an accurate measure of system latency. For more information on NVIDIA Reflex, please visit the NVIDIA Reflex Analyzer page.

For more information on HyperX Pulsefire Haste, please visit Pulsefire Haste product page.

Document FMETMA0020210923eh9n00013



online news

Roccat Pro Line of Gaming Mice Support NVIDIA Reflex Latency Analyzer

314 words 23 September 2021 ETMAG.com FMETMA English

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ROCCAT, Turtle Beach's Hamburg, Germany-based PC gaming accessories brand, today announced that the Kone Pro, Kone Pro Air, and Burst Pro professional-grade PC gaming mice are compatible with NVIDIA's latency measuring system, Reflex. NVIDIA Reflex is a revolutionary suite of technologies that optimize and measure system latency to deliver the ultimate competitive advantage. NVIDIA G-SYNC displays with Reflex have the world's first and only system latency analyzer that detect clicks coming from gaming mice with Reflex and measure the time for the resulting pixels (weapon muzzle flash) to change on screen. PC gamers can start every match with confidence knowing their system is operating at the lowest possible latency.

When using ROCCAT's Kone Pro, Kone Pro Air, or Burst Pro mice in conjunction with an NVIDIA G-SYNC display with Reflex, gamers can measure and improve full peripheral and end-to-end system latency. There are only a limited number of PC gaming mice verified by NVIDIA to achieve this designation.

"Our goal is always that ROCCAT products give gamers a competitive edge, and combining the speed of the Titan Optical Switches in our Pro mice with the ability to reduce system latency through NVIDIA's Reflex technology certainly does that," said René Korte, ROCCAT Founder and General Manager for PC Products at Turtle Beach. "NVIDIA is looking to improve the experience for all esports players, and our lightweight and lightning-fast Pro mice are designed to achieve this as well. We're excited to be partnering with NVIDIA to make to every click count."

"NVIDIA Reflex gives competitive gamers an accurate measurement of system latency," said Seth Schneider, Esports Product Manager, NVIDIA. "Using ROCCAT's Pro mice together with Reflex enables competitive gamers to accurately optimize their settings and head confidently into battle."

Document FMETMA0020210923eh9n0000z

Gaming Boom Sustainable Post-Pandemic, Says Nvidia CFO

600 words
15 September 2021
Warren's Consumer Electronics Daily
CEDW
Volume 21; Issue 179
English
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Nvidia's gaming demand is strong, "but our growth is continuing to be gated by supply," Chief Financial Officer Colette Kress told Citi's virtual tech conference Monday. "Channel inventory in the market is still low, and we continue to work on providing more supply into the channel to improve those scenarios."

With channel inventory so low, "overall prices in the market are a little bit higher than what, I would say, manufacturer suggested retail prices are," said Kress. "We have a ways to go in providing more of that inventory. We're starting to see prices decrease and therefore, make it more affordable and available to our gamers. But we're still working on that."

Nvidia is working with all its supply chain partners and "ecosystems" to improve components availability, said Kress. "It's very rare that we actually just sell chips. We are selling full platforms." It's incumbent on Nvidia "to think about the components that our partners and ecosystems must also procure to finish up those systems," she said. "We're working across the industry to make sure that we are all working together to get that inventory to the market and to gamers." The "entire process" involves "a lot of different companies working on providing more supply." she said.

The company doubts it will be able "to serve all of the demand" anytime soon, said Kress. "You'll see us more and more with longer-term commitments" in the procurement chain, including with contract manufacturers "that help build out using the supply that we have," she said. "Given the size of the company, we have quite a bit of optionality." Nvidia is partnering with two "high-end fabs" to procure the wafers it needs, she said. "We're probably one of the only large companies that has such a strong dual-fab process." The long-term nature of working together with the two fabs "has really helped us through this process," she said.

The universe of gamers "continues to expand," said Kress, when asked about the sustainability of the gaming boom post-pandemic. "Once a gamer, always a gamer," she said. Gaming during the pandemic became so much more than one-on-one competition, she said. "Now it is a full entertainment sport" that meets the demands of "all different types of users," from first-time to professional gamers, she said. There's also the people who are "just watching others game," she said, estimating the global audience for esports is about 500 million. PC gamer participation on Steam, the "very popular" online platform, is up more than 20% year on year, she said.

The "strong and powerful market of laptop gaming" has also driven adoption during COVID-19, said Kress. "Laptop gaming infuses some of the best performance, but also in a thin and light offering." More and more desktop-centric gamers are building their "second opportunity" with a laptop, fueling demand for Nvidia's Ampere-branded high-performance computing infrastructure, she said. "We are well positioned heading into the holiday season with Ampere."

Nvidia's RTX graphics cards are adaptable "across all of our notebooks," plus high-end desktops, said Kress. "We've got a great upgrade cycle ahead of us still." She estimates 80% of Nvidia's installed base "still has not upgraded to RTX, so we've got a great continued opportunity," she said. "We're getting ready for the holiday season, and as we turn the corner to next year, we're still purchasing supply for long term to fuel this market."

Document CEDW000020210920eh9f00003



Pentanet to launch Nvidia GeForce cloud gaming service in Australia on 22 September

491 words
15 September 2021
Telecompaper Asia
TELASI
English
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Australian internet services provider Pentanet has provided an update on the GeForce Now Powered by Pentanet cloud gaming service in Australia. The ISP has revealed that 18 Nvidia RTX blade servers have been deployed across Perth and Sydney data centres, with internal testing set to be completed this week.

The national rollout continues on schedule with Cloud.GG Beta Quest players in Australia and New Zealand set to be invited to participate in the GeForce Now Beta Play from September 22.

Beta Play will be free for selected players with RTX ON for real-time ray tracing. Users will have access to a library of over 1,000 games, and will be able to play them by connecting to their Steam, Epic Games Store, Ubisoft Connect and GOG.COM accounts. Players will also have access to 80 free-to-play titles included with GeForce NOW Powered by Pentanet.

Pentanet's internal Beta program has seen the team of gamers run RTX-enabled Cyberpunk 2077 on nearly any MacBook, even going back to 2012, Destiny 2 on a Samsung Galaxy phone, Apex Legends on a decade-old, budget Windows PC laptop, and other streaming options.

According to Pentanet founder and managing director, Stephen Cornish, demand leading into the Beta Play stage remains strong, with over 27,000 unique active users completing over 160,000 Cloud.GG Quests to secure a seat in Beta Play. The Quests are gamified activities designed to provide Pentanet with further insight into usage patterns and infrastructure demand to manage and optimise the hardware and infrastructure rollout.

Data gathered via Cloud.GG allows Pentanet to directly select players that cover a variety of circumstances — varying locations, different games, connection speeds and types, and hardware configurations. Pentanet plans to add a small batch of players to the service initially and add groups of Beta players every few days, to test the capacity of the platform on Australian networks.

Beta Players will be able to play the entire library of titles supported by GeForce NOW. That means users will be able to connect Steam, Epic Games Store, Ubisoft Connect, GOG or other compatible marketplaces for PC to play titles they already own.

Players can now register to begin their Beta Quest ahead of Beta Play on 22 September.

Details for the Australian launch of GeForce Now

GeForce Now Powered by Pentanet will be available next month, including pricing and subscription packages. GeForce Now is Nvidia's cloud-based game streaming service, delivering real-time gameplay from cloud to laptops, desktops, Macs, Shield TVs, Android devices or iPhones and iPads. Australian gamers will be able to connect to their store accounts and stream their own library of games, or play your favourite free-to-play games. With cloud saves for supported games, users can pick up their game where they left off, on any supported device, wherever they are.

Document TELASI0020210915eh9f0002u



Companies & Markets
Thriving To Build Gaming Community In India – Vishal Dhupar, NVIDIA

Ojasvi Nath
1,215 words
14 September 2021
14:23
BW Businessworld
ABPBUS
English
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We are always thriving towards building the gaming community in India, where the gamers are able to access influencers, experts and peers, while sharing their gaming experience for leisure and for esports

NVIDIA's invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined modern computer graphics and revolutionised parallel computing. More recently, GPU deep learning ignited modern AI — the next era of computing — with the GPU acting as the brain of computers, robots and self-driving cars that can perceive and understand the world.

The tech giant's breakthrough in graphics has improved gaming performance. In a recent conversation with BW Businessworld, Vishal Dhupar - Managing Director Asia South, NVIDIA, speaks on NVIDIA's gaming device range, new enhancements. India as a market, and more, Excerpts:

Tell us about NVIDIA's gaming device range, new enhancements and lineup, and the planned technology for customers in India this year and after?

Our breakthrough in graphics for gaming includes real-time ray tracing for the ultimate realism and Al-based DLSS that marvelously improves the gaming performance. Real-time ray tracing allows scenes to be rendered with photographic levels of fidelity, creating physically accurate shadows, reflections, refractions, and global illumination, giving the most realistic gaming experience. DLSS on the other hand is another powerful technology that uses special Al processes to give HD performance without sacrificing the image quality. We also released NVIDIA Reflex, designed for gamers to implement a low latency mode to get the best possible in-time response.

Another striking range is the GeForce Experience which enables users to update drivers, optimize games, and share victories. We recently launched our 3080 Ti RTX GPUs which is a powerful flagship using the Ampere architecture. NVIDIA Ampere has taken RTX to new heights for professional workloads and has marked an important inflection point for NVIDIA. It speeds up the rendering of ray-traced motion blur for faster results with greater visual accuracy. The RTX GPUs built on the ampere architecture can accelerate graphics, rendering, compute and AI significantly faster than previous generations and has emerged as a game changer in the market.

NVIDIA has redefined computer graphics with GeForce. Also, the laptop business has become one of the fastest-growing businesses in the company. Which of your product is ruling the charts in India? Since the Indian market is known to be a price-sensitive market, how do you cater to this userbase keeping in check the quality?

India as a country has a large base of both developers and students. There are a lot of students pursuing STEM education including engineering, which is a large student base. The market for laptop has always been there in India but the current pandemic has led the students to opt laptop as a medium to study and access the course content. Similarly, the demand for laptops with powerful GPUs like GeForce has taken a leap in the developer community owing to the work-from-home scenario. We have fairly a large share in the overall laptop market in the country which is powered by GeForce GPUs.

In addition, the introduction to Ampere 30-series GPUs have created a remarkable increase in the demand for laptops in India. Talking about price sensitivity, we believe India is a value-conscious market and when they actually start seeing value, they have their options open irrespective of the price. Hence, we make sure to deliver the right product value for the customers while working with our notebook OEM partners.

How do you see the gaming opportunity especially in a country like India, which has got a sudden boom during the pandemic in its already rising growth story?

Gaming has in fact been growing rapidly in India for the past five years, not only in the recent past. This growth has been both in leisure gaming and e-sports, the former offering interactive digital recreation and the latter a new professional avenue to earn a living. In addition, the growth of gaming has also been driven by the widespread availability of broadband at a reasonable cost, a young demographic who are digital natives, exposure to global gameplay through channels such as YouTube & Twitch, changing societal norms and perceptions and access to physical experience points such as cafes. The pandemic has only accelerated this trend, especially with the widespread adoption of powerful notebooks in our work from home era, which allow even more Indians to both works and enjoy PC gaming.

Tell us about the investment trend taking place in the Indian gaming industry from NVIDIA's point of view.

As a technology provider, our main focus is towards creating the availability of gaming system builders and GPUs for the gaming segment. In terms of investment, we have seen an uptick in e-sports, tournaments and arenas as rising trends and some organizations who have gone public, as a new space for investments.

What are the technological trends in gaming this year which NVIDIA may have missed?

Technology trends have continued to move the gaming world forward. As technology constantly evolves, online gaming experiences continue to improve. This technological environment is constantly growing, which brings forth numerous transformations that not only need to be adopted but adapted to as well.

- Ray Tracing is one of the most growing trends amongst the developers for next-generation gaming, where the technology is currently supported by console platforms as well
- Technologies like DLSS combined with Reflex allows a high frame rate for gaming which translates into rich gaming experience

NVIDIA's plans for the Indian market.

NVIDIA's prime focus is to continue to strive to make it as convenient as possible for gamers across the country to buy our GPUs and access our technology at all point of sales and in every possible way. We are always thriving towards building the gaming community in India, where the gamers are able to access influencers, experts and peers, while sharing their gaming experience for leisure and for esports. We aspire to be one of the biggest gaming communities in the world and through our partner ecosystem as well as our own initiatives like the GeForce experience, we aim to provide not only the best PC gaming experience but indeed the best gaming experience possible across all genres of games for our Indian gaming community.

The developer community is another focus area for us for which we have our GeForce laptop for developers program. They are using GPUs for gaming, visualization, and for AI, ML, and Data Science for computing. Our notebook market has a dual-use for their laptops, they are workers by day and gaming warriors by night. Having a good quality GPU will help them strike a balance between their professional work and leisure gaming activities and that's where NVIDIA RTX studio products come in.

We have approximately 400 million monthly active users when it comes to YouTubers. As the creator market expands, through our studio programs and new app launches like Canvas we are creating a beyond gaming experience. We are enabling all the requirements the Indian market demands, whether it's pure-play gaming, developers who require GeForce acceleration or students who have dual usage.

Document ABPBUS0020210914eh9e0002t



NVIDIA Corporation; Patent Issued for Remote operation of vehicles using immersive virtual reality environments (USPTO 11099558)

2,829 words 10 September 2021 Investment Weekly News INVWK 1292 English

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2021 SEP 18 (VerticalNews) -- By a News Reporter-Staff News Editor at Investment Weekly News -- NVIDIA Corporation (Santa Clara, California, United States) has been issued patent number 11099558, according to news reporting originating out of Alexandria, Virginia, by VerticalNews editors.

The patent's inventors are Ebert, Justin (Lafayette, CO, US), Gudadhe, Prajakta (Los Gatos, CA, US), Huang, Jen-Hsun (Los Altos Hills, CA, US), Johnston, Dane (High Ridge, MO, US).

This patent was filed on March 27, 2019 and was published online on August 24, 2021.

From the background information supplied by the inventors, news correspondents obtained the following quote: "As autonomous vehicles become more prevalent and rely less on direct human control, the autonomous vehicles may be required to navigate environments or situations that are unknown to them. For example, navigating around pieces of debris in the road, navigating around an accident, crossing into oncoming lanes when a lane of the autonomous vehicle is blocked, navigating through unknown environments or locations, and/or navigating other situations or scenarios may not be possible using the underlying systems of the autonomous vehicles while still maintaining a desired level of safety and/or efficacy.

"Some autonomous vehicles, such as those capable of operation at autonomous driving levels 3 or 4 (as defined by the Society of Automotive Engineers (SAE) "Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles"), include controls for a human operator. As such, conventional approaches to handling the above described situations or scenarios have included handing control back to a passenger of the vehicle. (e.g., a driver).

"However, for autonomous vehicles of autonomous driving level 5, there may not be a driver, or controls for a driver, so it may not be possible to pass control to a passenger of the autonomous vehicle (or a passenger may be unfit to drive). As another example, the autonomous vehicle may not include passengers (e.g., an empty robo-taxi), or may not be large enough to hold passengers, so control of the autonomous vehicles may be completely self-contained.

"Some conventional approaches have provided some level of remote control of autonomous vehicles by using a two-dimensional (2D) visualizations projected onto 2D displays, such as computer monitors or television displays. For example, the 2D display(s) at a remote operator's position may display image data (e.g., a video stream(s)) generated by a camera(s) of the autonomous vehicle to the remote operator, and the remote operator may control the autonomous vehicle using control components of a computer, such as a keyboard, mouse, joystick, and/or the like.

"However, using only a 2D visualization on a 2D display(s) may not provide enough immersion or information for the remote operator to control the autonomous vehicle as safely as desired. For example, the remote operator may not gain an intuitive or natural sense of locations of other objects in the environment relative to the autonomous vehicle by looking at a 2D visualization on s 2D display(s). In addition, providing control of an autonomous vehicle from a remote location using generic computer components (e.g., keyboard, mouse, joystick, etc.) may not lend itself to natural control of the autonomous vehicle (e.g., as a steering wheel, brake, accelerator, and/or other vehicle components would). For example, a correlation (or scale) between inputs to a keyboard (e.g., a left arrow selection) and control of the autonomous vehicle (e.g., turning to the left) may not be known, such that smooth operation may not be achievable (e.g., operation that may make the passengers feel comfortable). Further, by providing only a 2D visualization, valuable information related to the state of the autonomous vehicle may not be presentable to the remote operator in an easily digestible format, such as the angle of the wheels, the current position of the steering wheel, and/or the like."

Supplementing the background information on this patent, VerticalNews reporters also obtained the inventors' summary information for this patent: "Embodiments of the present disclosure relate to remote control of

autonomous vehicles. More specifically, systems and methods are disclosed that relate to transferring at least partial control of the autonomous vehicle and/or another object to a remote control system to allow the remote control system to aid the autonomous vehicle and/or other object in navigating an environment.

"In contrast to conventional systems, such as those described above, the systems of the present disclosure leverage virtual reality (VR) technology to generate an immersive virtual environment for display to a remote operator. For example, a remote operator (e.g., a human, a robot, etc.) may have at least partial control of the vehicle or other object (e.g., a robot, an unmanned aerial vehicle (UAV), etc.), and may provide controls for the vehicle or other object using a remote control system. Sensor data from the vehicle or other object may be sent from the vehicle or the other object to the remote control system, and the remote control system may generate and render a virtual environment for display using a VR system (e.g., on a display of a VR headset). The remote operator (e.g., a human, a robot, etc.) may provide controls to a control component(s) of the remote control system to control a virtual representation of the vehicle or other object in the virtual environment. The controls from the remote control system may then be sent (e.g., after encoding, scaling, etc.) to the vehicle or other object, and the vehicle or other object may execute controls that are based on the controls from the remote control system.

"As a result, a vehicle or other object that may have previously been unable to navigate certain environments, situations, or scenarios (e.g., due to restrictions, rules, etc.), may be controlled, at least partially, through the environments, situations, or scenarios based on controls from the remote operator. Thus, instead of coming to a stop or shutting down, the vehicle or other object may be able to navigate the situation and then continue according a planned path (e.g., by reentering an autonomous mode). By navigating the situation rather than stopping or shutting down, the vehicle or other object is able to minimize the impact with respect to the scheduled travel of the ego-car and to other vehicles or objects in the environment and/or can avoid creating an unsafe situation (e.g., by stopping or shutting down on a roadway or in another environment), thereby increasing safety within the environment as well. In addition, because the controls of the remote control system may translate more seamlessly to the vehicle controls (e.g., because the remote control system may include a steering wheel, a brake, and an accelerator), and due to the immersive nature of the virtual environment, the remote operator may be able to navigate the vehicle or other object through the environment more safely and efficiently than conventional systems."

The claims supplied by the inventors are:

- "1. A computer-implemented method comprising: initiating a remote control session, the remote control session including transfer of at least partial control of a vehicle to a control system remote from the vehicle; generating sensor data representative of one or more video streams using at least one camera of the vehicle; generating vehicle state data representative of a state of one or more components of the vehicle using one or more sensors of the vehicle; transmitting the sensor data and the vehicle state data to the control system at least to generate, based on the sensor data and the vehicle state data, a virtual simulation for display in a virtual environment of the control system, the virtual simulation including a display of at least one video stream of the one or more video streams and a representation of at least one component of the one or more components at a current state determined based at least in part on the vehicle state data; receiving control data representative of at least one control input from the control system; and causing actuation by at least one actuation component of the vehicle based on the at least one control input.
- "2. The method of claim 1, wherein the transmitting the sensor data comprises: encoding the sensor data to generate encoded sensor data; and transmitting the encoded sensor data to the control system, further wherein the sensor data is in a first format of a first data size, and the encoded sensor data is in a second format of second data size less than the first data size.
- "3. The method of claim 1, wherein the control system includes a virtual reality system comprising a virtual reality headset, and the virtual simulation is configured to be presented to a remote operator through the virtual reality headset.
- "4. The method of claim 1, wherein the virtual simulation is presented from a vantage point of a plurality of dynamically variable vantage points in the physical environment.
- "5. The method of claim 4, wherein the one or more components include at least one of a steering wheel, a wheel, a gear control, or a tire.
- "6. The method of claim 5, wherein the virtual simulation includes a representation of an interior of the vehicle, a vantage point of the display of the virtual environment is from within the interior of the vehicle, and one or more portions of the representation of the vehicle are removed or made at least partially translucent such that at least one component of the one or more components are visible in the virtual simulation from the vantage point.

