# AMD
# A620 CHIPSET
## FOR AMD RYZEN™ 7000 SERIES PROCESSORS

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# COMPLETE RANGE OF AM5 MOTHERBOARD CHOICES

LAUNCHED
## SEPTEMBER 2022

AMD SOCKET AM5 | X670 EXTREME

AMD SOCKET AM5 | X670

**Ultimate Performance, Processor and Memory Overclocking, and Leadership PCIe 5.0 Bandwidth**

LAUNCHED
## OCTOBER 2022

AMD SOCKET AM5 | B650 EXTREME

AMD SOCKET AM5 | B650

**High Performance with Processor and Memory Overclockability**

NEW
AVAILABLE
## APRIL 2023

AMD SOCKET AM5 | A620

**High Performance with Memory Overclockability**

* See endnote: GD-106.

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NEW

# AMD A620 CHIPSET

THE AMD RYZEN™ 7000 SERIES PLATFORM FOR THE MASSES

## STARTING AT ~$85 USD SEP

- The A620 makes Ryzen 7000 series processor platforms accessible for everyone. True, next-gen PC performance has never been more affordable.

## SUPPORTS MEMORY OVERCLOCKING

- Most models will support up to 6000 MHz overclocked DDR5 EXPO™ memory in a dual-channel, one-dim-per-channel configuration. Processor overclocking, PBO and Curve Optimizer are not supported, though.

## SUPPORTS 65W TDP, AND BEYOND

- Ideal for Ryzen 7000 processors with a 65W TDP. Models with higher TDPs will boot if the BIOS' AGESA version supports them, but multithreaded performance may be be limited by VRM power limits. We expect these power limits to have minimal impact on game performance.

* See endnote: GD-106. Prices subject to change.

