

SUN

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FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
X64 SERVERS							
<p>DDR3 Note #1: For Sun systems with 12 DIMM slots: Systems feature 1 or 2 processors each controlling 3 memory "channels" of 2 DIMM slots each. For best performance balance the total memory capacity equally between both CPUs. Overall memory speed is dependent upon the processor model and memory configuration: 1 DIMM per channel enables memory speed of 1333MHz; 2 DIMMs per channel reduces speed to 1066MHz; maximum speed with quad-rank DIMMs is 1066MHz with 1 DIMM per channel and 800MHz with 2 DIMMs per channel.</p> <p>DDR3 Note #2: For Sun systems with 18 DIMM slots: Systems feature 1 or 2 processors each controlling 3 memory "channels" of 3 DIMM slots each. For best performance balance the total memory capacity equally between both CPUs. Overall memory speed is dependent upon the processor model and memory configuration. For ILOM software version release 2 or later: 1 or 2 single- or dual-rank 2GB or 4GB DIMMs per channel enables memory speed of 1333MHz ; 2 8GB DIMMs per channel enables speed of 1066MHz; 3 DIMMs per channel reduces speed to 800MHz for single or dual-rank DIMMs; maximum speed with quad-rank DIMMs is 1066MHz with 1 DIMM per channel & 800MHz with 2 DIMMs per channel; 3 quad-rank DIMMs are not supported.</p>							
	Sun Fire X2100 M2	8GB	4	4GB	X5279A-Z	DRSX2100M2/4GB	2
	Sun Fire X2100	8GB	4	4GB	X4211A-Z	DRSU20E/4GB	2 ¹⁾
<p>¹⁾ Except for a single DIMM in the first slot (model 146), DIMMs must be installed in matched pairs. Three DIMMs is not a valid configuration. Dataram's DRSU20E/4GB is PC2700 333MHz; Sun's X4211A-Z is PC2100 266MHz.</p>							
	Sun Fire X2200 M2	128GB	16 ¹⁾	4GB	X5288A-C	DRSX2200M2S/4GB	2
				8GB	X4063A-Z	DRSX2200M2/8GB	2
				16GB	Not Offered by Sun	DRSX2200M2/16GB	2
<p>¹⁾ 8 DIMM slots per processor. When more than 4 DIMMs are configured per CPU, the memory is clocked down to 533MHz.</p>							
	Sun Fire X2250	64GB	8	8GB	X6382A	DRSX4450/8GB	2
				16GB	Not Offered by Sun - 4R	DRSX4450Q/16GB	2
				16GB	Not Offered by Sun - 2R	DRSX4450/16GB	2
	Sun Fire X2270	96GB	12	2GB	X8335A	DRSX2270-10/2GB	1
				2GB	X8337A	DRSX2270-13/2GB	1
				4GB	X8338A	DRSX2270-13/4GB	1
				8GB	X8336A	DRSX2270-10/8GB	1
				8GB	Not Offered by Sun	DRSX2270-13/8GB	1
<p>See DDR3 Note #1 at top of Sun x64 Servers section</p>							
N E W	Sun Fire X2270 M2	96GB	12	4GB	X8360A	DRSX2270-13/4GB	1
				8GB	X8359A	DRSX2270-10/8GB	1
				8GB	Not Offered by Sun	DRSX2270-13/8GB	1
<p>See DDR3 Note #1 at top of Sun x64 Servers section</p>							
	Sun Fire X4100	32GB ¹⁾	8	4GB	X8023A, X8023A-Z	DRSX4100/4GB	2
				8GB	Not Offered by Sun	DRSX4102/8GB	2
