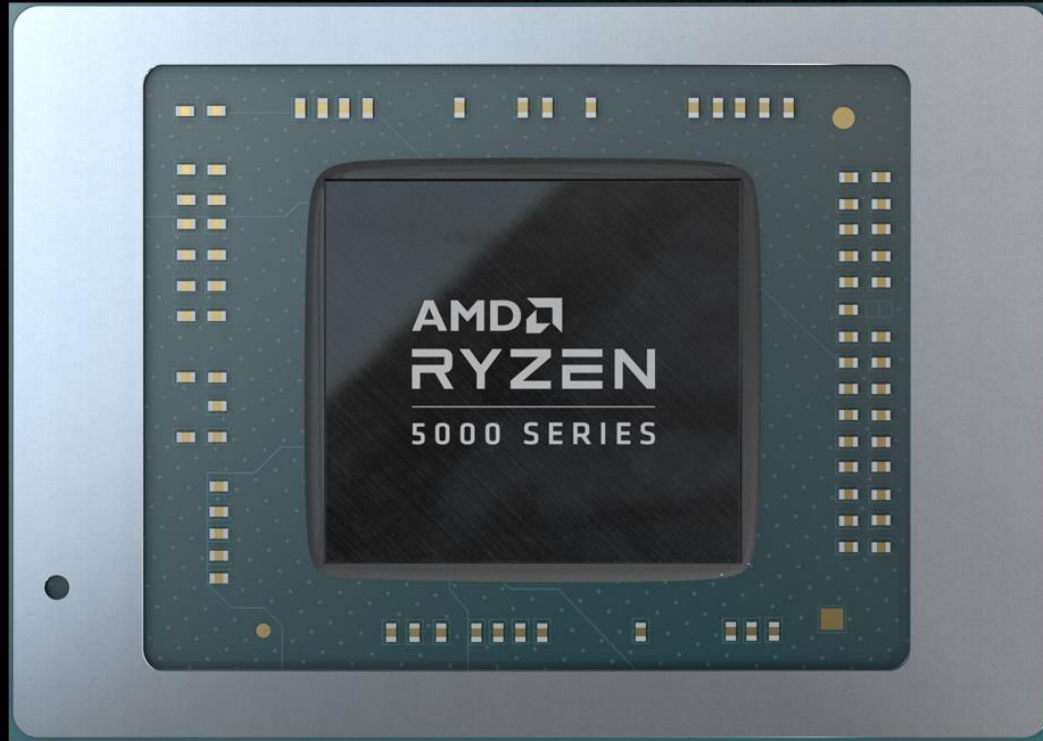




AMD RYZEN™ 5000 SERIES MOBILE

CES PRODUCT FAMILY PREVIEW

INTRODUCING AT CES 2021

AMD RYZEN™ 5000 SERIES MOBILE PROCESSORS

THE ULTIMATE BLEND OF PERFORMANCE AND EFFICIENCY

ULTIMATE PERFORMANCE

“Zen 3” Mobile
Processors in 7nm

INCREDIBLE EFFICIENCY

Leading Battery Life
For x86 Notebooks¹

UNMATCHED FLEXIBILITY

The Only 8-Core x86 CPU
for Ultrathin Laptops

INTRODUCING THE PRODUCT FAMILY

AMD RYZEN™ 5000 SERIES MOBILE PROCESSORS

RYZEN™ H-SERIES

Top performance in notebooks for gamers and content creators

AMD Model	Cores/ Threads	Max Boost (Base)	Cache	Node	TDP
RYZEN™ 9 5980HX	8/16	4.8 (3.3)	20MB	7nm	45W+
RYZEN™ 9 5980HS	8/16	4.8 (3.0)	20MB	7nm	35W
RYZEN™ 9 5900HX	8/16	4.6 (3.3)	20MB	7nm	45W+
RYZEN™ 9 5900HS	8/16	4.6 (3.0)	20MB	7nm	35W
RYZEN™ 7 5800H	8/16	4.4 (3.2)	20MB	7nm	45W
RYZEN™ 7 5800HS	8/16	4.4 (2.8)	20MB	7nm	35W
RYZEN™ 5 5600H	6/12	4.2 (3.3)	19MB	7nm	45W
RYZEN™ 5 5600HS	6/12	4.2 (3.0)	19MB	7nm	35W

