



# SuperWorkstations

Enterprise-Class Systems Optimized for Media & Entertainment, Engineering, and Research



**5038A-iL**

High Performance  
Versatile Features & I/O  
Access

**7047GR-TRF**

GPU Optimized  
w/ 5 GPUs

**7047AX-TRF/72RF**

Hyper-Speed  
Workstation

**7047A-T/73**

Storage Optimized w/  
8x SATA/ SAS 2.0 HDDs

**7037A-i/iL**

Dual CPU Workstation  
Mini-Tower

## Performance • Efficiency • Expandability • Reliability

- **Optimized Applications :**  
Video Editing, Digital Content Creation, CAD/CAE/CAM  
Software Development, Scientific Research and Oil & Gas Applications
- **Whisper-Quiet 21 dB Acoustics Models**
- **Redundant Platinum Level (95%+) Digital Power Supplies Available**
- **Up to 1TB DDR3 memory and 8x Hot-Swap HDDs**
- **Up to 5x GPUs supported with PCI-E 3.0 x16**
- **Supports Intel® Xeon® Processor E5-2600/2400/1600 v2 series  
up to 150W CPUs and E3-1200 v3 Product Families**
- **Server-Grade Design for 24x7 Operation**





**Hyper-Speed Workstation  
Outperforms by 20%  
via Hardware Acceleration**



**The Only 4+1 GPU  
System in the Market  
Up to 67% Performance Gain**



**Whisper-Quiet DP  
Solution with SAS**



**Compact High-End  
DP Solution**



	ULTIMATE	ULTIMATE	HIGH END	HIGH END
<b>SYSTEM</b>	<b>7047AX-TRF/72RF</b>	<b>7047GR-TRF</b>	<b>7047A-T/73</b>	<b>7037A-i</b>
<b>CPU</b>	Socket R LGA 2011 Dual Intel® Xeon® processor E5-2600 and E5-2600 v2 product families (Up to 150W TDP Hardware Acceleration Ready)	Socket R LGA 2011 Dual Intel® Xeon® E5-2600 and E5-2600 v2 product families	Socket R LGA 2011 Dual Intel® Xeon® E5-2600 and E5-2600 v2 product families	Socket R LGA 2011 Dual Intel® Xeon® E5-2600 and E5-2600 v2 product families
<b>Serverboard</b>	SUPER <sup>®</sup> X9DAX-iF SUPER <sup>®</sup> X9DAX-7F(-72RF SKU)	SUPER <sup>®</sup> X9DRG-QF	SUPER <sup>®</sup> X9DAi SUPER <sup>®</sup> X9DA7(-73 SKU)	SUPER <sup>®</sup> X9DAi
<b>Chipset</b>	Intel® C602	Intel® C602	Intel® C602	Intel® C602
<b>System Memory (max.)</b>	Supports up to 1TB DDR3 ECC LRDIMM (Hardware Acceleration Ready) and up to 512GB DDR3 ECC RDIMM	Supports up to 1TB DDR3 LRDIMM and up to 512GB DDR3 ECC RDIMM	Supports up to 1TB DDR3 LRDIMM and up to 512GB DDR3 ECC RDIMM	Supports up to 1TB DDR3 LRDIMM and up to 512GB DDR3 ECC RDIMM
