

MicroCloud
12x UP Hot-Pluggable Nodes
1620W Platinum Level Power



4-Way SAS On Board



4-Way



MODEL	A+ Server 3012MA-H12TRF	A+ Server 4042G-72RF4	A+ Server 4042G-6RF A+ Server 4042G-TRF
Processor Support	8/4 Core AMD Opteron™ 3000 series processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Key Applications	Cloud Computing, Web server, Datacenter applications	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, High performance computer cluster (HPCC)	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing
Outstanding Features	<ul style="list-style-type: none"> 12 UP hot-pluggable nodes in 3U 2x 3.5" or 4x 2.5" (optional) SATA drive bays per node RAID 0, 1, 10 (optional with 4x 2.5" drive bays installed) Up to 32GB DDR3 UDIMMs per node Micro LP PCI-E 2.0 x8 IPMI 2.0 + KVM w/dedicated LAN 1620W redundant Platinum Level (94%+) high-efficiency power supplies Independent power control 	<ul style="list-style-type: none"> Enterprise level 4-way system LSI 2208 SAS2 HW RAID controller 5 hot-swap 3.5" SATA/SAS drive bays RAID: 0, 1, 5, 6, 10, (50, 60 optional part required) 1TB DDR3 1600/1333/1066 SDRAM 4 Intel I350 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Platinum Level (94%+) Digital high-efficiency redundant power supplies 	<ul style="list-style-type: none"> Enterprise level 4-way system LSI 2008 SAS2 RAID controller (4042G-6RF only) 5 hot-swap 3.5" SATA/SAS drive bays (SAS for 4042G-6RF only) RAID: 0, 1, 10; (5 optional for 4042G-6RF only) RAID: 0, 1, 10 (4042G-TRF only) 1TB DDR3 1600/1333/1066 SDRAM 2 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Gold Level high-efficiency redundant power supplies
Serverboard/Chipset	H8SME-F AMD SR5650+SP5100	H8QG7-LN4F HyperTransport™ technology AMD SR5690+SR5670 *SP5100 + LSI2208	H8QG6-F/H8QG1-F HyperTransport™ technology AMD SR5690+SR5670 & SP5100 *SP5100 + LSI2208 (6RF series)
System Memory (Max.)	Twelve sets of 4 DIMM Sockets (Per Node) up to 32GB DDR3 ECC VLP-UDIMM 1600/1333/1066	1TB ECC Registered DDR3 1600/1333/1066 in 32 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 in 32 DIMMs
Expansion Slots	Twelve sets of Micro LP PCI-E 2.0 x8 slot	2 PCI-E 2.0 x16 2 PCI-E 2.0 x8	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 1 Universal I/O or PCI-E 2.0 x8
Onboard SAS/SCSI/SATA/IDE/RAID	AMD SP5100 for 4 SATA 2.0	LSI® 2208 SAS Controller for 5 SAS2 / SATA 2.0 ; HW RAID 0, 1, 5, 6, 10, 50, 60 support	LSI® 2008 SAS2 Controller (4042G-6RF only) AMD SP5100 for 6 SATA (4042G-TRF only)
Connectivity/VGA/Audio	Dedicated management LAN port; 2 Gigabit LAN Port (W/ Micro LP card) Matrox G200eW graphics controller	Quad Intel I350 Gigabit Ethernet Controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller
Management	Twelve sets of IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	Twelve sets of 2x 3.5" or 4x 2.5" (optional) SATA drive bays (internal)	Default 1 mobile rack (5x 3.5" drives) hot-swap drive bays Supports up to 2 mobile racks (10 drives) hot-swap drive bays	Default 1 mobile rack (5 drives) hot-swap drive bays Supports up to 2 mobile racks (10 drives) hot-swap drive bays
Peripheral Bays	N/A	3x 5.25" drive bays	3x 5.25" drive bays
Power Supply	1620W redundant Platinum Level (94%+) high-efficiency power supplies	1400W Platinum Level (94%+) Digital high-efficiency redundant power supplies	1400W Gold Level high-efficiency redundant power supplies
Cooling System	4x 9cm heavy duty fans with optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans speed control
Form Factor	3U Rackmount 749.3 x 132.5 x 444.5mm (29.5" x 5.21" x 17.5")	4U Rackmount (optional) / Tower 452 x 746 x 178mm (17.8" x 29.4" x 7")	4U Rackmount (optional) / Tower 452 x 746 x 178mm (17.8" x 29.4" x 7")