RYZEN™ U-SERIES

Powerful thin and light notebooks with great battery life

AMD Model	Cores/ Threads	Max Boost (Base)	Cache	Node	TDP
RYZEN™ 7 5800U	8/16	4.4 (1.9)	20MB	7nm	15W
RYZEN™ 7 5700U	8/16	4.3 (1.8)	12MB	7nm	15W
RYZEN™ 5 5600U	6/12	4.2 (2.3)	19MB	7nm	15W
RYZEN™ 5 5500U	6/12	4.0 (2.1)	11MB	7nm	15W
RYZEN™ 3 5300U	4/8	3.8 (2.6)	6MB	7nm	15W

RYZEN™ 5000 SERIES MOBILE TRANSITION

H-SERIES
Gaming and Content
Creation Systems

U-SERIES
Ultrathin Productivity
and Creation Systems

AMD Ryzen 4000 Series

Ryzen 9 4900H

Ryzen 9 4900HS

Ryzen 7 4800H

Ryzen 7 4800HS

Ryzen 5 4600H

Ryzen 5 4600HS

Ryzen 7 4800U

Ryzen 7 4700U

Ryzen 5 4600U

Ryzen 5 4500U

Ryzen 3 4300U

AMD Ryzen 5000 Series

Ryzen 9 5980HX "Zen 3"

Ryzen 9 5980HS "Zen 3"

Ryzen 9 5900HX "Zen 3"

Ryzen 9 5900HS "Zen 3"

Ryzen 7 5800H "Zen 3"

Ryzen 7 5800HS "Zen 3"

Ryzen 5 5600H "Zen 3"

Ryzen 5 5600HS "Zen 3"

Ryzen 7 5800U "Zen 3"

Ryzen 7 5700U "Zen 2"

Ryzen 5 5600U "Zen 3"

Ryzen 5 5500U "Zen 2"

Ryzen 3 5300U "Zen 2"

RYZEN™ 5000 SERIES MOBILE FEATURES

AMD Ryzen 5000 Series Mobile Processors	7nm Node	Higher Clocks	SMT On	CPPC On	“Zen 3” Architecture	Doubled L3 Cache
Ryzen 9 5980HX	•	•	•	•	•	•
Ryzen 9 5980HS	•	•	•	•	•	•
Ryzen 9 5900HX	•	•	•	•	•	•
Ryzen 9 5900HS	•	•	•	•	•	•
Ryzen 7 5800H	•	•	•	•	•	•
Ryzen 7 5800HS	•	•	•	•	•	•
Ryzen 5 5600H	•	•	•	•	•	•
Ryzen 5 5600HS	•	•	•	•	•	•
Ryzen 7 5800U	•	•	•	•	•	•
Ryzen 7 5700U	•	•	•	•	•	•
Ryzen 5 5600U	•	•	•	•	•	•
Ryzen 5 5500U	•	•	•	•		
Ryzen 3 5300U	•	•	•	•		