# BROAD A620 ECOSYSTEM SUPPORT

ASRock ASUS GIGABYTE™ msi BIOSTAR






## A WIDE PORTFOLIO OF OPTIONS FOR AMD RYZEN 7000 SERIES PROCESSORS

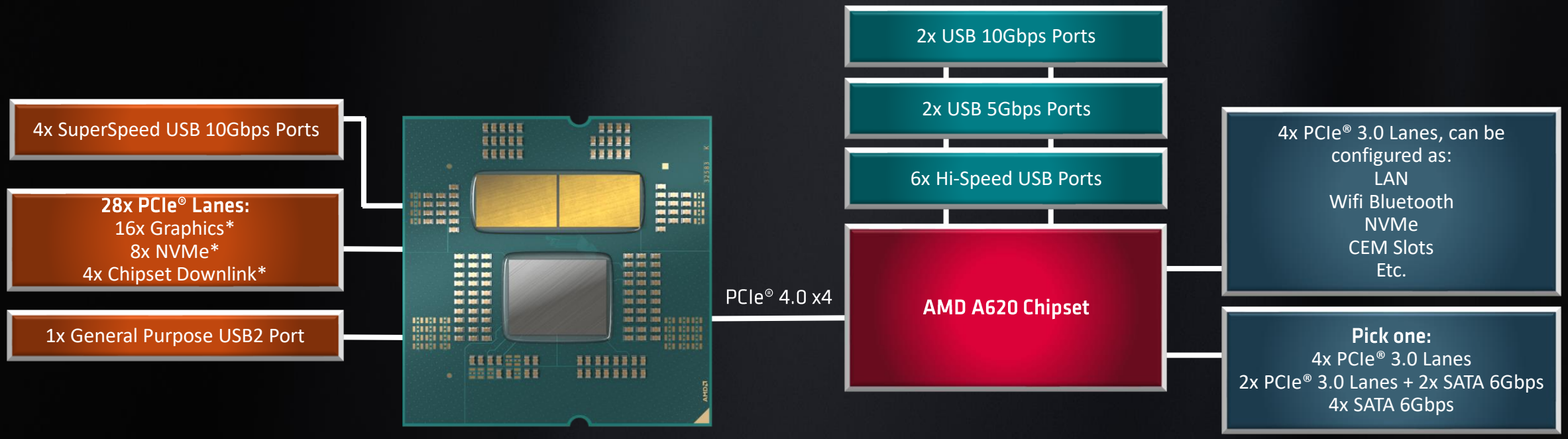
# AMD SOCKET AM5 CHIPSETS

## FEATURE MATRIX

| | Direct Processor PCIe® Lanes | | | Chipset-Provided USB and SATA | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | GRAPHICS | NVMe (+PCIe® GPP) (UP TO) | USABLE PCIe® LANES TOTAL/PCIe® 5.0 (UP TO) | RYZEN PROCESSOR OVERCLOCKING ENABLED | DDR5 MEMORY OVERCLOCKING ENABLED (SUPPORTS AMD EXPO™) | USB 20Gbps (UP TO) | USB 10Gbps (UP TO) | USB 5Gbps (UP TO) | MAXIMUM SATA PORTS (OR PCIe® 3.0) (UP TO) |
| AMD SOCKET AM5 X670 EXTREME | 1x16 or 2x8 PCIe® 5.0 | 1x4 PCIe® 5.0 + 4x PCIe® GPP | 44/24 | Yes | Yes | 2 | 12 | - | 8 |
| AMD SOCKET AM5 X670 | 1x16 or 2x8 PCIe® 4.0 | 1x4 PCIe® 5.0 + 4x PCIe® GPP | 44/8 | Yes | Yes | 2 | 12 | - | 8 |
| AMD SOCKET AM5 B650 EXTREME | 1x16 or 2x8 PCIe® 5.0 | 1x4 PCIe® 5.0 + 4x PCIe® GPP | 36/24 | Yes | Yes | 1 | 6 | - | 4 |
| AMD SOCKET AM5 B650 | 1x16 or 2x8 PCIe® 4.0 | 1x4 PCIe® 4.0 (PCIe® 5.0 Optional) | 36/0 | Yes | Yes | 1 | 6 | - | 4 |
| AMD SOCKET AM5 A620 | 1x16 PCIe® 4.0 | 1x4 PCIe® 4.0 | 32/0 | *No* | Yes | - | 2 | 2 | 4 |

# AMD A620

## CHISET DIAGRAM FOR SOCKET AM5




* Connection configured as PCIe® 4.0 on AMD A620 chipset.

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# RYZEN™ 7000 & A620 POWERED GAMING SYSTEM CONFIGURATIONS

SUGGESTED HARDWARE TO BUILD GREAT PRICE/PERFORMANCE RYZEN 7000 POWERED GAMING RIGS

## ENTRY LEVEL GAMING

| | |
|---|---|
| CPU | AMD Ryzen™ 5 7600 |
| MB | A620 |
| RAM | 2x 8GB DDR5-5200 CL36 |
| VGA | AMD Radeon RX 6600XT 8GB |
| STORAGE | 500GB M.2 PCIe4 SSD |
| PSU | 450W |

## MAINSTREAM GAMING

| | |
|---|---|
| CPU | AMD Ryzen™ 7 7700 |
| MB | A620 |
| RAM | 2x 8GB DDR5-5600 CL34 |
| VGA | AMD Radeon RX 6650XT 8GB |
| STORAGE | 1TB M.2 PCIe4 SSD |
| PSU | 500W |

## PERFORMANCE GAMING

| | |
|---|---|
| CPU | AMD Ryzen™ 7 7800X3D |
| MB | A620 |
| RAM | 2x 16GB DDR5-6000 CL32 |
| VGA | AMD Radeon RX 6750XT 12GB |
| STORAGE | 2TB M.2 PCIe4 SSD |
| PSU | 650W |

