October 19, 2023

AMD Introduces Fastest AMD Radeon Laptop Graphics Ever Developed

New AMD Advantage Alienware m18 laptop powered by AMD Ryzen 9 7945HX processors and Radeon RX 7900M GPUs delivers desktop-class performance for gaming and content creation on the go

SANTA CLARA, Calif., Oct. 19, 2023 (GLOBE NEWSWIRE) -- Today AMD (NASDAQ: AMD) introduced flagship laptop graphics processor AMD Radeon™ RX 7900M, the fastest AMD Radeon™ GPU ever developed for laptops[1]. Built on groundbreaking AMD RDNA™ 3 architecture, the new high-performance GPU brings incredible gaming and content creation performance to mobile systems, delivering 7% on average higher performance than the competitive offering in select games at QHD resolution[2].

In addition, today Alienware announced the latest member of the Alienware m18 laptop family featuring the new AMD Radeon GPUs. Powered by AMD Ryzen™ 9 7945HX processors and AMD Radeon RX 7900M GPUs and leveraging advanced AMD smart technologies[3], the Alienware m18 is the ultimate AMD Advantage™ laptop, offering astonishing performance to power the most demanding games and content creation applications.

“The Alienware m18 is our most advanced and powerful AMD Advantage laptop, designed to deliver no-compromises, desktop-level performance for gaming and content creation applications,” said Frank Azor, chief architect of Gaming Solutions and Marketing at AMD. “We worked closely with Alienware on the development of the system to offer the best mobile experiences possible, and we think customers will be absolutely delighted with what this system can do.”

“The Alienware m18 delivers the best mobile gaming solutions with desktop-level performance driving a spacious 18-inch display,” says Matt McGowan, Alienware Product Lead. “This performance juggernaut will transport you into your game-of-choice in style, and with full immersion.”

The AMD Radeon RX 7900M GPU offers 72 AMD RDNA™ 3 compute units featuring new AI and second-generation raytracing accelerators, 16GB of high-speed GDDR6 VRAM, AV1 encoding and more to push the limits of gaming and content creation on the go. Key features include:

- **AMD RDNA 3 Architecture** – Features redesigned compute units with unified raytracing and AI accelerators, second-generation AMD Infinity Cache™ technology and second-generation raytracing technology.
- **Dedicated AI Acceleration** – New AI accelerators are optimized for the latest AI workloads. New AI instructions and increased AI throughput are designed to deliver more performance than AMD RDNA 2 architecture.

- **16GB VRAM for 1440P Gaming** – 16GB of high-speed GDDR6 memory enables gamers to experience the latest titles at 1440p and beyond, and allows content creators to unpack high-resolution textures, and render complex 3D environments and animations in real time.
- **Improved Streaming & Ultra-High-Definition Encoding** – Improved AMD encoders deliver enhanced visual quality when streaming and recording. AMD AI and content adaptive machine learning technology has also been integrated into the AMD Media Framework to enable sharper text when streaming at low bitrates and resolutions. In addition, the encode/decode media engine unlocks new multi-media experiences with full AV1 encode/decode support, wide color gamut and high-dynamic range enhancements[4].

Key Product Specifications

Model	Compute Units	GDDR6	Game Clock[5] (MHz)	Boost Clock[6] (MHz)	Memory Interface	Infinity Cache	TGP
AMD Radeon RX 7900M	72	16GB	1825	Up to 2090	256-bit	64 MB	180W

Ultimate AMD Advantage Laptop

The Alienware m18 laptop is the latest addition to the AMD Advantage product family. AMD Advantage™ certified laptops are designed and tested to deliver the ultimate platform for gamers and creators, offering state-of-the-art experiences with new levels of performance and responsiveness. They combine the latest AMD Radeon GPUs and AMD Ryzen processors with AMD smart technologies, AMD Software: Adrenaline Edition™ application features, and other advanced system design characteristics that deliver premium computing experiences.

In addition to the new AMD Radeon RX 7900M GPU, the Alienware m18 laptop includes an AMD Ryzen 9 7945HX processor with 16 cores and 32 threads for incredible gaming, productivity, and creativity performance with the leadership efficiency of the AMD “Zen 4” architecture.