5000 U-Series

THE STANDARD FOR HIGHLY
PORTABLE PERFORMANCE

Uniquely Powerful

The only 8-core ultrathin CPUs

Fantastic Battery Life

Up to 21 hours of video playback¹

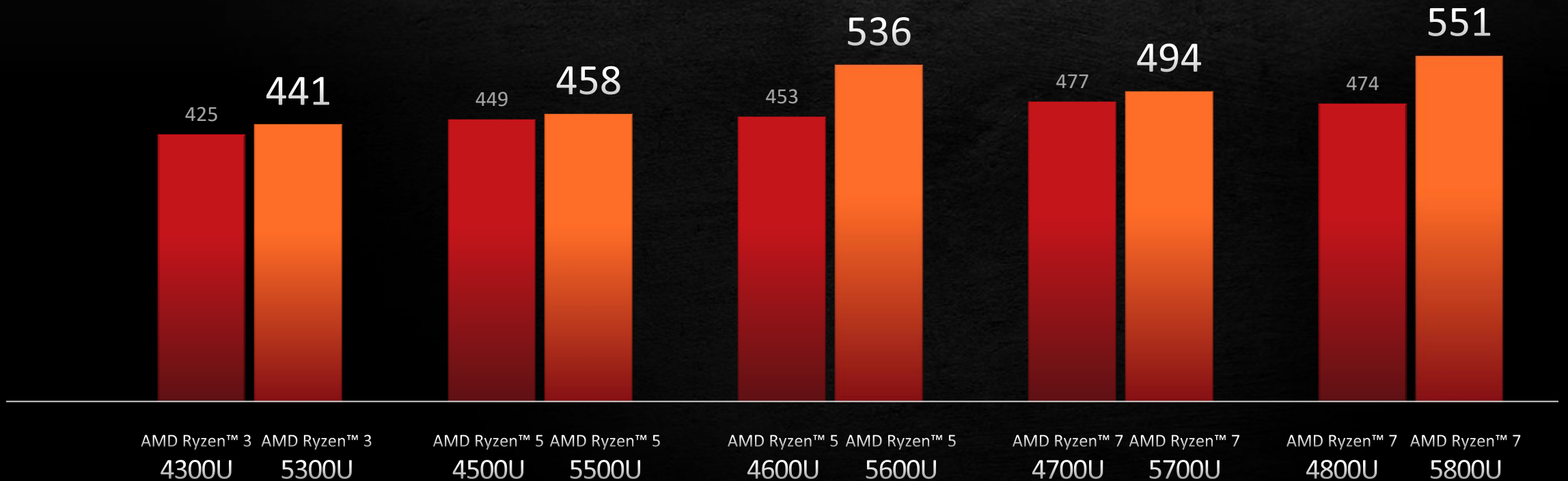
“Zen 3” Architecture

Award-winning performance & efficiency

AMD RYZEN™ 5000 SERIES MOBILE

PROFESSIONAL CLASS PROCESSING PERFORMANCE IN A NOTEBOOK

Single-Thread Performance Scaling
Up To



AMD RYZEN™ 7 5800U

THE FASTEST PRODUCTIVITY IN ULTRATHIN NOTEBOOKS

PRODUCTIVITY PERFORMANCE

PCMark® & Subtests
Up to

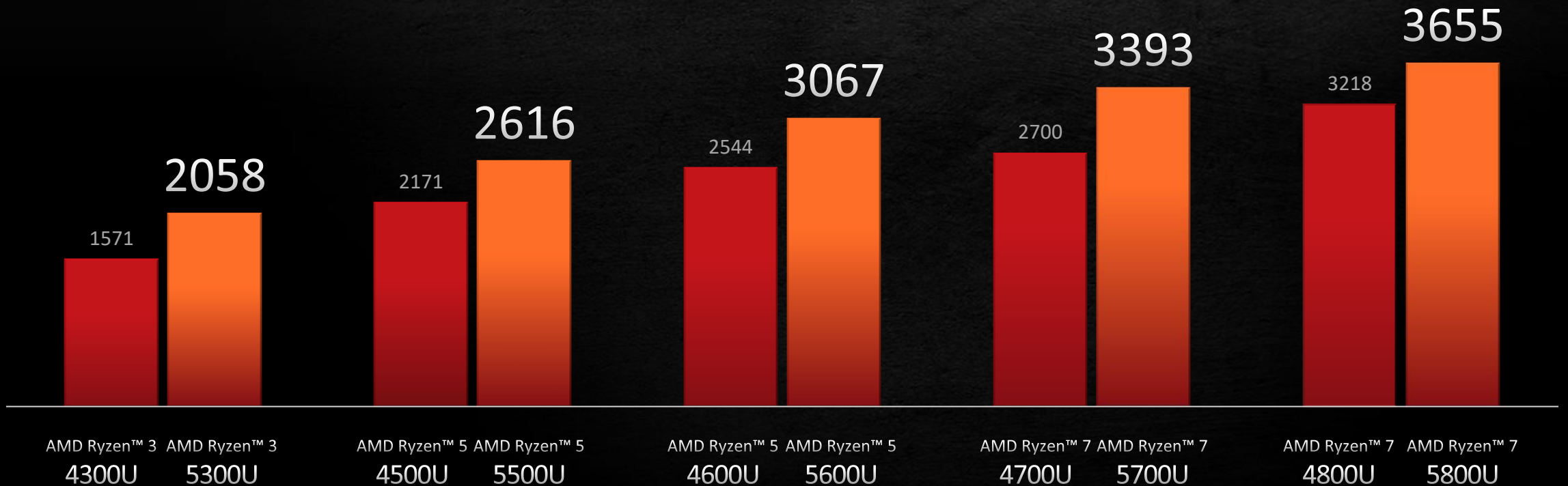
Core i7-1165G7 Ryzen™ 7 4800U Ryzen™ 7 5800U



