

October 26th, 2023

Maui, Hawaii



SNAPDRAGON® X ELITE BENCHMARKING SESSION

Benchmarking results are under embargo until October 30, 2023 @ 6am PT

Sriram Dixit, Director, Compute Product Management
Qualcomm Technologies Inc.

Establishing an
elevated standard
in computing





Qualcomm
Oryon CPU

Adreno GPU

Hexagon NPU

Memory

Snapdragon X Elite Reference Designs



Snapdragon X Elite
(Demo Config. A)



Snapdragon X Elite
(Demo Config. B)

Device TDP	80W max	23W
Height	16.8mm	15mm
Display	QHD (3840x 2160) 15.6 TFT	14.5" (2880x1800) OLED
Battery	87Wh (3S2P)	58Wh (3S1P)

BENCHMARKS

Geekbench

Cinebench

UL Procyon AI

Wildlife Extreme

Aztec Ruins

PC Mark

QUALCOMM ORYON™

Faster peak
performance at
70%
LOWER
POWER

Geekbench v6.2 Linux ST

Qualcomm Oryon CPU



i9-13980HX





Up to
10%
FASTER PEAK
PERFORMANCE

Geekbench v6.2 ST

Snapdragon X Elite (Demo Config. A)



Snapdragon X Elite (Demo Config. B)



i7-13800H



Ryzen 9 7940HS



M2





Up to
50%
FASTER PEAK
PERFORMANCE

Geekbench v6.2 MT

Snapdragon X Elite (Demo Config. A)



Core i7-13800H



Snapdragon X Elite (Demo Config. B)



Ryzen 9 7940HS



M2



CPU Peak Performance is based on a multi thread run utilizing Geekbench v6.2.1 in October 2023. Qualcomm Oryon was tested using a Qualcomm laptop reference design running Windows OS. Qualcomm Oryon was tested using a Qualcomm laptop reference design. The i7-13800H (14 core) was tested using a Razer Blade 15 2023 (RZ09-0485) laptop. Maximum performance reflected by i7-13800H represents maximum achievable results in given platform under unconstrained PL1/PL2 settings and no thermal limitations. The Ryzen 9-7940HS (14 core) was tested using an Asus ROG Zephyrus G14 2023 (GA402XV) laptop. Maximum performance reflected by Ryzen 9-7940HS represents maximum achievable results in given platform under 80W SlowLimit/FastLimit settings and no thermal limitations. The M2 was tested using a MacBook Pro 13" 2022 (A2338-8162) 8/10C + 16GB laptop running Mac OS.



Up to
20%
FASTER PEAK
PERFORMANCE

Cinebench 2024 ST

Snapdragon X Elite (Demo Config. A)



Snapdragon X Elite (Demo Config. B)



M2



Core i7-13800H



Ryzen 9 7940HS



CPU Peak Performance is based on a single thread run utilizing Cinebench 2024 in October 2023. Qualcomm Oryon was tested using a Qualcomm laptop reference design running Windows OS. Qualcomm Oryon was tested using a Qualcomm laptop reference design. The i7-13800H (14 core) was tested using a Razer Blade 15 2023 (RZ09-0485) laptop. Maximum performance reflected by i7-13800H represents maximum achievable results in given platform under unconstrained PL1/PL2 settings and no thermal limitations. The Ryzen 9-7940HS (14 core) was tested using an Asus ROG Zephyrus G14 2023 (GA402XV) laptop. Maximum performance reflected by Ryzen 9-7940HS represents maximum achievable results in given platform under 80W SlowLimit/FastLimit settings and no thermal limitations. The M2 was tested using a MacBook Pro 13" 2022 (A2338-8162) 8/10C + 16GB laptop running Mac OS.



Up to
2x
FASTER PEAK
PERFORMANCE

Cinebench 2024 MT

Snapdragon X Elite (Demo Config. A)



Core i7-13800H



Ryzen 9 7940HS



Snapdragon X Elite (Demo Config. B)



M2



CPU Peak Performance is based on a multi thread run utilizing Cinebench 2024 in October 2023. Qualcomm Oryon was tested using a Qualcomm laptop reference design running Windows OS. Qualcomm Oryon was tested using a Qualcomm laptop reference design. The i7-13800H (14 core) was tested using a Razer Blade 15 2023 (RZ09-0485) laptop. Maximum performance reflected by i7-13800H represents maximum achievable results in given platform under unconstrained PL1/PL2 settings and no thermal limitations. The Ryzen 9-7940HS (14 core) was tested using an Asus ROG Zephyrus G14 2023 (GA402XV) laptop. Maximum performance reflected by Ryzen 9-7940HS represents maximum achievable results in given platform under 80W SlowLimit/FastLimit settings and no thermal limitations. The M2 was tested using a MacBook Pro 13" 2022 (A2338-8162) 8/10C + 16GB laptop running Mac OS.



