



SPECIFICATIONS

Marketing Name	GeForce RTX™ 5090 32G VANGUARD SOC
Model Name	G5090-32VGS
Graphics Processing Unit	NVIDIA® GeForce RTX™ 5090
Interface	PCI Express® Gen 5
Core Clocks	Extreme Performance: 2527 MHz (MSI Center) Boost: 2512 MHz (GAMING & SILENT Mode)
CUDA® CORES	21760 Units
Memory Speed	28 Gbps
Memory	32GB GDDR7
Memory Bus	512bit
Output	DisplayPort x 3 (v2.1b) HDMI™ x 1 (As specified in HDMI™ 2.1b: up to 4K 480Hz or 8K 120Hz with DSC, Gaming VRR, HDR)
HDCP Support	Y
Power consumption	575W
Power connectors	16-pin x 1 (ATX 3.1 PSU recommended)
Recommended PSU	1000W
Card Dimension (mm)	357 x 151 x 76 mm
Weight (Card / Package)	2407 g / 3302 g
DirectX Version Support	12 Ultimate
OpenGL Version Support	4.6
Maximum Displays	4
G-SYNC® technology	Y
Digital Maximum Resolution	7680 x 4320

CONNECTIONS



1. DisplayPort
2. HDMI™

FEATURES



HYPER FROZR THERMAL DESIGN

An apex evolution of advanced thermal design that delivers unparalleled cooling and quiet operation.



STORMFORCE FAN

Seven fan blades, claw texturing, and a circular arc are designed for optimal airflow with minimal noise.



Advanced Vapor Chamber

Built-in Vapor Chamber swiftly transfers heat from the GPU and VRAM to the core pipe for optimal dissipation.



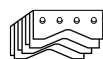
Core Pipes

Core Pipes feature a square design to maximize contact with the GPU baseplate for optimal thermal management.



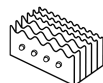
Filled Fins

Updated heat pipe pathing has allowed more space for additional heatsink fins.



Air Antegrade Fin 2.0

The fins feature a V-shaped cutout and a high-low design at the airflow passthrough to optimize flow efficiency.



Wave Curved 4.0

Precision-engineered wave edges with a high-low fin design enhance airflow and reduce turbulence.



Metal Backplate

A reinforcing metal backplate with airflow vents and thermal pads enhances cooling.



Dual BIOS

Dual BIOS lets you set the priority to full performance in GAMING mode or low noise in SILENT mode.



MSI Center

The exclusive MSI Center software lets you monitor, tweak and optimize MSI products in real-time.