

Intel[®] Server Board SE7501BR2 Memory List Test Report Summary



*Revision 52.0
March 2006*

Revision History		
Date	Rev	Modifications
Dec./02	1.0	Initial release.
Jan/03	2.0	Added Infineon* 256MB and 512MB parts. Added MSC* 512MB parts. (In shaded area)
Jan/03	3.0	Added Smart* 128MB parts. Added Dane-Elec* 512MB parts. Added Smart 1GB parts. Added Dataram* 1GB parts. Moved Infineon parts from 128MB listing to 256MB listing. Added Infineon 512MB part. Added Samsung* 512MB and 1GB parts. (In shaded area)
Jan/03	4.0	Added ATP* and Samsung 128MB parts. Added Avant* 1GB parts. Added ATP, Aved*, Buffalo*, Dataram and Infineon 256MB parts. Added Avant, Aved, Buffalo, Dataram, Legend*, Smart and Viking* 512MB parts. Removed Infineon 256MB part. (In shaded area)
Feb/03	5.0	Added Smart 128MB parts. Added Buffalo, Ventura*, Viking, ATP, Dane-Elec and Legend 512MB parts. Added MSC, Aved, Avant, Viking and ATP 1GB parts. (In shaded area)
Mar/03	6.0	Added Dataram and SimpleTech* 1GB parts. Added Micron* and SimpleTech 512MB parts. Added Infineon 256MB part. Added Samsung 128MB and 256MB parts. (In shaded area)
Mar/03	7.0	Added Infineon, Centon* and ATP 256MB parts. Added ATP and Viking 512MB parts. Added Micron 1GB parts. Added ATP 2GB parts. (In shaded area)
April/03	8.0	Added Viking 256MB parts. Added Smart and Peripheral* 512MB parts. Correction to Infineon 256MB part, now listed as 512MB. (In Shaded area)
May/03	9.0	Added Micron 128MB parts. Added Centon, Dataram, Buffalo, and Viking 256MB parts. Added Simple 512MB parts. Added Avant, Simple, Ma Labs* and Centon 1GB parts. (In shaded area)
June/03	10.0	Added ATP and Samsung 128MB parts. Added Viking and Buffalo 256MB parts. Added Viking, Buffalo, and ATP 512MB parts. Added Avant and Smart 1GB parts. Added Smart 2GB parts. (In shaded area)
June/03	11.0	Added Avant 1GB parts. (In shaded area). Also updated EOL Status
July/03	12.0	Added TRS* and Itaucom* 256MB parts. Added Legend, TRS and Itaucom 512MB parts. Added Buffalo 1GB parts. (In shaded area)
July/03	13.0	Added Smart and Itaucom 1GB parts. Added Micron 256MB and 1GB parts. Added Samsung 256MB, 512MB and 1GB parts. (In shaded area)
Aug/03	14.0	Added Ventura 512MB parts. Added Viking and TRS 1GB parts. Added Kingston* 256MB and 512MB parts. (In shaded area). Also Updated EOL status
Sept/03	15.0	Added Infineon and Samsung 512MB parts. Added Kingston 128MB part. (In shaded area)
Sept/03	16.0	Added Micron 512MB part. (In shaded area)
Oct/03	17.0	Added Infineon 256MB part. Added Ventura 512MB parts. Added Centon 1GB parts. (In shaded area). Also updated EOL status.
Nov/03	18.0	Added Apacer* 256MB parts. Added Infineon, Centon and Apacer 512MB parts. Added Samsung, Apacer, Ventura and Wintec* 1GB parts. Added TRS 2GB parts. Updated "Caution" note when using stacked DRAM modules. (In shaded area)
Nov/03	19.0	Added Apacer and Legend 256MB parts. Added Legend, Ventura and ATP 512MB parts. Added Wintec, ATP, Apacer and Legend 1GB parts. Added Netlist* 2GB parts. (In shaded area)
Nov/03	20.0	Added ATP 1GB parts. Added Dataram 2GB parts. (In shaded area)
Dec/03	21.0	Added Legend 1GB parts. Added Legacy 512MB, 1GB and 2GB parts. (In shaded area)
Jan/04	22.0	Added Smart 1GB parts. (In shaded area)
Jan/04	23.0	Updated EOL status.
Feb/04	24.0	Added Dane-Elec 256MB parts. Added Swissbit* 512MB parts. Added Dataram and Swissbit 1GB parts. New CMTL address. (In shaded area)
Mar/04	25.0	Added Smart and TRS 1GB parts. (In shaded area)
Mar/04	26.0	Added Legacy 512MB and 1GB parts. Added TRS 1GB parts. (In shaded area). And Updated EOL status.