Up to
10x
FASTER PEAK
PERFORMANCE

UL Procyon AI

Snapdragon X Elite (Demo Config. A)



Snapdragon X Elite (Demo Config. B)



Core i7-13800H



Ryzen 9 7940HS





Up to
2.5x
FASTER PEAK
PERFORMANCE

Aztec Ruins

Snapdragon X Elite (Demo Config. A)



Snapdragon X Elite (Demo Config. B)



M2



Core i7-13800H



Ryzen 9 7940HS





Up to
67%
FASTER PEAK
PERFORMANCE

Wildlife Extreme

Snapdragon X Elite (Demo Config. A)



M2



Snapdragon X Elite (Demo Config. B)



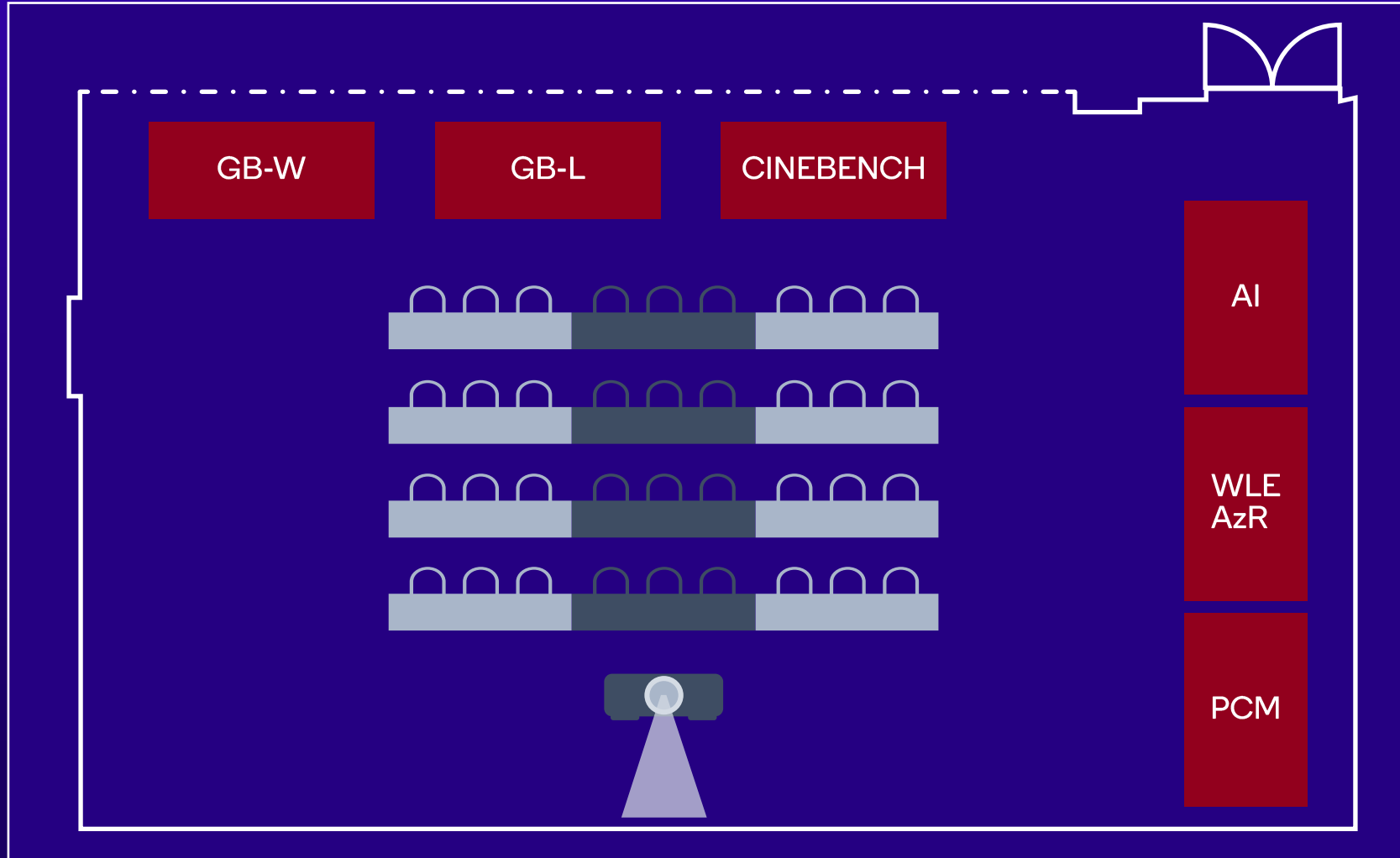
Ryzen 9 7940HS



Core i7-13800H



Session Room



THANK YOU



Follow us on:       

For more information, visit us at:

[snapdragon.com](https://www.qualcomm.com/snapdragon) & [snapdragoninsiders.com](https://www.qualcomm.com/snapdragoninsiders)

Nothing in these materials is an offer to sell any of the components or devices referenced herein.

©2018-2023 Qualcomm Technologies, Inc. and/or its affiliated companies. All Rights Reserved.

Qualcomm and Snapdragon are trademarks or registered trademarks of Qualcomm Incorporated. Other products and brand names may be trademarks or registered trademarks of their respective owners.

References in this presentation to "Qualcomm" may mean Qualcomm Incorporated, Qualcomm Technologies, Inc., and/or other subsidiaries or business units within the Qualcomm corporate structure, as applicable. Qualcomm Incorporated includes our licensing business, QTL, and the vast majority of our patent portfolio. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, operates, along with its subsidiaries, substantially all of our engineering, research and development functions, and substantially all of our products and services businesses, including our QCT semiconductor business.

Snapdragon and Qualcomm branded products are products of Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm patented technologies are licensed by Qualcomm Incorporated.