- "7. The method of claim 1, further comprising: generating calibration data corresponding to at least one of a sensitivity of a steering mechanism of the vehicle, a braking sensitivity of a braking mechanism of the vehicle, or an acceleration sensitivity of an acceleration mechanism of the vehicle; and transmitting the calibration data to the control system, wherein the calibration data is used by the control system, at least in part, to set a sensitivity of a steering mechanism of the control system, a braking sensitivity of a braking mechanism of the control system, or an acceleration sensitivity of an acceleration mechanism of the control system.
- "8. A method comprising: receiving sensor data representative of a field of view in a physical environment of at least one sensor of an ego-vehicle; receiving vehicle state information corresponding to one or more components of the ego-vehicle; generating a virtual environment based at least in part on the sensor data and the vehicle state information, the virtual environment including a representation of at least one component of the one or more components at a current state determined based at least in part on the vehicle state data; causing display of the virtual environment on a display of the control system; generating control data representative of at least one control of the virtual vehicle based at least in part on receiving at least one control input to the control system; and transmitting the control data to the ego-vehicle to cause the ego-vehicle to execute at least one control corresponding to the at least one virtual control.
- "9. The method of claim 8, wherein the virtual environment includes a representation of at least a portion of the virtual vehicle corresponding to the ego-vehicle and at least one video stream representing at least a portion of the sensor data displayed on a virtual display within the virtual environment.
- "10. The method of claim 8, wherein the display is of at least a portion of the virtual environment from a vantage point within the virtual vehicle corresponding to the ego-vehicle, and one or more portions of the representation of the virtual vehicle are removed or made at least partially translucent such that at least one component of the one or more components are visible in the virtual environment from the vantage point.
- "11. The method of claim 8, wherein the display is of at least a portion of the virtual environment from a vantage point outside of the virtual vehicle corresponding to the ego-vehicle, the field of view including at least a portion of the virtual vehicle and at one virtual display displaying a video stream represented by at least a portion of the sensor data.
- "12. The method of claim 8, wherein the virtual environment includes at least a portion of a virtual vehicle corresponding to the ego-vehicle, the virtual vehicle including virtual wheels aligned according an alignment of the wheels of the ego-vehicle in the physical environment as determined using the vehicle state data.
- "13. The method of claim 8, wherein the control input is indicative of a waypoint for the ego-vehicle, and the ego-vehicle uses the waypoint as an indicator to locally determine control decisions for navigating to the waypoint.
- "14. The method of claim 8, wherein the control system includes a virtual reality headset and at least one physical control component, the at least one physical control component including one or more of a steering component, a braking component, or an acceleration component.
- "15. The method of claim 8, wherein the sensor data includes first sensor data representative of a first field of view in the physical environment of a first camera and second sensor data representative of a second field of view in the physical environment of a second camera, and the method further comprises: stitching together, using one or more image or video stitching techniques, at least a portion of the first sensor data and the second sensor data to generate stitched sensor data, wherein the generating the virtual environment is based at least in part on the stitched sensor data.
- "16. The method of claim 8, wherein the control system includes at least one of a steering component, a braking component, or an acceleration component, and the method further comprises calibrating the at least one of the steering component, the braking component, or the acceleration component based at least in part on calibration data, the calibration data at least one of received from the ego-vehicle or obtained from a data store accessible by the control system.
- "17. The method of claim 8, wherein control inputs to the control system are scaled based at least in part on a difference in dimensions between the ego-vehicle and the virtual vehicle prior to execution of controls corresponding to the control inputs by the ego-vehicle in the physical environment.
- "18. The method of claim 8, further comprising: determining orientation information of a headset of the control system; correlating the orientation information with fields of view of sensors of the ego-vehicle; and determining a set of the sensors based at least in part on the correlating, wherein the sensor data is representative of fields of view of the set of the sensors.
- "19. A method comprising: generating, at a first time when a network connection strength is at a first level, first sensor data from a first set of sensors of a vehicle; transmitting the first sensor data to a control system remote from the vehicle to cause, at least in part, the control system to generate a virtual representation; Page 110 of 181 © 2022 Factiva, Inc. All rights reserved.

determining, at a second time, that the network connection strength is at a second level less than the first level and below a threshold; receiving, from the control system, orientation data representative of a detected orientation of a remote operator of the control system; determining, based at least in part on the orientation data and the network connection strength being below the threshold, a subset of the first set of sensors; generating second sensor data from the subset of the first set of sensors; transmitting the second sensor data to the control system to cause, at least in part, the control system to generate an updated virtual representation; and receiving control data representative of at least one control input from the control system.

"20. The method of claim 19, wherein one or more portions of the virtual environment corresponding to the first sensor data are replaced with one or more virtual portions in the updated virtual representation."

For the URL and additional information on this patent, see: Ebert, Justin. Remote operation of vehicles using immersive virtual reality environments. U.S. Patent Number 11099558, filed March 27, 2019, and published online on August 24, 2021. Patent URL:

http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11099558.PN.&OS=PN/11099558RS=PN/11099558

Keywords for this news article include: Business, Robotics, Computers, Transportation, Machine Learning, Self-Driving Cars, NVIDIA Corporation, Technology Companies, Emerging Technologies, Semiconductor - Specialized Companies.

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Document INVWK00020210910eh9a000kw



Nvidia, AMD Benefit From New Products, Strong Gaming Cycle: BofA

Shanthi Rexaline 542 words 9 September 2021 00:08 Benzinga.com BNZNGA English

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NVIDIA Corporation (NASDAQ: NVDA) and Advanced Micro Devices, Inc. (NASDAQ: AMD) continue to be bullish GPU plays despite changing market trends, according to a BofA Securities analyst.

The Semiconductor Analyst: Vivek Arya reiterated Buy ratings on AMD and Nvidia shares. The analyst has a \$135 price target for AMD and \$260 price target for Nvidia.

The Semiconductor Takeaways: The average selling prices that drove GPUs in 2021 will likely moderate in 2022, Arya said in a note.

The gaming environment remained robust in the second quarter, with discrete GPU sales rising 100% year-over-year and 14% quarter-over-quarter to \$3.45 billion, the analyst said.

The bulk of the year-over-year growth was driven by ASPs, as capacity constraints led vendors to prioritize higher-end/higher ASP products, he said.

The cumulative Ampere/Turing mix of Nvidia gamers grew 250 basis points month-over-month and 1,800 basis points year-over-year in August, with average ASPs 20%-100% above older-gen Pascal, Arya said, citing BofA's Steam Survey tracker.

A similar dynamic is likely to be seen for full year 2021 as constraints persist throughout the rest of the year, the analyst said. Total discreet GPUs sales climbed 62%, mainly driven by ASPs, even as units grew just 7%, he said.

This dynamic, the analyst said, will likely reverse in 2022as capacity comes online and mix normalizes.

Arya estimates 5% growth in the discreet GPU market, driven by units, while ASPs will likely fall 3%-5%.

Related Link: Why Teslas Elon Musk Is Reportedly Opposing Nvidias Proposed Arm Buy

Nvidia, the gaming leader with a unique accelerated computing franchise, and AMD, with a strong roadmap for CPU share gains, are benefiting from new products and strong gaming cycle, according to BofA.

Nvidia's <u>Ampere</u> penetration of 7.1% is below Turing and Pascal at equivalent points in their ramps, likely due to supply challenges, Arya said.

"Importantly Ampere avg. ASPs of \$523 are still 15- 65% above Turing/Pascal at equal points in their ramps, which should help support our long-term expectation for ~10% ASP appreciation as NVDA gamers mix up the stack," the analyst said.

Ampere adoption is likely to accelerateas more capacity comes online, likely in mid-to-late 2022, he said.

Intel Corporation (NASDAQ: INTC)'s CPU share among PC gamers increased 180 basis points month-over-month in August to 72.6%, Arya said. On a year-over-year basis, AMD's share was up 250 basis points, the analyst said.

AMD's overall PC + Server CPU share can grow 300-400 basis points annually through at least 2023, according of BofA.

AMD, NVDA, INTC Price Action: At last check, AMD shares were down 2.48% to \$106.44 and Nvidia was slipping 1.42% to \$223.40.

Intel shares were retreating 0.51% to \$53.38.

Photo: courtesy of Nvidia.

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Latest Ratings for NVDA

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Deutsche Bank Maintains Hold
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Document BNZNGA0020210908eh980018o



Nvidia Corporation - GANTheftAuto: Harrison Kinsley on Al-Generated Gaming Environments

Nvidia Corporation published this content on 08 Sep 2021 and is solely responsible for the information contained herein. Distributed by PUBT, unedited and unaltered, on 08 Sep 2021 13:10:41 UTC. 616 words

8 September 2021

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GANTheftAuto: Harrison Kinsley on Al-Generated Gaming Environments

Humans playing games against machines is nothing new - think of Deep Blue or <u>AlphaGo</u>. But now, computers can even develop their own games for people to play.

Programming enthusiast and social media influencer Harrison Kinsley spoke with NVIDIA Al Podcast host Noah Kravitz about creating GANTheftAuto, an Al-based neural network that generates a playable chunk of the classic video game Grand Theft Auto V.

The Al Podcast · GANTheftAuto: Harrison Kinsley on Al-Generated Gaming Environments

Inspired by NVIDIA GameGAN's recreation of PAC-MAN, Kinsley and his collaborator Daniel Kukeila decided to test how far they could take the idea of training an Al model to create its own gaming environment.

Key Points From This Episode:

- * GANTheftAuto is an AI model that generates features of the Grand Theft Auto gaming environment from its overall landscape to details like the sunlight reflecting off a car in real time, as a person plays the game. The model is based on a chunk of training data, not the actual code from the game.
- * Kinsley and Kukeila had to overcome challenges such as gathering enough data to train the model, training it in a reasonable amount of time and getting it to simulate real-life physics.
- * Aside from his own work, Kinsley helps people all over the world with their Al-based projects by posting programming tutorials and explainer videos to his YouTube channel, which is hosted under the name 'sentdex' and has over a million subscribers.

Tweetables:

'It's one of those things that gives you goosebumps when you see it ... there's something really cool about an Al-generated environment.' - Harrison Kinsley [5:46]

'I think Al-based software is the future.' - Harrison Kinsley [26:37]

You Might Also Like:

Matt Ginsberg Built a GPU-Powered Crossword Solver to Take on Top Word Nerds

Dr.Fill, the crossword puzzle-playing AI created by Matt Ginsberg - a serial entrepreneur, pioneering AI researcher and former research professor - scored higher than any humans earlier this year at the American Crossword Puzzle Tournament.

Perfect Pairing: NVIDIA's David Luebke on the Intersection of AI and Graphics

The NVIDIA Research team employs more than 200 scientists around the world who are driving innovation across a range of industries. David Luebke, who founded the team in 2006 and is now the company's vice president of graphics research, describes how AI and graphics go together 'like peanut butter and jelly.'

Cycle of DOOM Now Complete: Researchers Use AI to Generate New Levels for Seminal Videogame

DOOM, of course, is foundational to 3D gaming. 3D gaming, of course, is foundational to GPUs. And GPUs are foundational to deep learning, which is, now, thanks to a team of Italian researchers, being used to make new levels for ... DOOM.

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Technavio - Gaming Console Market Records a CAGR of over 6% by 2025 with Dominant Players including Dell Technologies Inc., Mattel Inc., Microsoft Corp., and NVIDIA Corp. | Technavio

741 words
25 August 2021
ENP Newswire
ENPNEW
English
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Technavio - Set to grow by USD 14.59 billion during 2021-2025, Technavio's latest market research report estimates the gaming console market to register a CAGR of over 6%.

With a focus on identifying dominant industry influencers, Technavio's reports present a detailed study by the way of synthesis, and summation of data from multiple sources. This report offers an up-to-date analysis regarding the current market scenario, the latest trends and drivers, and the overall market environment.

Technavio offers an up-to-date analysis regarding the current global market scenario and the overall market environment.

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Release date - 24082021

The enhanced features of next-generation gaming consoles, diversified gaming population, and enhanced technological features and product innovations will offer immense growth opportunities. In addition, increasing use of gaming consoles for non-gaming activities, the growing prominence of games-as-a-service (GaaS), and the surging emergence of gamification will aid in accelerating the market's growth during the forecast period.

Gaming Console Market 2021-2025: Segmentation

Gaming Console Market is segmented as below:

Туре

TV Consoles

Handheld Consoles

Application

Casual Gamers

Hardcore Gamers

Geography

APAC

North America

Europe

MEA

South America

Learn more about the factors assisting the growth of the market, download a free sample:

https://www.technavio.com/talk-to-us?report=IRTNTR70487

Gaming Console Market 2021-2025: Vendor Analysis and Scope

The gaming console market is concentrated, and the degree of concentration will accelerate during the forecast period. Atari Inc, Dell Technologies Inc., Mad Catz Global Ltd., Mattel Inc., Microsoft Corp., Nintendo Co. Ltd., NVIDIA Corp., Razer Inc., Sony Corp., and Valve Corp. are some of the major market participants.

To leverage the current opportunities and help businesses improve their market position, vendors must strengthen their foothold in the fast-growing segments while maintaining their positions in the slow-growing segments. Backed with competitive intelligence and benchmarking, our research reports on the gaming console market are designed to provide entry support, customer profile & M&As as well as go-to-market strategy support.

The report also covers the following areas:

Gaming Console Market size

Gaming Console Market trends

Gaming Console Market industry analysis

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Gaming Market by Type, Device, Platform, and Geography - Forecast and Analysis 2021-2025

Global Gaming Chair Market by Type, Price, and Geography - Forecast and Analysis 2020-2024

VR Gaming Market by Type, Application, and Geography - Forecast and Analysis 2020-2024

Gaming Console Market 2021-2025: Key Highlights

CAGR of the market during the forecast period 2021-2025

Detailed information on factors that will assist gaming console market growth during the next five years

Estimation of the gaming console market size and its contribution to the parent market

Predictions on upcoming trends and changes in consumer behavior

The growth of the gaming console market

Analysis of the market's competitive landscape and detailed information on vendors

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Document ENPNEW0020210825eh8p0004o



Lenovo IdeaPad <mark>Gaming</mark> 3i Upgraded With Intel Core i7-11370H CPU, Nvidia GeForce RTX 3050 GPU in India

406 words 24 August 2021 Khaleej Times KHALEJ English

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Lenovo IdeaPad Gaming 3i laptop has been refreshed in India and it comes with the latest Intel 11th Gen H-series processors and Nvidia GeForce RTX 30 series GPU. The gaming laptop comes with a high refresh rate display with slim bezels on the side and thick bezels on the top and bottom. It also offers the latest connectivity options, including Wi-Fi 6 and Thunderbolt 4. The laptop also has a backlit keyboard and slim form factor. Lenovo IdeaPad Gaming 3i comes with Windows 10 Home pre-installed.

Lenovo IdeaPad Gaming 3i price in India, availability

Lenovo IdeaPad Gaming 3i starts at Rs. 89,990 in India and will go on sale starting August 24, as per a press release. It will be available to purchase via Amazon and Lenovo website at first, with Flipkart and other offline channels following soon. As of now, there is only one configuration available for Lenovo IdeaPad Gaming 3i.

Epic Games Says Google Paid Phone, Game Makers to Avoid App Store Hit

Lenovo IdeaPad Gaming 3i specifications, features

Lenovo IdeaPad Gaming 3i runs Windows 10 Home out-of-the-box. The gaming laptop features a 15.6-inch full-HD (1,920x1,080 pixels) IPS anti-glare display with 120Hz refresh rate, 250 nits of peak brightness, 45 percent NTSC coverage, and DC dimming. Under the hood, it is powered by an Intel Core i7-11370H processor, paired with 8GB of RAM and 512GB of M.2 2280 PCIe 3.0x4 NVMe SSD storage. It also sports an Nvidia GeForce RTX 3050 GPU with 4GB GDDR6 VRAM and 90W maximum Total Graphics Power (TGP).

Lenovo Rides Work-From-Home Demand to Beat Q1 Profit Expectations

Audio is handled by two 2W stereo speakers with Nahimic Audio. They use a High Definition (HD) Audio chip with Realtek ALC3287 codec. The laptop has a 720p webcam with a shutter and connectivity options include Wi-Fi 6, Bluetooth, Thunderbolt 4, and more. There is a 45Whr battery on Lenovo IdeaPad Gaming 3i with support for Rapid Charge Pro, that can provide 50 percent battery power in just 30 minutes of charging. The keyboard is backlit with white lighting and there is a dedicated number pad as well. In terms of dimensions, Lenovo IdeaPad Gaming 3i measures 359.6x251.9x24.2mm and weighs 2.25kg.

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INVESTOR'S BUSINESS DAILY®

Technology

Graphics-Chip Maker Nvidia Tops Quarterly Views As Gaming Sales Soar

PATRICK SEITZ
418 words
19 August 2021
Investor's Business Daily
INVDAI
English
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Nvidia shares rose Thursday after the graphics-chip maker beat Wall Street's sales and earnings targets for its fiscal second quarter. It also guided higher for the current quarter. Nvidia stock approached a buy point on the news.

The Santa Clara, Calif.-based company late Wednesday said it earned an adjusted \$1.04 a share on sales of \$6.51 billion in the quarter ended Aug. 1. Analysts expected Nvidia earnings of \$1.02 a share on sales of \$6.33 billion, according to FactSet. On a year-over-year basis, Nvidia earnings jumped 89% while sales surged 68%.

For the current quarter, Nvidia expects to generate sales of about \$6.8 billion, up 44% year over year. It did not give a per-share earnings target. Wall Street had predicted Nvidia earnings of \$1.05 a share on sales of \$6.57 billion in the fiscal third quarter.

"Nvidia's pioneering work in accelerated computing continues to advance graphics, scientific computing and AI," Chief Executive Jensen Huang said in a <u>news release</u>.

Nvidia Stock Rises After Report

In morning trading on the <u>stock market today</u>, Nvidia stock advanced 2.5%, near 195.10. During the regular session Wednesday, shares fell 2.2% to 190.40.

Sales of video game graphics products soared 85% year over year to \$3.06 billion in the second quarter. Gaming chips accounted for 47% of Nvidia's revenue in the period.

Data center chip sales totaled \$2.37 billion, up 35% year over year. The segment made up 36% of Nvidia's total sales last quarter.

The rest of Nvidia's revenue came from chips for professional visualization and automotive applications.

Nvidia Stock Nears Buy Point

Nvidia is on IBD's Leaderboard watchlist as well as the IBD 50 and Big Cap 20 stock lists.

Over the past six weeks, Nvidia stock has formed a <u>cup-with-handle base</u> with a <u>buy point</u> of 207.43, according to <u>IBD MarketSmith</u> charts.

Follow Patrick Seitz on Twitter at @IBD_PSeitz for more stories on consumer technology, software and semiconductor stocks.

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Nvidia Gains on Forecast of Higher Prices for Gaming Chips

255 words 19 August 2021 Investing.com INVEN English

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Investing.com -

By Dhirendra Tripathi

Investing.com – Nvidia stock (NASDAQ:NVDA) traded 1% higher in Thursday's premarket as the company's second-quarter results topped estimates and the company officials predicted higher prices for its gaming chips.

Second-quarter revenue from sale of gaming chips was a record \$3.06 billion, up 85% from a year earlier as consumers bought more devices and spent more time playing online games.

Revenue from the company's data-center segment also hit a record as Cloud services boomed and demand for the company's AI software rose. Second-quarter data-center revenue touched \$2.37 billion, up 35%.

Nvidia's \$6.51 billion revenue in the second quarter topped analysts' estimate of \$6.32 billion. Adjusted earnings per share of \$1.04 were also higher than the estimated \$1.02.

The chipmaker estimates revenue in the ongoing quarter to come in at \$6.80 billion, plus or minus 2%.

The company management also expressed confidence in securing regulatory approvals for its proposed \$40 billion acquisition of rU.K.-based chip designer ARM, despite reports that it may take until the end of next year to gain clearance from Chinese antitrust authorities, and despite ongoing concern in U.K. political circles about the national security implications.

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Nvidia Posts All-Time High Quarterly Revenue: Gaming, ProViz, Crypto

Anton Shilov
601 words
19 August 2021
Tom's Hardware
TOMHA
English
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Gaming, ProViz graphics, and cryptocurrency mining drive Nvidia's revenues to record heights.