<b>Hot-Swap/Tool-Less Drive Bay</b>	8 SATA Hot Swap 3.5" (SAS model: SKU 7047AX-72RF)	8 SATA Hot Swap 3.5"	8 SATA Hot Swap 3.5" (SAS model: SKU 7047A-73)	4 SATA Internal 3.5" (tool-less)
<b>I/O Expansion</b>	2 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 UIO PCI-E 3.0 x8 or 1 PCI-E 2.0 x4 (in x8)	4 PCI-E 3.0 x16 (Double Width) 2 PCI-E 3.0 x8 (in x16) (Half Length) 1 PCI-E 2.0 x4 (in x8) (Half Length)	3 PCI-E 3.0 x16 2 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8)	3 PCI-E 3.0 x16 2 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8)
<b>Audio</b>	7.1 High Definition Audio	-	7.1 High Definition Audio	7.1 High Definition Audio
<b>I/O</b>	4 USB 3.0 (2 via header, 2 Rear) 7 USB 2.0 (2 Front, 4 Rear, 1 Type A), 1 VGA LSI 2208 SAS2 Controller (-72RF SKU only) Dual IEEE 1394a Headers	10 USB 2.0 (2 Front, 4 Rear, 2 Type A, 2 via header) 1 VGA	4 USB 3.0 (2 Front, 2 Rear) 7 USB 2.0 (2 Front, 4 Rear, 1 Type A) LSI 2308 SAS2 Controller (-73 SKU only) Dual IEEE 1394a Headers	4 USB 3.0 (2 Front, 2 Rear) 7 USB 2.0 (2 Front, 4 Rear, 1 Type A) Dual IEEE 1394a Ports
<b>LAN</b>	2 GbE LAN Ports (Dual Intel® i350)	2 GbE LAN Ports (Dual Intel® i350)	2 GbE LAN Ports (Dual Intel® i350)	2 GbE LAN Ports (Dual Intel® i350)
<b>Power Supply</b>	1280W <b>Redundant Platinum Level Digital</b> Power Supplies	1620W <b>Redundant Platinum Level</b> Power Supplies	1200W <b>Platinum Level High-Efficiency</b> Power Supply	900W <b>Gold Level High-Efficiency</b> Power Supply
<b>Dimension</b>	7" x 18.2" x 26.5" (W x H x D) (178 x 462 x 673mm)	7" x 18.2" x 26.5" (W x H x D) (178 x 462 x 673mm)	7" x 17.8" x 25.5" (W x H x D) (178 x 452 x 648mm)	7.6" x 16.7" x 20.68" (W x H x D) (193 x 424 x 525mm)
<b>Key Options</b>	2.5" HDD Adaptor Tray, System Information LCD Display, Rack Mount Kits	2.5" HDD Adaptor Tray, System Information LCD Display, Rack Mount Kits	2.5" HDD Adaptor Tray, System Information LCD Display, Rack Mount Kits	2.5" HDD Cage, System Information LCD Display

