

AMD 

Software
Adrenalin Edition

SOFTWARE MARKETING UPDATE

24.9.1 DRIVER RELEASE

AMD 

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NEW

AMD FLUID MOTION FRAMES 2

IN-DRIVER FRAME GENERATION **FOR ALL YOUR FAVORITE GAMES**

AFMF 2 UPGRADES

- AI-optimized for improved quality and smoothness
- Lower frame generation latency
- Lower overhead on AMD Ryzen™ Processors with Radeon™ graphics
- User tunable settings for the best experience
- Now works in borderless full screen mode
- Interop support with AMD Radeon™ Chill
- Support added for Vulkan® and OpenGL® games



Fluid Motion Frames 2

AMD RADEON™
RX 7900 XTX

62
AVG FPS

4K ULTRA

AMD RADEON™
RX 7900 XTX

158
AVG FPS

AMD HYPR-RX ON

4K ULTRA | FSR 2 | AFMF 2

WARHAMMER
SPACE MARINE

SEE ENDNOTES GD-225A, GD-234B, AND RS-672

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NEW

AMD HYPR-RX WITH AFMF 2

INSTANT PERFORMANCE *IN THOUSANDS OF GAMES*

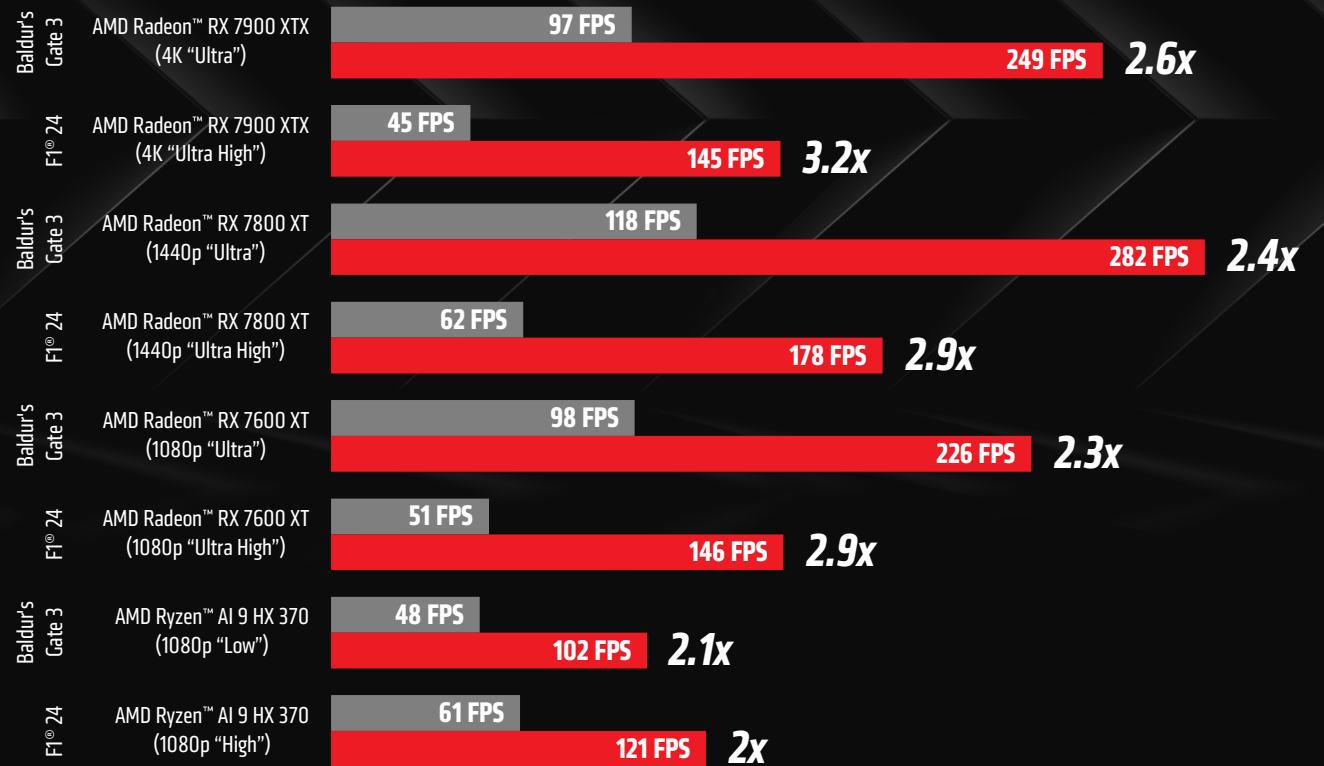
AMD HYPR-RX + AMD Fluid Motion Frames 2

2.5X

AVG PERFORMANCE UPLIFT

Baldur's Gate 3 and F1® 24 AMD HYPR-RX with AFMF 2 Performance

Average Frame Rate



■ AMD HYPR-RX OFF ■ AMD HYPR-RX ON (AMD FSR 2 + AFMF 2)