For its second quarter of FY2022 that ended on August 1, Nvidia on Wednesday posted its all-time record quarterly revenue of \$6.507 billion, a 68.3% increase over the same period a year ago. The company's sales were driven by unprecedented demand for high-end gaming GPUs, professional graphics cards used for ProViz applications, and cryptocurrency mining.

Nvidia's revenues have been steadily increasing ever since the company introduced its GeForce RTX 3000-series 'Ampere' GPUs last September that quickly gained acceptance among gamers despite very high MSRPs. The popularity of Nvidia's GeForce RTX 3000-series graphics cards, many of which are among the best graphics cards, has remained high, despite soaring prices due to shortages, which is why Nvidia sold every single graphics processor it could produce in the last 12 months or so.

As Nvidia ramped production of datacenter and professional solutions based on the Ampere architecture in the recent quarters, the company's revenue and profitability increased significantly as such products are sold at a huge premium. Furthermore, the company's products for automotive applications were also on the rise in O2

Click to view image (Image credit: Nvidia)

Along with an all-time high revenue of \$6.507 billion, Nvidia also posted a \$2.374 billion net income in Q2 FY2022, a 282% increase over \$622 million in Q2 FY2021. The company's gross margin also increased to 64.8%, up from 58.8% in the same quarter a year ago.

Click to view image (Image credit: Nvidia)

Gaming & Mining

Nvidia's bread and butter has always been its graphics business and in the recent quarter it has been thriving due to high average selling prices, record demand, and Ethereum mining. Sales of Nvidia's gaming hardware (which includes GeForce GPUs and console SoCs) in Q2 FY2022 totaled \$3.061 billion, up 11% sequentially and up 85% year-over-year.

Nvidia claims that over 80% of the new Ampere GPUs it shipped during the quarter were LHR (low hash rate) GPUs not particularly suitable for mining, so that vast majority (yet not all, Nvidia admits that) of GeForce RTX graphics cards sold in Q2 FY2022 ended up in the hands of gamers.

Sales of Nvidia's CMP (crypto mining processor) lineup totaled \$266 million, up significantly <u>from around</u> <u>\$150 million</u> in Q1 FY2022. Meanwhile, as profitability of Ethereum mining drops, Nvidia expects sales of CMP to collapse and shipments of gaming graphics boards to suffer moderately too.

Click to view image (Image credit: Nvidia)

Datacenters & ProViz

Sales of professional graphics cards and datacenter solutions are driven by multiple factors, including new products introductions, upgrade cycles, and a number of other. Back in the first quarter Nvidia introduced several new A-series compute GPUs for datacenters and RTX-series GPUs for ProViz applications. Since these products ramped up in Q2, Nvidia's datacenter business posted a \$2.366 billion revenue, a 35% increase compared to the same quarter a year ago, whereas the company's ProViz business sold graphics boards worth \$519 million, a 156% year-over-year increase.

Outlook

For companies like Nvidia, the third quarter is always the most successful because PC makers are increasing orders as they are preparing for back-to-school (BTS) and holiday seasons. For the third quarter of its

FY2022 (Q3 CY2021), Nvidia expects its revenues to hit 6.80 billion $\pm 2\%$ and gross margins to decrease to 65.2%.

Nvidia (Nvidia)

Document TOMHA00020210819eh8j0002u

THE WALL STREET JOURNAL.

Heard on the Street

Markets

Nvidia's Doing Just Fine on Its Own; Gaming, data center businesses booming even as chipmaker shifts tone on Arm deal

By Dan Gallagher
447 words
19 August 2021
04:52
The Wall Street Journal Online
WSJO
English
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All slowdowns should look like this.

Nvidia reported Wednesday afternoon that its <u>fiscal second quarter</u> revenue surged 68% year over year to \$6.5 billion. That is a new quarterly record for the chipmaker, even as its growth rate slowed from the 84% reported in the prior quarter that ended in April.

Revenue in the company's key videogaming and data center businesses grew by 85% and 35% year over year, respectively, though both also decelerated a bit from the previous guarter.

In other words, Nvidia is its own toughest competitor. The same holds true for its stock, which rose less than 3% following the results after having run up 36% over the last three months. At 47 times forward earnings, Nvidia is one of the most expensive chip companies on the market. It has also earned its premium, having tripled revenue while doubling adjusted operating margins in the last five years.

Still, there are questions about where the company is going and how exactly it will parlay its newfound might.

A deal struck last year to acquire Arm Holdings from SoftBank looks iffy. U.K. regulators are closely eyeing that deal and considering blocking it, according to a report by Bloomberg this month. Even Nvidia seemed to hedge somewhat, with Chief Financial Officer Colette Kress saying on Nvidia's conference call Wednesday that "discussions with regulators are taking longer than initially thought." She said the company remains confident in the deal, though she didn't reiterate the previous target closing date of early 2022.

Regardless of the outcome of the ARM deal, Nvidia's latest results show the chipmaker is doing just fine on its own. It even has managed to contain its exposure to cryptocurrency mining that <u>caused some pain</u> a couple of years back. Ethereum, the cryptocurrency mined with Nvidia's graphics processors, saw its price slide 38% from its peak during the quarter ended Aug 1. Thus, revenue from Nvidia's specialized crypto-mining cards totaled only \$266 million for the quarter, well below the \$400 million the company projected three months ago.

Ms. Kress added that crypto is now expected to make a "minimal contribution going forward," reducing the risk of miners dumping chips on the secondary market and driving down prices of Nvidia's gaming processors. It is a testament to Nvidia's overall success that it can easily afford to be picky about what business it is in.

Write to Dan Gallagher at dan.gallagher@wsj.com

Nvidia's Doing Just Fine on Its Own

Document WSJO000020210818eh8i007bx

THE WALL STREET JOURNAL

Technology

Tech

Nvidia's Gaming Chips Drive Record Quarterly Results; As demand remains high, company's profit nearly quadruples

By Asa Fitch
726 words
19 August 2021
03:24
The Wall Street Journal Online
WSJO
English

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Graphics-chip maker Nvidia Corp. benefited from continued hot demand for devices from computer videogamers and cryptocurrency miners, pushing its sales and profit to records in its most recent quarter.

Nvidia has been one of the tech companies that profited most handsomely from the pandemic-era economy, when millions of people <u>turned to videogames</u>, online services and other home-based activities during lockdowns

Sales rose by 68% to \$6.51 billion in the period ended in July, the company said. Net profit nearly quadrupled, reaching \$2.37 billion.

The company's latest generation of graphics cards are popular with computer gamers for whom high-quality images and fast frame-rates are prized. Its high-end cards have sold out fast, and resellers have responded to demand by buying available stocks and marking them up well above their list price.

The cards are also well-suited to the computing-power demands of cryptocurrency mining. To avoid that demand crimping the supply of components for gamers, Nvidia sells products specifically for the digital-currency creation market. It also has put in place software designed to limit the usefulness of its gaming cards for crypto-mining. Chief Financial Officer Colette Kress said more than 80% of the company's latest graphics cards had those limiters on them, adding that crypto-specific chips would be a minimal contributor to future revenue.

Nvidia has managed to continue growing its sales in recent quarters despite a world-wide shortage of chips that has forced some auto makers to pause production and is spreading to a wider set of industries.

Demand continues to outpace supply, Ms. Kress said on an earnings call.

While gaming and data-center chips are core to Nvidia's business, inroads have been made into other areas, including autonomous driving and emerging forms of digital collaboration and entertainment. Chief Executive Jensen Huang said Nvidia also aims to play a key role in enabling the emerging field of metaverses, the extensive online world transcending individual tech platforms, where people exist in immersive, shared virtual spaces. Some tech heavyweights believe these will be at the heart of the next phase of the internet. Over 500 companies and more than 50,000 individual creators have shown interest in the company's metaverse tool, called Omniverse, Ms. Kress said.

The company's shares have shot up since the onset of the Covid-19 pandemic, giving it the momentum to help finance a \$40 billion bid last year for Arm Holdings, which designs microprocessors that power most of the world's smartphones.

The transaction would be the biggest-ever deal in the chip industry and would help catapult Nvidia into areas, such as phone chips and CPUs, where it previously only dabbled. But the deal faces significant challenges, including opposition from competitors of Nvidia who license Arm's chip designs and scrutiny in the U.K., where the deal is undergoing a national-security review.

Ms. Kress said the company's efforts to buy Arm are slowly working their way through regulatory approvals.

"Although some Arm licensees have expressed concerns or objected to the transaction, and discussions with regulators are taking longer than initially thought, we are confident in the deal and that regulators should recognize the benefits of the acquisition to Arm, its licensees, and the industry," she said.

Nvidia's gaming revenue was \$3.06 billion in the second quarter, a record and a 85% increase from the same period a year ago.

The company also said its revenue from data-center sales, where its chips are widely used in artificial-intelligence calculations, reached \$2.37 billion, up 35% from the year-ago period.

Nvidia's sales and profit were both higher than analysts surveyed by FactSet on average expected.

The company suggested Wednesday that the wave it is riding has yet to crest. Revenue for the current quarter should be around \$6.8 billion, Nvidia said, higher than Wall Street forecasts.

Chip-supply shortages affecting the company's gaming business are expected to persist throughout the current quarter, Ms. Kress said.

Nvidia's shares rose by about 1.6% in after-hours trading.

Write to Asa Fitch at asa.fitch@wsj.com

Nvidia's Gaming Chips Drive Record Quarterly Results

Document WSJO000020210818eh8i005h9



Nvidia's Gaming Chips Drive Record Quarterly Results

By Asa Fitch
426 words
19 August 2021
02:43
Dow Jones Newswires Chinese (English)
RTNW
English
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Graphics-chip maker Nvidia Corp. benefited from continued hot demand for devices from computer videogamers and cryptocurrency miners, pushing its sales and profit to record heights in its most recent quarter.

Nvidia has been one of the tech companies that profited most handsomely from the pandemic-era economy, when millions of people turned to videogames, online services and other home-based activities during lockdowns.

Sales rose by 68% to \$6.51 billion in the period ending in July, the company said. Net profit nearly quadrupled, reaching \$2.37 billion.

The company's latest generation of graphics cards are popular with computer gamers for whom high-quality images and fast frame-rates are prized. Its high-end cards have sold out fast, and resellers have responded to demand by buying available stocks and marking them up well above their list price.

The cards are also well-suited to the computing-power demands of cryptocurrency mining. To avoid that demand crimping the supply of components for gamers, Nvidia sells products specifically for the digital-currency creation market. It also has put in place software designed to limit the usefulness of its gaming cards for crypto-mining.

Nvidia's Chief Financial Officer Colette Kress said the company's efforts to buy chip-design specialist Arm Holdings are slowly working their way through regulatory approvals.

"Although some Arm licensees have expressed concerns or objected to the transaction, and discussions with regulators are taking longer than initially thought, we are confident in the deal and that regulators should recognize the benefits of the acquisition to Arm, its licensees, and the industry," she said. Nvidia last year agreed to buy Arm for around \$40 billion from SoftBank Group Corp., in what would be the chip industry's biggest deal ever.

Nvidia's gaming revenue was \$3.06 billion in the second quarter, a record and a 85% increase from the same period a year ago.

The company also said its revenue from data-center sales, where its chips are widely used in artificial intelligence calculations, reached \$2.37 billion, up 35% from the year-ago period.

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Write to Asa Fitch at asa.fitch@wsj.com

(END) Dow Jones Newswires

18-08-21 2113GMT

Document RTNW000020210818eh8i000l8



Acer Predator Helios 300 gaming laptop With 11th Gen Intel CPU and Nvidia RTX 3070 GPU launched in India

Yetnesh Dubey 509 words 18 August 2021 Digit HTDIGI English

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India, Aug. 18 -- Acer Predator Helios 300 Gaming laptop is now available in India on Flipkart and the Acer Online Store. The gaming laptop segment in India is becoming more competitive with each passing day and just recently, HP launched its affordable Victus series to spice up the competition. Now, Acer is entering the battlefield with an updated Predator Helios 300 gaming laptop. Before the upgrade, the same laptop was available with an Intel 10th Gen Core i7 octa-core processor and an Nvidia RTX 3060 GPU.

The new model now comes with the upgraded 11th Gen Intel Core-H series CPUs, up to an Nvidia RTX 3070 GPU, along with several other upgrades.

Acer Predator Helios 300 Gaming Laptop Specifications, Price, Features

The ACER gaming laptop comes equipped with 11th Gen Intel Core H-series processors with 8 cores and 16 threads, and a boost clock of up to 4.6GHz. The laptop comes with a PCIe Gen 4 SSD with up to 2TB of storage space, a maximum of 32GB DDR4 RAM, and up to an Nvidia RTX 3070 laptop GPU featuring 3rd Gen Tensor cores.

Buyers can purchase their ACER Predator Helios 300 Helios gaming laptop with either a Full HD IPS 360Hz panel or a Quad HD IPS 165Hz display. The display covers 100& of SRGB colour space and has a claimed ultrafast response time of 3ms.

The new Acer Predator Helios 300 gaming laptop also comes equipped with HDMI 2.1 standard which can power an external display at up to 10k resolution. Additionally, the laptop also features an E2600 Ethernet controller, Wi-Fi 6 AX1650i and proprietary inbuilt software like Control Center 2.0 for maximum performance while gaming. The I/O also include a MiniDP, USB 3.2 ports, and a Thunderbolt 4 slot.

To cool such a powerful gaming laptop Acer is using its proprietary Vortex Flow cooling design which includes a triple fan setup and a custom made patented Aeroblade that keeps the important components like CPU, GPU and RAM cool during heavy workload.

The Acer Predator Helios 300 gaming laptop comes with DTS: X Ultra, a technology that grants high-end 360 degrees surround sound capabilities to any pair of headphones and speakers that you connect to the laptop.

Users can also customize RGB lights in four different areas on the keyboard including W, A, S, D. The keyboard also features two integral keys to activate Turbo or PredatorSense, allowing you to monitor your system's current state, perform overclocking and customize RGB.

The Acer Predator Helios 300 Gaming laptop is available for a starting price of Rs 1,29,999 via online outlets like Flipkart and Acer online store and official offline retail outlets as well.

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Document HTDIGI0020210818eh8i00002



CORSAIR introduces new CORSAIR ONE gaming PCs equipped with NVIDIA GeForce RTX 3080 Ti graphics

556 words
17 August 2021
05:30
MarketLine News and Comment
DTMNTR
English
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CORSAIR has unveiled updated configurations of its line of compact gaming PCs: the CORSAIR ONE i200 Limited Edition with an exclusive Meteor Gray chassis, CORSAIR ONE a200, and CORSAIR ONE PRO a200.

All systems are now available with the option of an NVIDIA® GeForce RTX3080 Ti graphics card, featuring advanced ray tracing for jaw-dropping 4K gaming performance. Completed with the latest Intelor AMD processors and an array of high-performance CORSAIR components, every CORSAIR ONE delivers outstanding performance in a small, unique form-factor, now with even more power.

The NVIDIA GeForce RTX 3080 Ti is the most powerful graphics card ever put in a CORSAIR ONE to date. Driven by NVIDIA Ampere architecture, the GeForce RTX 3080 Ti boasts advanced DLSS performance and accelerated ray tracing, allowing players to easily run demanding titles likeCyberpunk 2077andDoom: Eternalat the highest frame rates, resolutions, and 4K detail. 10,240 CUDA cores and 12GB of ultra-fast GDDR6X memory enable the phenomenal performance that content creators need to power through popular creative applications such as Adobe After Effects, Adobe Premiere Pro, and Blender. For the silkiest-smooth image quality at the maximum settings, CORSAIR ONE compact PCs equipped with a GeForce RTX 3080 Ti are premier choices for both gamers and creators.

The CORSAIR ONE's distinct form-factor sets it apart from any other system. Measuring 200mm by 172.5mm by 380mm, and just 12L in volume, the CORSAIR ONE fits the performance of today's most advanced gaming PCs in just an 8" x 7" footprint. The CORSAIR ONE's patented convection-assisted liquid cooling system ensures that despite its size, the high-end hardware inside runs at peak performance, with dedicated liquid cooling for both the CPU and graphics card while heat is efficiently exhausted from the top. The CORSAIR ONE i200 Limited Edition, CORSAIR ONE a200, and CORSAIR ONE PRO a200 are completed by a host of high-quality CORSAIR parts, with up to 64GB of VENGEANCE LPX DDR4 memory, an SF750 80 PLUS Platinum SFX power supply, and a 2TB PCIe 4.0 M.2 NVMe SSD in select models.

With the powerful new option of an NVIDIA GeForce RTX 3080 Ti, alongside the best desktop processors from either Intel or AMD, the CORSAIR ONE i200 Limited Edition, CORSAIR ONE a200, and CORSAIR ONE PRO a200 continue to defy expectations when it comes to cutting-edge gaming and streaming performance in a small package.

Availability, Warranty, and Pricing

The CORSAIR ONE i200 Limited Edition, CORSAIR ONE a200, and CORSAIR ONE PRO a200 are available immediately from the CORSAIR webstore in North America, UK, and select regions in Europe. Availability will expand to additional regions soon. For up-to-date availability information, please refer to the CORSAIR website or contact your local CORSAIR sales or PR representative.

The CORSAIR ONE i200 Limited Edition, CORSAIR ONE a200, and CORSAIR ONE PRO a200 are backed by a two-year warranty, alongside the CORSAIR worldwide customer service and technical support network.

For up-to-date pricing of the CORSAIR ONE i200 Limited Edition, CORSAIR ONE a200, and CORSAIR ONE PRO a200, please refer to the CORSAIR website or contact your local CORSAIR sales or PR representative.

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Document DTMNTR0020210820eh8h00032



CE Noticias Financieras English

New rival for Nvidia and AMD: Intel announces its first graphics cards for gaming

295 words
16 August 2021
CE NoticiasFinancieras
NFINCE
English
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It finally happened. Intel, one of the few leading companies in the microprocessor market in recent decades, has just announced that it will become a direct competitor to Nvidia and AMD after launching its own line of dedicated graphics cards for gaming. The series is called Intel Arc and is scheduled to launch in early 2022.

Intel's plans to venture into the graphics accelerator market have been known for some time. Now, we finally know the name and the date of departure. 'Arc' should not be confused with Intel Ark (a company portal to help identify processor models).

As revealed by the portal Ars Technica, Intel's first Arc graphics will be a kind of successor to the DG1, cards that the company released only for OEMs that sell already assembled computers. These compared in performance to Nvidia's GeForce GTX 1030, in its GDDR5 versions.

Intel showed an interesting trailer in which, far from giving too many technical details, its product stood out for being compatible with modern features such as real-time ray tracing and ai accelerated super sampling. The latter technology will compete directly with Nvidia's DLSS and AMD's FidelityFX.

The trailer showed gameplay of Forza Horizon 4 and Metro Exodus, two titles not necessarily modern, but with respectable graphical requirements. The company also announced that more GPU models will arrive in the immediate future, all based on the first of them that, for now, is codenamed Alchemist.

The next models have already been christened: Battlemage, Celestial and Druid. They all seem to have an initial letter based on the Latin alphabet. Details of precise pricing and release dates are not yet known.

Document NFINCE0020210816eh8g00b80



Nvidia Corporation - Watch: Making Masterpieces in the Cloud With Virtual Reality

Nvidia Corporation published this content on 11 Aug 2021 and is solely responsible for the information contained herein. Distributed by PUBT, unedited and unaltered, on 11 Aug 2021 16:32:43 UTC. 615 words

11 August 2021

Public Companies News and Documents via PUBT

LCDVP

English

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Watch: Making Masterpieces in the Cloud With Virtual Reality

Immersive 3D design and character creation are going sky high this week at <u>SIGGRAPH</u>, in a demo showcasing NVIDIA CloudXR running on Google Cloud.

The clip shows an artist with an untethered VR headset creating a fully rigged character with <u>Masterpiece</u> Studio Pro, which is running remotely in Google Cloud and interactively streamed to the artist using CloudXR.

Bringing Characters to Life in XR

The demo focuses on an interactive technique known as digital sculpting, which uses software to create and refine a 3D model as if it were made of a real-life substance such as clay. But moving digital sculpting into a VR space creates a variety of challenges.

First, setting up the VR environment can be complicated and expensive. It typically requires dedicated physical space for wall-mounted sensors. If an artist wants to interact with the 3D model or move the character around, they can get tangled up in the cord that connects their VR headset to their workstation.