## Supermicro Enterprise-Class Hyper-Speed Solutions

The Supermicro 7047AX-TRF/72RF are the industry's fastest, most powerful workstation solutions with compute speed and reliability as the primary focus, targeting mission critical applications. Built upon the X9DAX series motherboard, Supermicro SuperWorkstations support the highest performance Intel® Xeon® E5-2600 v2 product family processors (up to 150W TDP) achieving application performance improvements up to 20%. Some exclusive features of the Supermicro Enterprise-Class Hyper-Speed Solutions:

### Baseboard Management Controller with Additional Hardware Monitoring Features

- Show real-time voltage and power consumption
- System Event Log to track system status
- IPMI command support, Remote Management Tool support

### Hardware Optimization

- Board-level Hyper-Speed circuitry
- Latest VRMs for flexible tuning plus additional VRM phase for stability
- Highest quality capacitors for reliability at extreme operating temperatures
- Airflow optimized designs and custom heatsinks for optimized thermal distribution

### BIOS Features

- Auto-recovery failsafe options
- Adjust frequency, voltage and memory latency in BIOS
- BIOS remote programming, backup BIOS chip select

**World Record  
Benchmark Performance**



**Compact DP Solution**



**New!**  
*High Performance, Versatile Features & I/O Access*



**Most Cost-Effective Maximus System**



**Whisper-Quiet Entry Level Cost-Effective Solution**



MAINSTREAM	MAINSTREAM	MAINSTREAM	ENTRY LEVEL
<b>7037A-iL</b>	<b>5038A-iL</b>	<b>5037A-i</b>	<b>5037A-iL</b>
Socket B2 LGA 1356 Dual Intel® Xeon® E5-2400 and E5-2400 v2 product families	Socket H3 LGA 1150 Intel® Xeon® E3-1200 V3 product family Intel® 4th Gen Core™ i7/i5/i3 Pentium and Celeron	Single Socket R LGA 2011 Intel® Xeon® E5-2600/1600 and E5-2600/1600 v2 product families; Intel® Core™ i7 Sandy Bridge/Ivy Bridge Extreme / Performance series	Single Socket H2 LGA 1155 Intel® Xeon® E3-1200 & E3-1200 v2 product family 2nd & 3rd Generation Core™ i7/i5/i3, Pentium & Celeron Series
SUPER● X9DAL-i	SUPER● X10SAE	SUPER● X9SRA	SUPER● X9SAE
Intel® C602	Intel® C226	Intel® C602	Intel® C216
Supports up to 384GB DDR3 ECC LRDIMM and up to 192GB DDR ECC RDIMM	Supports up to 32GB DDR3 1600MHz ECC / Non-ECC UDIMM	Supports up to 512GB DDR3 ECC LRDIMM, up to 256GB DDR3 ECC RDIMM or up to 64GB DDR3 ECC/non-ECC UDIMM (DDR3 up to 1866MHz)	Supports up to 32GB DDR3 ECC / Non-ECC UDIMM, DDR3 up to 1600MHz (by CPU)
4 SATA Internal 3.5" (tool-less)	4 SATA Internal 3.5" (tool-less)	4 SATA Internal 3.5" (tool-less)	4 SATA Internal 3.5" (tool-less)
1 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8) 1 PCI 32-bit	2 PCI-E 3.0 x16 Slots (x16 / NA or x8 / x8) 3 PCI-E 2.0 x1 (in x4) Slots 2 PCI-32 Slots	2 PCI-E 3.0 x16 1 PCI-E 3.0 x4 (in x8) 1 PCI-E 2.0 x4 (in x8) 1 PCI 32bit	1 PCI-E 3.0 x16 2 PCI-E 2.0 x4 (1 in x8) 2 PCI-E 2.0 x1 1 PCI 32bit
7.1 High Definition Audio	7.1 High Definition Audio	7.1 High Definition Audio	7.1 High Definition Audio
4 USB 3.0 (2 Front , 2 Rear) 10 USB 2.0 (2 front 4 via header, 4 rear)	Triple Display (1 DVI, 1 VGA, 1 HDMI, 1 Display Port) 6 USB 3.0 Ports (2 Front, 2 Rear, 2 via header) 10 USB 2.0 Ports (2 Front, 4 Rear, 4 via headers) 2 Front 1394a Ports, 2 COM Ports (via headers)	4 USB 3.0 (2 Front , 2 Rear) 14 USB 2.0 (2 Front, 8 Rear, 4 via header)	4 USB 3.0 (2 Front , 2 Rear) 8 USB 2.0 (2 Front, 4 Rear, 2 via header) 2 HDMI, 1 VGA, 2 COM Ports (1 Rear, 1 via header)
2 GbE LAN Ports (Dual Intel® 82574L)	2 GbE LAN Ports (Intel® i217V and i210AT)	2 GbE LAN Ports (Intel® 82579LM and 82574L)	2 GbE LAN Ports (Intel® 82579LM and 82574L)
500W High-Efficiency Power Supply	500W High-Efficiency Bronze Level Power Supply	900W High-Efficiency Gold Level Power Supply	500W High-Efficiency Bronze Level Power Supply
7.6" x 16.7" x 20.68" (W x H x D) (193 x 424 x 525mm)	7.6" x 16.7" x 20.68" (W x H x D) (193 x 424 x 525mm)	7.6" x 16.7" x 20.68" (W x H x D) (193 x 424 x 525mm)	7.6" x 16.7" x 20.68" (W x H x D) (193 x 424 x 525mm)
2.5" HDD Cage, System Information LCD Display	2.5" HDD Cage, System Information LCD Display	2.5" HDD Cage, System Information LCD Display	2.5" HDD Cage, System Information LCD Display