Revision History		
Date	Rev	Modifications
Apr/04	27.0	Added Ventura and Kingston 1GB parts. Added Legacy 1GB and 2GB parts. (In shaded area)
May/04	28.0	Added Viking 256MB, 512MB and 1GB parts. Added Ventura 1GB and 2GB parts. Added RamTech* and Dataram 1GB parts. (In shaded area)
Jun/04	29.0	Added Ventura 512MB parts. Added ATP 1GB parts. (In shaded area)
Jun/04	30.0	Added Ventura 1GB parts. (In shaded area)
July/04	31.0	Added Smart, Viking and Legacy 1GB parts. Added Kingston 2GB parts. (In shaded area)
Aug/04	32.0	Added Dataram 1GB parts. Micron 256MB part. (In shaded area)
Sept/04	33.0	Added support for DDR333 modules. Added Legend, TRS and Dane-Elec 512MB parts. Added Apacer, Smart and Wintec 1GB parts. (In shaded area)
Octt/04	34.0	Added Legend 256MB and 2GB parts. (In shaded area)
Oct/04	35.0	Added Smart 1GB parts. (In shaded area)
Oct/04	36.0	Added Viking 1GB parts. (In shaded area)
Nov/04	37.0	Added Buffalo 512MB parts. Added TRS 1GB parts. (In shaded area)
Nov/04	38.0	Added Dane-Elec 512MB and 1GB parts. Added Buffalo 1GB parts. (In shaded area)
Nov/04	39.0	Added Smart 512MB parts and Corsair 1GB parts. (In shaded area)
Nov/04	40.0	Added Avant 1GB parts. (In shaded area)
Dec/04	41.0	Added Buffalo and Swissbit 1GB parts. (In shaded area)
Feb/05	42.0	Added Dataram 512MB parts. (In shaded area)
Feb/05	43.0	Added Swissbit 1GB parts. (In shaded area)
Mar/05	44.0	Added note on Lead free modules (these modules are now in bold text). Added Apacer 512MB parts. Added Kingston 1Gb parts. (In shaded area)
Apr/05	45.0	Added Avant 512MB parts. Added Simple 1GB parts. Added Kingston 2GB parts. (In shaded area)
Aug05	46.0	Added Kingston 1GB and 512MB parts. (In shaded area)
Aug/05	47.0	Added TRS 2GB parts. Added Kingston 512MB parts. (In shaded area)
Oct/05	48.0	Added Kingston 2GB part. (In shaded area) Updated unleaded parts to correct shading.
Jan/06	49.0	Added Legend 1GB and 2GB parts. (In shaded area)
Jan/06	50.0	Added Legend 512MB part. (In shaded area)
Mar/06	51.0	Added Legend 1GB pat. (In shaded area)
Mar/06	52.0	Added Kingston 1GB part. (In shaded area)

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The Intel® Server Board SE7501BR2 may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

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Overview of Memory Testing

The following procedure is used to test memory modules for use in the Intel® Server Board SE7501BR2. Memory is a vital subsystem in a platform. Intel Corporation requires strict guidelines to be met before a memory vendor and part is put onto the qualified memory list. Each Intel Server Board product has a separate qualified memory list.

Memory qualification for Intel's Server Board products is performed by Intel's Memory Validation Laboratory (MVL), and by an independent external test laboratory, Computer Memory Test Lab (CMTL*)¹. CMTL is a leading memory testing organization responsible for testing a broad range of memory products. Memory devices tested by Intel's MVL or CMTL must undergo rigorous tests to ensure that the product will perform the intended server functions.