The system also combines high-performance memory, the latest in laptop cooling technology and more to push the limits of gaming and productivity. It offers a selection of high-quality 18-inch QHD+ and FHD+ display panels featuring 3ms response time, 1000:1 contrast ratio, 300 nits brightness and up to 480Hz refresh rate. In addition, the system features a host of AMD smart technologies that elevate laptop performance and efficiency to new levels:

- **AMD SmartShift Max[7]** – Dynamically shifts extra power between AMD Radeon GPUs and AMD Ryzen processors in real-time to help boost performance for gaming, video editing, 3D rendering and content creation workloads.
- **AMD SmartAccess Graphics** – Automatically switches to the discrete AMD Radeon GPU for maximum gaming performance and reduced latency while maintaining AMD FreeSync™ technology[8].
- **AMD Smart Access Memory™[9]** – Unlocks higher performance by providing AMD Ryzen processors with full access to the high-speed AMD Radeon graphics memory.
- **AMD SmartAccess Video[10]** – Intelligently divides the decoding and encoding workloads across AMD Ryzen processors and AMD Radeon graphics cards, delivering

higher levels of performance.

Availability

The Alienware m18 with AMD Radeon RX 7900M GPU options is expected to be available today, starting at $2,799.99 (US) / $3,799.99 (CA) on Alienware.com. Contact Alienware for more information.

Supporting Resources

- Learn more about AMD Radeon RX graphics for laptops and the AMD Radeon RX 7900M here
- Learn more about AMD Ryzen 9 7945HX processors here
- Learn more the Alienware m18 laptop here
- Learn more about the AMD Advantage Design Framework here
- Follow AMD on LinkedIn
- Follow AMD on Twitter

About AMD
For more than 50 years AMD has driven innovation in high-performance computing, graphics and visualization technologies. Billions of people, leading Fortune 500 businesses and cutting-edge scientific research institutions around the world rely on AMD technology daily to improve how they live, work and play. AMD employees are focused on building leadership high-performance and adaptive 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, LinkedIn and Twitter pages.

CAUTIONARY STATEMENT
This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) such as the features, functionality, performance, availability, timing and expected benefits of AMD products including the AMD Radeon™ RX 7900M GPUs, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are commonly identified by words such as "would," "may," "expects," "believes," "plans," "intends," "projects" and other terms with similar meaning. Investors are cautioned that the forward-looking statements in this press release are based on current beliefs, assumptions and expectations, speak only as of the date of this press release and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Such statements are subject to certain known and unknown risks and uncertainties, many of which are difficult to predict and generally beyond AMD's control, that could cause actual results and other future events to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Material factors that could cause actual results to differ materially from current expectations include, without limitation, the following: Intel Corporation’s dominance of the microprocessor market and its aggressive business practices; global economic uncertainty; cyclical nature of the semiconductor industry; market conditions of the industries in which AMD products are sold; loss of a significant customer; impact of the COVID-19 pandemic on AMD’s business, financial condition and results of operations; competitive markets in which AMD’s products are sold; quarterly and seasonal sales patterns; AMD's ability to adequately protect its technology or other intellectual property; unfavorable currency exchange rate fluctuations; ability of third party manufacturers to manufacture AMD's products on a timely basis in sufficient quantities and using competitive technologies; availability of essential equipment, materials, substrates or manufacturing processes; ability to achieve expected

