

HP ZBOOK ULTRA G1A

POWERED BY AMD RYZEN™ AI MAX PRO SERIES PROCESSORS

“TRANSFORMATIVE AI PERFORMANCE. REDEFINING WORKFLOWS**”



*<https://www.hp.com/us-en/workstations/zbook-ultra.html>

REDEFINING PERFORMANCE FOR COMPACT WORKSTATIONS

Cutting Edge CPU and Memory

- Up to 16 desktop-class “Zen 5” CPU cores
- Unified memory architecture up to 128GB

Powerful Certified Graphics

- AMD RDNA™ 3.5 based integrated GPU (up to 40 CUs)
- Flexibly configurable VRAM – up to 96GB

Enhanced AI Experiences

- Dedicated AMD XDNA 2 NPU (Up to 50+ TOPS) for Copilot+ PC
- Up to 126 TOPS of system-level AI performance**

**See endnote: GD-243

HP ZBOOK ULTRA G1A (AMD) VS DELL PRECISION 5490 (INTEL + NVIDIA)

HP ZBook Ultra G1a

AMD Ryzen™ AI Max+ PRO 395 Processor with integrated AMD Radeon™ 8060S graphics



VS



Dell Precision 5490

Intel® Core™ Ultra 9 185H CPU with discrete Nvidia RTX 3000 Ada graphics (8GB)

UP TO **102%** FASTER RENDERING

When compared to Intel® Core™ Ultra 9 185H running the V-Ray Benchmark 6

UP TO **44%** FASTER CERTIFIED 3D GRAPHICS

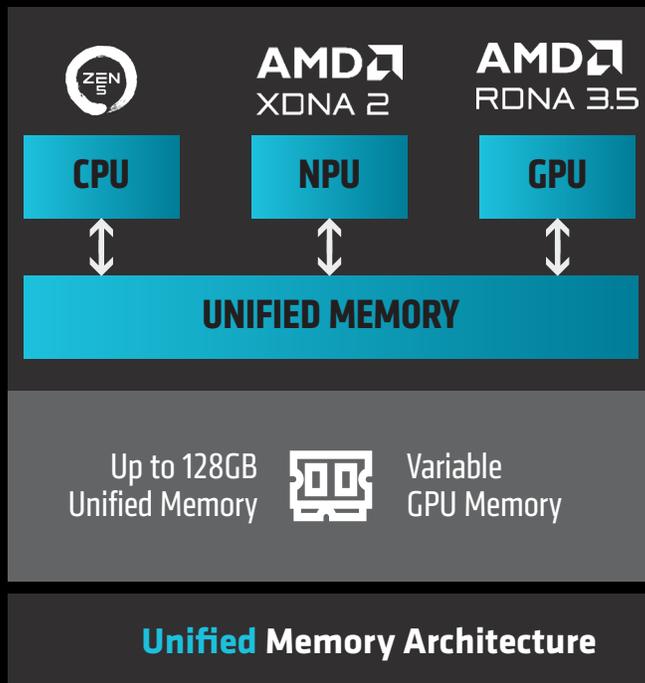
When compared to Intel® Core™ Ultra 9 185H with discrete Nvidia RTX 3000 Ada graphics running the SPECcap® Solidworks (GPU) benchmark

