

QUICK REFERENCE GUIDE:

AMD RYZEN™ MOBILE PROCESSORS

AMD Ryzen™ Mobile Processors deliver premium performance for productivity, entertainment, gaming, and content creation in thin and light laptops.



APRIL 2020

NEW
FOR 2020



AMD Ryzen™ 4000 Series Mobile Processors

7nm “Zen 2” Architecture | Up to 8 cores, 16 Threads

Recommend the world’s most advanced laptop processors¹ for the best entertainment experiences and ultra-responsive computing for heavy workloads.



More cores means more performance⁶ to **multitask, create, and game faster than ever**



Stay connected with **double the power efficiency²** of previous gen for longer battery life, and Wi-Fi 6 and Bluetooth 5³ compatibility

4K

Edit photos or stream entertainment in vibrant clarity with built-in AMD Radeon™ Graphics—the **best available for ultrathin laptops⁴**

	Model	CPU Cores / Threads	Total Cache	Max Boost ⁵ (up to)	TDP	GPU Cores	Graphics Frequency
Gaming & Content Creation	AMD Ryzen™ 9 4900H Mobile Processor with Radeon™ Graphics	8C/16T	12 MB	4.4 GHz	45W	8	1750 MHz
	AMD Ryzen™ 7 4800H Mobile Processor with Radeon™ Graphics	8C/16T	12 MB	4.2 GHz	45W	7	1600 MHz
	AMD Ryzen™ 5 4600H Mobile Processor with Radeon™ Graphics	6C/12T	11 MB	4.0 GHz	45W	6	1500 MHz
Premium Ultrathin	AMD Ryzen™ 7 4800U Mobile Processor with Radeon™ Graphics	8C/16T	12 MB	4.2 GHz	15W	8	1750 MHz
	AMD Ryzen™ 7 4700U Mobile Processor with Radeon™ Graphics	8C/8T	12 MB	4.1 GHz	15W	7	1600 MHz
	AMD Ryzen™ 5 4600U Mobile Processor with Radeon™ Graphics	6C/12T	11 MB	4.0 GHz	15W	6	1500 MHz
	AMD Ryzen™ 5 4500U Mobile Processor with Radeon™ Graphics	6C/6T	11 MB	4.0 GHz	15W	6	1500 MHz
	AMD Ryzen™ 3 4300U Mobile Processor with Radeon™ Graphics	4C/4T	6 MB	3.7 GHz	15W	5	1400 MHz



AMD Ryzen™ 3000 Series Mobile Processors

12nm “Zen+” Architecture | Up to 4 Cores, 8 Threads

Recommend for immersive entertainment and powerful productivity on-the-go.



Snappy multitasking to tackle to-do lists



Power efficient design supports **long-lasting battery for life on-the-go**

4K

AMD Radeon™ Graphics deliver **gorgeous visuals** for captivating entertainment

	Model	CPU Cores / Threads	Total Cache	Max Boost ⁵ (up to)	TDP	GPU Cores	Graphics Frequency
Gaming & Content Creation	AMD Ryzen™ 7 3750H Mobile Processor with Radeon™ Vega Graphics	4C/8T	6 MB	4.0 GHz	35W	10	1400 MHz
	AMD Ryzen™ 5 3550H Mobile Processor with Radeon™ Vega Graphics	4C/8T	6 MB	3.7 GHz	35W	8	1200 MHz
Premium Ultrathin	AMD Ryzen™ 7 3700U Mobile Processor with Radeon™ Vega Graphics	4C/8T	6 MB	4.0 GHz	15W	10	1400 MHz
	AMD Ryzen™ 5 3500U Mobile Processor with Radeon™ Vega Graphics	4C/8T	6 MB	3.7 GHz	15W	8	1200 MHz
	AMD Ryzen™ 3 3300U Mobile Processor with Radeon™ Vega Graphics	4C/8T	6 MB	3.5 GHz	15W	6	1200 MHz
	AMD Ryzen™ 3 3250U Mobile Processor with Radeon™ Graphics	2C/4T	5 MB	3.5 GHz	15W	3	1200 MHz
	AMD Ryzen™ 3 3200U Mobile Processor with Radeon™ Vega Graphics	2C/4T	5 MB	3.5 GHz	15W	3	1200 MHz

The AMD Ryzen™ family of mobile processors includes **U-Series** for ultrathin premium devices and **H-Series** for thin and light gaming laptops. Help direct your customers to the best processor type to match their computing needs.

GAMING & CONTENT CREATION



AMD Ryzen™ H-Series

35-45W TDP | Optimized for discrete graphics cards

For gamers and content creators who desire the ultimate level of performance in a thin and light laptop.

	Ryzen™ 5	Ryzen™ 7	Ryzen™ 9
	Fast	Faster	Fastest
Game, Stream, & Record Capture every win		✓	✓
Intensive Workloads 3D modeling and CAD software	✓	✓	✓
Demanding Content Creation Render, edit, and encode time-intensive projects	✓	✓	✓
Ultra-smooth 1080p Gaming at High Settings AAA, Esports, MMORPG, Battle Royale	✓	✓	✓

PREMIUM ULTRATHIN DEVICES



AMD Ryzen™ U-Series

15W TDP | Built-in AMD Radeon™ Graphics

For customers that want premium performance and long-lasting battery life in ultrathin laptops.

	Ryzen™ 3	Ryzen™ 5	Ryzen™ 7
	Fast	Faster	Fastest
Advanced Creative Apps Render, edit, and encode			✓
Smooth 1080p Gaming at Low Settings Play popular eSports		✓	✓
Power-User Productivity Run multiple apps at once with ultra-responsiveness	✓	✓	✓
Streaming Entertainment Watch your favorite shows in up to 4K, HDR	✓	✓	✓
Casual Gaming	✓	✓	✓
Light Media Editing	✓	✓	✓

1. RM3-01 As of January 2020, the Ryzen 4000 series mobile processor is the "Most advanced laptop processor," defined as superior 7nm process technology in a smaller node, 15W and 45W typical TDP.

2. RM3-123 Based on AMD internal analysis, March 2020, of Ryzen 4000 series processors vs. 2nd generation Ryzen™ processors. Actual performance per watt may vary.

3. Wi-Fi 6 and Bluetooth 5.0 availability varies by laptop manufacturer and are system configuration dependent. Check with your laptop manufacturer for compatibility information.

4. RM3-218 Testing by AMD Performance Labs as of 12/09/2019 utilizing an AMD Ryzen™ 4800U reference system, a Dell XPS 7390 system with Intel® Core i7-1065G7 processor, a Dell XPS 7390 system with Intel® Core i7-10710U processor, and a Dell XPS 7390 system with Intel® Core i7-10510U processor in 3DMark® Time Spy. Results may vary. 3DMark is a registered trademark of Futuremark Corporation.

5. 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. GD-150

6. RM3-6 Testing by AMD Performance Labs as of 11/22/2019 utilizing the Ryzen 7 4800U vs. 2nd Gen Ryzen 7 3700U in Cinebench R20 Benchmark. Results may vary.

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