**Supermicro SuperWorkstations are NVIDIA® 2<sup>nd</sup> Generation Maximus™ Certified**

A workstation should not limit your creativity. Supermicro SuperWorkstations unleash your creative potential. With the 7047GR-TRF, you can tap into the power of NVIDIA® Maximus technology with an industry leading 5 GPUs. **That's 1x NVIDIA® Quadro® GPU for accelerating design and visualization tasks and 4x NVIDIA Tesla® K20 GPUs to handle simultaneous compute-intensive tasks such as simulation and rendering.** This specialized system also features dual Intel® Xeon® E5-2600 v2 product family processors, maximized memory (up to 1TB) and non-blocking native PCI-E 3.0 configurations along with **redundant Platinum Level** high-efficiency (94%+) power supplies for maximum uptime and availability.

The 7047A-T is targeted at high-end engineering, oil and gas, and financial applications and supports dual actively-cooled double-width GPUs, dual Intel® Xeon® E5-2600 v2 product family processors (up to 150W), up to 1TB 1866MHz memory in 16 DIMM slots, 8 hot-swappable 3.5" HDDs and built-in 7.1 HD audio. The 7037A-i, optimized for creative design and multimedia professionals, will demo video and effects programs in a smaller footprint SuperWorkstation while the Whisper-Quiet 5037A-i is a cost-effective entry system.

NVIDIA® 2nd Generation Maximus™ certified SuperWorkstations support industry-standard applications such as Adobe Premiere Pro, Autodesk 3ds Max and Maya, Assimilate, RTT Deltagen, SCRATCH, and DaVinci Resolve. Feel the freedom of real time workflow. Get your Supermicro SuperWorkstation powered with NVIDIA® Maximus™ technology today!





# SuperWorkstation Solutions

Supermicro offers a complete line of SuperWorkstation Solutions from entry level to ultimate high-end systems. All systems are built with Supermicro quality and include high-efficiency power supplies, optimized cooling subsystems, advanced motherboard designs and rich multimedia features. SuperWorkstations are ideal for Content Generation, Gaming, Entertainment, Scientific Research and General-Purpose Computing.

## Optimized Workstation Motherboards

**New!**



	Workstation	Entry Level	E5-1600/E5-2600 Support	Cost Optimized Dual Socket	Feature Rich Dual Socket
Model Name	<b>X10SAE</b>	<b>X9SAE, X9SAE-V</b>	<b>X9SRA</b>	<b>X9DAL-3/i</b>	<b>X9DAi</b>
Key Features	Cost-effective for entry-level WS with <b>1 x DP, HDMI, DVI and 2 COM ports</b>	Cost-effective for entry-level WS with <b>2 HDMI and 2 COM ports</b>	Powerful single processor with dual GPU support	Cost optimized dual socket ATX	Feature rich dual socket E-ATX
CPU/Chipset	Intel® 4th Generation Core™ i3 series Intel® 4th Generation Core™ i5 series Intel® 4th Generation Core™ i7 series Intel® Xeon® processor E3-1200 v3 series	Intel® Xeon® E3-1200 series & E3-1200 v2 series; 2nd & 3rd Generation Core i3, Pentium & Celeron series	Intel® Xeon® E5-1600/2600 v2 product family; C602 chipset	<b>Dual Intel® Xeon® E5-2400 and E5-2400 v2 product families C606/602 Chipset</b>	<b>Dual Intel® Xeon® E5-2600 v2 product family; C602 chipset</b>
Memory	Up to 32GB DDR3 ECC/non-ECC UDIMM	Up to 32GB DDR3 ECC/non-ECC UDIMM	Up to 512GB DDR3 ECC LRDIMM or 64GB DDR3 ECC/non-ECC UDIMM	Up to 384GB DDR3 ECC LRDIMM and up to 192GB DDR3 ECC RDIMM	Up to 1TB DDR3 ECC LRDIMM and up to 512GB DDR3 ECC RDIMM
I/O Expansion	2 PCI-E 3.0 x16 slots (16/NA or 8/8) 3 PCI-E 2.0 x1 2 -5V PCI 32bit	1 PCI-E 3.0 x16 (X9SAE) or 2 PCI-E 3.0 x8 (X9SAE-V) 2 PCI-E 2.0 x4 (1 in x8 slot) 2 PCI-E 2.0 x1 1 PCI 32bit	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x4 (in x8) 1 PCI-E 2.0 x4 (in x8) 1 PCI 32bit	1 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8) 1 PCI 32bit	3 PCI-E 3.0 x16 2 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8)
I/O	6x USB 3.0, 10x USB 2.0, <b>1 VGA, 1 HDMI, 2 COM ports</b> 7.1 High Definition	4x USB 3.0, 8x USB 2.0, <b>1 VGA, 2 HDMI, 2 COM ports</b> 7.1 High Definition	4x USB 3.0, 14x USB 2.0 7.1 High Definition	4x USB 3.0, 10x USB 2.0 7.1 High Definition	4x USB 3.0, 7x USB 2.0, Dual 1394 7.1 High Definition
LAN	Dual GbE LAN	Dual GbE LAN	Dual GbE LAN	Dual GbE LAN	Dual GbE LAN