LEADERSHIP SOFTWARE SUMMARY

Top Performance Enhancing Features

AMD
Fluid Motion Frames 2

In-driver frame generation technology

RX 6000 & Newer

AMD
RADEON
Super Resolution

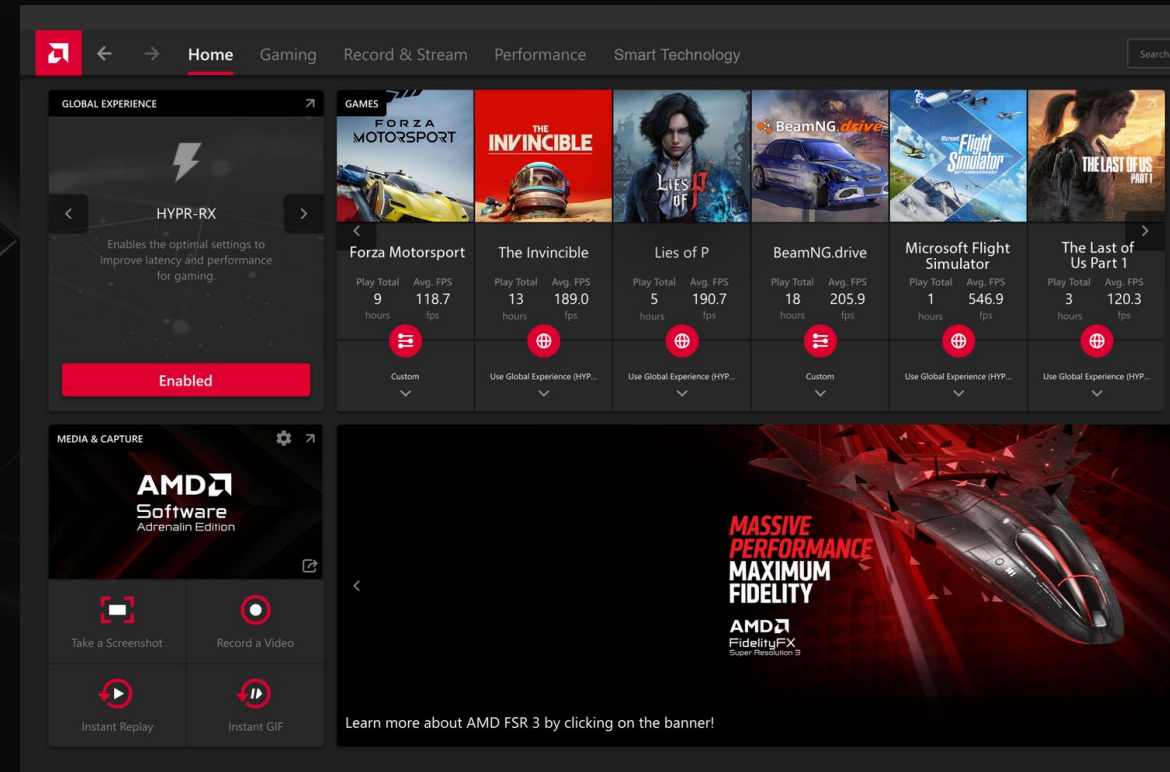
In-driver upscaling technology

RX 6000 & Newer

AMD
FidelityFX
Super Resolution

In-game upscaling and frame generation technology

RX 500 & Newer



AMD
Fluid Motion Frames 2

+

AMD
RADEON
Super Resolution

OR

AMD
FidelityFX
Super Resolution

+

AMD
RADEON
Boost

+

AMD
RADEON
Anti-Lag

=

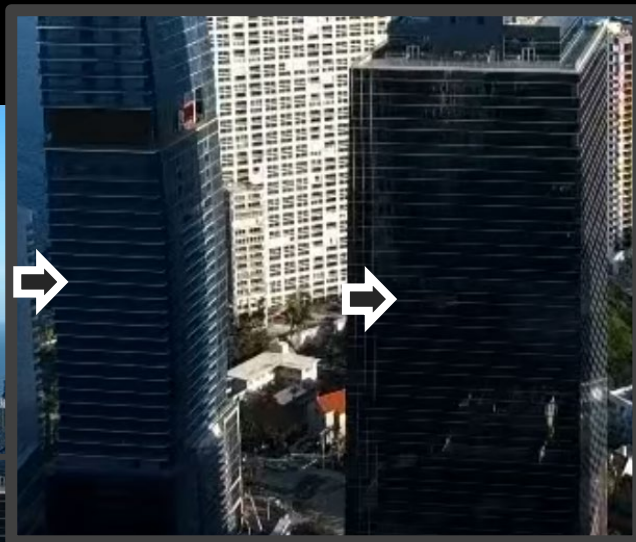
AMD
HYPR-RX

NEW

GEOMETRIC DOWNSCALING

EXPERIENCE **SMOOTHER VIDEO PLAYBACK**

Current Downscaling Method



Geometric Downscaling in 24.9.1



Example: 4K source video played at 1080p screen resolution

WHAT'S NEW

- Improves video quality when played in a window that is smaller than its native resolution
- Reduced visual artifacts and aliasing for smooth video playback
- Support for AMD RDNA™ 3 architecture-based products and all DX11 applications

AMD SOFTWARE: ADRENALIN EDITION™ APPLICATION

The screenshot displays the AMD Adrenalin Edition application interface. At the top, there is a navigation bar with tabs for Home, Gaming, Record & Stream, Performance, and Smart Technology. A search bar and utility icons are on the right. The main content area is divided into sections: GLOBAL EXPERIENCE (HYPR-RX), GAMES (Forza Motorsport, The Invincible, Lies of P, BeamNG.drive, Microsoft Flight Simulator, The Last of Us Part 1), and DRIVER & SOFTWARE. The GAMES section shows performance metrics for each game, including Play Total (hours) and Avg. FPS. Three user feedback boxes are overlaid on the screenshot:

- Fluid motion frames is really really good in witcher 3 and plague tale**
Not only does it give you high motion clarity but it also smooths over stutters, witcher 3 has antilag+ so if you are running like 90 base frames you are basically getting no input latency and huge fps with ray tracing on an amd card, really impressive stuff. Hdr and vrr arent working yet though, hopefully these are fixed fast.
- Thank you AMD!**
Thanks for adding AFMF support to 6000 series cards :)
- Coming from Nvidia to AMD, the Tuning section of Adrenalin is amazing.**
So I sold my 3080 10GB for a 7900XT 20GB with a cost of for the £350 upgrade and so impressed with it. Not just the lovely boost in performance but the Adrenaline software is amazing.
