



SPECIFICATIONS

Marketing Name	GeForce RTX™ 5090 32G LIGHTNING Z
Model Name	G5090-32LZ
Graphics Processing Unit	NVIDIA® GeForce RTX™ 5090
Cores	21760 Units
Memory	32GB GDDR7
Power connectors	16-pin x 2 (1-to-3 dongle not supported.)
Memory Interface	512bit
Core Clocks	Extreme Performance: 2775 MHz (MSI Center) Boost: 2730 MHz
Memory Speed	28 Gbps
Maximum Displays	4
Digital Maximum Resolution	7680 x 4320
Output	USB Type-C x 1 (Dedicated for Lightning display panel only), DisplayPort x 3 (2.1b), HDMI™ x 1 (As specified in HDMI™ 2.1b: up to 4K 480Hz or 8K 120Hz with DSC, Gaming VRR, HDR)
Power consumption (W)	OC:800 W Extreme:1000W
Recommended Power Supply (W)	1600W
DirectX Version Support	12 Ultimate
Card Dimension(mm)	Card: 260 x 151 x 61 mm Radiator: 394 x 120 x 56 mm
Weight	TBD g / TBD g

CONNECTIONS



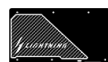
1. DisplayPort
2. HDMI™
3. Type-C (For Lightning display panel only)

FEATURES



CUSTOM PCB FOR EXTREME OVERCLOCKING

Engineered for extreme 3oz copper layer and premium components to deliver exceptional stability, and sustained peak performance.



FORGED IN CARBON FIBER — REINFORCED. LIGHT. BEAUTIFUL.

Rigid carbon fiber and Lightning Pattern detailing deliver technical elegance.



FULL-COVER COLDPLATE FOR MAXIMUM COOLING

Precision-engineered waterways cover the GPU, VRAM, and MOSFETs, ensuring uncompromised thermal performance.



HYBRID-FIN RADIATOR FOR OPTIMIZED AIRFLOW

A uniquely engineered fin structure alternates between dense and sparse sections, creating distinct hot and cold zones that enhance heat exchange.



NEXT-GENERATION ADVANCED PUMP

Delivers higher pressure and precision-optimized coolant flow for thermal efficiency and sustained peak performance.



WORLD'S FIRST GRAPHICS CARD WITH A FULL 8-INCH DISPLAY

Introducing the world's first graphics card with a fully integrated 8-inch screen, blending aesthetics and function.



LIGHTNING FAN - MASTERING AERODYNAMIC POWER

Designed for the Lightning series, the fan's aerodynamic blades optimize airflow and pressure to ensure maximum cooling.



LIGHTNING HUB & OVERDRIVE APP - TOTAL CONTROL, ANYWHERE

Exclusive to the Lightning series, this web-based hub and mobile app deliver seamless GPU, display, and lighting control.