<p>¹⁾ 16GB maximum for single processor models. 4 DIMM slots per processor.</p>							
	Sun Fire X4100 M2	64GB ¹⁾	8	4GB	X4226A-C	DRSX4200M2S/4GB	2
				8GB	X4227A-Z, X4233A	DRSX4200M2/8GB	2
				16GB	Not Offered by Sun	DRSX4200M2/16GB	2
<p>¹⁾ 32GB maximum for single processor models. 4 DIMM slots per processor.</p>							
	Sun Fire X4140	128GB ¹⁾	16	8GB	X6322A	DRSX4440/8GB	2
				16GB	X4287A	DRSX4440/16GB	2
<p>¹⁾ 64GB maximum for single processor models. 8 DIMM slots per processor.</p>							
	Sun Fire X4150	64GB	16	8GB	X6382A	DRSX4450/8GB	2
	Sun Fire X4170, X4270, X4275	192GB	18	2GB ¹⁾	Not Offered by Sun	DRSX1066R2/2GB	1
				2GB ¹⁾	Not Offered by Sun	DRSX1333R2/2GB	1
				2GB	X5866A	DRSX1066R/2GB	1
				2GB	X5869A	DRSX1333R/2GB	1
				4GB	X5867A	DRSX1066R/4GB	1
				4GB	X5870A	DRSX1333R/4GB	1
				8GB	X5868A	DRSX1066R/8GB	1
				8GB	Not Offered by Sun	DRSX1333R/8GB	1
				16GB	Not Offered by Sun	DRSX1066RQ/16GB	1
<p>¹⁾ Cost-effective, dual-rank offerings based on x8 DRAMs; Enhanced ECC (Chipkill) supported only in Lock-Step mode. See DDR3 Note #2 at top of Sun x64 Servers section</p>							
N E W	Sun Fire X4170 M2, X4270 M2	144GB	18	4GB	X4850A, X5870A	DRSX1333R/4GB	1
				8GB	X4851A, X5868A	DRSX1066R/8GB	1
<p>72GB maximum for single processor models. 9 DIMM slots per processor. See DDR3 Note #2 at top of Sun x64 Servers section</p>							
	Sun Fire X4200	32GB ¹⁾	8	4GB	X8023A, X8023A-Z	DRSX4100/4GB	2
				8GB	Not Offered by Sun	DRSX4102/8GB	2
<p>¹⁾ 16GB maximum for single processor models. 4 DIMM slots per processor.</p>							
	Sun Fire X4200 M2	64GB ¹⁾	8	4GB	X4226A-C	DRSX4200M2S/4GB	2
				8GB	X4227A-Z, X4233A	DRSX4200M2/8GB	2
				16GB	Not Offered by Sun	DRSX4200M2/16GB	2
<p>¹⁾ 32GB maximum for single processor models. 4 DIMM slots per processor.</p>							
	Sun Fire X4240	128GB ¹⁾	16	8GB	X6322A	DRSX4440/8GB	2
				16GB	X4287A	DRSX4440/16GB	2
<p>¹⁾ 64GB maximum for single processor models. 8 DIMM slots per processor.</p>							
	Sun Fire X4250	64GB	16	8GB	X6382A	DRSX4450/8GB	2

DATARAM MEMORY PRODUCTS FOR SUN SYSTEMS

FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
Sun Fire X4440		256GB ¹⁾	32	8GB	X6322A	DRSX4440/8GB	2
				16GB	X4287A	DRSX4440/16GB	2
¹⁾ 64GB maximum for single processor models. 8 DIMM slots per processor.							
Sun Fire X4450		256GB	32	8GB	X6382A	DRSX4450/8GB	2
Sun Fire X4540		64GB	16 ¹⁾	16GB	X8356A	DRSX4600M2/16GB	2
¹⁾ 8 DIMM slots per processor.							
Sun Fire X4600 M2	4-DIMM CPU Card	128GB	32 ¹⁾	4GB	X8123A-C-Z	DRSX4600M2S/4GB	2
Sun Fire X4600 M2	8-DIMM CPU Card	512GB	64 ²⁾	8GB	X8124A-Z, X8098A	DRSX4600M2/8GB	2
				4GB	X8123A-C-Z	DRSX4600M2S/4GB	2
				8GB	X8124A-Z, X8098A	DRSX4600M2/8GB	2
				16GB	X8356A	DRSX4600M2/16GB	2
¹⁾ The system supports 1 to 8 CPU/Memory Cards each having 4 DIMM slots.							
