November 15, 2018

# New AMD Radeon™ RX 590 Graphics Cards Deliver Leading-Edge, Smooth HD Gaming Experience for Latest Games

*– New 12nm GPUs harness advanced "Polaris" architecture, Radeon FreeSync™ gaming display technology and feature-rich Radeon™ Software to power stunning gaming, targeting beyond 60 FPS in latest AAA and eSports titles –*

AMD Radeon™ RX 590 Graphics Card

*– Gamers receive up to three new PC games for free with purchase of Radeon™ RX 590, and other eligible Radeon™ RX graphics cards and Radeon™ RX-powered PCs –*

SANTA CLARA, Calif., Nov. 15, 2018 (GLOBE NEWSWIRE) -- AMD (NASDAQ: AMD) today unveiled the Radeon™ RX 590 graphics card, an advanced 12nm GPU designed to deliver amazing gaming experiences and outstanding performance for the latest AAA, eSports and Virtual Reality (VR) titles.

Powered by AMD "Polaris" architecture[1], the AMD Radeon™ RX 590 graphics card provides faster clock speeds for higher gaming performance than the AMD Radeon™ RX 580 graphics card[2], and delivers up to 20 percent or higher performance-per-dollar than the competition[3]. Paired with the advanced AMD Radeon FreeSync™ gaming display technology[4] and loaded with the latest AMD Radeon™ Software features, the AMD Radeon™ RX 590 graphics card delivers an exceptional gaming experience.

"This new graphics card provides beautiful visuals, blistering frame rates, and the latest and greatest features for PC gaming," said Scott Herkelman, corporate vice president and general manager, Radeon Technologies Group at AMD. "Combined with AMD Radeon FreeSync™ technology[4] for smooth, stutter-free gaming, game Day-0 launch performance

updates and an ever-expanding Radeon™ Software feature set, the Radeon™ RX 590 graphics card provides an amazing experience for the legions of performance and hard-core gamers everywhere."

Features of the AMD Radeon™ RX 590 graphics card include:

- **Outstanding Gaming Performance:** The AMD Radeon™ RX 590 graphics card is built upon 12nm process technology and the advanced AMD "Polaris"[1] architecture, including 4th Gen GCN graphics cores, display engine and multimedia cores to enable exceptional performance in low-level APIs like DirectX® 12[5]and Vulkan®. It also provides a visually stunning HD gaming experience running at up to 60 FPS or higher in the most popular AAA games, and up to 100 FPS in some of the most popular eSports titles[6].

- **Best Software Features for Gamers:** AMD Radeon™ Software features game Day-0 driver support and up-to-the minute game optimizations for performance enhancements. Gamers can effortlessly capture, stream and share their memorable moments and clutch victories with Radeon™ ReLive technology; monitor performance and PC system info and socialize with the AMD Link app; and fine-tune a range of settings to fit their needs with AMD Radeon™ WattMan technology[7].

- **Largest Gaming Display Ecosystem[8]:** With over 500 AMD Radeon FreeSync™-technology[4] capable monitors to choose from, achieving pixel-perfect, silky-smooth gameplay has never been easier. AMD Radeon FreeSync™ technology[4] synchronizes the monitor update rate to the game, eliminating tears and choppiness. AMD Radeon FreeSync™ 2 HDR technology[4] offers up to 2x better brightness and color volume compared to sRGB[9].

- **Premium Virtual Reality:** The AMD Radeon™ RX 590 graphics card delivers beautifully rich and immersive VR environments during gameplay. AMD LiquidVR™ technology provides broad compatibility, plug-and-play ease of use and stable platform support for the new wave of advanced VR vendors and technologies.[10]

**Up to Three Free Games with Radeon™ RX Purchase**

Today, AMD also launched the 'Raise the Game Fully Loaded' bundle, offering gamers PC versions of the highly anticipated Resident Evil™ 2, Devil May Cry™ 5 and Tom Clancy's The Division® 2, for free with the purchase of an eligible AMD Radeon™ RX graphics card or Radeon™ RX powered PC. Gamers who purchase an AMD Radeon™ RX Vega or RX 590, or an eligible Radeon™ RX Vega or RX 590 powered PC, will receive free copies of all three games. Gamers who purchase an AMD Radeon™ RX 580 or RX 570 graphics card, or an eligible Radeon™ RX 580 or RX 570 powered PC, can choose two of these games for free. For more information on the program and where to buy, visit: www.amd.com/raisethegame[11]

**Pricing and Availability**

The AMD Radeon™ RX 590 graphics card is available worldwide today starting at $279 SEP USD from leading add-in-board partners, including ASUS, PowerColor, Sapphire and XFX.

**Supporting Resources**

- Learn more about the AMD Radeon™ RX 590 graphics card here
- Learn more about the 'Raise the Game Fully Loaded' bundle here
- Become a fan of Radeon on Facebook
- Follow AMD on Twitter @AMD
- Follow Radeon™ graphics on Twitter

**About AMD**

For more than 45 years AMD has driven innovation in high-performance computing, graphics and visualization technologies — the building blocks for gaming, immersive platforms and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, Facebook and Twitter pages.

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[1] The information contained herein is for informational purposes only, and is subject to change without notice. Timelines, roadmaps, and/or product release dates shown in this Press Release are plans only and subject to change. "Polaris" is a codename for AMD architecture, and is not a product name. GD-122.