UP TO **4x** FASTER AI INFERENCE

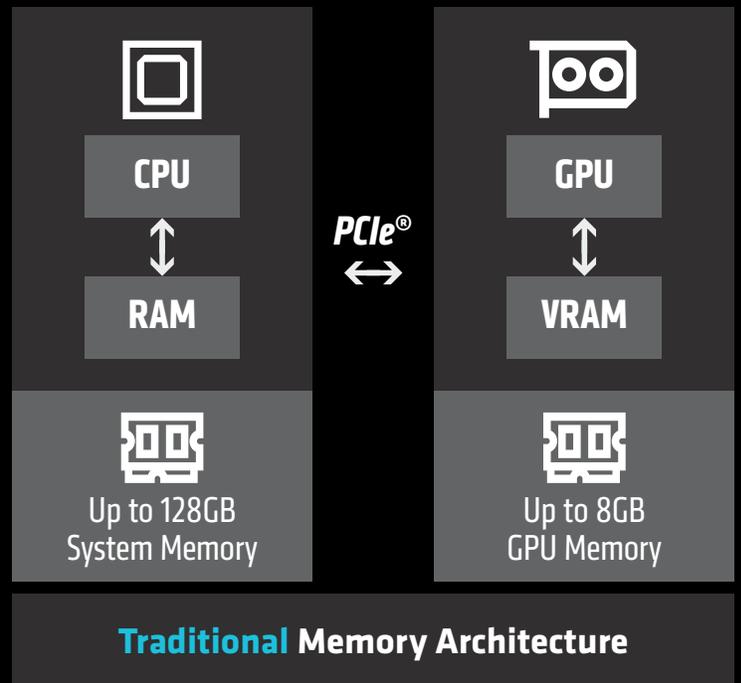
When compared to Intel® Core™ Ultra 9 185H with discrete Nvidia RTX 3000 Ada graphics running the Llama3 70B Instruct Q4 (Tokens/sec)

See endnote: STXP-13, STXP-17, STXP-20

UNIFIED MEMORY ARCHITECTURE



VS



HP ZBOOK ULTRA G1A ENABLES NEW MOBILE WORKSTATION EXPERIENCES

55 Watt



Copilot+PC



Mobile Experience

Powerful CPU, ISV-certified graphics and memory performance for desktop-level performance with **great energy efficiency, and a cool & quiet experience**

160 Watt



Intel Core Ultra 9 (Series 1)

