

# SuperWorkstation 5039AD-I



**Integrated Board**



**Super C9X299-PGF**

**Views: | [Angled View](#) | [Side View](#) |  
| [Front View](#) | [Rear View](#) |**

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Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

## Applications

- High-end Desktop
- Extreme Gaming
- High-performance computing
- Simulation and Creation Design

## Key Features

1. Single Socket R4 supports Intel® Core™ i9/i7/i5 X-Series, and Intel® Core™ i9 Extreme X-Series Processors
2. Intel® X299 chipset
3. Up to 128GB Non-ECC UDIMM, DDR4-2666MHz, in 8 DIMM slots
4. 4 PCI-E 3.0 x16; 1 PCI-E 3.0 x4, 2 M.2 M key with Intel® Optane™ support, and 2 U.2
5. 6 SATA3 (6 Gbps) ports; RAID 0, 1, 5, 10
6. 5G LAN and 1GbE LAN
7. 6 fixed 3.5" and 4 fixed 2.5" drive bays  
2 standard 5.25" drive bays
8. 1 VGA, ALC 1220 7.1 HD Audio
9. 2x 12cm front cooling fan;  
1x 12cm rear exhaust fan
10. 750W Multi-output Power Supply

# Specifications

## Product SKUs

**SuperWorkstation** ■ SYS-5039AD-I (Black)

## Motherboard

**Super C9X299-PGF**

## Processor/Cache

**CPU**

- Single socket R4 (LGA 2066) supported, CPU TDP support up to 165W
- Intel® Core™ i9/i7/i5 X-Series, and Intel® Core™ i9 Extreme X-Series Processors (Skylake-X/Cascade Lake-X)

## System Memory

**Memory Capacity**

- 8x 288-pin DDR4 DIMM slots
- Supports up to 128GB DDR4 Non-ECC Un-Buffered memory (UDIMM)

**Memory Type**

- 2666/2400/2133/1866/1600MHz Non-ECC DDR4 288-pin UDIMM

**DIMM Sizes**

- 16GB, 8GB, 4GB

**Memory Voltage**

- 1.2V

## On-Board Devices

**Chipset**

- Intel® X299 Chipset

**SATA**

- SATA3 via PCH w/ RAID 0, 1, 5, 10

**IPMI**

- ASPEED AST2500

**Network Controllers**

- Single LAN with Intel® Ethernet Controller I210-AT, shared IPMI port
- Single LAN with Aquantia 5G LAN chip AQC108

**Audio**

- ALC 1220 7.1 HD Audio

## Input / Output

**SATA**

- 6 SATA3 (6Gbps) ports

**LAN**

- 2 RJ45 Gigabit Ethernet LAN ports

**USB**

- 4 USB 3.0 ports (2 rear + 2 front)
- 4 USB 3.1 ports (rear, 3 Type A + 1 Type C)

**Display**

- 1 VGA port

**Serial Port / Header**

- 1 COM Port (1 header)

## Expansion Slots

**PCI-Express**

- 4 PCI-E 3.0 x16 slots
- 1 PCI-E 3.0 x1 slot
- \*\*\* 4 PCI-E 3.0 x16 slots (8/NA/16/16 or 8/8/8/16 or NA/4/8/16 (Skylake-X 28 Lanes/Cascade-X 48 Lanes) or NA/4/4/8 (Kabylake-X), 1 PCI-E 3.0 x1 slot \*\*\*

**M.2**

- M.2 Interface: 2 PCI-E 3.0 x4
- Form Factor: slot1: 22110/2280, slot2: 2280
- Key: M-Key (RAID 0, 1 support)
- M-Key for SSD and Optane

## Chassis

**Form Factor**

- Mid-Tower

**Model**

- CSE-GS5A-754K**

## Dimensions and Weight

**Height**

- 18.1" (460mm)

**Width**

- 7.9" (201mm)

**Depth**

- 19.4" (493mm)

**Package**

- 24.9" (H) x 14.2" (W) x 24.0" (D)

**Weight**

- Net Weight: 22.27 lbs (10.1 kg)
- Gross Weight: 28.22 lbs (12.8 kg)