AMD RYZEN™ 5000 SERIES MOBILE

PROFESSIONAL CLASS MULTIPROCESSING PERFORMANCE IN A NOTEBOOK

Multi-Threaded Performance Scaling
Up To



UP TO

17.5 HOURS

GENERAL USAGE¹

UP TO

21 HOURS

MOVIE PLAYBACK¹

AMD RYZEN™  **5800U**

1. See endnotes: CZM-33.

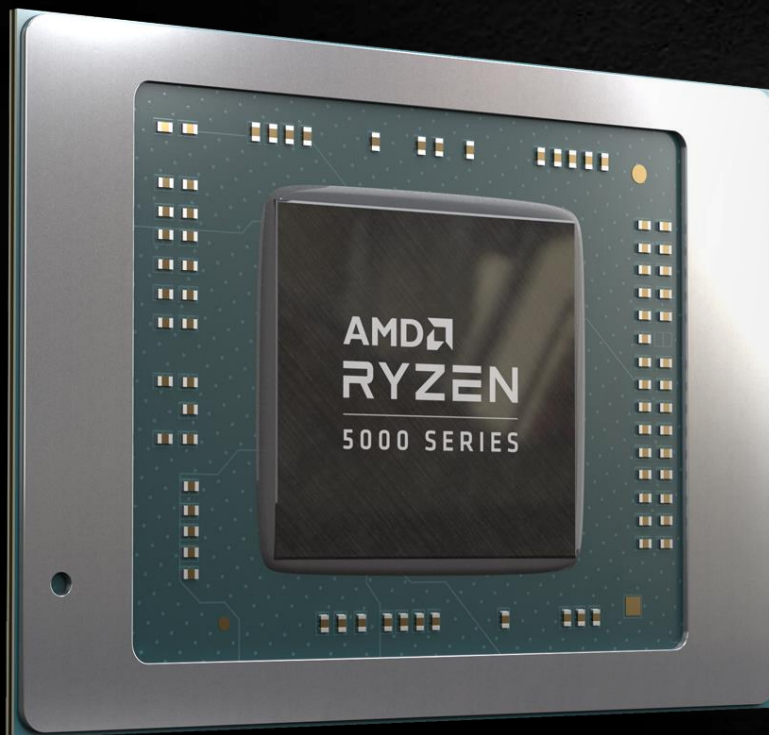
HS

THE ULTIMATE IN PORTABLE GAMING PERFORMANCE

Compact Performance
35W TDP

Impressive Battery Life
Creator & Gaming Notebooks

“Zen 3” Architecture
Fast Gaming & Content Creation



AMD RYZEN™ **9** 5980HS

THE ULTIMATE MOBILE PROCESSOR FOR
GAMING NOTEBOOKS IN 2021

8 Cores
16 Threads

Up to
4.8GHz Boost
3.0GHz Base

20MB
L2+L3 Cache

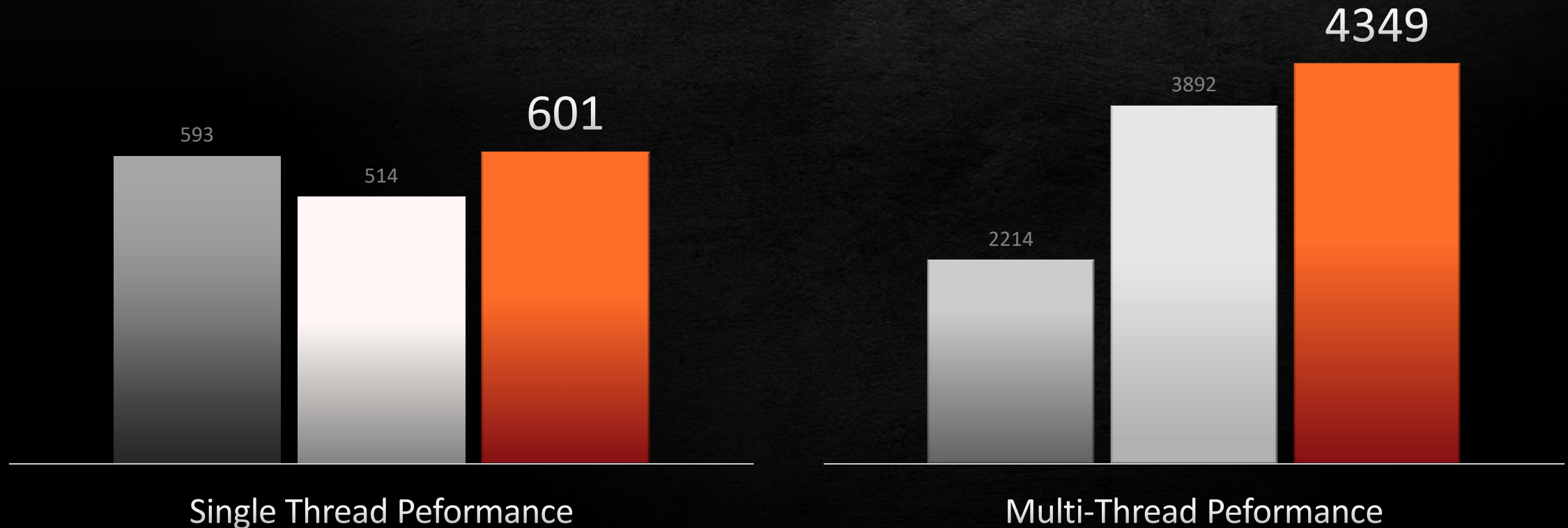
35W TDP

AMD RYZEN™ 9 5980HS

THE FASTEST MOBILE PROCESSORS YOU CAN GET

CINEBENCH R20
Up to

■ Core i7-1185G7 ■ Core i9-10980HK ■ Ryzen™ 9 5980HS





THE WORLD'S BEST MOBILE PROCESSORS FOR GAMERS

Unlocked for OC
On Select OEM Systems

Unleashed TDP
45W+ TDP for Serious Gaming

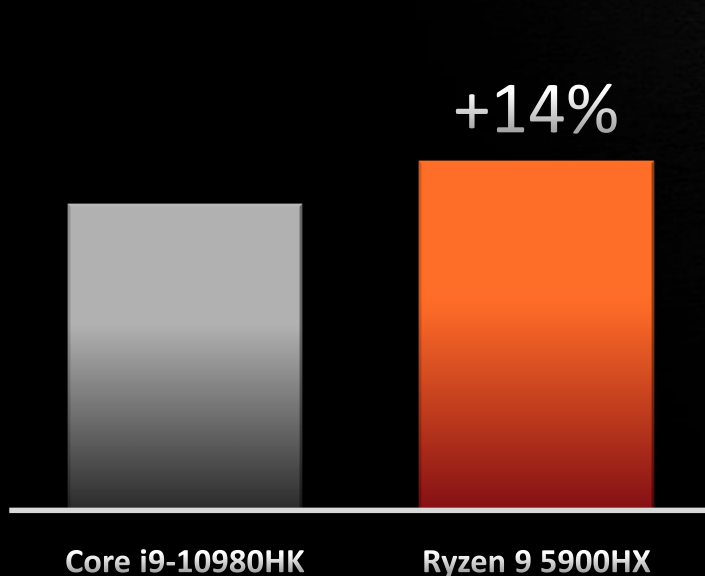
“Zen 3” Architecture
Fast Gaming & Content Creation