CloudXR, hosted from Google Cloud on a tetherless HMD, addresses these challenges by providing artists with the freedom to create from virtually anywhere. With a good internet connection, there's no need for users to be physically tethered to an expensive workstation to have a seamless design session in an immersive environment.

Masterpiece Studio Pro is a fully immersive 3D creation pipeline that simplifies the character design process. From blocking in basic shapes to designing a fully textured and rigged character, artists can easily work on a character face-to-face in VR, providing a more intuitive experience.

In Masterpiece Studio Pro, artists can work on characters at any scale and use familiar tools and hand gestures to sculpt and pose models - just like they would with clay figures in real life. And drawing bones in position couldn't be easier, because artists can reach right into the limbs of the creature to place them.

Getting Your Head in the Cloud

Built on NVIDIA RTX technology, CloudXR solves immersive design challenges by cutting the cord. Artists can work with a wireless, all-in-one headset, like the HTC VIVE Focus 3, without having to deal with the hassles of setting up a VR space.

And with <u>CloudXR on Google Cloud</u>, artists can rent an NVIDIA GPU on a Google Cloud Virtual Workstation, powered by <u>NVIDIA RTX Virtual Workstation technology</u>, and stream their work remotely. The VIVE Focus 3 is HTC's latest standalone headset, which has 5K visuals and active cooling for long design sessions.

'We're excited to show how complex creative workflows and high-quality graphics come together in the ultimate immersive experience - all running in the cloud,' said Daniel O'Brien, general manager at HTC Americas. 'NVIDIA CloudXR and the VIVE Focus 3 provide a high quality experience to immerse artists in a seamless streaming experience.'

With Masterpiece Studio Pro running on Google Cloud, and streaming with NVIDIA CloudXR, users can enhance the workflow of creating characters in an immersive environment - one that's more intuitive and productive than before.

Check out our other demos at SIGGRAPH, and learn more about NVIDIA CloudXR on Google Cloud.

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Document LCDVP00020210811eh8b00klr



With Nvidia RTX 30-series GPU prices finally falling, is it time to build a gaming PC?

Matt Hanson 850 words 10 August 2021 TechRadar TECHR English

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There's finally some good news for PC gamers, as prices of Nvidia's latest GPUs, like the RTX 3080, appear to be dropping after months of inflation. But what does this mean for building a new PC?

Could the GPU nightmare finally be over? Perhaps – as there's some encouraging signs that Nvidia's RTX 30-series graphics cards, including the excellent RTX 3080 and RTX 3060, may finally be dropping in price after months of inflation.

The global chip shortage – in part caused by the Covid-19 pandemic – combined with pent-up demand and a boom in cryptocurrency mining, has caused a perfect storm that has made new graphics cards extremely hard to get hold of. To make matters worse, when GPUs are in stock, some retailers or resellers are selling them at inflated prices.

- * These are the best graphics cards
- * How about buying the best gaming laptop you can afford?
- * We also pick the best gaming PCs

This has made upgrading your PC, or building a new one from scratch, a real headache, as well as being more expensive than usual. So, a new report from <u>3DCenter.org</u>, as spotted <u>by Toms Hardware</u>, which suggests prices for certain GPUs may be dropping, is certainly good news.

Before we dig in to what this means, there are some caveats. For a start, the report looks at prices in Germany only. However, Germany is one of the biggest markets for PC components, so a trend there could hint at wider market implications.

What's also interesting about the report is that while <u>Nvidia graphics card</u> prices appear to be falling, the prices for <u>AMD graphics cards</u> are actually rising. This has led to some Nvidia GPUs being better value than AMD ones. What a world we live in.

According to the report, back in may Nvidia cards were selling at a whopping 300% above their MSRP (manufacturer's suggested retail price). However, a month later that inflation had dropped to 191%, and is now at 150%. While still above MSRP, it's still a substantial drop.

What about AMD?

While these price drops are good news for people wanting an Nvidia graphics card, for AMD fans, it appears to be a different matter, as prices haven't dropped quite as much. New AMD RX 6000 series cards were selling at 214% of their MSRP recently, and that has dropped to just 159%.

Of course, the price of AMD cards didn't have as far to fall as Nvidia ones, but with its rival's prices dropping faster, it could leave AMD's GPUs looking like a worse value proposition.

So, what's going on? For a start, while Nvidia has been implementing hash rate limiters to stop its GPUs being so attractive to cryptocurrency miners, which could have a knock-on effect of miners and scalpers mass-buying its GPUs and inflating prices, AMD hasn't followed suit.

There's also the fact that Nvidia's GPUs are vastly outselling AMD's graphics cards – with the ultra-high-end RTX 3090 outselling all AMD RX 6000 GPUs according to a recent Steam Hardware Survey.

This would suggest there's less leeway (or desire) for retailers to start dropping the prices of AMD GPUs as quickly.

Is now a good time to build or upgrade?

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With graphics cards being so scarce, or selling for such high amounts recently, many people have been holding off building or upgrading their PCs. So, does this drop in price suggest now's the time to build your dream rig?

In one way – yes. If you find an Nvidia RTX 30-series GPU on sale right now for a price you can afford, it's worth getting. There's a good chance it's being sold for less than it would have been going for a few months ago.

GPU stock still remains low, so if you don't buy one now, it may go out of stock and you may not be able to get hold of one for months, further delaying your build.

However, there are also reasons to wait, if you can. The prices are going in the right direction, but they are still being sold above MSRP. By holding on, you may find prices drop further – though there's no guarantee they will.

What this does mean is that PC gamers finally have a bit of flexibility. A few months ago with inflated prices and low stock, we recommended not upgrading your PC. However, with prices dropping, for some people now is a good time.

With <u>Black Friday</u> and <u>Cyber Monday</u> coming up later in the year, we may see prices drop a little further. We don't expect any bargains, but we may finally be able to upgrade our PCs without spending obscene amounts. We hope.

* AMD vs Nvidia: who makes the best GPUs?

Nvidia RTX 3070, RTX 3080, And RTX 3090 Lined Up In A Promotional Image From Nvidia (Nvidia)

Document TECHR00020210810eh8a000m9



online news

Xiaomi Preparing OLED Gaming TVs with NVIDIA G-Sync Support

142 words 9 August 2021 ETMAG.com FMETMA English

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Xiaomi is preparing to release their next-generation Mi OLED gaming television lineup with support for NVIDIA G-Sync. Xiaomi has posted three teasers on their Weibo account about the upcoming TV promoting its OLED panel and G-Sync support however they are yet to announce any details about potential resolutions, refresh rates, or prices. The TV may be part of the NVIDIA Big Format Gaming Display program which all include dedicated G-Sync modules however no confirmation has been given by either company. We can deduce that the TV will support HDMI 2.1 given the inclusion the NVIDIA G-Sync support and the lack of bandwidth offered by HDMI 2.0. Xiaomi will release more details for the Mi OLED TV at an official announcement on August 10th.

Document FMETMA0020210812eh8900006



PC/ Laptops

Dell Alienware m15 R5 Ryzen Edition, m15 R6 Gaming Laptops With Nvidia RTX 30-Series Graphics Launched in India

Tasneem Akolawala 555 words 3 August 2021 16:59 NDTV NDTVIN English

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Dell Alienware m15 R5 Ryzen Edition and Dell Alienware m15 R6 gaming laptops have launched in India. The Dell Alienware m15 R5 Ryzen Edition gaming laptop is powered by an AMD Ryzen R7-5800 H-Series mobile processor. The Dell Alienware m15 R6 is powered by an Intel Core i7-11800H Tiger Lake processor. Both the Alienware gaming laptops come with Nvidia GeForce RTX 30-series GPUs, Killer Wi-Fi 6 AX1650 wireless, and an array of ports including an HDMI 2.1 port for 4K/ 120Hz native experiences.

Dell Alienware m15 R5 Rvzen Edition. Alienware m15 R6: Price in India. sale

The new <u>Dell Alienware m15 R5 Ryzen Edition</u> gaming laptop is priced starting at Rs. 1,34,990, whereas the <u>Alienware m15 R6</u> starts at Rs. 1,59,990. Both the models are available for purchase on <u>Dell.com</u>.

Dell Alienware m15 R5 Ryzen Edition specifications

On the specifications front, the Alienware m15 R5 Ryzen Edition gaming laptop runs on Windows 10 Home or Pro versions and comes with a 15.6-inch full-HD (1,920x1,080 pixels) display with a 165Hz refresh rate and 300 nits of peak brightness. It can be powered by up to an AMD Ryzen R7 5800H processor, paired with 16GB of DDR4 (3,200MHz) RAM and up to 4TB (2x 2TB) of PCIe M.2 SSD storage. There's a choice between Nvidia GeForce RTX 3060 and Nvidia GeForce RTX 3050Ti dedicated graphics cards that come with 6GB of GDDR6 VRAM.

The gaming laptop comes with an 86Whr battery and an Alienware HD 720p webcam with dual-array microphones. The Alienware m15 R5 Ryzen Edition gaming laptop supports Killer Wi-Fi 6 and Bluetooth v5.2. Connectivity options include three USB Type-A ports (one with PowerShare 2), one USB Type-C port, an HDMI 2.1 port, an Ethernet port, and a 3.5mm headphone/ mic jack.

Dell Alienware m15 R6 specifications

Coming to the <u>Dell Alienware m15 R6</u>, it comes with Windows 10 Home and Pro options, and features a 15.6-inch display that can be equipped with up to a 15.6-inch QHD (2,560x1,440 pixels) panel with a 240Hz refresh rate and 400 nits of peak brightness. Under the hood, it comes with up to an 11th Intel Core i7-11800H Tiger Lake CPU, paired with up to an Nvidia GeForce RTX 3080 GPU that comes with 8GB of GDDR6 VRAM.

The Dell Alienware m15 R6 gaming laptop comes with up to 32GB of DDR4 RAM clocked at 3,200MHz and up to 2TB (2x 1TB) PCIe M.2 SSD for storage. Connectivity options include three USB Type-A ports, a Thunderbolt 4 port, an HDMI 2.1 port, a 3.5mm headphone jack, and an Ethernet port. You also get Killer Wi-Fi 6 and Bluetooth v5.2. Alienware m15 R6 is backed by an 86Whr battery and ships with a 240W adapter. Is OnePlus cannibalising itself with the Nord 2 5G? We discussed this and more on Orbital, the Gadgets 360 podcast. Orbital is available on Apple Podcasts, Google Podcasts, Spotify, Amazon Music and wherever you get your podcasts.

Click here to view video

Document NDTVIN0020210804eh830000w



Global \$4.98 Billion Cloud Gaming Market to 2026 Featuring Google, Cyber Cloud Technologies, Nvidia, Kingsoft Cloud, Microsoft, Ubitus, Sony

666 words 3 August 2021 22:15 PR Newswire PRN English

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DUBLIN, Aug. 3, 2021 /PRNewswire/ -- The "Global Cloud Gaming Market (2021-2026) by Type, Application and Geography - Competitive Analysis, Impact of COVID-19, Ansoff Analysis" report has been added to ResearchAndMarkets.com's offering.

The Global Cloud Gaming Market is estimated to be worth USD 2.3 Billion in 2020 and is expected to reach USD 4.98 Billion by 2025, growing at a CAGR of 16.7%.

Market Dynamics

The rise in digitalization, increasing world online gaming competitions, an upsurge of mobile games, and the introduction of new technologies like 5G are major factors promoting the increase of the cloud gaming market. Cloud gaming enables the reduction of data storage and edge computing.

Moreover, fast speed, OTT gaming services, continuous updating, and education or learning games have escalated cloud gaming. However, bandwidth issues in developing countries are hindering the market growth.

The increasing adoption of cloud technology in developing countries is anticipated to create new opportunities in the market.

Recent Developments

1. Amazon announced new cloud gaming service, Luna. - 24th September 2020

 Jezby Ventures acquires Blade, a French startup that owns Shadow- a cloud-based gaming service. - 30th April 2021

Company Profiles

Some of the companies covered in this report Google LLC, Cyber Cloud Technologies LLC, In Nvidia Corporation, Kingsoft Cloud Holdings, Microsoft Corporation, Ubitus Inc., Sony Group Corporation, etc

Key Topics Covered:

- 1 Report Description
- 1.1 Study Objectives
- 1.2 Market Definition
- 1.3 Currency
- 1.4 Years Considered
- 1.5 Language
- 1.6 Key Shareholders
- 2 Research Methodology
- 2.1 Research Process
- 2.2 Data Collection and Validation

- 2.3 Market Size Estimation
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- 3 Executive Summary
- 3.1 Introduction
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- 3.3 Market Outlook
- 4 Market Influencers
- 4.1 Drivers
- 4.1.1 New Technologies to Promote Cloud Gaming
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- 4.2 Restraints
- 4.2.1 Low Bandwidth and Latency Issues in Developing Countries
- 4.2.2 High Cost of Game Consoles
- 4.3 Opportunities
- 4.3.1 Government Initiatives in Cloud Platform
- 4.3.2 New Innovative Technologies
- 4.4 Challenges
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- 6 Global Cloud Gaming Market, By Type
- 6.1 Introduction
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- 7.2 Smartphones
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- 8 Global Cloud Gaming Market, By Geography

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- 9 Competitive Landscape
- 9.1 Competitive Quadrant
- 9.2 Market Share Analysis
- 9.3 Strategic Initiatives
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- 9.3.2 Partnerships and Collaborations
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Apple Inc.
  -- Crytek GmbH
   -- Cyber Cloud Technologies LLC
   -- Faceboo. Inc. (PlayGiga S.L.)
   -- LeEco
   -- LiquidSky Software Inc.
   -- Microsoft Corporation
   -- Numecent Holdings Ltd
   -- Nvidia Corporation
   -- Kingsoft Cloud Holdings
   -- Parsec Cloud Inc.
   -- PlayKey
   -- Amazon.co. Inc
   -- Shawdow. tech (Blade SAS)
   -- Simplay Gaming Ltd
   -- Sony Group Corporation
   -- Tencent Cloud
   -- BlacknutSAS
   -- Ubitus Inc.
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For more information about this report visit https://www.researchandmarkets.com/r/ciasj6

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Document PRN0000020210803eh83000vt



Lenovo launches Legion 5 Pro gaming laptops with Nvidia RTX 30 series GPUs

360 words 26 July 2021 National Iraqi News Agency NAIRAQ English

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Chinese electronics maker Lenovo on Monday launched in India the Legion 5 Pro gaming laptop. Powered by AMD Ryzen 5000 H-series processors, the gaming-centric laptop boasts up to 140W NVIDIA GeForce RTX 3070 discrete graphic processing unit. Priced at Rs 1,39,990 (for NVIDIA GeForce RTX 3060, 16GB) and Rs 1,59,990 (for NVIDIA GeForce RTX 3070, 32GB), the Lenovo Legion 5 Pro is now available for pre-ordered on Amazon India and Lenovo online portal. It will be available at retail stores from August.

As for the specifications, the Lenovo Legion 5 Pro is powered by the Ryzen 7 5800H processor, which is built on AMD's Zen 3 architecture. According to Lenovo, the gaming laptop is equipped to deliver competitive gaming and productivity performance with lightning-fast frame rates and uncompromised battery life of up to 8.1 hours.

The Legion 5 Pro comes with the NVIDIA GeForce RTX 30 Series discrete graphics processing unit. These GPUs boast Nvidias 2nd Generation Ray Tracing, 3rd Generation AI Tensor Cores, etc. According to Lenovo, the Legion 5 Pro is capable of peak graphics performance at up to 140W without thermal throttling. The laptop comes with Lenovos Coldfront 3.0 thermal management technology, which helps the machine in maintaining thermals.

The Legion 5 Pro is touted by the company to offer a 90 per cent screen-to-body ratio. It sports a 16-inch QHD resolution IPS screen of 165Hz refresh rate and up to 3ms response time. It is a 16:10 aspect ratio screen with support for NVIDIA G-SYNC and AMD FreeSync technologies. This screen supports Dolby Vision, VESA Display, and HDR 400. Besides, it is 100 per cent sRGB rated for colour accuracy, and is touted to hit peak brightness of 500 nits.

As for the keyboard, the Legion 5 Pro boasts TrueStrike Keyboard with soft-landing switches and 4-zone RGB lighting. Audio is covered by Nahimic-tuned Audio drivers for 360-degree audio with features like night mode with smart volume reduction, sound tracker, and background noise suppression.

Document NAIRAQ0020210726eh7q0002t



PC/ Laptops

HP Victus 16 Gaming Laptops With Nvidia GeForce RTX 30 Series GPUs Launched in India

Vineet Washington 441 words 26 July 2021 11:23 NDTV NDTVIN English

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HP Victus 16 gaming laptop models were launched in India on Monday, bringing the latest AMD Ryzen and Intel 11th Gen processors to the company's mainstream portfolio. HP Victus E series is powered by up to AMD Ryzen 7 processors while the HP Victus D series is powered by up to Intel Core i7 processor. Both models come with Nvidia GeForce RTX 30 series GPUs and feature 16-inch displays with high refresh rates. The HP Victus 16 range was originally unveiled globally back in May.

HP Victus E series, HP Victus D series: Price in India, availability

<u>HP Victus E series</u> starts at Rs. 64,999 and will be available for purchase via Amazon India in a Mica Silver colour. <u>HP Victus D series</u> starts at Rs. 74,999 and will be available via Reliance digital online and offline stores in the coming weeks in a Performance Blue colour.

HP Victus E series, HP Victus D series: Specifications

HP Victus 16 gaming laptop models come with Windows 10 and will be upgradeable to Windows 11 later this year. They feature 16-inch displays with up to full-HD resolution with 144Hz refresh rate, 300 nits peak brightness, and Eyesafe low blue light technology. Under the hood, the E series is configured with AMD Ryzen 5 5600H or Ryzen 7 5800H processors, while the D series has a choice of Intel 11th Gen Core i5-11300H or Core i7-11800H processors. The HP Victus E series offers a choice between Nvidia and AMD GPU which includes up to an Nvidia GeForce RTX 3060 6GB laptop GPU or an AMD Radeon RX 5500M GPU. The HP Victus D series comes with only the Nvidia option which is up to a GeForce RTX 3060 6GB laptop GPU.

They offer up to 16GB DDR4 RAM that is upgradable to 32GB. For storage, single SSD configurations are available up to 512GB PCIe Gen4. HP has paced a five-way airflow design with bigger vents and larger fans that have longer fin length for better thermal efficiency. The OMEN Gaming HUB software allows you to change performance modes, undervolt, use network booster, and monitor system vitals. You also get Bang & Olufsen speaker system in the HP Victus 16 gaming laptop models. Click here to view video The recently-concluded first season of Loki is our focus this week on Orbital, the Gadgets 360 podcast. Orbital is available on Apple Podcasts, Google Podcasts, Spotify, Amazon Music and wherever you get your podcasts.

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MINT, Companies

Nvidia's new demo paves the way for gaming laptops running on mobile chips

Prasid Banerjee 408 words 20 July 2021 Mint HNMINT English

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NEW DELHI, July 20 -- Chipmaker Intel's hold on the personal computing market is facing a whole new threat from Nvidia. At the Game Developers Conference (GDC) 2021, last night, the company - which is known for its graphics chips - showcased a demo of a game called Wolfenstein: Youngblood running on MediaTek's ARM-based Kompanio 1200 processor and Nvidia's RTX 3060 GPU.

This paves the way for laptops that run fully on ARM chips paired with Nvidia's PC-class gaming GPUs, something that hasn't been seen so far.

The demo won't come as a surprise to industry watchers, who have expected such a pairing since the chip giant agreed to buy ARM for \$40 billion in September last year. ARM's chip designs have largely been used for mobile chips, running on every smartphone today but the company has also made inroads into the data center and supercomputer markets.

More recently, chips made on ARMs designs have gained prominence amongst PC makers, especially with tech giant Apple choosing to shift from Intel for its Macbooks. The company started the transition last year, announcing its own M1 chip, which is based on ARM's designs. Apple has said that it plans to transition completely away from Intel's chips for all of its personal computing devices by 2023.

Fellow GPU giant, AMD, has also been working with mobile chipmaker Samsung to build synergy between its GPUs and Samsung's ARM-based chips. The two companies had announced a partnership earlier this year, which will see Samsung's ARM-based Exynos chips using AMD's RDNA2 GPU architecture.

