General Specifications

Name	AMD Ryzen™ 7 5700X
Family	Ryzen
Series	Ryzen 5000 Series
Form Factor	Desktops, Boxed Processor
Market Segment	Enthusiast Desktop
Regional Availability	Global , China , NA , EMEA , APJ , LATAM
Former Codename	Vermeer
Processor Architecture	Zen 3
# of CPU Cores	8
Multithreading (SMT)	Yes
# of Threads	16
Max. Boost Clock	Up to 4.6 GHz
Base Clock	3.4 GHz
L1 Cache	512 KB
L2 Cache	4 MB
L3 Cache	32 MB
Default TDP	65W
Processor Technology for CPU Cores	TSMC 7nm FinFET
Processor Technology for I/O Die	12nm (Globalfoundries)
CPU Compute Die (CCD) Size	74mm²
I/O Die (IOD) Size	125mm²
Package Die Count	2
Unlocked for Overclocking	Yes
CPU Socket	AM4
Supporting Chipsets	X570 , X470 , X370 , B550 , B450 , B350 , A520
CPU Boost Technology	Precision Boost 2
Instruction Set	x86-64
Supported Extensions	AES , AMD-V , AVX , AVX2 , FMA3 , MMX-plus , SHA , SSE , SSE2 , SSE3 , SSE4.1 , SSE4.2 , SSE4A , SSSE3 , x86-64
Thermal Solution (PIB)	Not Included
Max. Operating Temperature (Tjmax)	90°C
Launch Date	04/04/2022

***OS Support**	Windows 11 - 64-Bit Edition , Windows 10 - 64-Bit Edition , RHEL x86 64-Bit , Ubuntu x86 64-Bit

Connectivity

Native USB 3.2 Gen 2 (10Gbps)	4
Native USB 3.2 Gen 1 (5Gbps)	0
Native USB 2.0 (480Mbps)	0
Native SATA Ports	2
PCI Express® Version	PCIe® 4.0
Native PCIe® Lanes (Total/Usable)	24 , 20
Additional Usable PCIe Lanes from Motherboard	**X570** 16x Gen 4 **X470** 2x Gen 3, 8x Gen 2
NVMe Support	Boot , RAID0 , RAID1 , RAID10
System Memory Type	DDR4
Memory Channels	2
Max. Memory	128 GB
System Memory Subtype	UDIMM
System Memory Specification	Up to 3200 MT/s
Max Memory Speed	**2x1R** DDR4-3200 **2x2R** DDR4-3200 **4x1R** DDR4-2933 **4x2R** DDR4-2667
ECC Support	Yes (Requires mobo support)

Graphics Capabilities

Graphics Model	Discrete Graphics Card Required

Product IDs

Product ID Boxed	100-100000926WOF* , 100-100000926WOZ*
Product ID Tray	100-000000926
Product ID MPK	100-100000926NPK* , 100-100000926KPK*

Key Features

Supported Technologies	AMD StoreMI Technology , AMD Ryzen™ VR-Ready Premium