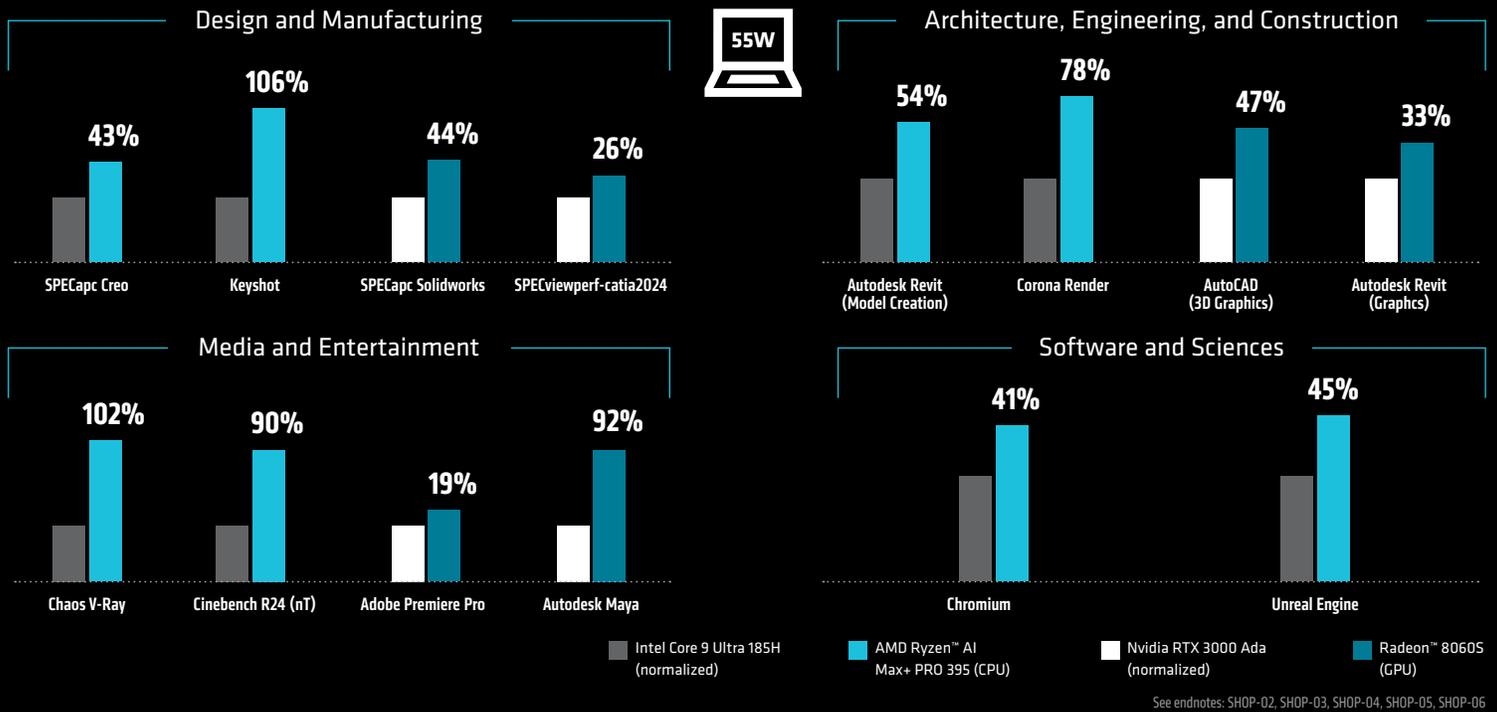


NV RTX 3000 Ada (8GB)



Discrete components require more energy **impacting battery life, noise level and heat** especially with heavy workloads

CUTTING-EDGE MOBILE PERFORMANCE ACROSS ALL WORKSTATION VERTICALS



SPECIFICATIONS

MODEL	PROCESSOR	GRAPHICS	DISPLAY	HP WOLF SECURITY	OPERATING SYSTEM	BATTERY LIFE	CONNECTIVITY	DIMENSIONS/WEIGHT
HP ZBook Ultra G1a 	Up to AMD Ryzen™ AI Max+ PRO 395 processor (16 CPU cores)	Up to AMD Radeon™ 8060S graphics (40 Compute Units)	Up to AMD Radeon™ 8060S graphics (40 Compute Units)	✓	Windows 11 Pro, Ubuntu preinstall, RHEL certified	HP XL-Long Life 4-cell, 74.5Wh	Left: 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™); HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1) Right: 1 USB Type-A® 10Gbps signaling rate (charging); 1 security lock slot; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1)	12.29 x 8.48 x 0.73 in / 31.22 x 21.55 x 1.85 cm Starting at 3.3 lbs, 1.50kg

VISIT [AMD.COM/PARTNER](https://www.amd.com/partner) Your source for tools, training, news, reviews, and much more!

1. **CD-243:** Trillions of Operations per Second (TOPS) for an AMD Ryzen processor is the maximum number of operations per second that can be executed in an optimal scenario and may not be typical. TOPS may vary based on several factors, including the specific system configuration, AI model, and software version. **CD-243**
 2. **SHOP-02:** Testing as of November 2024 by AMD Performance Labs using the following benchmarks: SPEC Workstation 31, SPECcapc PTC Creo, SPECcapc Solidworks 2024, Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-02**
 3. **SHOP-03:** Testing as of November 2024 by AMD Performance Labs using the following benchmarks: Puget Adobe Premiere Pro, Puget After Effects, Cinebench R24 (n-thread), V-Ray Benchmark 6 (CPU), Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-03**
 4. **SHOP-04:** Testing as of November 2024 by AMD Performance Labs using the following benchmarks: SPECcapc Solidworks 2024, SPECcapc PTC Creo, SPECviewperf 2024, Luxion Keyshot, Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-04**
 5. **SHOP-05:** Testing as of November 2024 by AMD Performance Labs using the following benchmarks: Revit 2025 benchmarks, Catalyst AutoCAD benchmark 2022, Corona Render, Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-05**
 6. **SHOP-06:** Testing as of November 2024 by AMD Performance Labs using the following benchmarks: Chromium Compilation, Unreal Engine 5.3 Compilation, Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-06**
 7. **SHOP-11:** Testing as of November 2024 by AMD Performance Labs using the following benchmark: Llama 3 70B Instruct (4 Tokens/sec), Configuration for AMD Ryzen™ AI Max+ PRO 395 processor: AMD reference board, Radeon™ 8060S graphics, 128GB unified memory (96GB graphics, 32GB rest of system), 1TB SSD, VBS=ON, Windows 11. Configuration for Intel Core Ultra 9 185H processor: Dell Precision 5490 14", Nvidia RTX 3000 Ada Graphics (8GB), 64GB RAM, 1TB SSD, VBS=ON, Windows 11. Laptop manufacturers may vary configurations yielding different results. **SHOP-11**