²⁾ The system supports 1 to 8 CPU/Memory Cards each having 8 DIMM slots. DIMMs must be installed in matched sets of four.							
Sun Fire X4640		512GB	64 ¹⁾	8GB	X8124A-Z, X8098A	DRSX4600M2/8GB	2
				16GB	X8356A	DRSX4600M2/16GB	2
¹⁾ The system supports 1 to 8 CPU/Memory Cards each having 8 DIMM slots.							
ENTRY LEVEL SPARC SERVERS							
Sun Fire V125		8GB	4	2GB	X7704A-4	DRS243/2GB	2
Sun Fire V210		16GB ¹⁾	8	4GB	X7711A-4	DRS243/4GB	2
				2GB ²⁾	X7704A-4, X7704A, X7604A...	DRS240/2048	2
Sun Fire V215		16GB ¹⁾	8	4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
				2GB	X7704A-4	DRS243/2GB	2
¹⁾ 8GB with single processor models. 4 DIMM slots per processor.							
²⁾ The use of the 2GB or 4GB upgrades requires Sun Fan Upgrade Kit (X7418A) in older systems. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							
Sun Fire V215		16GB	8 ¹⁾	2GB	X8704A	DRSU45/2GB	2
				4GB	X8711A	DRSU45/4GB	2
¹⁾ 4 DIMM slots per processor							
Sun Fire V240		16GB ¹⁾	8	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
Sun Fire V245		16GB ¹⁾	8	4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
				2GB	X7704A-4	DRS243/2GB	2
¹⁾ 8GB with single processor models. 4 DIMM slots per processor. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							
Sun Fire V245		16GB	8 ¹⁾	2GB	X8704A	DRSU45/2GB	2
				4GB	X8711A	DRSU45/4GB	2
¹⁾ 4 DIMM slots per processor							
Sun Fire V250	1.06GHz, 1.28GHz	16GB	8 ¹⁾	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
Sun Fire V250		16GB	8 ¹⁾	4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
				4GB	Not Offered by Sun	DRS243/4GB	2
¹⁾ Four dedicated DIMM sockets per processor, arranged as two banks of two. In a single processor configuration all four DIMMs should be identical to allow for interleaving between banks and best performance. In a dual processor configuration all eight DIMMs should be identical. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							
Sun Fire 280R		16GB	8	2GB	X7051A, X7062A	DRS280/2048	4
Sun Fire V440	1.06GHz, 1.28GHz	32GB	16 ¹⁾	4GB	X7063A	DRSB2000A/4096	4
				8GB	Not Offered by Sun	DRS280B/8192	4
Sun Fire V440		32GB	16 ¹⁾	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
¹⁾ Memory is installed on one to four CPU/Memory Cards, each containing one processor and four DIMM slots. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							
Sun Fire V445		32GB	16 ¹⁾	2GB	X8704A	DRSU45/2GB	2
				4GB	X8711A	DRSU45/4GB	2
¹⁾ 4 DIMM slots per processor							
COOLTHREADS SERVERS							
Sun Fire T1000		32GB	8	4GB	SEKX2C1Z, X7802A	DRST2000/4GB	2 ¹⁾
Sun Fire T1000		32GB	8	8GB	SEKX2D1Z, X7803A	DRST2000/8GB	2 ¹⁾
				4GB	SEKX2C1Z, X7802A	DRST2000/4GB	2 ¹⁾
¹⁾ Memory must be installed in groups of 4 matched DIMMs. Valid configurations are 4 or 8 matched DIMMs.							
Sun Fire T2000		64GB	16	8GB	SEKX2D1Z, X7803A	DRST2000/8GB	2 ¹⁾
¹⁾ Memory must be installed in groups of 8 matched DIMMs. Valid configurations are 8 or 16 matched DIMMs.							
MIDRANGE SERVERS							
Sun Fire V480		64GB ¹⁾	2 ²⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
Sun Fire V480		64GB ¹⁾	2 ²⁾	4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
				2GB	X7051A, X7051A-Z	DRS280/2048	4
¹⁾ Requires OBP 4.13.2 and POST 4.13.0 versions or greater for configurations exceeding 24GB per CPU/Memory Card.							