Being able to perform an undervolt with my card from official software is great. I no longer need additional software like MSI Afterburner!

FOCUS
ON **STABILITY**

RADEON READY
DRIVERS

NO LOGIN OR USER
INFORMATION REQUIRED

EASY TO USE
MODERN UI

CONTINUOUS **INNOVATION**
OVER TIME

EXPERIENCE GAMING GREATNESS TODAY

AMD 

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GD-157: AMD Radeon Anti-Lag is compatible with DirectX 9/11/12 APIs, and Windows 10/11. Hardware compatibility includes Radeon RX 400 Series discrete graphics and newer dGPUs and Ryzen 2000 Series and newer CPUs, including hybrid and detachable graphics configurations. No mGPU support.

GD-158: Radeon Boost is compatible with Windows 10/11 in select titles. Hardware compatibility includes Radeon RX 400 dGPUs and newer, Ryzen 2000 Series CPUs and newer, including hybrid and detachable graphics configurations. No mGPU support. Radeon Boost Variable Rate Shading is compatible with AMD Radeon RX 6000 Series Graphics and newer. For a list of compatible titles see <https://www.amd.com/en/technologies/radeon-boost>.

GD-187A: AMD FidelityFX Super Resolution (FSR) versions 1, 2, and 3 are available on select games which require game developer integration and are supported on select AMD products. AMD does not provide technical or warranty support for AMD FidelityFX Super Resolution enablement on other vendors' graphics cards. See <https://www.amd.com/en/technologies/fidelityfx-super-resolution> for additional information.

GD-197: Radeon Super Resolution works with games that support exclusive and borderless full-screen modes. AMD Software: Adrenalin Edition 22.5.2 or newer is required.

GD-225A: AMD HYPR-RX works on the AMD Radeon RX 7000 Series GPUs and newer or the Ryzen 7040 Series APUs with integrated RDNA 3 graphics and newer. AMD HYPR-RX allows various features within AMD Software interoperate, working at the same time, including Radeon Super Resolution, FidelityFX Super Resolution, Radeon Anti-Lag, Radeon Boost, and AMD Fluid Motion Frames where applicable to select titles.

GD-231A: Advanced frame generation interpolation technology when used with AMD FidelityFX Super Resolution (FSR) 3 inserts 1 frame between existing ones which can therefore enable up to 2x the framerate in supported games.

