

QUICK REFERENCE GUIDE:

AMD Ryzen™ 6000 Series Processors with Radeon™ Graphics

SPEED. ENDURANCE. INFINITE POSSIBILITIES. Experience pure performance with thrilling speed and incredible battery life.



EXPERIENCE PURE SPEED

Enjoy astonishing performance with AMD Ryzen™ 6000 Series processors.

FREEDOM TO UNPLUG

Go further with smart battery management designed for up to 24 hours battery life on select ultrathin systems¹.

CHOOSE EXCEPTIONAL

Discover the new and explore infinite possibilities with world-class laptops that exceed expectations.

	Model	Cores /Threads	Max Boost ² (up to)/ Base	TDP	Cache	On-Chip Graphics	Node	Architecture
AMDA AMDA RADEON GOSS SESSES S CRAPMICS	AMD Ryzen™ 9 6980HX processor	8C / 16T	5.0 / 3.3 GHz	45W+	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
AMDA AMDA RADEON	AMD Ryzen™ 9 6980HS processor	8C / 16T	5.0 / 3.3 GHz	35W	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
AMDA AMDA RADEON	AMD Ryzen™ 9 6900HX processor	8C / 16T	4.9 / 3.3 GHz	45W+	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
ANDA ANDA RADEON	AMD Ryzen™ 9 6900HS processor	8C / 16T	4.9 / 3.3 GHz	35W	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
AMDA AMDA RADEON	AMD Ryzen™ 7 6800H processor	8C / 16T	4.7 / 3.2 GHz	45W	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
AMON AMON RADEON	AMD Ryzen™ 7 6800HS processor	8C / 16T	4.7 / 3.2 GHz	35W	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
ANDA ANDA RADEON 6006 SERIES 5 CRAPKICS	AMD Ryzen™ 5 6600H processor	6C / 12T	4.5 / 3.3 GHz	45W	19 MB	AMD Radeon™ 660M graphics	6nm	"Zen 3+"
AMDA AMDA RADEON	AMD Ryzen™ 5 6600HS processor	6C / 12T	4.5 / 3.3 GHz	35W	19 MB	AMD Radeon™ 660M graphics	6nm	"Zen 3+"
AMDIT RADIEUN CORO SERIES 7 CRAPRICS	AMD Ryzen™ 7 6800U processor	8C / 16T	4.7 / 2.7 GHz	15-28W	20 MB	AMD Radeon™ 680M graphics	6nm	"Zen 3+"
AMOR AMOR ANDEON	AMD Ryzen™ 5 6600U processor	6C / 12T	4.5 / 2.9 GHz	15-28W	19 MB	AMD Radeon™ 660M graphics	6nm	"Zen 3+"

NEXT-GEN CONNECTIVITY: Bringing the speed, bandwidth, and connectivity customers need³





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BLUETOOTH **5.2 WITH LE AUDIO**



PCI EXPRESS®

GEN 4



SYSTEM MEMORY

LPDDR5/DDR5



HDMI®2.1

HFR, FRL, DSC, HDR10+, VRR





FEATURES AND HIGHLIGHTS: Elevating the premium user experience

Fastest AMD Ryzen™ **Mobile Processor Ever**

Up to 5 GHz max boost² for the first time from AMD

Breakthrough Ultrathin Performance

Now up to 28W max TDP for U-Series pushes the performance bar for thin and lights

Incredible Graphics

New AMD Radeon™ 600M graphics are fast enough to play almost any game title at 1080p resolution4

All-New Connected Platform

A new platform with next-gen connectivity like PCIe® 4.0, DDR5, and high-speed USB4®3

AI-Powered Audio

Al-powered noise cancellation built right on the chip to chat and listen distraction free³

Premium Display Options

Supports up to 4x displays with HDR, BT.2020, and DCI-P3 for rich art, work, and play

Windows 11 **Security**

AMD Ryzen™ 6000 Series processors deliver the full breadth of new Windows 11 security features

= BEST = BETTER = GOOD

		Web Browsing, Email, Social	Streaming Media in up to 4K	Productivity Workloads	Esports Gaming	Photo and Video Editing	Advanced 3D Modeling / CAD	HD AAA Gaming	Enthusiast Gaming w/ dGpu	Gaming & Streaming
ENTHUSIAST GAMING & CONTENT CREATION 35W-45W TDP	AMD Ryzen™ 9 6000 H-Series									•
	AMD Ryzen™ 7 6000 H-Series								•	•
	AMD Ryzen™ 5 6000 H-Series					•	•	•	0	
PREMIUM ULTRATHIN	AMD Ryzen™ 7 6000 U-Series	•			•		•	•		•
15W-28W TDP	AMD Ryzen™ 5 6000 U-Series		•		•	•	0	0		

The information contained herein is for informational purposes only, and is subject to change without notice. Timelines, roadmaps, and/or product release dates shown herein are plans only and subject to change. "Zen 3" is codename for AMD architecture, and is not a product name. GD-122

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RMB -15 Based on testing by AMD as of 12/14/2021. Battery life evaluated with hours of continuous 1080p local video playback using the h.264 video codec. 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. System configuration: AMD reference motherboard(s), Ryzen* 7 5800U @ 15W and 2x8GB LPDDR4, Ryzen* 7 6800U @ 28W and 2x8GB LPDDR5, 1080p eDP PSR display with Varibright at 150 nits, Samsung 980 Pro 1TB SSD, WLAN enabled and disconnected, Windows 11 22000.282, BIOS 103BRCI (5800U). Video file: 1920x1080, 23.976 FPS, h.264

GD-150 Max boost for an AMD Ryzen processor 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

Not all systems feature all capabilities. Check with system manufacturer for specific features and functions

RMB-7 Based on testing by AMD as of 12/14/2021. The integrated graphics performance of Ryzen 6000 Series processors can get up to 45 FPS average in the majority of 11 tested PC game titles at 1080p resolution with low settings.