²⁾ One or two CPU/Memory Cards can be installed, each supporting two CPUs and 16 DIMM slots (4 banks of 4).							
Sun Fire V490		64GB	2 ¹⁾	4GB	X7056A, X7056A-Z	DRS280/4096	4
Sun Fire V490		64GB	2 ¹⁾	8GB	Not Offered	DRS880/8192	4
				2GB	X7051A, X7051A-Z	DRS280/2048	4
¹⁾ One or two CPU/Memory Cards can be installed, each supporting two CPUs and 16 DIMM slots (4 banks of 4).							

DATARAM MEMORY PRODUCTS FOR SUN SYSTEMS

FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
Sun Fire V880z		96GB ¹⁾	3 ²⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
				4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
¹⁾ Requires OBP 4.13.2 and POST 4.13.0 versions or greater for configurations exceeding 24GB per CPU/Memory Card.							
²⁾ One to three CPU/Memory Cards can be installed, each supporting two CPUs and 16 DIMM slots (4 banks of 4).							
Sun Fire V880		128GB ¹⁾	4 ²⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
				4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
¹⁾ Requires OBP 4.13.2 and POST 4.13.0 versions or greater for configurations exceeding 24GB per CPU/Memory Card.							
²⁾ One to four CPU/Memory Cards can be installed, each supporting two CPUs and 16 DIMM slots (4 banks of 4).							
Sun Fire V890		128GB	4 ¹⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
				4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
¹⁾ One to four CPU/Memory Cards can be installed, each supporting two CPUs and 16 DIMM slots (4 banks of 4).							
Sun Fire V1280	900MHz, 1.2GHz	96GB	3 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.							
Sun Fire E2900		192GB	3 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU.							
Sun Fire 3800	900MHz, 1.05GHz, 1.2GHz	128GB	2 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
¹⁾ Up to two CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.							
Sun Fire E4900		192GB	3 ¹⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
				4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU.							
Sun Fire 4800, 4810	900MHz, 1.05GHz, 1.2GHz	192GB	3 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.							
Sun Fire E6900		384GB	6 ¹⁾	2GB	X7051A, X7051A-Z	DRS280/2048	4
				4GB	X7056A, X7056A-Z	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
¹⁾ Up to six CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU.							
Sun Fire 6800	900MHz, 1.05GHz, 1.2GHz	384GB	6 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	Not Offered	DRS880/8192	4
¹⁾ Up to six CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.							
SPARC ENTERPRISE SERVERS							
SPARC Enterprise T1000		32GB	8	4GB	SEKX2C1Z, X7802A	DRST2000/4GB	2 ¹⁾
				8GB	SEKX2D1Z, X7803A	DRST2000/8GB	2 ¹⁾
¹⁾ Memory must be installed in groups of 4 matched DIMMs. Valid configurations are 4 or 8 matched DIMMs.							
SPARC Enterprise T2000		64GB	16	4GB	SEKX2C1Z, X7802A	DRST2000/4GB	2 ¹⁾
				8GB	SEKX2D1Z, X7803A	DRST2000/8GB	2 ¹⁾
¹⁾ Memory must be installed in groups of 8 matched DIMMs. Valid configurations are 8 or 16 matched DIMMs.							
SPARC Enterprise T5120, T5220		128GB	16	8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SESX2D1Z, X4290AF	DRST5440/16GB	2
Valid configurations are 4, 8 or 16 DIMMs of the same capacity only.							
SPARC Enterprise T5140		128GB	16	8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SESX2D1Z, X4290AF	DRST5440/16GB	2
With System Firmware 7.1.6.d or higher, either 1.8V FB-DIMMs (SESX2x1Z, DRST5220, DRST5440) or low voltage (LV) 1.5V FB-DIMMs (SESX2x3Z, DRTS5440LV) are supported. All FB-DIMMs must be the same voltage. If you upgrade to LV 1.5V FB-DIMMs, you must replace all FB-DIMMs.							