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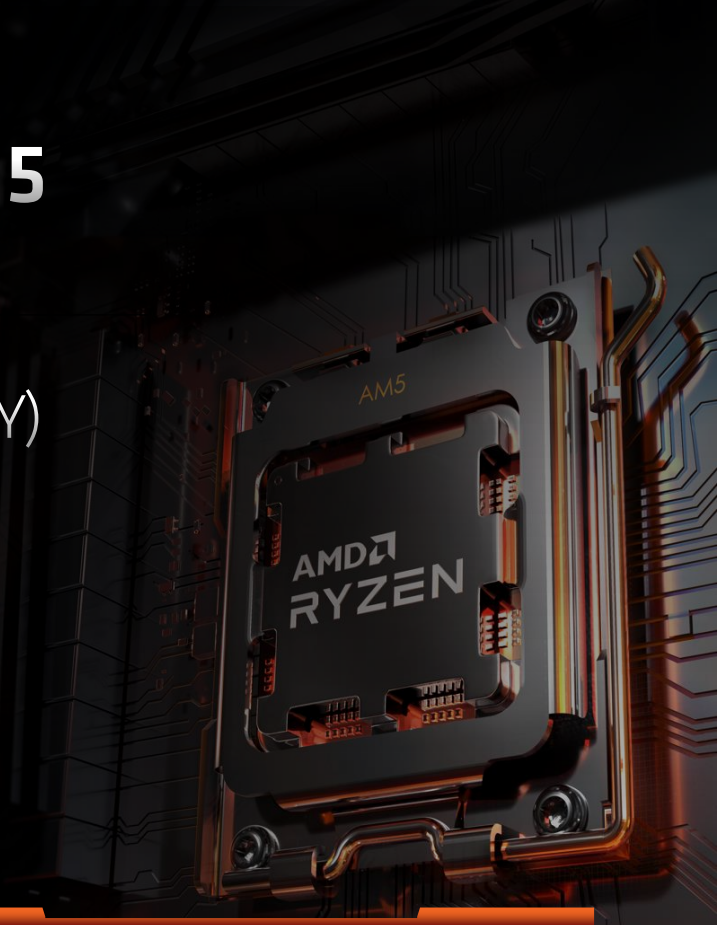
# AMD RYZEN™ 7000 SERIES & AM5

A **5**-STAR PLATFORM

- **5nm** (LEADERSHIP EFFICIENCY)
- **5GHz+** (UNLOCKED, UP TO)
- **AM5** (2025+ SUPPORT)
- **PCIe® 5.0** (GPU & SSD)
- **DDR5** (WITH AMD EXPO™)


## ABSOLUTE PERFORMANCE

## LEADING TECHNOLOGIES

## ADVANCE YOUR EXPERIENCE

* SEE ENDNOTES: GD-106, GD-150

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# GENERAL DISCLAIMER AND ENDNOTES

Overclocking and/or Undervolting AMD processors and memory, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate outside of AMD's published specifications will void any applicable AMD product warranty, even when enabled via AMD hardware and/or software. This may also void warranties offered by the system manufacturer or retailer. Users assume all risks and liabilities that may arise out of overclocking / undervolting AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or vulnerability. GD-106.

The Ryzen 9 7900 offers up to 31% better gaming peformance than the AMD Ryzen 9 5900X in Dota 2. The Ryzen 9 7900 offers up to 18% better gaming peformance than the AMD Ryzen 9 5900X in Shadow of the Tomb Raider. The Ryzen 9 7900 offers up to 7% better gaming peformance than the AMD Ryzen 9 5900X in Borderlands 3. The Ryzen 9 7900 offers up to 18% better gaming peformance than the AMD Ryzen 9 5900X in CS:GO. RPL-20.

The Ryzen 9 7900 offers up to 19% better content creation peformance than the AMD Ryzen 9 5900X in Cinebench R23 nT. The Ryzen 9 7900 offers up to 48% better content creation peformance than the AMD Ryzen 9 5900X in PudgetBench Photoshop. The Ryzen 9 7900 offers up to 12% better content creation peformance than the AMD Ryzen 9 5900X in PCMark Digital Content Creation. The Ryzen 9 7900 offers up to 22% better content creation peformance than the AMD Ryzen 9 5900X in POV-Ray. RPL-21.

Precision Boost Overdrive requires an AMD Ryzen Threadripper or a Ryzen 3000/4000/5000/7000 series desktop processor, and a compatible motherboard. AMD Ryzen 3400G and 3200G series processors are not compatible. Because Precision Boost Overdrive enables operation of the processor outside of AMD's published specifications, use of the feature invalidates the AMD product warranty and may also void warranties offered by the system manufacturer or retailer. Availability of Precision Boost Overdrive in pre-built OEM desktop systems will vary based on the PC manufacturer's settings. Check with the PC manufacturer prior to purchase. GD-179.

# GENERAL DISCLAIMER AND ENDNOTES

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

The Ryzen 9 7900 with PBO Enabled and water cooled has up to 34% better performance versus without Precision Boost Overdrive. RPL-27

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