manufacturing yields for AMD's products; AMD's ability to introduce products on a timely basis with expected features and performance levels; AMD's ability to generate revenue from its semi-custom SoC products; potential security vulnerabilities; potential security incidents including IT outages, data loss, data breaches and cyber-attacks; potential difficulties in upgrading and operating AMD's new enterprise resource planning system; uncertainties involving the ordering and shipment of AMD's products; AMD's reliance on third-party intellectual property to design and introduce new products in a timely manner; AMD's reliance on third-party companies for design, manufacture and supply of motherboards, software and other computer platform components; AMD's reliance on Microsoft and other software vendors' support to design and develop software to run on AMD's products; AMD's reliance on third-party distributors and add-in-board partners; impact of modification or interruption of AMD's internal business processes and information systems; compatibility of AMD's products with some or all industry-standard software and hardware; costs related to defective products; efficiency of AMD's supply chain; AMD's ability to rely on third party supply-chain logistics functions; AMD's ability to effectively control sales of its products on the gray market; impact of government actions and regulations such as export administration regulations, tariffs and trade protection measures; AMD's ability to realize its deferred tax assets; potential tax liabilities; current and future claims and litigation; impact of environmental laws, conflict minerals-related provisions and other laws or regulations; impact of acquisitions, joint ventures and/or investments on AMD's business and AMD's ability to integrate acquired businesses; impact of any impairment of the combined company's assets on the combined company's financial position and results of operation; restrictions imposed by agreements governing AMD's notes, the guarantees of Xilinx's notes and the revolving credit facility; AMD's indebtedness; AMD's ability to generate sufficient cash to meet its working capital requirements or generate sufficient revenue and operating cash flow to make all of its planned R&D or strategic investments; political, legal, economic risks and natural disasters; future impairments of goodwill and technology license purchases; AMD's ability to attract and retain qualified personnel; AMD's stock price volatility; and worldwide political conditions. Investors are urged to review in detail the risks and uncertainties in AMD's Securities and Exchange Commission filings, including but not limited to AMD's most recent reports on Forms 10-K and 10-Q.

© 2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Advantage, FreeSync, Radeon, RDNA, Ryzen, Smart Access Memory, and combinations thereof are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective owners.

[1] Testing done by AMD performance labs, September 13, 2023, on a Dell Alienware m18 equipped with an AMD Ryzen 9 7945HX and an AMD Radeon RX 7900M, 32GB DDR5-4800MHz RAM, Video Driver 22.40.76-230711a-394071C-Dell, Win 11 Pro and a Lenovo Legion 7 equipped with an AMD Ryzen 9 6900HX and an AMD Radeon RX 6850M XT, 32GB DDR5-4800MHz RAM, Video Driver 21.40.40.07.220420a-378733C-Lenovo, Win 11 Pro. Tested in the following benchmarks: Time Spy Graphics Score, Time Spy Extreme Graphics Score, Port Royal Graphics Score, Fire Strike Graphics Score, Fire Strike Extreme Graphics Score, Fire Strike Ultra Graphics Score. Laptop manufacturers may vary configurations, yielding different results. Performance may vary. RM-145

[2] Testing done by AMD performance labs, August 9, 2023, on a Dell Alienware m18 laptop equipped with an AMD Ryzen 9 7945HX and an AMD Radeon RX 7900M, 32GB DDR5-4800MHz RAM, Video Driver 22.40.76-230711a-394071C-Dell, Win 11, versus an Aorus laptop equipped with an Intel i7 13700H and an Nvidia GeForce RTX 4080, 16GB DDR5-

5200MHz RAM, Video Driver 536.67, Win 11. Tested on the following applications and settings at 1440p: Forza Horizon 5 (RT) @ DX12 RT Maxed (RT), Forza Horizon 5 @ DX12 Maxed, Spiderman Miles Morales (RT) @ DX12 Maxed (RT), F1 2022 (RT) @ DX12 Ultra High (RT), DOOM Eternal (RT) @ Vulkan Ultra Nightmare (RT), The Callisto Protocol (RT) @ DX12 Ultra (RT), Metro Exodus Enhanced Edition (RT) @ api:N/A Extreme (RT), Dying Light 2 @ DX12 High, The Callisto Protocol @ DX12 Ultra, Assassin's Creed Valhalla @ DX12 Ultra High, Spiderman Miles Morales @ DX12 Maxed, Forspoken (RT) @ DX12 UltraHigh (RT), Dead Space (RT) @ DX12 Ultra (RT), Forspoken @ DX12 UltraHigh, Resident Evil 4 (RT) @ DX12 Max (RT), Far Cry 6 (RT) @ DX12 Ultra (RT), Company Of Heroes @ DX12 Maximum, Metro Exodus @ DX12 Extreme, Resident Evil 4 @ DX12 Max (No RT), F1 2022 @ DX12 Ultra High no RT, DOOM Eternal @ Vulkan Ultra Nightmare, Dead Space @ DX12 Ultra, Star Wars Jedi Survivor @ DX12 Epic, Control @ DX12 High, Hogwarts Legacy @ DX12 Ultra, Call Of Duty: Modern Warfare 2 @ DX12 Extreme, Far Cry 6 @ DX12 Ultra, Starfield @ DX12 Ultra (Default), Dirt 5 @ DX12 Ultra High, Borderlands 3 @ DX12 Badass, Cyberpunk 2077 @ DX12 Ultra. Laptop manufacturers may vary configurations, yielding different results. Performance may vary. RM-141