Valid configurations are 8, 12 or 16 DIMMs of the same capacity only.							
SPARC Enterprise T5240		256GB ¹⁾	32 ¹⁾	8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SESX2D1Z, X4290AF	DRST5440/16GB	2
With System Firmware 7.1.6.d or higher, either 1.8V FB-DIMMs (SESX2x1Z, DRST5220, DRST5440) or low voltage (LV) 1.5V FB-DIMMs (SESX2x3Z, DRTS5440LV) are supported. All FB-DIMMs must be the same voltage. If you upgrade to LV 1.5V FB-DIMMs, you must replace all FB-DIMMs.							
¹⁾ 256GB with optional Sun Mezzanine Kit. 16 slots on system board; 16 slots on Mezzanine.							
Valid configurations are 8, 16 or 32 DIMMs of the same capacity only. All 16 slots on Mezzanine must be populated.							

DATARAM MEMORY PRODUCTS FOR SUN SYSTEMS

FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
SPARC Enterprise T5440		512GB	64 ¹⁾	4GB	SEX2B2Z, X4203AF	DRST5440/4GB	2
				8GB	SEX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SEX2D1Z, X4290AF	DRST5440/16GB	2
<p>1, 2 or 4 CPU Modules (CMP's) can be installed, each having 4 FB-DIMM slots. 1, 2 or 4 Memory Modules may be installed, each having 12 FB-DIMM slots. Each CMP is paired with a Mem. Mod. All FB-DIMMs in the system must be the same capacity. Each CMP/Mem. Mod. pair supports 3 possible configurations: 4 FB-DIMMs (on the CMP), 8 FB-DIMMs (4 on the CMP, 4 on the Mem. Mod.), or 16 FB-DIMMs (4 on the CMP, 12 on the Mem. Mod.).</p>							
SPARC Enterprise M3000		64GB	8 ¹⁾	8GB	SEWX2B2Z	DRSM3000S/8GB	4
				16GB	SEWX2C1Z, SEWX2C2Z-N	DRSM3000/16GB	4
				32GB	SEWX2D1Z, SEWX2D2Z-N	DRSM3000/32GB	4
<p>¹⁾ The 8 DIMM slots are arranged in two groups--"A" and "B". The DIMMs in group "A" must be equal or greater than those in group "B".</p>							
SPARC Enterprise M4000		256GB	4 ¹⁾	16GB	SELX2B2Z	DRSM5000S/16GB	1 ¹⁾
				32GB	SELX2C1Z	DRSM5000/32GB	1 ¹⁾
				64GB	SELX2D1Z	DRSM5000/64GB	1 ¹⁾
				16GB	Sun does not offer	DRSM5000DS/16GB	8 ²⁾
				32GB	Sun does not offer	DRSM5000D/32GB	8 ²⁾
64GB	Sun does not offer	DRSM5000D/64GB	8 ²⁾				
<p>¹⁾ The M4000 supports 2 to 4 Memory Cards, each containing 8 DIMM sockets. Sun's SELX2x1Z and Dataram's DRSM5000/xxGB are Memory Cards with 8 DIMMs installed.</p> <p>²⁾ Dataram's DRSM5000D/xxGB contain 8 DIMMs only & are meant to replace DIMMs of smaller capacity on existing Memory Cards. Configuration rules should be considered prior to changing system memory. Consult your system's service manual or Dataram's Sales/Customer Support.</p>							
SPARC Enterprise M5000		512GB	8 ¹⁾	16GB	SELX2B2Z	DRSM5000S/16GB	1 ¹⁾
				32GB	SELX2C1Z	DRSM5000/32GB	1 ¹⁾
				64GB	SELX2D1Z	DRSM5000/64GB	1 ¹⁾
				16GB	Sun does not offer	DRSM5000DS/16GB	8 ²⁾
				32GB	Sun does not offer	DRSM5000D/32GB	8 ²⁾
64GB	Sun does not offer	DRSM5000D/64GB	8 ²⁾				
<p>¹⁾ The M5000 supports 2 to 8 Memory Cards, each containing 8 DIMM sockets. Sun's SELX2x1Z and Dataram's DRSM5000/xxGB are Memory Cards with 8 DIMMs installed.</p> <p>²⁾ Dataram's DRSM5000D/xxGB contain 8 DIMMs only & are meant to replace DIMMs of smaller capacity on existing Memory Cards. Configuration rules should be considered prior to changing system memory. Consult your system's service manual or Dataram's Sales/Customer Support.</p>							