AMD RYZEN™ 9 5900HX

THE PROCESSOR FOR 2021's BEST GAMING NOTEBOOKS

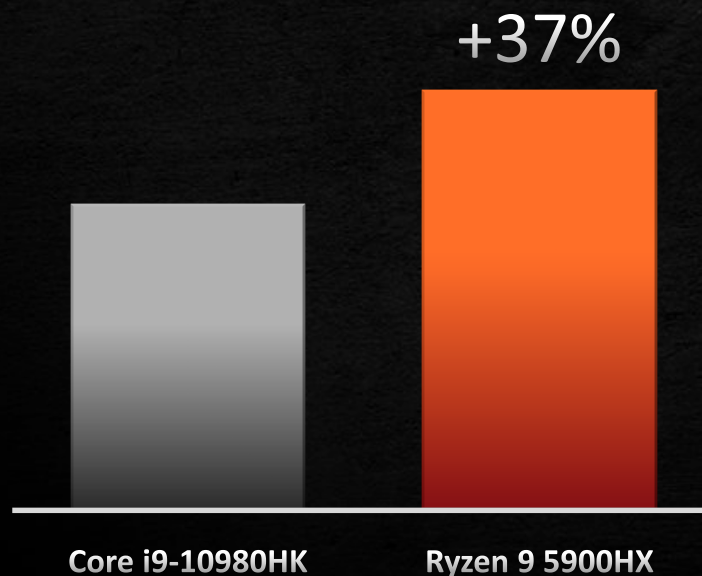
SINGLE-THREAD PERFORMANCE

(Cinebench R20 1T)



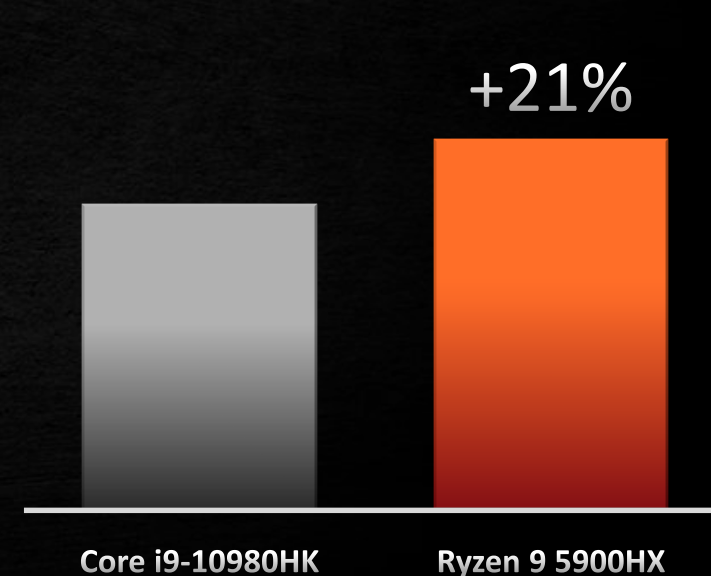
OVERALL CPU PERFORMANCE

(Passmark PT10 CPU Score)