While companies like Apple and Microsoft have been pushing for personal computing devices to run on ARM-based chips, Nvidia's GDC demo also paves the way for gaming laptops on such chips. This is a major development since ARM chips are known for their energy efficiency, making laptops last much longer on battery, and allowing slimmer devices to be created.

These chips should also, in theory, be cheaper than traditional PC chips, though Apple's M1 Macbooks are being sold at the same price as earlier Intel-powered devices.

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Document HNMINT0020210720eh7k00232



Nvidia shows off RTX ray tracing, high-end gaming tech running on Arm

Carrie Mihalcik 255 words 19 July 2021 CNET News.com CNEWSN English

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Nvidia is working to expand its RTX tech to more devices, and the company on Monday took a big step forward. In demos for the Game Developers Conference, Nvidia showed off <u>real-time ray tracing and DLSS</u> on an ARM-based platform for the first time.

The company showed off the advanced graphics in demos of Wolfenstein: Youngblood and The Bistro, both running on a GeForce RTX 3060 GPU paired with a MediaTek Kompanio 1200 Arm processor.

"We're now investing in new platforms where we can deploy advanced graphics so gamers have more choice," wrote Nvidia spokesperson Brian Burke in a blog post. "The performance and energy efficiency of ARM CPUs with NVIDIA technologies can open an entirely new class of PCs."

Click to view video.

Nvidia made this work by extending support for its RTX software development kits to Arm and Linux, including deep learning super sampling (DLSS), RTX direct illuminations (RTXDI), RTX global illumination (RTXGI), Nvidia real-time denoisers (NRD) and RTX memory utility (RTXMU).

The RTXDI, NRD and RTXMU SDKs for Arm with Linux and Chromium are available Monday, Nvidia said, adding that RTXGI and DLSS will be "coming soon."

The company also said the <u>July Nvidia Studio Driver</u>, available Monday, provides heightened performance and reliability for the two major game engines: Unity and Unreal Engine. It also includes support for updates to Toolbag and Omniverse.

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| David Paul Morris/Bloomberg via Getty Images Document CNEWSN0020210719eh7j000bn



Nvidia brings ray tracing and DLSS to ARM-powered PCs – are cheaper gaming laptops coming?

Darren Allan 410 words 19 July 2021 TechRadar TECHR English

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Fruits of Nvidia and MediaTek partnership shown off at GDC with Wolfenstein: Youngblood demo.

In a move to bring the benefits of RTX graphics cards to a wider audience, Nvidia has announced that ray tracing and DLSS are now supported by ARM chips for the first time, with Wolfenstein: Youngblood being the showcase game demonstrating this feat.

At GDC (Game Developers Conference), Nvidia showed off a demo of Wolfenstein: Youngblood using ray tracing and DLSS, as well as a ray-traced demo of 'The Bistro', both running on a MediaTek Kompanio 1200 ARM chip hooked up with an RTX 3060 graphics card. That Kompanio chip is expected to be the beating heart of a number of Chromebooks from major manufacturers going forward.

- * Nvidia's RTX 3060 Ti is the best GPU for most people
- * Check out all the best PC games
- * We'll show you how to build a PC

This is all part of an Nvidia and MediaTek partnership to drive forward and get Team Green's graphical bells and whistles like ray tracing on board ARM PCs that we first heard about back in April. Exactly what hardware we might see in the pipeline still isn't clear, but the hope is that an affordable ARM-toting laptop with GeForce GPU could be beefy enough to be able to run your Steam games via emulation.

Laying a foundation

PC Tseng, general manager of MediaTek's intelligent multimedia business unit, enthused: "MediaTek and Nvidia are laying the foundation for a new category of ARM-based high-performance PCs."

Nvidia clarifies that to achieve this latest advance, a number of RTX SDKs have been produced to work with ARM hardware, and that includes RTX Direct Illumination (RTXDI), Nvidia Optix Al-Acceleration Denoiser (NRD), RTX Memory Utility (RTXMU) and RTX Global Illumination (RTXGI) plus DLSS.

The firm notes that all but the latter two SDKs are now available for ARM with Linux and Chromium, with the DLSS and RTXGI SDKs coming 'soon'.

Meanwhile, there is of course another option for running ray-traced games on low-powered, cheap hardware, and that's streaming courtesy of Nvidia GeForce Now, where you're effectively swapping out concerns around CPU and GPU grunt for the beefiness of your internet connection.

* Find the best Nvidia GPU for you

Nvidia ray tracing on ARM shown with Wolfenstein: Youngblood demo (Nvidia)

Document TECHR00020210719eh7j000p2

Razer Unveils The Blade 17 Gaming Laptop With The Intel Core i9-11900H & The NVIDIA GeForce RTX 3080

Alex Casas 545 words 15 July 2021 Wccftech.com NEWAGAE English

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Razer has just unveiled one of its most powerful laptops, the Blade 17. The Razer Blade 17 comes equipped with the Intel 11th Gen Tiger Lake-H i9-11900H processor and the NVIDIA GeForce RTX 3080 graphics cards.

Razer Blade 17 Comes With An Intel Core i9-11900H, An NVIDIA GeForce RTX 3080, & A 4K 120Hz Touch Display

The Razer Blade 17 takes advantage of the 8 cores and 16 threads that the Intel 11th Gen <u>Tiger Lake-H</u> i9-11900H processor provides. The processor is able to achieve a max turbo boost frequency of 4.9 GHz as well. In the graphics department, the Blade 17 comes equipped with the most powerful offering in NVIDIA's mobile gaming graphics card lineup, the GeForce RTX 3080. It comes equipped with 32GB of DDR4-3200 memory and a 1TB NVMe. The powerful graphics card is able to power a 17.3" 4K touch display with a 120Hz refresh rate. You may be worried about your touchscreen getting dirty, but Razer thought about that and implemented an anti-fingerprint resistive coating.

- * Click to view image.

Razer also improved on other features some may not notice on the Blade 17 laptops including a full HD 1080p webcam for high-quality video calls. Although it may go unnoticed by many, the cooling inside of the Blade 17 is important as it has some powerful internal components to cool. It has an upgraded cooling solution that features an improved vapor chamber and high-speed, quiet fans. The touchpad has also been upgraded with palm rejection which helps to stop the cursor from moving while typing if you accidentally hit the touchpad with your palm. Brad Wildes, Senior Vice President and General Manager of Razer's Systems Business Unit, was excited to unveil and said this about the Blade 17.

The Blade 17 has been a staple in the premium gaming laptop space for years, and it's crucial that we continue to deliver the kind of mind-blowing performance and impeccable quality that our fans expect and deserve. Continuously integrating improvements while introducing the newest, top-of-the-line hardware advancements is what gives the Blade family its 'edge'. Razer Blades have always been synonymous with style and power, and we intend to keep it that way.

The Razer Blade 17 features Thunderbolt 4 ports as well as USB-C charging. The keyboard features per-key RGB backlighting powered by Razer Chroma. It also comes with THX Spatial Audio for immersive 360-degree sound. The Blade 17 only comes equipped with a single PCIe 4.0 NVMe SSD, but the laptop has a second slot for future upgrades.

The Razer Blade 17 starts at \$2,399.99 for the base configuration of an Intel Core i7-11800H and an NVIDIA GeForce RTX 3060. The Razer Blade 17 is currently available for preorder on the Razer webstore.

Click to view image.

Document NEWAGAE020210715eh7f00001



Enscape Leverages NVIDIA DLSS to Offer Better Performance of Virtual Reality Walkthroughs for Architects

645 words 14 July 2021 18:30 PR Newswire PRN English

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AI Upscaling Significantly Improves Quality and Performance of Real-Time Visualizations

KARLSRUHE, Germany and NEW YORK, July 14, 2021 /PRNewswire/ -- Enscape, a leading provider of 3D real-time visualization and virtual reality technology for architects and designers, today announced it will leverage NVIDIA DLSS Deep Learning Super Sampling technology to help AEC firms get access to the latest real-time rendering technology. Integrating NVIDIA's AI technology into Enscape's cutting-edge rendering software means users can get better quality and performance with lower system requirements to create a more realistic experience during walkthroughs and exports for clients.

"Architects and designers globally are looking for ways to quickly and easily visualize their designs and bring them closer to reality. Enscape is partnering with innovative organizations to address this challenge," said Christian Lang, CEO at Enscape. "We're proud to be working with NVIDIA to provide our architecture and design customers around the world access to high-quality real-time rendering and visualization technology."

Users will get access to the NVIDIA DLSS technology in Enscape 3.1 -- the next version scheduled to be released on July 21. The deep learning-based upscaling technique renders internally at a lower resolution but outputs a clean and sharp high-resolution image for high-quality videos and high-performance virtual reality walkthroughs. With NVIDIA DLSS enabled, video rendering time decreases, quality increases, and visual distortions are removed. Users can enjoy improved real-time performance of walkthroughs and higher frame rates with much lower GPU requirements. This latest technology is available to users with an NVIDIA RTX graphics card.

"NVIDIA DLSS is a great example of artificial intelligence delivering practical benefits to improve industry workflows," said Andrew Rink, head of AEC industry marketing strategy at NVIDIA. "AEC customers using NVIDIA RTX GPUs will be delighted at the innovative way Enscape has integrated our technology to enhance their powerful rendering software."

With Enscape and NVIDIA DLSS, users can also take advantage of the latest generation of high-res VR headsets and enjoy high-performance virtual reality experiences.

Enscape's real-time 3D rendering and virtual reality solution brings visual exploration directly into numerous modeling tools, including Autodesk Revit, SketchUp, Rhinoceros, ArchiCAD, and Vectorworks, providing an integrated visualization and design workflow.

See what Daniel Stine, Director of Design Technology at Lake|Flato Architects has to say about Enscape's new NVIDIA DLSS capabilities in this blog post.

With Enscape 3.1, users can enjoy many other new features and improvements that will make it even easier for architects and designers worldwide to visualize as they design directly from their modeling software.

Try Enscape for free:

To see what Enscape already has to offer, users can get a free 14-day trial here.

For more information:

Please visit: enscape3d.com and download the press kit here.

About Enscape

Enscape develops high-quality 3D real-time rendering and visualization software and provides continuous innovation in accessible design technology. Architects and designers worldwide use Enscape software to unleash their creativity and make the built environment tangible before it exists. Enscape gives designers the power to create realistic renderings based on their existing planning data and automatically produce videos, panoramic images, and VR simulations. Enscape software is used by renowned architecture firms in over 150 countries. The company's corporate headquarters is in Karlsruhe (Germany) and has an office in New York (USA). To learn more, visit us online at enscape3d.com and follow us @Enscape3D

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https://www.prnewswire.com/news-releases/enscape-leverages-nvidia-dlss-to-offer-better-performance-of-virtual-reality-walkthroughs-for-architects-301333122.html

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Document PRN0000020210714eh7e000fs



Events

NVIDIA Brings Computing Transformation from **Gaming** to Business

534 words
13 July 2021
Asia Electronics Industry
ASELEC
English
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NVIDIA's keynote address at the COMPUTEX 2021 CEO Keynote focused on how accelerated computing is transforming today's gaming, personal and enterprise computing.

Jeff Fisher NVIDIA, GeForce Senior Vice President announced a new range of advanced processors to further elevate user experience, while Manuvir Das, Head of Enterprise Computing discussed the transformation at the enterprise level.

Leading the pack of advanced processors is the RTX 3800 Ti flagship gaming graphical processing unit (GPU) based on Ampere and 2Gen RT Cores and 3Gen Tensore Cores. "The RTX 3800 Ti represents the best of our gaming line and introduced as the only way to play in 4K with RTX ON. The RTX 3080 Ti is one and a half faster than its predecessor and tears through the latest game with all the settings cranked up. It is a powerful GPU with 34 shader teraflops, 67 RT teraflops and 273 Tensor teraflops," said Fisher. He described this as the greatest generational leap ever.

Jeff Fisher NVIDIA, GeForce Senior Vice President at NVIDIA Fisher announces the RTX3800 Ti flagship gaming GPU.

Fisher also announced Alienware x15, a GeForce RTX 3800 ultra-thin laptops, powered by Max-Q technology including Dynamic Boost 2.0, Whisper Mode and Advanced Optimus, and features a 1440p G-Sync display.

The NVIDIA Studio is designed to meet the growing need of 3D designers, video editors and photographers. It includes specially configured systems optimized for creating special workflows and supported by a monthly cadence of drivers. For 3D artists, NVIDIA created the Omniverse Machinima, making it easy to produce cinematic or animated stories with advanced real-time Ray Tracing and artificial intelligence (AI).

Meanwhile, Das revealed the three essential ingredients built by NVIDIA: the hardware foundation from which to make any system, the software platform for AI, and the software platform for collaborative design. "It is time to democratize AI by bringing its transformative power to every company and its customers," Das said.

Manuvir Das, Head of Enterprise Computing at NVIDIA

To help system manufacturers create Al-optimized designs and to ensure that the systems can be relied on by customers, NVIDIA made NVIDIA-Certified, a program for servers that incorporate GPU acceleration. Das announced that NVIDIA will expand its NVIDIA-Certified systems program to systems with NVIDIA BlueField DPUs. The NVIDIA-Certified System program will expand to support accelerated systems with Arm-based host CPUs. A development kit for application developers has also been developed with GIGABYTE.

Building on NVIDIA's work to enable powerful GPU instances in the cloud, Das said Google Cloud is among the first cloud service providers planning to enable NVIDIA's powerful Base Command Platform for the management and orchestration of clusters in their cloud instances. The software is designed for large-scale, multi-user and multi-team AI development workflows hosted either on premises or in the cloud.

NVIDIA will partner with leading global systems providers to offer NVIDIA Omniverse Enterprise, making it easy for teams to collaboratively design and simulate in 3D.

In the field of security, NVIDIA is working with Red Hat to provide Morpheus developer kits for both OpenShift and Red Hat Enterprise Linux (RHEL).

Document ASELEC0020211119eh7d0004i

Gigabyte Unveils The AORUS RTX 3080 Ti GAMING BOX, A Portable NVIDIA GeForce RTX 3080 Ti For Laptop Users

Alex Casas 433 words 11 July 2021 Wccftech.com NEWAGAE English

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We have already seen the <u>AORUS GAMING BOX come equipped with an NVIDIA GeForce RTX 3080 and 3090</u>, but now, Gigabyte is launching the AORUS RTX 3080 Ti GAMING BOX, which obviously features the <u>NVIDIA GeForce RTX 3080 Ti</u>.

Inside The Gigabyte AORUS RTX 3080 Ti GAMING BOX Is A State Of The ART AIO Cooling Solution

The AORUS RTX 3080 Ti GAMING BOX debuts a built-in all-in-one water cooling system. This is the first time ever that an external graphics box features a water cooling system. It features the AORUS WATERFORCE cooling system which allows for great performance in a compact form factor. It features an optimized pump and water block with a large copper plate, it provides the most efficient water flow and cooling performance at a lower noise level. Not only does it cool the GPU, but it also cools the VRAM and MOSFET to ensure a longer lifespan. The all-around cooling solution that Gigabyte has brought features a 240mm aluminum radiator with two 120mm fans all in a compact form factor.

- * Click to view image.

On top of the superb cooling, it features the Thunderbolt 3 high-speed transmission interface for the best in class connectivity. This allows gamers and creatives alike to transfer the power of a full-sized system into an Ultrabook with no downside. Gamers can now play games with RTX enabled on an Ultrabook, something never seen before. Connection won't be an issue either with a built-in network chip. Creators using an Ultrabook can also harness the power and perform tasks normally done on a PC such as video editing, rendering, and much more. For all those who like RGB, the AORUS GAMING BOX features a little RGB lighting controlled through the AORUS engine and RGB Fusion 2.0. The NVIDIA GeForce RTX 3080 Ti inside the Gaming Box does not come factory overclocked, so it features the default boost clock of 1665 Mhz. The display output ports on the Gaming Box are three DisplayPort 1.4 and two HDMI 2.1 ports.

The <u>AORUS RTX 3080 Ti GAMING BOX has been listed on Gigabyte's website</u>, but details including price, availability and release date are still unknown.

Click to view image.

Document NEWAGAE020210711eh7b00001



Lenovo IdeaPad <mark>Gaming</mark> 3 81Y4019EIN Laptop Intel Core i7 10th Gen NVIDIA GTX 1650 8GB 512GB SSD Windows 10

169 words 6 July 2021 Mubasher MUBEN English

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Lenovo IdeaPad Gaming 3 81Y4019EIN Laptop Intel Core i7 10th Gen NVIDIA GTX 1650 8GB 512GB SSD Windows 10 laptop has a 15.6 Inches display for your daily needs. This laptop is powered by Intel Core i7 10th Gen processor, coupled with 8GB of RAM and has 512GB SSD storage at this price point.

It runs on undefined operating system. As far as the graphics card is concerned this notebook has a undefined NVIDIA GTX 1650 graphics card to manage the graphical functions. To keep it alive, it has a 3 cell Li-lon battery and weighs 2.2 KG.

Lenovo IdeaPad Gaming 3 81Y4019EIN Laptop Intel Core i7 10th Gen NVIDIA GTX 1650 8GB 512GB SSD Windows 10 Price In India

Lenovo IdeaPad Gaming 3 81Y4019EIN Laptop Intel Core i7 10th Gen NVIDIA GTX 1650 8GB 512GB SSD Windows 10 laptop price in India is Rs 99,290.

Document MUBEN00020210706eh76000dx

NVIDIA Corporation; Patent Issued for System and method for network coupled gaming (USPTO 11027199)

1,815 words 30 June 2021 Telecommunications Weekly TELWK 829 English

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2021 JUN 30 (VerticalNews) -- By a News Reporter-Staff News Editor at Telecommunications Weekly -- From Alexandria, Virginia, VerticalNews journalists report that a patent by the inventors Holmes, Stephen (Fort Collins, CO, US), filed on February 10, 2020, was published online on June 8, 2021.

The patent's assignee for patent number 11027199 is NVIDIA Corporation (Santa Clara, California, United States).

News editors obtained the following quote from the background information supplied by the inventors: "As technology has advanced, computers have become increasingly faster and more capable of performing a variety of executing a variety of programs. One popular category of programs is gaming. Games have become increasingly advanced with higher resolution graphics demanding increasing advanced hardware. Conventional gaming systems involve a game console that is connected to a television for outputting video from the game and one or more controllers connected the game console. Given the advanced nature of modern gaming, game controllers and in particular, game console hardware is increasingly expensive to manufacture and purchase."

As a supplement to the background information on this patent, VerticalNews correspondents also obtained the inventors' summary information for this patent: "This Summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter.

"A need has arisen for a solution that allows game playing without the need to manufacture or purchase of individual expensive game console hardware.

"Accordingly, embodiments of the present invention reduce the cost of accessing game streaming services by removing the need for separate hardware for running a game streaming client. Embodiments include an internet connectable controller that is connected to a user's local network and thereby connected to the Internet and game streaming service. The game can then be streamed independently to an Internet connected display logged into the game streaming service without the need for a game console. For instance, the game can be independently streamed to a television, a tablet, a phone, or other display device that is capable of executing a game streaming client.

"One embodiment of the present invention is directed to a system. The system includes a plurality of input controls and a network controller configured for communicating with a game streaming service. The network controller can be configured for receiving game feedback information from the game streaming service. The system further includes a processor coupled to the plurality of input controls and the network controller. The processor is configured communicate with the game streaming service to login to a game streaming service account and communicate input from the plurality of controls to the game streaming service. The system further includes a power source configured to provide power to the plurality of input controls, the network controller, and the processor. In some embodiments, the system is configured to communicate with the game streaming service without a gaming console.

"The system can further include an audio interface configured for receiving input audio and outputting audio. The audio interface can be configured for coupling of at least one of a headset and a pair of headphones. The system can further include a memory for storing information associated with the game streaming service account and one or more networks. The system is further configured for receiving network information (e.g., network configuration information) to communicate with the game streaming service from a device comprising a display.

"Another embodiment of the present invention is directed to a method of controlling a game. The method includes connecting a controller to a wireless access point. The wireless access point is communicatively coupled to a game streaming service. The method further includes sending game streaming service account information from the controller to the game streaming service and sending a selection of a game of the game streaming service. The method further includes receiving an input at the controller and sending the input from Page 153 of 181 © 2022 Factiva, Inc. All rights reserved.

the controller via the wireless access point to the game streaming service. In some embodiments, the input comprises a button press on the controller. The method can further include receiving a voice command and sending the voice command to the game streaming service.