SPARC Enterprise M8000		1TB	128 ¹⁾	64GB	SEM2C1Z	DRSM8000/64GB	16 ¹⁾
				128GB	SEM2D1Z	DRSM8000/128GB	16 ¹⁾
<p>¹⁾ The M8000 supports up to 4 CMUs, each containing 32 DIMM sockets (8 per CPU).</p>							
SPARC Enterprise M9000-32		2TB	256 ¹⁾	64GB	SEM2C1Z	DRSM8000/64GB	16 ¹⁾
				128GB	SEM2D1Z	DRSM8000/128GB	16 ¹⁾
<p>¹⁾ The M9000 with 32 processors supports up to 8 CMUs, each containing 32 DIMM sockets (8 per CPU).</p>							
SPARC Enterprise M9000-64		4TB	512 ¹⁾	64GB	SEM2C1Z	DRSM8000/64GB	16 ¹⁾
				128GB	SEM2D1Z	DRSM8000/128GB	16 ¹⁾
<p>¹⁾ The M9000 with 64 processors supports up to 16 CMUs, each containing 32 DIMM sockets (8 per CPU).</p>							
CARRIER-GRADE SERVERS							
Netra 210		16GB ¹⁾	8	2GB ²⁾	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB ²⁾	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
<p>¹⁾ 8GB with single processor models. 4 DIMM slots per processor.</p> <p>²⁾ The use of the 2GB or 4GB upgrades requires Sun Fan Upgrade Kit (X7418A) in older systems. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).</p>							
Netra 240		16GB	8	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB	Not Offered by Sun	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	Not Offered by Sun	DRS243/4GB	2
<p>Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).</p>							
Netra 20	1750, 2750, 1900, 2900	8GB	8	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
Netra 440		32GB	16 ¹⁾	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
<p>¹⁾ Memory is installed on one to four CPU/Memory Cards, each containing one processor and four DIMM slots. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).</p>							
Netra 1280		96GB	3 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
<p>¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.</p>							
Netra 1290		192GB	3 ¹⁾	2GB	X7051A	DRS280/2048	4
				4GB	X7056A	DRS280/4096	4
				8GB	X7058A-Z	DRS880/8192	4
<p>¹⁾ Up to three CPU/Memory cards can be installed. Each card supports two or four CPUs and 32 DIMM slots (8 banks of 4). Each CPU controls two banks. DIMMs can only be installed where there is a corresponding CPU. Fill both banks per CPU before moving to the next.</p>							

DATARAM MEMORY PRODUCTS FOR SUN SYSTEMS

FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
Netra X4200 M2		32GB ¹⁾	8	4GB	X4226A-C	DRSX4200M2S/4GB	2
				8GB	X4227A-Z, X4233A	DRSX4200M2/8GB	2
¹⁾ 16GB maximum for single processor models. 4 DIMM slots per processor.							
Netra X4250		128GB ¹⁾	16	8GB	X6382A	DRSX4450/8GB	2
¹⁾ 128GB maximum when 8GB FB-DIMMs are available.							
NEW	Netra X4270	144GB	18	4GB	X4850A, X5870A	DRSX1333R/4GB	1
				8GB	X4851A, X5868A	DRSX1066R/8GB	1
See DDR3 Note #2 at top of Sun x64 Servers section							
Netra X4450		256GB ¹⁾	32	8GB	X6382A	DRSX4450/8GB	2
¹⁾ 256GB maximum when 8GB FB-DIMMs are available.							
Netra T2000		64GB	16	4GB	SEKX2C1Z, X7802A	DRST2000/4GB	2 ¹⁾
				8GB	SEKX2D1Z, X7803A	DRST2000/8GB	2 ¹⁾
¹⁾ Memory must be installed in groups of 8 matched DIMMs. Valid configurations are 8 or 16 matched DIMMs.							
