GRAPHICS CARDS

# GeForce RTX™ 5090 32G LIGHTNING Z







## SPECIFICATIONS

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|---|---|
| **Marketing Name** | GeForce RTX™ 5090 32G LIGHTNING Z |
| **Model Name** | G5090-32LZ |
| **Graphics Processing Unit** | NVIDIA® GeForce RTX™ 5090 |
| **Interface** | PCI Express® Gen 5x 16 |
| **Core Clocks** | Extreme Performance: 2775 MHz (MSI Center)<br>Boost: 2730 MHz |
| **CUDA® CORES** | 21760 Units |
| **Memory Speed** | 28 Gbps |
| **Memory** | 32GB GDDR7 |
| **Memory Bus** | 512bit |
| **Output** | USB Type-C x 1 (Dedicated for Lightning display panel only),<br>DisplayPort x 3 (2.1b),<br>HDMI™ x 1<br>(As specified in HDMI™ 2.1b: up to 4K 480Hz or 8K 120Hz with DSC, Gaming VRR, HDR) |
| **HDCP Support** | Y |
| **Power consumption** | OC:800 W<br>EXtreme:1000W |
| **Power connectors** | 16-pin x 2 (1-to-3 dongle not supported.) |
| **Recommended PSU** | 1500W+ |
| **Card Dimension (mm)** | Card: 260 x 151 x 61 mm<br>Radiator: 394 x 120 x 56 mm |
| **Weight (Card / Package)** | TBD g / TBD g |
| **DirectX Version Support** | 12 Ultimate |
| **OpenGL Version Support** | 4.6 |
| **Maximum Displays** | 4 |
| **G-SYNC® technology** | Y |
| **Digital Maximum Resolution** | 7680 x 4320 |

## 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.

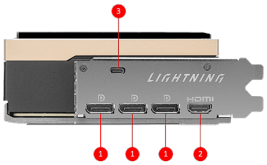
**LIGHTNING HUB & OVERDRIVE APP – TOTAL CONTROL, ANYWHERE**

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

## CONNECTIONS

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

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