* Please check 'Tested Memory List' on Supermicro website for compatibility

G34 DP 4U/Tower Server

GPU Optimized



MODEL	A+ Server 4022G-6F	A+ Server 4021GA-62R+F	A+ Workstation 4021A-T2 A+ Workstation 4021A-T2B
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Key Applications	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	Ultra-high performance workstation, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	High-end workstation, business critical applications, front-end server, database applications, video server
Outstanding Features	<ul style="list-style-type: none"> Mainstream system in 4U/Tower form factor 100% cooling redundancy 8 hot-swap SAS or SATA Drive Bays RAID: 0, 1, 10 512GB DDR3 1600/1333/1066 SDRAM in 16 DIMMs 6 PCI-E 2.0 expansion slots IPMI 2.0 management 920W Platinum Level (94%+) high-efficiency power supply with PMBus 	<ul style="list-style-type: none"> GPU optimized 4U/tower solution Up to 4 TeraFLOPS of performance per system Up to 4 GPUs installed per system Supports up to 7 expansion cards Support PCI-E 2.0 IPMI 2.0 + KVM w/ dedicated LAN 1400W Gold Level high-efficiency redundant power supplies with PMBus 4 sets of 6-pin 12V for GPU or graphics cards 	<ul style="list-style-type: none"> SuperQuiet mode Up to 8 SATA drive bays 2 PCI-E x16 64GB DDR2 800/667/533 SDRAM 2 Gigabit Ethernet ports SIMLP(+)(IPMI 2.0) management Low-noise 645W with fan speed control
Serverboard/Chipset	H8DG6-F / HyperTransport™ technology Dual AMD SR5690+SP5100	H8DA6+-F / HyperTransport™ technology Dual AMD SR5690+SP5100	H8DAE-2 / HyperTransport™ technology NVIDIA MCP55-Pro + IO55 NEC 720400 PCI-X Bridge
System Memory (Max.)	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMM sockets	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs
Expansion Slots	3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (using x8 slots)	4 PCI-E 2.0 x16 2 PCI-E 2.0 x4 (using x8 slots) 1 32-bit PCI	2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (using x8 slot) 1 64-bit PCI-X 133 MHz 1 64-bit PCI-X 100 MHz SIMLP IPMI slot
Onboard SAS/SCSI/SATA/IDE/RAID	LSI* 2008 SAS2 Controller	LSI* 2008 SAS2 Controller AMD SP5100 for 6 SATA2	NVIDIA MCP55-Pro for 6 SATA
Connectivity/VGA/Audio	Dual LAN with Intel® 82576 Gigabit Ethernet controllers Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet controller ALC883 audio CODEC high definition 7.1 channel sound
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMLP(+)(IPMI 2.0), SuperDoctor III, Watch Dog
Drive Bays	8 hot-swap 3.5" SAS or SATA drive bays	8 hot-swap 3.5" SAS2/SATA drive bays	6 hot-swap 3.5" SATA drive bays and 2 spare SATA drive bays 2x 5.25" drive bays
Peripheral Bays	2x 5.25" drive bays optional floppy drive	3x 5.25" drive bays optional floppy drive	2x 5.25" drive bays optional floppy drive
Power Supply	920W Platinum Level (94%+) high-efficiency power supply with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus 4 sets of 6-pin 12V for GPU or graphics cards	645W with low-noise fan speed control
Cooling System	3x 8cm hot-swap cooling fans & 2x 8cm exhaust fans with air shroud & optimal fan speed control	4x 9.2cm hot-swap cooling fans with air shroud 2x 8cm exhaust fans optimal fan speed control	4x 8cm 4-pin Pulse Width Modulated (PWM) fans with air shroud 1x 8cm exhaust fan
Form Factor	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")

** Fully populated DDR2 800/667 will be downgraded to DDR2 533
** Please check 'Tested Memory List' on Supermicro website for compatibility