[2] Based on AMD internal analysis in October 2018, comparing the clock speed of the Radeon™ RX 590 (1469 MHz Base/1545 MHz Boost) to the Radeon™ RX 580 (1257MHz Base/1340MHz Boost).

[3] Testing done by AMD performance labs 11/6/18 on Intel i7 7700K,16GB DDR4 3000MHz, Radeon RX 590, ASUS GTX 1060 6GB, AMD Driver 18.40, Nvidia driver 416.34 and Windows 10 achieved the following frame rates/scores at 1080p Maximum settings: Using Shadow of the Tomb Raider, F1 2018, Monster Hunter World, Far Cry 5, Pubg, Fortnite, Overwatch, Rocket League. Radeon RX 590 scored: 69fps, 83fps, 63fps, 84fps, 77fps, 83fps, 136fps, and 238 fps respectively. GTX 1060 6GB scored: 59fps, 65fps, 50fps, 76fps, 71fps, 79fps, 138fps, and 224fps respectively.
PC manufacturers may vary configurations yielding different results. All scores are an average of 3 runs with the same settings. Performance may vary based on use of latest drivers. Performance-per-dollar was calculated using an average performance advantage of 12% for the Radeon RX 590 in games cited, with pricing of the Radeon™ RX 590 at $279 USD and the average pricing of the Nvidia GTX 1060 6B at $331.39 USD, based on listings at PCPartPicker.com and Newegg.com on 11/6/18.

[4] FreeSync 2 does not require HDR capable monitors; driver can set monitor in native mode when FreeSync 2 supported HDR content is detected. Otherwise, HDR content requires that the system be configured with a fully HDR-ready content chain, including: graphics card, graphics driver and application. Video content must be graded in HDR and viewed with an HDR-ready player. Windowed mode content requires operating system support GD-105

[5] DirectX® 12 enablement requires an x86 processor and a Radeon™ graphics chip based on the Graphics Core Next architecture and Windows® 10. GD-99

[6] Testing done by AMD performance labs 11/6/18 on Intel i7 7700K,16GB DDR4 3000MHz, Radeon RX 590, Radeon RX 480 and GTX 970, AMD Driver 18.40, Nvidia driver 416.34 and Windows 10 achieved the following frame rates/scores at 1080p Maximum settings: Using shadow of the tomb raider Monster Hunter World, Far Cry 5 and Call of Duty Black Ops 4: Radeon RX 590 scored: 69 fps, 63 fps, 84 fps and 125 fps respectively. Radeon RX 480 scored: 58 fps, 51 fps, 69 fps and 103 fps respectively. GTX 970 scored 49 fps, 44 fps, 63 fps and 69 fps respectively. PC manufacturers may vary configurations yielding different results. All scores are an average of 3 runs with the same settings. Performance may vary based on use of latest drivers. RX-262

Testing done by AMD performance labs 11/6/18 on Intel i7 7700K,16GB DDR4 3000MHz, Radeon RX 590, Radeon RX 480 and GTX 970, AMD Driver 18.40, Nvidia driver 416.34 and Windows 10 achieved the following frame rates/scores at 1080p Maximum settings: Using PUBG, Fortnite, Overwatch and World of Warcraft: Azeroth. Radeon RX 590 scored: 77 fps, 83 fps, 136 fps and 111 fps respectively. Radeon RX 480 scored: 63 fps, 66 fps, 110 fps and 91 fps respectively. GTX 970 scored 61 fps, 69 fps, 114 fps and 99 fps respectively. PC manufacturers may vary configurations yielding different results. All scores are an average of 3 runs with the same settings. Performance may vary based on use of latest drivers. RX-263

[7] Overclocking AMD processors, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate beyond their stock specifications will void any applicable AMD product warranty, even when such overclocking is enabled via AMD hardware and/or software. This may also void warranties offered by the system manufacturer or retailer. Users assume all risks and liabilities that may arise out of overclocking AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or vulnerability. GD-106

[8] As of Nov. 2018, the number of FreeSync technology enabled screens available (>500) at https://www.amd.com/en/products/freesync-monitors - Largest ecosystem when compared to publicly available listings of competing product solutions at https://www.144hzmonitors.com/list-of-g-sync-monitors/ and https://www.blurbusters.com/gsync/list-of-gsync-monitors/ which list 58 screens respectively. GD-130

[9] Only attainable when using a FreeSync 2 API enabled game or video player and content that uses at least 2x the perceivable brightness and color range of sRGB, and using a FreeSync 2 qualified monitor. Based on AMD internal testing as of November 2016. GD-105

[10] Users will need to obtain a VR headset compatible with AMD's GPU technologies and AMD LiquidVR™ technology. See www.amd.com/liquidvr for more information. GRT-6

[11] Offer available through participating retailers only. 18+ only. Following purchase, Coupon Code must be redeemed by April 6, 2019, after which coupon is void. Residency and additional limitations apply. For full Terms & Conditions, visit www.amdrewards.com. Campaign period begins November 15, 2018 and ends February 9, 2019 or when supply of Coupon Codes is exhausted, whichever occurs first. Eligible AMD Product must be purchased during Campaign Period. Offer void where prohibited.

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/4df5700e-3611-496b-a05a-e6737b6c840a

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