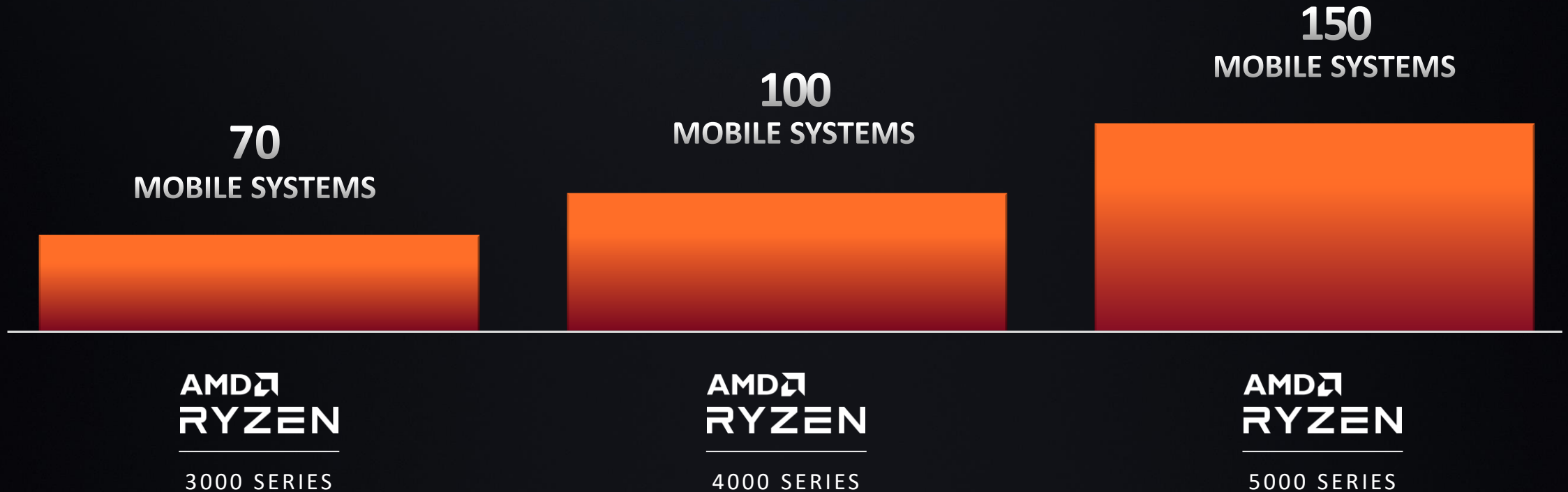
GAME PHYSICS PERFORMANCE

(3DMark Fire Strike Physics)



PORTFOLIO EXPANSION

WITH AMD RYZEN™ MOBILE



AVAILABILITY STARTING FEBRUARY

FOOTNOTES

- GD-150: Max boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates.
- CZM-33: Testing by AMD Performance Labs as of 12/08/2020 using an AMD Ryzen 7 5800U processor on an AMD Reference Platform configured with a 53WHr battery, WLAN enabled and Bluetooth off, using 1080p video playback (result: up to 21.4 hours) and the MobileMark 2018 benchmark test (result: up to 17.5 hours).
- CZM-35: As of December 2020, the Ryzen 5000 series mobile processors are the “Most advanced/powerful mobile processors,” defined as the highest-performing single-thread and multi-thread performance available on x86 mobile processors.
- CZM-38: Testing by AMD Performance Labs as of 12/30/2020 using PCMark 10, PCMark Apps (APP Performance Overall), Word, Excel, PowerPoint, Edge to measure the productivity performance of a Ryzen 7 4800U vs. Core i7-1165G7; a Ryzen 7 5800U vs. Core i5-113G57; and a Ryzen 3 5400U vs. Core i3-1115G4. Results may vary. PC Mark is a trademark of UL LLC.
- CZM-48: Testing by AMD engineering using the the Cinebench R20 nT benchmark, measuring multithreaded performance of a Ryzen 7 5800U processor engineering sample vs Ryzen 7 4800U, Ryzen 7 5700U processor engineering sample vs Ryzen 7 4700U, Ryzen 5 5600U processor engineering sample vs Ryzen 5 4600U, Ryzen 5 5500U processor engineering sample vs Ryzen 5 4500U, Ryzen 3 5400U processor engineering sample vs Ryzen 3 4300U. Performance may vary.
- CZM-36: Testing by AMD Performance Labs as of 12/09/2020, using the Cinebench R20 1T; Cinebench R20 nT; PassMark 10; and 3DMark Fire Strike physics test to measure the CPU performance of a Ryzen 9 5900HX (45W) and Ryzen 9 5980HX (45W) reference systems configured with 32GB DDR4 memory, Samsung 970 Pro SSD, Vega graphics vs. a similarly configured Alienware M17 r3 with Core i9-10980HK processor, and NVIDIA GeForce RTX 2080 Super graphics. Results may vary.
- MIL-002: AMD internal testing completed on 7Dec2020 on a reference platform with 2x pre-production EPYC™ 7003 series 32-core processors, compared to an Intel server on a production system with 2x Intel® Xeon® Gold 6258R (28C) processors. Results may vary.