

AMD Ryzen™ 7 5800X3D

GENERAL
SPECIFICATIONS

CONNECTIVITY

GRAPHICS
CAPABILITIES

KEY FEATURES

General Specifications

Platform:	Desktop
Market Segment:	Enthusiast Desktop
Product Family:	AMD Ryzen™ Processors
Product Line:	AMD Ryzen™ 7 Desktop Processors
AMD PRO Technologies:	No
Consumer Use:	Yes
Regional Availability:	Global, China, NA, EMEA, APJ, LATAM
Former Codename:	"Vermeer"
Architecture:	"Zen 3"
# of CPU Cores:	8
Multithreading (SMT):	Yes
# of Threads:	16
Max. Boost Clock:	Up to 4.5GHz
Base Clock:	3.4GHz
L1 Cache:	512KB
L2 Cache:	4MB
L3 Cache:	96MB
Default TDP:	105W

Processor Technology for CPU Cores:	TSMC 7nm FinFET
Processor Technology for I/O Die:	12nm (Globalfoundries)
CPU Compute Die (CCD) Size:	74mm ²
I/O Die (IOD) Size:	125mm ²
Package Die Count:	1
CPU Socket:	AM4
Socket Count:	1P
Supporting Chipsets:	X570 X470 B550 B450 A520
CPU Boost Technology:	Precision Boost 2
Instruction Set:	x86-64
Supported Extensions:	AES, AMD-V, AVX, AVX2, FMA3, MMX(+), SHA, SSE, SSE2, SSE3, SSE4.1, SSE4.2, SSE4A, SSSE3, x86-64
Thermal Solution (PIB):	Not included
Max. Operating Temperature (Tjmax):	90°C
*OS Support:	Windows 11 - 64-Bit Edition Windows 10 - 64-Bit Edition RHEL x86 64-Bit Ubuntu x86 64-Bit *Operating System (OS) support will vary by manufacturer.

Connectivity

USB Type-C® Support:	Yes
Native USB 3.2 Gen 2 (10Gbps) Ports:	4
Native USB 3.2 Gen 1 (5Gbps) Ports:	0
Native USB 2.0 (480Mbps) Ports:	0
Native SATA Ports:	2

PCI Express® Version:	PCIe 4.0	
Native PCIe® Lanes (Total/Usable):	24/20	
Additional Usable PCIe Lanes from Motherboard:	AMD X570	16x Gen 4
	AMD X470	2x Gen 3
	AMD X470	8x Gen 2
NVMe Support:	Boot, RAID0, RAID1, RAID10	
System Memory Type:	DDR4	
Memory Channels:	2	
Max. Memory:	128GB	
System Memory Subtype:	UDIMM	
Max Memory Speed:	2x1R	DDR4-3200
	2x2R	DDR4-3200
	4x1R	DDR4-2933
	4x2R	DDR4-2667
ECC Support:	Yes (Requires mobo support)	

Graphics Capabilities

Integrated Graphics:	No
Graphics Model:	Discrete Graphics Card Required

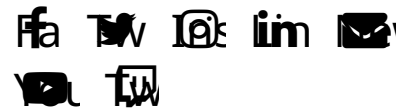
Key Features

Supported Technologies:	AMD 3D V-Cache™ Technology Windows® 11 Gaming AMD "Zen 3" Core Architecture AMD Ryzen™ VR-Ready Premium
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