

# Desktop Gaming Workstation SYS-531AD-I

UP mid-tower workstation for gaming and content creation



## Key Applications

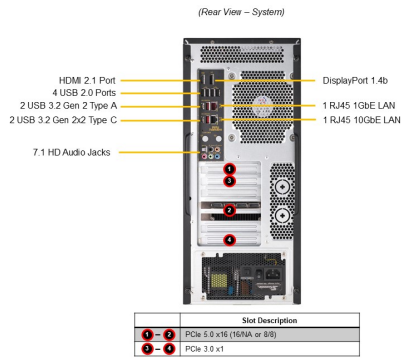
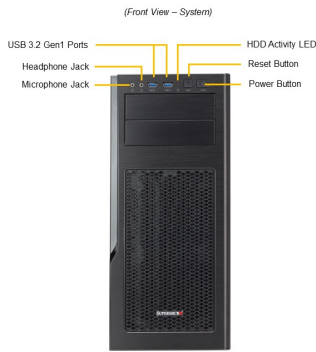
High-performance Gaming, Content Creation,

## Key Features

- Supports 14th/13th/12th Gen Intel® Core™ i9, i7, i5, and i3 Processors;
- 2 PCIe 5.0 x16 slots (16/NA or 8/8);
- 3x 12cm PWM Fans;



|                          |                                                                                                                                                                                                                                                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor              | <p>Mid-Tower</p> <p>Enclosure: 200 x 460 x 493mm (7.9" x 18.1" x 19.4")</p> <p>Package: 361 x 632 x 610mm (14.2" x 24.9" x 24")</p>                                                                                                                                           |
| Processor                | <p>Single Socket V0 (LGA-1700)</p> <p>14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® Processors</p> <p>Up to 24C/48T; Up to 16MB Cache</p>                                                                                                                |
| GPU                      | <p>Up to 1 double-width GPU</p>                                                                                                                                                                                                                                               |
| System Memory            | <p>Slot Count: 4 DIMM slots</p> <p>Max Memory (2DPC): Up to 128GB 4400MT/s non-ECC DDR5 UDIMM</p>                                                                                                                                                                             |
| Drive Bays Configuration | <p>Default: Total 6 bays</p> <ul style="list-style-type: none"> <li>• 6 internal fixed 3.5" SATA drive bays</li> </ul> <p>M.2: 2 M.2 PCIe 3.0 x4 NVMe slots (M-key 2280/22110)</p> <p>1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2280/22110)</p> <p>Peripheral Bays: 2 5.25" bays</p> |
| Expansion Slots          | <p>Default</p> <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x8 FHFL slots</li> <li>• 2 PCIe 3.0 x1 FHFL slots</li> </ul> <p>Option A</p> <ul style="list-style-type: none"> <li>• 1 PCIe 5.0 x16 FHFL slot</li> <li>• 2 PCIe 3.0 x1 FHFL slots</li> </ul>              |
| On-Board Devices         | <p>SATA: SATA (6Gbps)</p> <p>Chipset: Intel® Z790</p> <p>Network Connectivity: 1 RJ45 1GbE with Intel® PHY I219-V</p> <p>1 RJ45 10GbE with Marvell® AQC113</p>                                                                                                                |
| Input / Output           | <p>USB: 4 USB 2.0 ports(rear)</p> <p>2 USB 2.0 ports(header)</p> <p>2 ports(front)</p> <p>2 ports(rear)</p> <p>Video: 1 HDMI 2.1 port</p> <p>1 DisplayPort 1.4b port</p> <p>Audio: 7.1 HD Audio</p> <p>TPM: 1 TPM header</p>                                                  |



|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Cooling        | <p>Fans: Up to 2x 120mm Fan(s)</p> <p>Up to 1x 120mm Fan(s)</p> <p>Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)</p>                                                                                                                                                                                                                                                                                                                                                                                   |
| Power Supply          | 1x 750W Gold Level power supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| System BIOS           | BIOS Type: AMI 256MB SPI Flash                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Management            | Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO)                                                                                                                                                                                                                                                                                                                                                                                                                   |
| PC Health Monitoring  | <p>Other Features:</p> <p>8-pin 12v DC power connector, ACPI power management, ATX Power connector, Chassis intrusion header, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, RoHS, Voltage and Frequency Overclocking, WOL</p> <p>Voltage:</p> <p>+1.0V PCH, +1.8V PCH, +12V, +3.3V, +5V, +5V standby, 1.05 (PCH), 3.3V standby, 5 (4-pin), CPU, CPU temperature, CPU thermal trip support, PCH temperature, System temperature, VBAT, VRM temperature</p> |
| Dimensions and Weight | <p>Weight: Gross Weight: 26 lbs (11.8 kg)</p> <p>Net Weight: 20 lbs (9 kg)</p> <p>Available Color: Black / Gray</p>                                                                                                                                                                                                                                                                                                                                                                                                 |
| Operating Environment | <p>Operating Temperature: 10°C to 35°C (50°F to 95°F)</p> <p>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 90% (non-condensing)</p> <p>Non-operating Relative Humidity: 5% to 95% (non-condensing)</p>                                                                                                                                                                                                                                                        |
| Motherboard           | <a href="#">Super C9Z790-CG</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Chassis               | <a href="#">CSE-GS5A-754K</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |