

AMD Ryzen™ 7 8700F

GENERAL SPECIFICATIONS

CONNECTIVITY

GRAPHICS CAPABILITIES

AI ENGINE CAPABILITIES

PRODUCT IDS

SECURITY,
VIRTUALIZATION, AND
MANAGEABILITY

General Specifications

Platform:	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:	"Phoenix"
Architecture:	"Zen 4"
# of CPU Cores:	8
Multithreading (SMT):	Yes
# of Threads:	16
Max. Boost Clock ⁱ :	Up to 5.0GHz
Base Clock:	4.1GHz
L2 Cache:	8MB

L3 Cache:	16MB
Default TDP:	65W
AMD Configurable TDP (cTDP):	45-65W
Processor Technology for CPU Cores:	TSMC 4nm FinFET
CPU Compute Die (CCD) Size:	178mm ²
Package Die Count:	1
Unlocked for Overclocking ⁱ :	Yes
AMD EXPO™ Memory Overclocking Technology:	Yes
Precision Boost Overdrive:	Yes
Curve Optimizer Voltage Offsets:	Yes
AMD Ryzen™ Master Support:	Yes
CPU Socket:	AM5
CPU Boost Technology:	Precision Boost 2
Instruction Set:	x86-64
Supported Extensions:	AES, AMD-V, AVX, AVX2, AVX512, FMA3, MMX(+), SHA, SSE, SSE2, SSE3, SSE4.1, SSE4.2, SSE4A, SSSE3, x86-64
Max. Operating Temperature (Tjmax):	95°C
Launch Date:	4/1/2024
*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

Native USB 4 (40Gbps) Ports:	2	
Native USB 3.2 Gen 2 (10Gbps) Ports:	2	
Native USB 2.0 (480Mbps) Ports:	1	
PCI Express® Version:	PCIe 4.0	
Native PCIe® Lanes (Total/Usable):	20 / 16	
NVMe Support:	Boot, RAID0, RAID1	
System Memory Type:	DDR5	
Memory Channels:	2	
Max. Memory:	256GB	
System Memory Subtype:	UDIMM	
Max Memory Speed:	2x1R	DDR5-5200
	2x2R	DDR5-5200
	4x1R	DDR5-3600
	4x2R	DDR5-3600
ECC Support:	No	

Graphics Capabilities

Integrated Graphics:	No
Graphics Model:	Discrete Graphics Card Required

AI Engine Capabilities

Brand Name:	AMD Ryzen™ AI
AMD Ryzen™ AI:	Available
Performance:	Up to 16 TOPS

Product IDs

Product ID Boxed:	100-100001590BOX 100-100001590CBX
Product ID Tray:	100-000001590 (AM5)
Product ID MPK:	100-100001590MPK 100-100001590CPK

Security, Virtualization, and Manageability

AMD Enhanced Virus Protection (NX bit):	Yes
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