Netra T5220		128GB	16	8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SESX2D1Z, X4290AF	DRST5440/16GB	2
Valid configurations are 4, 8 or 16 DIMMs of the same capacity only.							
Netra T5440		256GB ¹⁾	32 ¹⁾	8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
Either 1.8V FB-DIMMs (SESX2x1Z, DRST52200) or low voltage (LV) 1.5V FB-DIMMs (SESX2x3Z, DRST5440LV) are supported.							
Memory Riser 501-7678 supports only 1.8V FB-DIMMs; Memory Riser 511-1231 supports either 1.5V or 1.8V FB-DIMMs.							
All FB-DIMMs must be the same voltage. If you upgrade to LV 1.5V FB-DIMMs, you must replace all FB-DIMMs.							
¹⁾ 256GB with optional Sun Mezzanine Kit. 16 slots on system board; 16 slots on Mezzanine.							
Valid configurations are 8, 16 or 32 DIMMs of the same capacity only. All 16 slots on Mezzanine must be populated.							
BLADE SERVERS							
DDR3 Note #1: For Sun systems with 12 DIMM slots: Systems feature 1 or 2 processors each controlling 3 memory "channels" of 2 DIMM slots each. For best performance balance the total memory capacity equally between both CPUs. Overall memory speed is dependent upon the processor model and memory configuration: 1 DIMM per channel enables memory speed of 1333MHz; 2 DIMMs per channel reduces speed to 1066MHz; maximum speed with quad-rank DIMMs is 1066MHz with 1 DIMM per channel and 800MHz with 2 DIMMs per channel.							
DDR3 Note #2: For Sun systems with 18 DIMM slots: Systems feature 1 or 2 processors each controlling 3 memory "channels" of 3 DIMM slots each. For best performance balance the total memory capacity equally between both CPUs. Overall memory speed is dependent upon the processor model and memory configuration: 1 DIMM per channel enables memory speed of 1333MHz; 2 DIMMs per channel reduces speed to 1066MHz; 3 DIMMs per channel reduces speed to 800MHz for single or dual-rank DIMMs; maximum speed with quad-rank DIMMs is 1066MHz with 1 DIMM per channel and 800MHz with 2 DIMMs per channel; 3 quad-rank DIMMs are not supported.							
Sun Blade T6300 Server Module		32GB	8	8GB	X5724A	DRST6300/8GB	2
Sun Blade T6320 Server Module		128GB	16	4GB	SESX2B2Z, X4203AF	DRST5440/4GB	2
				8GB	SESX2C1Z, X4204A	DRST5220/8GB	2
				16GB	SESX2D1Z, X4290AF	DRST5440/16GB	2
Valid configurations are 4, 8 or 16 DIMMs of the same capacity only. All DIMMs in a branch must be identical.							
Sun Blade X6220 Server Module		64GB	16 ¹⁾	8GB	X4293A	DRSX6220/8GB	2
¹⁾ 8 DIMM slots per processor							
Sun Blade X6240 Server Module		128GB	16 ¹⁾	8GB	X4262A	DRSX6440/8GB	2
				16GB	X4249A	DRSX6440/16GB	2
¹⁾ 8 DIMM slots per processor							
Sun Blade X6250 Server Module		64GB	16 ¹⁾	8GB	X4402A	DRSX6250/8GB	2
¹⁾ 8 DIMM slots per processor							
Sun Blade X6270		144GB	18	2GB	X4653A	DRSX6270-13/2GB	1
				4GB	X4654A	DRSX6270-13/4GB	1
				8GB	X4652A	DRSX6270-10/8GB	1
				8GB	Not Offered by Sun	DRSX6270-13/8GB	1
See DDR3 Note #2 at top of Sun Blade Servers section							
Sun Blade X6275		192GB	24 ¹⁾	2GB	X4673A	DRSX6275-13/2GB	1
				4GB	X4674A	DRSX6275-13/4GB	1
				8GB	Not Offered by Sun	DRSX6275-10/8GB	1
				8GB	Not Offered by Sun	DRSX6275-13/8GB	1
¹⁾ 12 DIMM slots per node. See DDR3 Note #1 at top of Sun Blade Servers section							
Sun Blade X6440 Server Module		256GB	32 ¹⁾	8GB	X4262A	DRSX6440/8GB	2
				16GB	X4249A	DRSX6440/16GB	2
¹⁾ 8 DIMM slots per processor. Install DIMMs in the slots farthest from the CPU first.							