"The method can further include sending an indicator indicating whether an audio device is coupled to the controller. The indicator indicates whether at least one of a headset or a pair of headphones are coupled to the controller. The method can further include receiving audio information in response the indicator and outputting the audio information to the audio device coupled to the controller. The audio information can be an individualized audio stream associated with the controller.

"The method can further include connecting to a wireless network having an identifier matching a default network name and receiving network information associated with the wireless access point. The method can further include receiving the game streaming service account information and disconnecting from the wireless network having the identifier matching the default network name.

"Another embodiment of the present invention is directed to a method for streaming a game. The method includes receiving account information for a game streaming service from a display device via a network connection and receiving game streaming service account information from a controller. The method further includes receiving a selection of a game of the game streaming service from the controller, executing the game, and sending output of the game to the display device via the network connection. In some embodiments, the game streaming service account information from the controller is sent from the controller to a wireless access point.

"The method can further include receiving an input from the controller and sending a result of the input to the display device. The result can comprise include one or more images. The method can include sending an individualized audio stream to the controller. In some embodiments, the display device is an Internet connected television."

The claims supplied by the inventors are:

- "1. A method performed on a game controller, comprising: making a wireless connection to a computing device; receiving network information associated with a wireless access point from the computing device via the wireless connection; disconnecting from the computing device; connecting to the wireless access point based on the received network information to communicate through a communication network with a game streaming service; communicating with the game streaming service with respect to a game streaming service account; receiving user input from a plurality of input controls; and communicating the user input to the game streaming service via a first connection through the communication network that is separate from a second connection used by the game streaming service to communicate to a display device.
- "2. The method of claim 1, wherein the computing device is a smartphone, tablet, or computer.
- "3. The method of claim 1, wherein the display device is a television, a monitor, a projector, a tablet, or a smartphone.
- "4. The method of claim 1, further comprising: communicating game streaming service account information to the game streaming service.
- "5. The method of claim 1, further comprising: receiving audio information from the game streaming service; and outputting audio information.
- "6. The method of claim 1, further comprising: receiving audio information from a user; and communicating the audio information to the game streaming service.
- "7. The method of claim 6, wherein the audio information is a voice print password.
- "8. The method of claim 1, further comprising: receiving game feedback information from the game streaming service, wherein the game feedback information is tactile, rumble, or vibration feedback; and causing the game controller to output physical feedback to a user based on the feedback information.
- "9. The method of claim 1, further comprising: storing, in the game controller, information associated with the game streaming service account.
- "10. The method of claim 1, wherein communicating the user input to the game streaming service comprises providing the received user input to the game streaming service without repackaging the user input.
- "11. A method performed on a game controller, comprising: making a wireless connection to a computing device; receiving network information associated with a wireless access point from the computing device via the wireless connection; disconnecting from the computing device; connecting to the wireless access point

based on the received network information to communicate through a communication network with a game streaming service; communicating with the game streaming service with respect to a game streaming service account; receiving user input from a plurality of input controls; and communicating the user input to the game streaming service through the communication network to cause a game to be executed based on the user input and to cause an output of the game to be displayed on a display device that is in communication with the game streaming service.

- "12. The method of claim 11, wherein the computing device is a smartphone, tablet, or computer.
- "13. The method of claim 11, wherein the display device is a television, a monitor, a projector, a tablet, or a smartphone.
- "14. The method of claim 11, further comprising: communicating game streaming service account information to the game streaming service.
- "15. The method of claim 11, further comprising: receiving audio information from the game streaming service; and outputting audio information.
- "16. The method of claim 11, further comprising: receiving audio information from a user; and communicating the audio information to the game streaming service.
- "17. The method of claim 16, wherein the audio information is a voice print password.
- "18. The method of claim 11, further comprising: receiving game feedback information from the game streaming service, wherein the game feedback information is tactile, rumble, or vibration feedback; and causing the game controller to output physical feedback to a user based on the feedback information.
- "19. The method of claim 11, further comprising: storing, in the game controller, information associated with the game streaming service account.
- "20. The method of claim 11, wherein communicating the user input to the game streaming service comprises providing the received user input to the game streaming service without repackaging the user input."

For additional information on this patent, see: Holmes, Stephen. System and method for network coupled gaming. U.S. Patent Number 11027199, filed February 10, 2020, and published online on June 8, 2021. Patent URL:

http://patft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=11027199.PN.&OS=PN/11027199RS=PN/11027199

Keywords for this news article include: Business, Television, Wireless Network, NVIDIA Corporation, Wireless Technology, Technology Companies, Communication Network, Wireless Access Point.

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Document TELWK00020210630eh6u000iq



Intel's Xe DG2 gaming GPU is almost here to fight Nvidia and AMD

Jess Weatherbed 682 words 29 June 2021 TechRadar TECHR English

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Intel has revealed that its upcoming DG2 gaming GPU is now sampling to partners, meaning we could see an early 2022 release date.

Intel's Xe HPG desktop graphics card prototype (codenamed DG2) is now sampling to partners, suggesting an appearance for Team Blue's upcoming gaming GPU might be just around the corner.

While we appreciate this might not sound as exciting as a new release from AMD or Nvidia, this is huge news for the gaming market, potentially splitting the current duopoly.

In fact, two leaked benchmarks have appeared for variants of the GPU that suggest similar performance to the Nvidia GeForce GTX 1050, though it's worth noting that three additional SKUs are anticipated, with the flagship 512 EU (execution unit) card rumored to sit somewhere between the GeForce RTX 3070 and RTX 3080 for performance.

- * Check out all the best PC games
- * We'll show you how to build a PC
- * These are the best processors of 2021

While the flagship model is expected to run at clock speeds of up to 2.2GHz, with 16GB of GDDR6 video RAM on board (and a 256-bit memory bus), both of the current leaks are for lower-powered variants, and we're working under the assumption that the SKUs currently being sampled are of the mobile variety rather than desktop.

Still, this means we could see an Intel discrete graphics card officially revealed in a matter of months, making CES 2022 a suitable window for Intel to show what its new gaming hardware is capable of. What makes all this especially exciting is that DG2 will have (allegedly) better ray tracing support than the current AMD 'Big Navi' GPUs, and another rival to Nvidia's DLSS feature is also being developed, <u>dubbed XeSS</u>.

If Intel can pull this off at an affordable price point, both Nvidia and AMD might have to accept the gaming GPU market is no longer a two-horse race. Ultimately, we will have to wait until more information is released into the wild before getting our hopes up.

RX 6700 XT 100%RTX 3070 97%448EU @ 1.8 GHz 92% ------128EU @ 1.9 GHz 100% GTX 1650 88% pic.twitter.com/giPGE8JtBJJune 18, 2021

See more

Three's a crowd

Peddling back to the leaked benchmarks that have appeared on the scene, one appears to show the integrated graphics capabilities of Intel's upcoming 12th-generation CPUs, adding some weight to existing rumors that the DG2 graphics would be paid with some <u>Alder Lake</u> products.

This performance certainly won't be blowing anyone's mind, but for non-gaming optimized builds, this offers a suitable alternative to buying a dedicated graphics card.

And of course, that isn't to say it can't play games - it's anticipated that you'll see similar performance to that of the elderly Nvidia GTX 460, so indie titles and even low requirement games like League of Legends or Counter-Strike: Global Offensive will run just fine.

[GB5 GPU] Unknown CPUCPU: Genuine Intel 0000 (14C 20T)Min/Max/Avg: 20496/21235/21078 MHzCodename: Alder LakeCPUID: 906A0GPU: Intel UHDAPI: Open CLScore: 6516VRAM: 1.5 GBhttps://t.co/zm96hpWiD0June 25, 2021

See more

The second benchmark to appear for the DG2 is a discreet GPU with 256 execution units and a maximum frequency of 1,400 MHz, achieving similar results to another outdated favorite, the Nvidia GTX 1050 with 18,482 points in OpenCL.

As with all rumors, take all of this with a healthy pinch of salt until we get some more official data from Intel, which shouldn't be that long of a wait now that partners are sampling prototypes. While both of the SKUs with benchmark leaks might not be as exciting as a rival to products like the <u>GeForce RTX 3080 or the Radeon RX 6800 XT</u>, there are high expectations for the flagship of the DG2 lineup.

* These are the best graphics cards

Via WCCFTech

Intel Xe HPG (Intel)

Document TECHR00020210629eh6t000p2



Telefonica Germany tests VR gaming on 5G standalone network with Ericsson, Nvidia

205 words
28 June 2021
Telecompaper Europe
TELEUR
English
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Telefonica Germany said it has tested virtual reality games on its 5G standalone network in Munich. It has shown the game Half Life Alyx in the demonstration with Ericsson and Nvidia.

The 5G antennas on the O2 network at the company's Munich office transport the signals from the VR game into the 5G core network supplied by Ericsson. Telefonica has also installed the Nvidia CloudXR software and RTX graphics processors on an edge computing server in the 5G data centre in Munich. The game's data is obtained from the cloud via this server and transmitted to the gamer via the O2 cellular network. As an end device, O2 used a Samsung Galaxy S21.

With virtual reality gaming, players operate in an interactive 3D environment using VR glasses. Mobile virtual reality gaming is a very demanding digital application that requires extremely short delay times, fast data rates and a high level of reliability that only 5G standalone networks can provide. Telefonica said it will in future offer the gaming experience nationwide thanks to 5G standalone networks. It has already started to operate its new 5G core network in several data centres, including in Munich and Duesseldorf.

Document TELEUR0020210628eh6s000p3



MSIs new gaming laptops bring Intels new H45 Tiger Lake chips & Nvidia RTX 30-series GPUs together

Karthik lyer 411 words 25 June 2021 Digit HTDIGI English

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India, June 25 -- Intel updated its Tiger Lake CPU line for laptops by adding the new H45 chips not too long ago. Now, MSI has become the first laptop manufacturer in India to bring the new 11th Gen Intel Core H45 chips laptops along with Nvidia's RTX 30-series GPUs.

New Gaming Laptops with Intel H45 chips & RTX 30-Series GPU

MSI's new crop of laptops in India with the updated internals include its GE and GS series. These laptops, depending on the variants you pick, can have up to an 11th Gen Intel Core i9 processor and an Nvidia RTX 3080 GPU. MSI will be launching and updating more laptops to have the new hardware, and one of them is the MSI Pulse GL66 gaming laptop.

The MSI Pulse GL66 is powered by one of the newer H45 processors from Intel. It's the Core i7 11800H in this case which has 8 Willow Cove cores and 16 threads. You are looking at a base clock of 3.1Ghz at 45W and it can achieve a single-core Boost of up to 4.6Ghz while all cores can run at up to 4.2Ghz. For graphics, it has an RTX 3060 GPU with 6GB VRAM and it's got a TGP of 80W with 5W more for boost. Additionally, you get 16GB DDR4 RAM onboard, 1TB NVMe drive, and a 1080p display with a refresh rate of 144Hz.

We tested this laptop for our review and found out that it's indeed a very capable machine that can be used reliably for both gaming as well as creative workloads. You can watch our full review of the MSI Pulse GL66 gaming laptop below -

Pricing & Availability

According to MSI, only the GE and GS series laptops have launched in India now. Other laptops, including the MSI Pulse GL66 that we have reviewed, will arrive soon. The MSI GE series starts at Rs 2,23,990 whereas the MSI GS series starts at Rs 2,07,990 in India. The MSI Pulse GL66 variant which we reviewed today, will cost you Rs 1,39,990 when it goes on sale.

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Document HTDIGI0020210625eh6p0002y



Want an Nvidia RTX 3080 Ti on Prime Day? These gaming PCs could net you one

Daryl Baxter 590 words 21 June 2021 TechRadar TECHR English

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If you're on the hunt for an Nvidia RTX 3080 Ti on Prime Day, you won't get one for the GPU alone, but there are gaming PCs out there...

As expected, we've not seen any Prime Day deals for the Nvidia GeForce 3080Ti on its own, but we have seen it in several gaming PCs.

As <u>Amazon Prime Day</u> has now begun, you're likely going to see plenty of incredible deals for <u>gaming laptops</u>, <u>gaming PCs</u>, and even <u>PC components</u>, but even with some hefty discounts, these can be incredibly expensive investments.

With it being a huge challenge to find a GeForce 30 series graphics card on its own, others have turned to gaming PCs that have them pre-installed. Thankfully, there's a few on Prime Day that we've found that feature some significant discounts, ready to ship to you with a GeForce 3080Ti installed.

- * Browse all the latest offers at Amazon
- * Save with a 30-day free Amazon Prime trial

Best 3080Ti gaming PCs

toCheeeek

Gaming RDY LCMBG205 Gaming PC: \$3,799.99 \$3,599.99 at iBuyPower

Save \$200 - If you're looking for a PC that has the GeForce 3080Ti pre-installed to save you searching for one, this is a PC that can help you future-proof your games for the next few years. Featuring a 1TB M.2 SSD alongside 32GB DDR4 memory, with an Intel Core i9 at i9-11900KF Processor (8X 3.50GHz) to boot, this is a PC definitely able to run current games at Ultra settings for a long while.

toCheeeek

AMD Ryzen 9 RTX Gaming PC: \$3,569.99 \$3,369.99 at iBuyPower

Save \$200 - A PC with a Ryzen 7 CPU instead, the 5800X is built for gaming, with eight cores and speeds of up to 4.7Ghz. The PC also features a 500GB M.2 SSD with 16GB DDR4 memory. This is a PC that's ready to run current games on Steam, Game Pass and more at Ultra settings for a long while.

toCheeeek

Intel Z590 Gaming Evo RTX II: \$4,029.99 \$3,729.99 at iBuyPower

Save \$300 - Featuring a 1TB M.2 SSD alongside 32GB DDR4 memory, with an Intel Core i9 at i9-11900KF Processor (8X 3.50GHz) to boot, this is a PC that can run the upcoming Forza Horizon 5 and Halo Infinite at their best settings, as long as you have a great monitor to boot.

More Amazon Prime Day deals

- * Amazon devices: early Prime offers from \$14.99
- * Amazon Echo Dot: 2 for \$49.98 with code PDDOT2PACK
- * Amazon Echo: 2 for \$119.98 with code ECHOPRIME
- * Audible Premium Plus: save 53% on your first 4 months

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- * Apple Watch Series 6 (40mm, GPS): \$399 \$279 at Amazon
- * Deals under \$25: save on games, smart home, fashion and more
- * Fashion: men's and women's fashion from \$14
- * Headphones: save on Sony, Beats, Bose and more
- * iPad (8th generation): was \$329 now \$299
- * Kitchen: save up to 42% on Cusimax, Cosori, Instant Pot and more
- * Laptops: Chromebooks, MacBooks and gaming laptops discounted
- * Nike: save on NBA jerseys, sneakers, and more
- * Nintendo Switch: big titles now \$10 off
- * PS5: now starting at \$29.88
- * Smartwatches: save up to 35% on Samsung Galaxy Watch 3
- * Subscription boxes: <u>50% off for Prime members</u>
- * TVs: Fire-enabled smart TVs starting at just \$99.99

Gaming RDY LCMBG205 (TechRadar)

Document TECHR00020210621eh6l00108

Intel Xe-HPG DG2 Gaming GPUs With 3584 & 1024 Cores Tested, Flagship Performance On Par With NVIDIA GA104 & AMD Navi 22 Chips

Hassan Mujtaba 1,587 words 18 June 2021 Wccftech.com NEWAGAE English

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The performance numbers of Intel's next-generation Xe-HPG DG2 Gaming GPUs have leaked out by TUM_APISAK. The performance metrics which were obtained through an online database show that Intel will have their fastest chips pitted against AMD & NVIDIA's 2nd best chips within their current RDNA 2 and Ampere lineup.

Intel Xe-HPG DG2 Gaming GPU Performance Leaks Out, Will Tackle AMD Navi 22 & NVIDIA GA104 GPUs

The leaker shared performance numbers of two Intel Xe-HPG DG2 SKUs, one being a 448 EU part and the other being a 128 EU part. Do note that both of these GPU variants are based on different SKUs. The Xe-HPG DG2 with 448 EUs is going to be based on a cut down DG2-512 EU die while the 128 EU SKU is going to be based on the Xe-HPG DG2-128 EU die. Both will feature variable die sizes and we have only so far seen the flagship die from Intel themselves.

— APISAK (@TUM_APISAK) June 18, 2021

With that said, the Intel Xe-HPG DG2-448 EU SKU tested was operating at a clock speed of around 1.8 GHz while the 128 EU SKU was operating at a clock speed of around 1.9 GHz. We don't know if that's the average, max, or base clock speed but given what we have seen on the Xe architecture, it should be the maximum clock speed.

In terms of performance, the Intel DG2 448 EU GPU delivered performance close to the NVIDIA RTX 3070 while the RX 6700 XT was 8% faster. It looks like the flagship part with 512 EUs will compete in this benchmark favorably against the RTX 3070 Ti and 6700 XT. The 128 EU part is 12% faster than the GeForce GTX 1650 which puts it in the same league as the GTX 1650 Ti or 1650 SUPER. So we're looking at two GPUs with very different performance targets. Also, the DG2 512 EU chip is going to about the same size or slightly larger than the NVIDIA GA104 and AMD Navi 22 GPUs as reported here.

This shows that Intel might not compete against the flagship GPUs from NVIDIA and AMD, at least until the next generation. What they will do is try to offer more competitive products around the \$500 US price range where the AMD Radeon RX 6700 XT and NVIDIA GeForce RTX 3070 currently sit. That plus backed with a good feature set such as hardware-accelerated ray-tracing support & their own AI super-sampling technology onboard, Intel might end up with a very attractive graphics lineup.

Click to view image.

On the same front, Intel is said to offer its own 'XeSS' solution to rival DLSS and FSR. The encoding and prosumer capabilities are also going to be very impressive for Xe-HPG graphics cards. Intel has already confirmed support for hardware-accelerated ray-tracing, sampler feedback, & other DX12 Ultimate features on its Xe-HPG architecture.

Note - The leaker didn't mention what specific benchmark these numbers come from or the fact whether these are desktop or notebook SKUs however based on the comparisons being made, it looks like these are in fact desktop discrete graphics cards that were internally tested by Intel and spotted in an online database.

Here's Everything We Know About Intel Xe-HPG DG2 Gaming GPU Lineup

Intel Xe-HPG DG2 512 EU Discrete Gaming Graphics Cards

Each Xe-HPG based DG2 GPU SKU will come in various configurations which will range from the full-fat chip to several cut-down variants. This is similar to NVIDIA's Ampere GA102-400, GA102-200 naming schemes, or AMD's Navi 21 XTX, Navi 21 XT, Navi 21 XL naming conventions. The top DG2 512 EU variant has just one configuration listed so far and that utilizes the full die with 4096 cores, 256-bit bus interface, and up to 16 GB GDDR6 memory (8 GB GDDR6 listed too). Based on demand and yields, Intel could produce more variants of this flagship chip but we can't say for sure right now.

A concept image of Intel's upcoming XE GPUs.

The Xe-HPG DG2 512 EU chip is suggested to feature clocks of up to 2.2 GHz though we don't know if these are the average clocks or the maximum boost clocks. Also, it is stated that Intel's initial TDP target was 225-250W but that's been upped to around 275W now. We can expect a 300W variant with dual 8-pin connectors too if Intel wants to push its clocks even further. We have also already seen leaked PCB and pictures of an ES Xe-HPG DG2 based graphics card which you can see here.

Intel Xe-HPG DG2 384 EU Discrete Gaming Graphics Cards

Moving on, we have the Intel Xe-HPG DG2 384 GPU SKU which is expected to comprise at least three variants. The full fat chip will feature 3072 cores, up to 12 GB GDDR6 memory (6 GB GDDR6 listed too), and a 192-bit bus interface. Then we have two variants, a 256 EU and a 192 EU variant which are comprised of 2048 and 1536 cores. While both variants feature a 128-bit bus interface, the 256 EU SKU will come with up to 8 GB GDDR6 memory (4 GB GDDR6 listed too) while the 192 EU variant will stick with just 4 GB GDDR6 memory. Based on the specifications, these GPUs will be positioned as mainstream parts.

Click to view image.