[3] AMD smart technologies, including AMD SmartAccess Graphics, SmartAccess Storage, SmartAccess Video, SmartShift Eco, SmartShift Max, and SmartShift RSR may require OEM or developer enablement and are available with select configurations only. Select additional AMD hardware is required. For additional information see https://www.amd.com/en/graphics/amd-radeon-rx-laptops. GD-216.

[4] Video codec acceleration (including at least the HEVC (H.265), H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. GD-176

[5] Game clock is the expected GPU clock when running typical gaming applications, set to typical TGP (Total Graphics Power). Actual individual game clock results may vary. GD-147

[6] Boost Clock Frequency is the maximum frequency achievable on the GPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variation in applications and workloads. GD-151

[7] SmartShift Eco technology and SmartShift Max technology require OEM enablement on select laptops with an AMD Radeon RX 6000 Series graphics card and Ryzen 6000 Series mobile processor. GD-209

[8] AMD FreeSync™ technology requires AMD Radeon™ graphics and a display that supports FreeSync technology as certified by AMD. AMD FreeSync™ Premium technology adds requirements of mandatory low framerate compensation and at least 120 Hz refresh rate at minimum FHD. AMD FreeSync™ Premium Pro technology adds requirements for the display to meet AMD FreeSync Premium Pro compliance tests. See www.amd.com/freesync for complete details. Confirm capability with your system manufacturer before purchase. GD-127

[9] Smart Access Memory technology is compatible with AMD Radeon RX 5000 Series GPUs or later, Ryzen 3000 Series CPUs or later (excluding Ryzen 5 3400G and Ryzen 3 3200G CPUs), AMD desktop kits (4800S Series and later), and an AMD 500 Series motherboard or later with the latest BIOS update available at the vendor website. OEM support is required. For additional information see https://www.amd.com/en/technologies/smart-access-memory. GD-178

[10] AMD smart technologies, including AMD SmartAccess Graphics, SmartAccess Storage, SmartAccess Video, SmartShift Eco, SmartShift Max, and SmartShift RSR may require OEM or developer enablement and are available with select configurations only. Select additional

AMD hardware is required. For additional information see https://www.amd.com/en/graphics/amd-radeon-rx-laptops. GD-216.

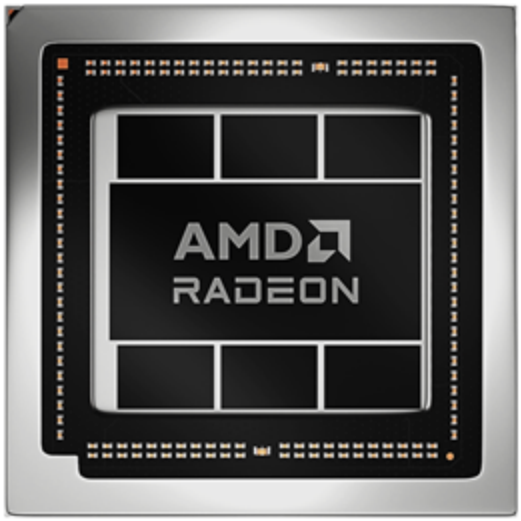
Contact:
George Millington
AMD Communications
(408) 547-7481
George.Millington@amd.com

Suresh Bhaskaran
AMD Investor Relations
(408) 749-2845
Suresh.bhaskaran@amd.com

A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/a5777106-07bf-4fbf-a179-90fea6f00c09

Source: Advanced Micro Devices, Inc.

AMD Radeon™ RX 7900M laptop graphics



AMD Radeon™ RX 7900M laptop graphics