Sun Blade X6450 Server Module		192GB	24	8GB	X4402A	DRSX6250/8GB	2
Sun Blade X8420 Server Module		128GB	16	8GB	X5095A-Z	DRSX8440/8GB	2
				16GB	Not Offered by Sun	DRSX8440/16GB	2
Four processors per Server Module; 4 DIMM slots (32GB max) per processor.							
Sun Blade X8440 Server Module		256GB	32 ¹⁾	8GB	X5095A-Z	DRSX8440/8GB	2
				16GB	Not Offered by Sun	DRSX8440/16GB	2
Four processors per Server Module; 8 DIMM slots (64GB max) per processor.							
Sun Blade X8450 Server Module		128GB ¹⁾	32	8GB	X4402A	DRSX6250/8GB	2
¹⁾ When 8GB DIMMs are available							

DATARAM MEMORY PRODUCTS FOR SUN SYSTEMS

FAMILY	MODEL	MAX	SLOTS	CAPACITY	MFG #	DATARAM #	BOARDS
X64 BASED WORKSTATIONS							
Sun Ultra 20 M2		8GB	4	4GB	X5279A-Z	DRSX2100M2/4GB	2
Sun Ultra 20		8GB ¹⁾	4	4GB	X4211A-Z	DRSU20E/4GB	2
¹⁾ Sun's X4211A-Z and Dataram's DRSU20E/4GB are ECC type memory and should not be mixed with Sun's X8008A Non-ECC type memory. 8GB maximum with ECC memory; 1GB maximum with Non-ECC memory. Dataram's DRSU20E/4GB is PC2700 333MHz; Sun's X4211A-Z is PC2100 266MHz.							
Sun Ultra 24		8GB	4	4GB	X5279A-Z	DRSX2100M2/4GB	2
Sun Ultra 27		24GB	6	2GB	X3914A	DRSU27-1333/2GB	1
				4GB	Not Offered by Sun	DRSU27-1333/4GB	1
Sun Ultra 40 M2		64GB ¹⁾	8 ²⁾	8GB	X5289A-Z	DRSU40M2/8GB	2
				16GB ¹⁾	Not Offered by Sun	DRSU40M2/16GB	2
¹⁾ Support for the 16GB upgrade and 64GB of system memory requires BIOS version 1.22 or later. ²⁾ 4 DIMM slots per processor							
SPARC BASED WORKSTATIONS							
Sun Blade 1000, 2000		8GB	8	2GB	X7051A	DRS280/2048	4
				4GB	X7063A	DRSB2000A/4096	4
Sun Blade 1500		8GB	4	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							
Sun Ultra 25		8GB	4	2GB	X8704A	DRSU45/2GB	2
				4GB	X8711A	DRSU45/4GB	2
Sun Ultra 45		16GB	8 ¹⁾	2GB	X8704A	DRSU45/2GB	2
				4GB	X8711A	DRSU45/4GB	2
¹⁾ 4 DIMM slots per processor							
Sun Blade 2500	1.6GHz	16GB	8 ¹⁾	2GB	X7704A-4, X7704A, X7604A...	DRS240/2048	2
				4GB	X7711A-4	DRS240/4096	2
				2GB	X7704A-4	DRS243/2GB	2
				4GB	X7711A-4	DRS243/4GB	2
¹⁾ 8 slots and 16GB with two CPUs. 4 slots and 8GB with one CPU. Dataram recommends Open Boot Prom (OBP) 4.16v1 or later for the use of the DRS243/xxx (DDR333/PC2700).							