<u>Videocardz</u> had earlier leaked out the die configuration of the Intel Xe-HPG DG2 384 GPU variant which should measure 190mm2. The PCB blueprint shows 6 memory module locations which do confirm a 192-bit bus interface and either 6 or 12 GB GDDR6 memory capacity. The 384 and 256 EU SKUs are expected to feature 16 MB and 8 MB smart cache, respectively. The clock speeds for the 384 EU parts are reported at 600 MHz base and 1800 MHz turbo while the 256 EU part will feature a 450 MHz base and 1400 MHz turbo clock

Intel Xe-HPG DG2 128 EU Discrete Gaming Graphics Cards

Then lastly, we have the Intel Xe-HPG DG2 128 EU parts. The top config is once again a full-fat SKU with 1024 cores, a 64-bit bus interface, and 4 GB GDDR6 memory. The cut-down variant will come with 96 EUs or 768 cores and a 4 GB GDDR6 memory featured across a 64-bit bus interface. This GPU will be very similar to the DG1 GPU-based discrete SDV board however DG2 will have a more improved architecture design and definitely more performance uplift over the first-gen Xe GPU architecture. This lineup is definitely going to be aimed at the entry-level desktop discrete market based on the specifications.

Intel Xe-HPG DG2 GPU Specifications (Credits: Igor's Lab)

	SKU 1	SKU 2	SKU 3	SKU 4	SKU 5
Package type	BGA2660	BGA2660	BGA2660	TBC	TBC
Supported Memory Technology	GDDR6	GDDR6	GDDR6	GDDR6	GDDR6
Memory speed	16 Gbps				
Interface / bus	256-bit	192-bit	128-bit	64-bit	64-bit
Memory Size (Max)	16 GB	12 GB	8 GB	4 GB	4 GB
Smart cache size	16 MB	16 MB	8 MB	TBC	TBC
Graphics Execution Units (EUs)	512	384	256	196	128
Graphics Frequency (High) Mobile	1.1 GHz	600 MHz	450 MHz	TBC	TBC
Graphics Frequency (Turbo) Mobile	1.8 GHz	1.8 GHz	1.4 GHz	TBC	TBC
TDP Mobile (Chip Only)	100	100	100	TBC	TBC
TDP desktop	TBC	TBC	TBC	TBC	TBC

Intel Xe-HPG DG2 GPU Based Discrete Gaming Graphics Card Specs:

```
GPU Variant GPU SKU Execution Units Shading Units (Cores) Memory Capacity Memory Bus TGP Xe-HPG 512EU DG2-512EU 512 EUs 4096 16/8 GB GDDR6 256-bit \sim 275\,\mathrm{W}
```

Xe-HPG 384EU DG2-384EU 384 EUs	3072	12/6 GB GDDR6
192-bit TBC		
Xe-HPG 256EU DG2-384EU 256 EUs	2048	8/4 GB GDDR6
128-bit TBC		
Xe-HPG 192EU DG2-384EU 192 EUs	1536	4 GB GDDR6
128-bit TBC		
Xe-HPG 128EU DG2-128EU 128 EUs	1024	4 GB GDDR6
64-bit TBC		
Xe-HPG 96EU DG2-128EU 86 EUs	768	4 GB GDDR6
64-bit ~120W		

We have seen the Intel Xe-HPG DG2 GPU-based <u>discrete graphics card engineering sample leak out</u> last month along with some rumored performance and pricing figures, <u>you can read more on that here</u>. All we know for sure is that Intel will be launching its DG2 lineup later this year for desktops & mobility PC platforms.

Where are you expecting the Intel Xe GPUs to land within the desktop discrete graphics card landscape?

- * Faster Than AMD/NVIDIA with higher prices.
- * Faster Than AMD/NVIDIA with similar prices.
- * On Par With AMD/NVIDIA with higher prices.
- * On Par With AMD/NVIDIA with similar prices.
- * On Par With AMD/NVIDIA with lower (competitive prices).
- * Slower Than AMD/NVIDIA with similar prices.
- * Slower Than AMD/NVIDIA with lower (competitive prices).

View Results

Click to view image.

Document NEWAGAE020210618eh6i000m9

Cloud Gaming Market is Booming Worldwide | Nvidia, PlayKey, Cyber Cloud

1,016 words 12 June 2021 iCrowdNewswire ICROWDN English

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Latest released the research study on Global Cloud Gaming Market, offers a detailed overview of the factors influencing the global business scope. Cloud Gaming Market research report shows the latest market insights, current situation analysis with upcoming trends and breakdown of the products and services. The report provides key statistics on the market status, size, share, growth factors of the Cloud Gaming. The study covers emerging player's data, including: competitive landscape, sales, revenue and global market share of top manufacturers are Sony (Japan), GameFly (PlayCast) (United States), Nvidia (United States), Ubitus (China), PlayGiga (Spain), Crytek GmbH (Germany), PlayKey (United States), Utomik (Kalydo) (United States), Cyber Cloud (United States), Yunlian Technology (China), Liquidsky (United States).

Free Sample Report + All Related Graphs & Charts @: https://www.advancemarketanalytics.com/sample-report/22535-global-cloud-gaming-market-1

Definition:

Cloud gaming is an famous technology evolving in the gaming industry which allows a user to stream high-end games on devices such as laptops, tablets, and mobiles with a good internet connection. This technology helps in eliminating the requirement for the regular hardware upgrade or a gaming console. Owing to rising investments and demand for the good gaming experience and increment in count of mobile users, fuels the growth of the cloud gaming market. Cloud providers can easily penetrate the market with advance equipment's and network connectivity supporting the high-end games. Game developers are continuously working to enhance the gamer's experience by launching and rewriting codes for diverse platforms such as PlayStation, Xbox, and Windows.

Market Trend:

Surging penetration of online gaming across the social media platform

Technological advancements across the online gaming industry

Market Drivers:

Increment in count of smartphone and smart devices

Increasing adaptability due to high speed internet connectivity

Efficient hardware compatibility in both developing and developed economies

Rise in sophisticated gaming techniques and increased consume

Opportunities:

The rising popularity of e-sports, multiplayer video game competition between professional and amateur players

The Global Cloud Gaming Market segments and Market Data Break Down are illuminated below:

by Cloud Type (Public, Private, Hybrid), Platform Type (Smartphones, Tablets, Gaming Consoles, PCs), Streaming Type (Video, File)

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https://www.advancemarketanalytics.com/enquiry-before-buy/22535-global-cloud-gaming-market-1

Analyst at AMA have conducted special survey and have connected with opinion leaders and Industry experts from various region to minutely understand impact on growth as well as local reforms to fight the situation. A special chapter in the study presents Impact Analysis of COVID-19 on Global Cloud Gaming Market along with tables and graphs related to various country and segments showcasing impact on growth trends.

Region Included are: North America, Europe, Asia Pacific, Oceania, South America, Middle East & Africa

Country Level Break-Up: United States, Canada, Mexico, Brazil, Argentina, Colombia, Chile, South Africa, Nigeria, Tunisia, Morocco, Germany, United Kingdom (UK), the Netherlands, Spain, Italy, Belgium, Austria, Turkey, Russia, France, Poland, Israel, United Arab Emirates, Qatar, Saudi Arabia, China, Japan, Taiwan, South Korea, Singapore, India, Australia and New Zealand etc.

What benefits does AMA research study is going to provide?

Latest industry influencing trends and development scenario Open up New Markets To Seize powerful market opportunities Key decision in planning and to further expand market share Identify Key Business Segments, Market proposition & Gap Analysis Assisting in allocating marketing investments

Strategic Points Covered in Table of Content of Global Cloud Gaming Market:?

Chapter 1: Introduction, market driving force product Objective of Study and Research Scope the Cloud Gaming market

Chapter 2: Exclusive Summary - the basic information of the Cloud Gaming Market.

Chapter 3: Displaying the Market Dynamics- Drivers, Trends and Challenges of the Cloud Gaming

Chapter 4: Presenting the Cloud Gaming Market Factor Analysis Porters Five Forces, Supply/Value Chain, PESTEL analysis, Market Entropy, Patent/Trademark Analysis.

Chapter 5: Displaying market size by Type, End User and Region 2015-2020

Chapter 6: Evaluating the leading manufacturers of the Cloud Gaming market which consists of its Competitive Landscape, Peer Group Analysis, BCG Matrix & Company Profile

Chapter 7: To evaluate the market by segments, by countries and by manufacturers with revenue share and sales by key countries (2021-2026).

Chapter 8 & 9: Displaying the Appendix, Methodology and Data Source

Finally, Cloud Gaming Market is a valuable source of guidance for individuals and companies in decision framework.

Get More Information:

https://www.advancemarketanalytics.com/reports/22535-global-cloud-gaming-market-1

Key questions answered

Who are the Leading key players and what are their Key Business plans in the Global Cloud Gaming market? What are the key concerns of the five forces analysis of the Global Cloud Gaming market? What are different prospects and threats faced by the dealers in the Global Cloud Gaming market? What are the strengths and weaknesses of the key vendors?

Definitively, this report will give you an unmistakable perspective on every single reality of the market without a need to allude to some other research report or an information source. Our report will give all of you the realities about the past, present, and eventual fate of the concerned Market.

Thanks for reading this article; you can also get individual chapter wise section or region wise report version like North America, Europe or Asia.

About Author:

Advance Market Analytics is Global leaders of Market Research Industry provides the quantified B2B research to Fortune 500 companies on high growth emerging opportunities which will impact more than 80% of worldwide companies' revenues.

Our Analyst is tracking high growth study with detailed statistical and in-depth analysis of market trends & dynamics that provide a complete overview of the industry. We follow an extensive research methodology coupled with critical insights related industry factors and market forces to generate the best value for our clients. We Provides reliable primary and secondary data sources, our analysts and consultants derive informative and usable data suited for our clients business needs. The research study enable clients to meet varied market objectives a from global footprint expansion to supply chain optimization and from competitor profiling to M&As.

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Document ICROWDN020210612eh6c000jo

NVIDIA GEForce RTX 3070 Ti Now Available, Here's Where To Buy The Full Gaming 'Ampere GA104' Graphics Card

Hassan Mujtaba 1,559 words 10 June 2021 Wccftech.com NEWAGAE English

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NVIDIA has officially <u>launched</u> the GeForce RTX 3070 Ti 8 GB graphics card which enters the retail segment as the best 1440p gaming card. The NVIDIA GeForce RTX 3070 Ti has an MSRP of \$599 US but given the current market situation, don't expect it below \$1000 US. We will be providing links to retail outlets where the graphics card can be bought.

NVIDIA GeForce RTX 3070 Ti 'Full Ampere GA104' Graphics Card Now Available, Here's Where To Buy

In our <u>Founders Edition</u> and <u>Custom model</u> reviews of the NVIDIA GeForce RTX 3080 Ti graphics card, we found it to offer 10% better performance over the RTX 3070 with its full Ampere GA104 GPU core and GDDR6X memory. The GeForce RTX 3070 Ti might be faster than the GeForce RTX 3070 but going by MSRP, you are paying more than 20% for a 10-15% performance gain. This makes the Ti slightly underwhelming and you rather just get an RTX 3080 (at MSRP) which has higher memory capacity and more performance.

NVIDIA's new flagship gaming GPU is here, the <u>@NVIDIA</u> GeForce RTX 3080 Ti. Get ultra performance with it's Ampere architecture, enhanced RT Cores and Tensor Cores, streaming multiprocessors, and G6X memory.

Available on Newegg Shuffle at 6am PT ► https://t.co/73JM8jY3lApic.twitter.com/cZ0jAH8okk

- Newegg (@Newegg) June 3, 2021

The RTX 3070 Ti being a fresh launch could see better stock and LHR would mean that it will land in the hands of gamers than miners. Following are a few links where you could find the RTX 3070 Ti for purchase:

- * NVIDIA GeForce RTX 3070 Ti Founders Edition \$599.99 US (BestBuy)
- * ASUS GeForce RTX 3070 Ti TUF Gaming \$949.99 US (BestBuy)
- * Gigabyte GeForce RTX 3070 Ti Eagle \$599.99 US (Newegg)
- * ZOTAC GeForce RTX 3070 Ti Trinity \$599.99 US (Newegg)
- * MSI GeForce RTX 3070 Ti Ventus 3X \$599.99 US (Newegg)
- * EVGA GeForce RTX 3070 Ti XC3 \$599.99 US (Newegg)
- * ASUS GeForce RTX 3070 Ti TUF Gaming \$599.99 US (Newegg)
- * EVGA GeForce RTX 3070 Ti XC3 Ultra \$699.99 US (Newegg)
- * EVGA GeForce RTX 3070 Ti FTW3 Ultra \$799.99 US (Newegg)
- * Gigabyte GeForce RTX 3070 Ti Eagle OC \$799.99 US (Newegg)
- * Gigabyte GeForce RTX 3070 Ti Gaming OC \$849.99 US (Newegg)
- * ZOTAC GeForce RTX 3070 Ti AMP HOLO \$899.99 US (Newegg)
- * Gigabyte GeForce RTX 3070 Ti Vision OC \$899.99 US (Newegg)
- * MSI GeForce RTX 3070 Ti Ventus 3X OC \$929.99 US (Newegg)
- * ASUS GeForce RTX 3070 Ti TUF Gaming OC \$949.99 US (Newegg)
- * MSI GeForce RTX 3070 Ti Gaming X Trio \$979.99 US (Newegg)

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- * Gigabyte GeForce RTX 3070 Ti AORUS Master \$979.99 US (Newegg)
- * ASUS GeForce RTX 3070 Ti ROG STRIX OC \$999.99 US (Newegg)

Following are retail links from the UK and EU:

- * ASUS GeForce RTX 3070 Ti ROG STRIX OC (SCAN)
- * ASUS GeForce RTX 3070 Ti ROG STRIX (SCAN)
- * ASUS GeForce RTX 3070 Ti ROG STRIX OC (EBuyer)
- * ASUS GeForce RTX 3070 Ti ROG STRIX (EBuyer)
- * MSI GeForce RTX 3070 Ti Ventus 3X £529.99 (CCL)
- * ZOTAC GeForce RTX 3070 Ti AMP Holo TBA (OCUK)
- * ZOTAC GeForce RTX 3070 Ti Trinity TBA (OCUK)
- * ASUS GeForce RTX 3070 Ti TUF Gaming OC (Aria)
- * ASUS GeForce RTX 3070 Ti ROG STRIX (Aria)
- * ASUS GeForce RTX 3070 Ti ROG STRIX OC (Aria)
- * MSI GeForce RTX 3070 Ti SUPRIM X (Aria)
- * MSI GeForce RTX 3070 Ti Gaming X Trio (Aria)
- * MSI GeForce RTX 3070 Ti Ventus 3X OC (Aria)

The NVIDIA GeForce RTX 3070 Ti is designed to be a 1440p gaming solution and as such, it rocks the full GA104 GPU core based on Samsung's 8nm process node. The GeForce RTX 3070 Ti is a bigger upgrade over its non-Ti brother than the RTX 3080 Ti, offering both increase cores and a faster VRAM configuration. Following are the specifications.

Click to view image.

NVIDIA GeForce RTX 3070 Ti Graphics Card Specifications

The NVIDIA GeForce RTX 3070 Ti on the other hand is going to feature the GA104-400-A1 GPU. The NVIDIA GeForce RTX 3070 Ti will utilize the PG141-SKU10 board. The Ampere GPU will feature 6144 CUDA cores or 48 SMs. These are 4% more CUDA cores than the GeForce RTX 3070 & around 30% lower cores than the GeForce RTX 3080. The card features clock speeds of 1580 MHz base & 1770 MHz boost.

The NVIDIA GeForce RTX 3070 Ti will also feature 8 GB GDDR6X memory and what's important here is the fact that NVIDIA is utilizing the higher-grade GDDR6X chips rather than the standard GDDR6 modules featured on the existing GeForce RTX 3070 graphics card. The NVIDIA GeForce RTX 3070 Ti will end up close to the RTX 3080 with a TGP of 290W considering the increased cores & the newer memory modules. The card will retain a 256-bit bus interface and pin speeds will be rated at 19 Gbps like the GeForce RTX 3080 and the RTX 3080 Ti.

Click to view image.

The GeForce RTX 3070 Ti is expected to launch by the start of June for an MSRP of around \$599 US. As for design, the graphics card is rocking a slightly updated Founders Edition cooler. The standard RTX 3070 comes with a single 8-pin connector while the RTX 3070 Ti rocks a 12-pin micro-fit power interface and also a brand new PCB design which is similar to the irregular PCB designs featured on the RTX 3080, RTX 3080 Ti, and RTX 3090.

The graphics card also features a flow-through design vs the dual-fan cooler on the non-Ti variant. Display outputs include the standard 1 HDMI 2.1 & triple DP 2.0 interfaces. For those of you who're getting the card, NVIDIA has released its latest GeForce 466.77 WHQL drivers which offer support for the RTX 3070 Ti along with various bug fixes and added support for RTX features in AAA games. You can download the drivers from here.

NVIDIA GeForce RTX 3070 Ti Product Gallery & PCB Shots:

* Click to view image.

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- * Click to view image.
- * Click to view image.
- * Click to view image.

NVIDIA GeForce RTX 3070 Ti Custom Models:

- * Click to view image.

NVIDIA GeForce RTX 30 Series 'Ampere' Graphics Card Specifications:

Graphics Card Name NVIDIA GeForce RTX 3050 NVIDIA GeForce RTX 3050 Ti NVIDIA GeForce RTX 3060 NVIDIA GeForce RTX 3060 Ti NVIDIA GeForce RTX 3070 NVIDIA GeForce RTX 3070 Ti NVIDIA GeForce RTX 3080 NVIDIA GeForce RTX 3080 Ti NVIDIA GeForce RTX 3090

GPU Name	Ampere GALU/	Ampere GALU/	Ampere
GA106-300	Ampere GA104-200	Ampere GA104-300	Ampere
GA104-400	Ampere GA102-200	Ampere GA102-225	Ampere
GA102-300			
Process Node	Samsung 8nm	Samsung 8nm	Samsung
8nm	Samsung 8nm	Samsung 8nm	Samsung 8nm
	Samsung 8nm	Samsung 8nm	Samsung 8nm
Die Size	TBA	TBA	TBA
	395.2mm2	395.2mm2	395.2mm2
	628.4 mm2	628.4 mm2	628.4 mm2
Transistors	TBA	TBA	TBA
	17.4 Billion	17.4 Billion	17.4 Billion
	28 Billion	28 Billion	28 Billion

CUDA Cores	2048?	2560?	3584	
	4864	5888	6144?	
	8704	10240	10496	
TMUs / ROPs	64 / 40	80 / 48	112 /	
64	152 / 80	184 / 96	192/ 104?	
	272 / 96	320 / 112	328 / 112	
Tensor / RT Co	res 64 / 16	80 / 20	112 /	
28	152 / 38	184 / 46	192/ 48?	
	272 / 68	320 / 80	328 / 82	
Base Clock	TBA	TBA	1320	
MHz.	1410 MHz	1500 MHz	TBA	
11112	1440 MHz	1365 MHz	1400 MHz	
Boost Clock	TBA	TBA	1780	
MHz	1665 MHz	1730 MHz	TBA	
11112	1710 MHz	1665 MHz	1700 MHz	
ED22 Compute	TBA	TRA	12.7	
FP32 Compute				
TFLOPs	16.2 TFLOPs	20 TFLOPs	TBA	
DE EET OD	30 TFLOPs	TBA	36 TFLOPs	
RT TFLOPs	TBA	TBA	25.4	
TFLOPs	32.4 TFLOPs	40 TFLOPs	TBA	
	58 TFLOPs	TBA	69 TFLOPs	
Tensor-TOPs	TBA	TBA	101	
TOPs	129.6 TOPs	163 TOPs	TBA	
	238 TOPs	TBA	285 TOPs	
Memory Capacity	-	4 GB GDDR6?	12 GB	
GDDR6	8 GB GDDR6	8 GB GDDR6	8-16 GB	
GDDR6 X?	10 GB GDDR6X	12 GB GDDR6X	24 GB	
GDDR6 X				
Memory Bus	128-bit	128-bit	192-bit	
	256-bit	256-bit	256-bit	
	320-bit	384-bit	384-bit	
Memory Speed	TBA	TBA	15 Gbps	
	14 Gbps	14 Gbps	TBA	
	19 Gbps	19 Gbps	19.5 Gbps	
Bandwidth	TBA	TBA	360	
Gbps	448 Gbps	448 Gbps	TBA	
	760 Gbps	912 Gbps	936 Gbps	
TGP	~75W	~100W	170W	
	200W	220W	290W	
	320W	350W	350W	
Price (MSRP / 1	FE) \$149?	\$199?	\$329	
•	\$399 US	\$499 US	\$599 US?	
	\$699 US	\$1199	\$1499 US	
Launch (Availa	·	2021?	, =	
	December 202		2020 10th	
June 2021		2020 3rd June 2021	24th	
September 2020	I / CII Depectabel	2020 014 04110 2021	2 1 011	
September 2020				

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Document NEWAGAE020210610eh6a0008d



online news

ViewSonic Reveals ELITE Gaming Monitor Lineup with NVIDIA Reflex Technology

504 words 7 June 2021 ETMAG.com FMETMA English

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ViewSonic, unveils ELITE professional gaming monitors armed with the latest NVIDIA Reflex and G-Sync technology. Delivering maximized latency improvements for high-velocity, graphics-intensive games, ELITE's XG251G and XG271QG monitors also boast precise, competitive frames-per-second (FPS), highest refresh rate of 360 Hz, and industry-leading 1 ms (GTG) response time.