GD-234B: AMD Fluid Motion Frames, or AFMF, is a frame generation technology designed to increase frame rates and smoothness for game winning performance with minimal impact to image quality. AFMF is integrated into the AMD Software: Adrenalin Edition™ Application. AFMF supports AMD Radeon™ RX 6000 and 7000 Series discrete desktop graphics cards, mobile laptop and handheld systems with AMD Ryzen™ 7000, 8000, and Z1 Series Processors with AMD Radeon™ 700M Series Graphics and AMD Ryzen AI 300 Series Processors with AMD Radeon™ 800M Series Graphics, including models with AMD Radeon™ RX 6000 and 7000 Series discrete mobile graphics supported in both hybrid mode and dedicated graphics mode, and AMD Ryzen™ 7000 and 8000 Series mobile and desktop processors with AMD Radeon™ 700M Series Graphics and AMD Ryzen AI 300 Series mobile processors with AMD Radeon™ 800M Series Graphics.

RS-672: Testing by AMD as of September 2024, on the AMD Radeon™ RX 7900 XTX graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the Warhammer 40,000: Space Marine 2 “Start of Game” benchmark at 3840 x 2160, “Ultra” graphics preset and DirectX 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-673: Testing by AMD as of September 2024, on the AMD Radeon™ RX 7900 XTX, 7800 XT, 7600 XT graphics cards and the AMD Ryzen™ AI 9 HX 370 processor with AMD Radeon™ 890M graphics using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, and on an ASUS Zenbook S 16 laptop with an AMD Ryzen™ AI 9 HX 370 processor, 32GB LPDDR5X-7500 RAM, and Windows 11 Pro 2024 Update, using the Baldur's Gate 3 “Starting Level” benchmark at 3840 x 2160, 2560 x 1440, 1920 x 1080, “Ultra” and “Low” graphics presets with DirectX® 11, and the F1® 24 built-in benchmark, 3840 x 2160, 2560 x 1440, 1920 x 1080 “Ultra High” and “High” graphics presets with DirectX® 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

ENDNOTES AND DISCLAIMERS

RS-674: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7900 XTX graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the Baldur's Gate 3 “Starting Level” benchmark at 3840 x 2160 “Ultra” graphics preset and DirectX® 11. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-675: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7900 XTX graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the F1® 24 built-in benchmark at 3840 x 2160 “Ultra High” graphics preset and DirectX® 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-676: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7800 XT graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the Baldur's Gate 3 “Starting Level” benchmark at 2560 x 1440 “Ultra” graphics preset and DirectX® 11. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-677: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7800 XT graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the F1® 24 built-in benchmark at 2560 x 1440 “Ultra High” graphics preset and DirectX® 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-678: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7600 XT graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the Baldur's Gate 3 “Starting Level” benchmark at 1920 x 1080 “Ultra” graphics preset and DirectX® 11. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-679: Testing by AMD as of July 2024, on the AMD Radeon™ RX 7600 XT graphics card using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on a test system configured with an AMD Ryzen™ 7 7800X3D CPU, 32GB DDR5-6000 RAM, MSI MEG X670E ACE motherboard, and Windows 11 Pro 2023 Update, using the F1® 24 built-in benchmark at 1920 x 1080 “Ultra High” graphics preset and DirectX® 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-680: Testing by AMD as of September 2024, on the AMD Ryzen™ AI 9 HX 370 processor with AMD Radeon™ 890M graphics using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on an ASUS Zenbook S 16 laptop with an AMD Ryzen™ AI 9 HX 370 processor, 32GB LPDDR5X-7500 RAM, and Windows 11 Pro 2024 Update, using the Baldur's Gate 3 “Starting Level” benchmark at 1920 x 1080 “Low” graphics preset and DirectX® 11. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

RS-681: Testing by AMD as of September 2024, on the AMD Ryzen™ AI 9 HX 370 processor with AMD Radeon™ 890M graphics using the AMD Software: Adrenalin Edition™ 24.9.1 driver, AMD Smart Access Memory technology, and AMD HYPR-RX using AMD FidelityFX™ Super Resolution 2 (AMD FSR 2) technology with “Quality” mode and AMD Fluid Motion Frames 2 (AFMF 2) technology enabled versus AMD HYPR-RX OFF, on an ASUS Zenbook S 16 laptop with an AMD Ryzen™ AI 9 HX 370 processor, 32GB LPDDR5X-7500 RAM, and Windows 11 Pro 2024 Update, using the F1® 24 built-in benchmark at 1920 x 1080 “High” graphics preset and DirectX® 12. AMD HYPR-RX performance is dependent on the AMD FSR 2 quality mode selected and enabling of AMD Fluid Motion Frames 2. AMD FSR 2 requires developer integration and is available in select games. System manufacturers may vary configurations, yielding different results.

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