	NVIDIA SLI Enabled	Onboard SAS2 (6 Gbps)	Up to 5 GPUs	Enterprise-Class Hardware Acceleration
Model Name	<b>X9DAE</b>	<b>X9DA7</b>	<b>X9DRG-QF</b>	<b>X9DAX-7F/IF/7TF/ITF</b>
Key Features	Supports 2-way GeForce SLI for highest image quality with SLI Antialiasing	Fast, reliable storage with onboard SAS2	Most powerful GPU WS board available with 5-GPU support	Enterprise-class Hardware Acceleration for fastest CPU performance
CPU/Chipset	<b>Dual Intel® Xeon® E5-2600 v2 product family C602 chipset</b>	<b>Dual Intel® Xeon® E5-2600 v2 product family C602 chipset</b>	<b>Dual Intel® Xeon® E5-2600 v2 product family C602 chipset</b>	<b>Dual Intel® Xeon® E5-2600 v2 product family Hardware Acceleration Support C602 chipset</b>
Memory	Up to 1TB DDR3 ECC LRDIMM and up to 512GB DDR3 ECC RDIMM	Up to 1TB DDR3 ECC LRDIMM and up to 512GB DDR3 ECC RDIMM	Up to 1TB DDR3 ECC LRDIMM and up to 512GB DDR3 ECC RDIMM	Up to 1TB DDR3 ECC RDIMM and up to 512GB DDR3 ECC RDIMM <b>Hardware Acceleration Support</b>
I/O Expansion	3 PCI-E 3.0 x16 2 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8)	3 PCI-E 3.0 x16 2 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8)	<b>4 PCI-E 3.0 x16 (Double Width)</b> 2 PCI-E 3.0 x8 (1 in x16)* 1 PCI-E 2.0 x4 (in x8)* * Denotes Half Length	2 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 UIO PCI-E 3.0 x8 or 1 PCI-E 2.0 x4 (in x8)
I/O	4x USB 3.0, 7x USB 2.0, Dual 1394 <b>2-Way GeForce SLI</b> 7.1 High Definition	4x USB 3.0, 7x USB 2.0, Dual 1394 <b>LSI 2308 SAS2 8-ports</b> 7.1 High Definition	10x USB 2.0, 1x VGA, IPMI 2.0	4x USB 3.0, 7x USB 2.0, Dual 1394 1x VGA, IPMI 2.0 <b>LSI 2208 SAS2 8-ports (** SKUs)</b> 7.1 High Definition
LAN	Dual GbE LAN	Dual GbE LAN	Dual GbE LAN	Dual GbE LAN / Dual 10GbE (** SKUs)

## Optimized Chassis



SC731 Series

SC732 Series

SC733 Series

SC743 Series

SC747 Series

[www.supermicro.com/SuperWorkstations](http://www.supermicro.com/SuperWorkstations)

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