Outgun rivals with ultra-high shot accuracy and bleeding-edge responsiveness on ViewSonic ELITE's professional gaming monitors - the ELITE XG251G is the first 24.5" ELITE monitor with the highest refresh rate of 360Hz, and 27" ELITE XG271QG unlocks buttery-smooth gameplay with 240Hz. Integrated with NVIDIA Reflex and G-Sync capabilities, both displays are paired with blistering-fast refresh rates and hyper-quick response time for seamless kills and exact click-timing action. Gamers can also gaze upon alien jungles and sweeping landscapes in true-to-life color from 99% Adobe color coverage and brightness of 400 nits. The NVIDIA Reflex ecosystem is engineered to reduce latency and input lag to give gamers higher aiming precision, more accurate hit registration, and faster tactical advantage. System latency is the time it takes for an action on an additional peripheral, such as a mouse or keyboard, to happen onscreen in real-time. In gaming where responsiveness and accuracy are key to winning a battle, a delay in movement or unregistered shots will result in major defeat.

The technology features Reflex Latency Analyser which captures end-to-end system latency and delivers a precise reading of CPU and GPU performance, allowing gamers to register every click in millisecond accuracy and achieve the desired peeker's advantage with ease. The optional Low Latency Boost lets the GPU overclock without affecting the picture quality, so gamers can crank up performance settings and still enjoy cinematic visuals at the same time.

Drawn from gamers' insights, these monitors are geared with intuitive ELITE Design Enhancements (EDE) to elevate the gaming desk setup. The minute details such as mood-enhancing ambient RGB light, friction-free mouse anchor, and reinforced clutter-free headphones hook will banish any distractions for a truly immersive gaming experience. Equipped with full ergonomic features, gamers can tilt, swivel, and adjust the screen's height to their comfort and focus on ruling the arena.

ViewSonic ELITE XG251G Specifications 24.5" FHD VESA DisplayHDR 400 IPS Non-Glare display True-to-life colors from 99% Adobe Color Gamut Highest refresh rate of 360Hz and 1 ms (GTG) response time NVIDIA Reflex and G-Sync technology TUV-Certified Eye Comfort Ultimate connectivity with HDMI, DisplayPort, and USB ports Ergonomic features and ELITE Design Enhancements (EDE) ViewSonic ELITE XG271QG Specifications 27" QHD VESA DisplayHDR 400 IPS display Brilliant, vibrant imagery from 99% Adobe Color Gamut Lightning-fast refresh rate of 240Hz and 1 ms (GTG) response time NVIDIA Reflex and G-Sync technology Ergonomic features and ELITE Design Enhancements (EDE) Availability

ViewSonic ELITE XG251G and ELITE XG271QG monitors will be available worldwide in Q3, 2021.

Document FMETMA0020210608eh670003m



online news
EVGA Releases X17 and X15 Gaming Mice with NVIDIA Reflex Analyzer Support

219 words 7 June 2021 ETMAG.com FMETMA English

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EVGA X17 / X15 Gaming Mice now support the revolutionary NVIDIA Reflex Latency Analyzer, giving competitive gamers an accurate measurement of system latency for the first time.

NVIDIA Reflex Latency Analyzer is a revolutionary system latency measurement tool that detects clicks coming from Reflex Latency Analyzer compatible mice, EVGA X17 / X15, and then measures the time it takes for the resulting pixels (i.e. a gun muzzle flash) to change on NVIDIA G-SYNC Esports displays. PC performance for competitive gaming is about responsiveness—how quickly your display updates after mouse clicks or movements. This type of measurement has been virtually impossible for gamers to do before now, requiring over \$7000 in specialized high-speed cameras and equipment. Reflex Latency Analyzer provides a much more complete and accurate understanding of mouse, PC, and display performance. Now with Reflex Latency Analyzer, gamers can start a match with confidence, knowing their system is operating exactly as it should be. Learn more on how to use the Reflex Latency Analyzer. Measure your accuracy with NVIDIA REFLEX ANALYZER With the EVGA X17 / X15 gaming mouse, EVGA GeForce RTX 30 Series graphics card, and compatible NVIDIA G-Sync monitor you can enable real-time latency measurement of a single mouse click.

Document FMETMA0020210608eh670003a

All of the Nvidiagaming laptop features you didn't know about

Yasmine Crossland 1,529 words 5 June 2021 T3 SMLIV English

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You'll never look back after gaming with the RTX 30-series graphics cards

Gaming laptops are the fastest growing gaming platform in the world right now, according to Nvidia. And no wonder, with fast and furious advancements each year giving more powerful, efficient experiences in smaller and thinner devices than ever before.

You might be a fierce advocate for next-gen consoles like the <u>PlayStation 5</u> or <u>Xbox Series X</u>, but the <u>best gaming laptops</u> are making a strong case for portable all-in-one gaming kit. They deliver speed, power and outstanding visual performance as well as high refresh rates, boosting the realms of what's possible during gameplay.

The RTX 30-series is Nvidia's shiny new generation of compact graphics cards. Brand new for 2021, you'll find them in over 70 gaming and studio laptops from the likes of MSI, Razer and Asus. The 30-series largely focuses on AI accelerated gaming, while Ray Tracing is another one of the biggest selling points, improving the visual quality of games with realistic reflections, lighting and shadows making for eye-popping imagery and colours.

Click to view image (Image credit: MSI)

Beginning with the entry-level Nvidia RTX 3050, the GPU for more mainstream and accessible laptops, the 30-series goes right up to the Nvidia RTX 3080 which is their flagship level premium powerhouse.

With every new generation of GPU comes new features worth knowing about, and it's the 3rd generation of Max Q which makes this series stand out from the crowd. Max Q is made up of a number of features that all work towards making Nvidia gaming laptops powerful, quiet, thin, and light. Under the Max Q umbrella is Advanced Optimus, Dynamic Boost 2.0, Whisper Mode 2.0, Battery Boost, Resizable BAR, DLSS 2.0 and Nvidia Reflex. Plus, it packs in a few handy tools for content creation.

MSI GS66 Stealth Nvidia gaming laptop (Image credit: Future)

To test them all out, I got my hands on the MSI GS66 Stealth Nvidia gaming laptop. Available with a choice of graphics cards, I was using their top model packing the Nvidia RTX 3080 with 16GB GDDR6, Nvidia's most powerful new GPU.

If you're considering buying a Nvidia gaming laptop, or even if you already own one, you'll need to know about all of these Max Q features.

Nvidia Advanced Optimus

Advanced Optimus is a power-saving feature where the Nvidia gaming laptop uses Artificial Intelligence to switch seamlessly between integrated graphics and your Nvidia RTX 30-series GPU.

Nvidia RTX 30-series GPUs will consume lots more battery power than the integrated graphics card. Some workloads (like light web browsing) don't need the full power of the RTX 30-series GPU while some tasks (like large games) are so complex that they may need the power of all the system's GPUs. For that reason, it'll massively benefit battery life to be able to switch between the two as and when you need.

Advanced Optimus will also allow you to maintain high refresh rates and the anti-screen-tearing benefits of Nvidia G-Sync whilst seamlessly switching between your integrated graphics and the RTX 30-series graphics card, something that was not previously possible with the old version of Optimus technology. The end result is that competitive and fast-paced gaming is not affected by background switches between processing units, I definitely noticed this using the MSI GS66 Stealth Nvidia gaming laptop.

To enable it, right-click on your desktop to open the Nvidia Control Panel and select Manage Display Mode. If Advanced Optimus is available you will see three Display Mode options with one being Automatic Select.

Click to view image (Image credit: Future)

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Nvidia Dynamic Boost 2.0

Dynamic Boost shifts power between the CPU, GPU, and graphics memory of your Nvidia gaming laptop. So depending on what the workload is, power can be borrowed from the CPU to help run the GPU and vice versa. This second instalment of Dynamic Boost uses Artificial Intelligence networks to determine where needs the power most. It balances the power in the system to boost in-game performance and achieve the highest frame rate possible. You won't need to do anything to switch this on, it runs automatically.

Nvidia Battery Boost

Battery Boost is a way for you to extend your battery life while gaming. You can adjust it from the GeForce Experience app settings page. Along a scale, you increase or decrease the maximum frame rate and quality. So you'll increase battery usage with better quality, and to extend the battery life, you can decrease the quality although this will give you fewer frames per second.

It's a really useful Max Q feature, especially if you plan to use the laptop outside of your home. I didn't use the MSI GS66 Stealth out and about, but it did mean I could move around the house freely without needing to be near a plug all the time.

Click to view image (Image credit: Future)

Nvidia Whisper Mode 2.0

One big problem with powerful PCs is the fan noise so Whisper Mode 2.0 is a major benefit of having a Nvidia gaming laptop. It uses AI to consistently monitor the fans and the system itself to try and keep noise within a selected range.

From the GeForce Experience desktop app, you can choose an acoustic profile (ranging from Quiet, Quieter and Performance) as well as a target frame rate. The system will then use AI to try to balance the fans and frame rate keeping it within the profile you chose. That means that those who are willing to sacrifice a few frames per second can have a quieter gaming experience. It's great for gaming in quieter places like cafes or libraries, for example.

Not all RTX 30-series laptops support Whisper Mode 2.0 - it's a system-level integration so will depend entirely on the laptop, as the computer has to be built with these features in mind. How well it works will depend on the components too, it'll work better with some laptops than with others.

Playing FPS games like Call of Duty: Black Ops Cold War, the MSI GS66 Stealth Nvidia gaming laptop could sometimes be quite noisy. Whisper Mode 2.0 definitely helped to reduce the sound of the fans, although admittedly it didn't completely solve the problem. As noted above, that is likely to be down to the components themselves.

Whisper Mode 2.0 (Image credit: Future)

Nvidia Resizable BAR

Resizable BAR stands for Base Address Register. It's an advanced PCI Express feature that enables the CPU to access the entire GPU frame buffer at once. That means that the swapping of data between the CPU and GPU is done in one large batch, helping to improve efficiency and increasing performance in games.

Not all games will benefit from this feature, though. For games that do, like F1 2020 and Cyberpunk, you can seriously take the MSI GS66 Stealth's performance up yet another level.

Nvidia DLSS 2.0

Nvidia DLSS super sampling uses deep learning to render highly detailed imagery using fewer pixels while boosting your frame rates. It maximises all of your graphics settings and reconstructs the image to your native screen resolution. DLSS massively improves performance and gives you high frame rates for 1440p gaming, while using the same amount of GPU power.

MSI GS66 Stealth is thin, light and portable. (Image credit: Future)

Nvidia Reflex

System latency is the time between you clicking your mouse in a game, and when you see the response happen on the display. It's how long it takes to put a move into action. Nvidia Reflex is a new suite of technologies built to optimise and measure system latency in competitive games, reducing latency in GPU bound scenarios.

Using the MSI GS66 Stealth to play Fortnite, with Nvidia Reflex enabled the mouse and keyboard inputs felt even sharper than they otherwise would. For an even better experience, you can use it with compatible mice like the Razer DeathAdder V2. A great feature for those looking for an edge over the competition.

Creating content with Nvidia

Nvidia gaming laptops don't just cater to gamers. They've actually got a few features that will help creators.

Nvidia Studio accelerates creative tasks like video and photo editing, as well as performance boosts in top renderers like Blender Cycles and Chaos V-Ray. There's also the Nvidia Studio Suite which will help you do your best work. For instance, Nvidia Broadcast uses Al to filter your audio while recording video, so no pesky background noise disrupts your flow. It also has a few virtual background effects. Plus, the GeForce Experience app allows you to access the latest drivers, and seamlessly capture and share your work.

* Want to display your laptop on a big screen? Here are the best gaming monitors you can buy

Nvidia gaming laptop: MSI GS66 Stealth (MSI)

Document SMLIV00020210605eh6500002



CE Noticias Financieras English

PC Gaming. NVIDIA: Graphics cards for mining and gaming unleash stampede (VIDEO)

290 words
4 June 2021
CE NoticiasFinancieras
NFINCE
English
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As if it were the Holy Grail, a batch of NVIDIA graphics cards caused a stampede of dozens of people outside a store in the United States.

In a video shared by streamer PrestonALewi, who was present at the spot where the arrival of NVIDIA graphics cards was announced.

As you can see, people are waiting in the parking lot, until chaos breaks out after the opening of the establishment.

Everyone is looking to be the first to arrive on the spot to be able to get hold of an NVIDIA graphics card (or GPU), forming a large mass of people.

This is because it is a product required by two main consumer sectors: gamers and cryptocurrency miners.

NVIDIA's graphics cards are the best both to power a Gaming PC, and to perform the processes to get a bitcoin.

There is a worldwide shortage of NVIDIA graphics cardsSince the rise of cryptocurrency mining, NVIDIA graphics cards began to become scarce around the world, getting worse with the pandemic.

As with the PS5 and Xbox Series X, the components for NVIDIA graphics cards began to be insufficient, especially for the high-end.

There was too much demand for these products; every time they went on sale, they sold out in a matter of minutes.

For the most part, it was the miners who hoarded all the shipments in order to have more power in their company of obtaining coins.

This left players unable to assemble or scale their teams with better elements to have the best gaming experience.

Although NVIDIA said it would prioritize gamers, so far the situation hasn't changed much with graphics cards.

Document NFINCF0020210605eh64000rl

MSI Announces Its Lineup Of NVIDIA GeForce RTX 3080 Ti & RTX 3070 Ti Cards Featuring SUPRIM, Gaming Trio, & VENTUS 3X Models

Alex Casas 577 words 2 June 2021 Wccftech.com NEWAGAE English

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With the launch of the NVIDIA GeForce RTX 3080 Ti less than a day away, MSI has announced its lineup of RTX 3080 Ti and RTX 3070 Ti graphics cards. Offerings include models from MSI's SUPRIM, Gaming Trio, and Ventus 3X families.

MSI Can Push The Performance Of The NVIDIA GeForce RTX 3080 Ti & 3070 Ti With SUPRIM Family Of Graphics Cards

Starting off with the enthusiast offering, MSI is offering the SUPRIM and SUPRIM X for both the NVIDIA GeForce RTX 3080 Ti and the RTX 3070 Ti. The SUPRIM series graphics cards take advantage of the TRI FROZR 2S cooling system with the TORX FAN 4.0 and an advanced interior cooling design to adequately cool every part of the GPU. In addition to the powerful cooling, the custom PCB features a 20 phase power design and an increased TGP at 400W all powered through a triple 8-pin PCIe power connector. This allows the card to boost up to 1830 Mhz. The shroud of the card features polished aluminum as well as a polished aluminum backplate with plenty of RGB lighting which can be controlled through the Dragon Center software. For a deeper look into the entirety of the card, you can check out our review of the MSI GeForce RTX 3080 Ti SUPRIM.

- * Click to view image.

Taking a step down, we reach the Gaming Trio series which will offer both the NVIDIA GeForce RTX 3080 Ti and RTX 3070 Ti. The MSI Gaming Trio cards are similar to the SUPRIM cards as they also take advantage of the TRI FROZR 2 cooling system which uses the high-performance TORX FAN 4.0. The shroud features an angled design opting for a matte black finish with silver accents. The backplate also features a matte black finish. Throughout the card, there is RGB lighting which is addressable through MSI's Dragon Center software.

- * Click to view image.

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- * Click to view image.

The entry-level model for MSI will be the Ventus 3X which will also be offered as an NVIDIA GeForce RTX 3080 Ti and an RTX 3070 Ti. The Ventus 3X models feature the TORX Fan 3.0 to provide good cooling. The aluminum backplate offers additional cooling as well with thermal pads. The overall aesthetic is matte black with a silver accent as well as having a brushed finish on the aluminum backplate. The more industrial aesthetic makes it look sleeker and it would fit right in with a lower profile, less flashy build.

The NVIDIA GeForce RTX 3080 Ti will launch tomorrow, June 3rd, for \$1199 (FE model) and the NVIDIA GeForce RTX 3070 Ti will launch June 10th for \$599 (FE model). The higher-end custom models will carry a premium price tag. Here is a <u>full review of the NVIDIA GeForce RTX 3080 Ti</u> to help you in your decision whether to buy an RTX 3080 Ti.

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Document NEWAGAE020210602eh62000ma

INVESTOR'S BUSINESS DAILY®

Technology

Graphics-Chip Maker Nvidia Touts Gaming, Al Advancements

PATRICK SEITZ
569 words
1 June 2021
Investor's Business Daily
INVDAI
English
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Graphics-chip maker Nvidia announced its latest flagship gaming processors and initiatives to broaden availability of its artificial intelligence technology. But Nvidia stock was little changed on Tuesday.

Nvidia made its announcements Monday at the virtual Computex trade show. The annual show, normally held in Taipei, Taiwan, is online this year because of the Covid-19 pandemic. Organizers canceled last year's show because of the health crisis.

During a video presentation, Nvidia executives unveiled the company's new top-of-the-line graphics processing units, or GPUs, for PC video games. The GeForce RTX 3080 Ti will be available worldwide on Thursday starting at \$1,199. A less-powerful version, the RTX 3070 Ti, will available next week starting at \$599.

The new gaming GPUs offer better performance and fidelity than their predecessors, said Jeff Fisher, senior vice president of Nvidia's GeForce business. They promise to show games with sharper images, better lighting effects and smoother video motion.

Nvidia Stock Flat On Computex News

On the <u>stock market today</u>, Nvidia stock ended the regular session up a fraction to 650.58. Earlier in the day, Nvidia stock fell as much as 2.1% to 636.17.

On Friday, Nvidia stock broke out of a <u>cup base</u> at a <u>buy point</u> of 648.67, according to <u>IBD MarketSmith</u> charts. The <u>5% buy zone</u> extends to 681.10, based on <u>IBD trading guidelines</u>. However, the last three breakout attempts by Nvidia stock have failed.

Nvidia stock ended the regular session Friday up 4.9% to 649.78. Two days earlier, the Santa Clara, Calif.-based company easily beat Wall Street's targets for its <u>fiscal first quarter</u> on strong sales of gaming and data-center processors.

Nvidia Looks To 'Democratize' Al

Also Monday, Nvidia announced dozens of new servers that have been certified to run Nvidia Al Enterprise software. They include systems from Dell Technologies, Lenovo and Hewlett Packard Enterprise. More than 50 systems are now certified to run Nvidia Al Enterprise software.

Plus, the chipmaker announced that Alphabet-owned Google will be among the first cloud computing service providers to enable Nvidia Base Command, a cloud-hosted development hub for Al projects.

"It is time to democratize AI by bringing its transformative power to every company and its customers," said Manuvir Das, head of enterprise computing at Nvidia.

Elsewhere at Computex, chipmakers Advanced Micro Devices and Intel also held video briefings. AMD and Intel each introduced new central processing units at the show.

Nvidia stock ranks first out of 30 stocks in IBD's fabless chipmaker industry group, according to IBD Stock Checkup. It has an IBD Composite Rating of 97 out of 99. The Composite Rating scores a stock's key growth metrics against all other stocks regardless of industry group. AMD ranks tenth in the fabless chipmaker group. Meanwhile, Intel ranks No. 22 in IBD's semiconductor manufacturing industry group.

Follow Patrick Seitz on Twitter at @IBD_PSeitz for more stories on consumer technology, software and semiconductor stocks.

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