**Available Colors**

- Black

## Front Panel

**Buttons**

- Power On/Off Button
- Reset Button

**LEDs**

- Power LED
- Hard drive activity LED

**Ports**

- 2 USB 3.0 ports
- 1 Earphone, 1 Microphone port

## Drive Bays

**Fixed**

- 6 fixed 3.5" drive bays
- 4 fixed 2.5" drive bays

**Peripheral**

- 2 standard 5.25" drive bays

## System Cooling

**Fans**

- 2x 12cm front cooling fans
- 1x 12cm rear exhaust fan

## Power Supply

750W Multi-output Power Supply for Desktop, semi-modular cable output

**AC Input**

- 100-240Vac, 50-60Hz

**+5V**

- Max: 20A & Min: 0A

**+12V**

- Max: 62A & Min: 0.1A (100Vac-240Vac)

**+3.3V**

- Max: 20A & Min: 0A

**+5V SB**

- Max: 2.5A & Min: 0A

**-12V**

- Max: 0.3A

## Certification



**Gold Certified**

## PC Health Monitoring

**Voltage**

- +12V, +3.3V, +5V, 1.05 (PCH), 1.2V (VDIMM), 3.3V standby, Chassis intrusion header, Monitors CPU voltages, VBAT

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<b>U.2</b>	<ul style="list-style-type: none"> <li>U.2 Interface: PCI-E 3.0 x4 (Skylake-X/Cascade-X)</li> </ul>
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#### System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>UEFI 128Mb</li> </ul>
<b>BIOS Features</b>	<ul style="list-style-type: none"> <li>ACPI 3.0 or later</li> <li>SMBIOS 2.7 or later</li> <li>BIOS rescue hot-key</li> <li>SPI dual/quad speed support</li> <li>Overclock support</li> </ul>

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<b>FAN</b>	<ul style="list-style-type: none"> <li>5x 4-pin fan headers (up to 5 fans), Fan speed control, Overheat LED indication, PWM fan speed control, Thermal control tachometer fan connectors</li> </ul>
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<b>Other Features</b>	<ul style="list-style-type: none"> <li>ACPI power management, ATX Power connector, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, Intel Smart Response Technology, Voltage and Frequency Overclocking, WOL</li> </ul>
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#### Operating Environment / Compliance

<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

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## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-C9X299-PGF	1	Super C9X299-PGF Motherboard
	CSE-GS5A-754K	1	3U Mid-Tower Chassis
<b>Cable 1</b>	CBL-0044L	2	SATA,INT,FLAT,57.7CM,26AWG
<b>Manual</b>	MNL-2000-QRG	1	5039AD-I Quick Reference Guide
<b>Parts</b>	MCP-260-00117-0N	1	
<b>Power Supply</b>	PWS-754-PQ	1	SSR-750FX 750W Multi-output-output PS with modular cable

### Optional Parts List

	Part Number	Qty	Description
<b>Heat Sink</b>	SNK-P0050AP4	-	Active CPU Heat Sink
<b>Heat Sink</b> (CPU TDP >= 165W)	SNK-P3017A	-	Liquid Cooling Module w/ a 3-pin Pump Connector for SYS-5038AD-I and SYS-5039AD-T
<b>Cable</b> (for 2.5" NVMe drives)	CBL-SAST-0957	-	Mini SAS HD to PCIe SFF-8639 w/ Power, 55CM, 45CM, 34 AWG,RoHs
<b>Intel VROC Standard</b>	AOC-VROCSTNMOD	-	Intel VROC Upgrade Module Standard supports RAID 0/1/10
<b>Intel VROC Premium</b>	AOC-VROCPREMOD	-	Intel VROC Premium Module Premium supports RAID 0/1/10/5
<b>Intel VROC</b>	AOC-VROCINTMOD	-	Intel VROC Upgrade Module for Intel SSD only, RAID 0/1/10/5
<b>DVD-ROM &amp; Cables</b>	DVM-LTE-DVDRW24-HBT	-	Black LITE-ON 5.25" HH 24X DVD-RW SATA drive PBF
	CBL-0082L	-	Y split, big 4-pin to two RA SATA power extension 15cm, 18AWG
	CBL-SAST-0624	-	SATA, INT, ROUND, ST-ST, 70cm, 30AWG