Intel's Server and Workstation Board qualified memory lists categorize memory modules as Advanced Tested. The Advanced Testing process involves a paper qualification, a standard voltage and room temperature functional test, and a voltage and temperature margin functional test. A paper qualification is a review of critical timings, electrical characteristics, timing requirements, environmental requirements, and packaging requirements in order to see if the memory meets Intel's memory specifications. The standard voltage and room temperature test involves testing the memory module on the particular Intel board for which it is being qualified with test software operating under Microsoft* Windows* 2000 Advanced Server for no less than 24 hours. The voltage and temperature margin testing involves testing the memory module on the particular Intel board for which it is being qualified with various test software and operating systems for 48-72 hours under various voltage and temperature margin conditions. Memory modules that have completed Advanced Testing are known to be compatible with the product on which they were tested, and with the test software and operating system that was utilized during the test procedure.

For information regarding the testing procedure required to reach each phase, please contact your Intel Representative.

¹ CMTL* is an independent memory testing organization responsible for testing a broad range of memory products. Receiving a "PASS" after being tested by CMTL, means that a product functions correctly and consumers can use it to perform the intended server functions. In order to pass these stringent standards, memory products must maintain the highest manufacturing procedures and pass an exacting battery of tests. Testing is performed with equipment and a procedure as defined by Intel's various functional testing levels. CMTL contact:

Office: (949) 716-8690
Fax (949) 716-8691

Computer Memory Test Lab (CMTL)
24 Hammond Suite F
Irvine, CA 92618
<http://www.cmtlabs.com/>

Qualified Memory for the Intel® Server Board SE7501BR2

The Intel® SE7501BR2 server board has 4 DIMM sockets supporting up to 8 GB of Registered ECC DDR266 or DDR333 memory using four 72-bit DIMM modules. These four DIMM sockets constitute two memory banks; Bank1 with contiguous sockets labeled DIMM1A and DIMM1B, and Bank2 with contiguous sockets labeled DIMM2A and DIMM2B². Memory must be installed in pairs; DIMM Bank1 must be populated before DIMM Bank2. Memory within a DIMM bank must be identical; between banks only the DIMM size may be different. DIMM and memory configurations must adhere to the following:

- DDR266 and DDR333 registered ECC 2.5V modules (in compliance with the DDR JEDEC DIMM Specification)
- DIMM organization: x72 ECC
- Pin Count: 184
- Memory capacity: 128MB, 256MB, 512MB, 1GB and 2GB
- Serial PD: JEDEC Rev 2.0
- Interface: SSTL2
- CAS Latency: 2 and 2.5
- Minimum configuration: 256MB using two 128MB DIMMs in Bank1
- One or two memory banks may be populated

Note: Memory qualification is done by testing identical memory modules in all DIMM sockets. Memory qualification does not include testing of mixed DIMM type and/or vendors; mixing of DIMM type and/or vendors is not recommended.

Below is a chart that lists the current supported memory types:

DDR266 Registered SDRAM Module Configurations for Cas Latency 2 & 2.5					
DIMM Capacity	DIMM Organization	DRAM Density	DRAM Organization	# DRAM Devices/rows/Banks	# Address bits rows/Banks/column
128MB	16M x 72	64Mbit	16M x 4	18/1/4	12/2/10
128MB	16M x 72	64Mbit	8M x 8	18/2/4	12/2/9
128MB	16M x 72	128Mbit	16M x 8	9/1/4	12/2/10
256MB	32M x 72	64Mbit	16M x 4	36/2/4	12/2/10
256MB	32M x 72	128Mbit	32M x 4	18/1/4	12/2/11
256MB	32M x 72	128Mbit	16M x 8	18/2/4	12/2/10
256MB	32M x 72	256Mbit	32M x 8	9/1/4	13/2/10
512MB	64M x 72	128Mbit	32M x 4	36/2/4	12/2/11
512MB	64M x 72	256Mbit	64M x 4	18/1/4	13/2/11
512MB	64M x 72	256Mbit	32M x 8	18/2/4	13/2/10
512MB	64M x 72	512Mbit	64M x 8	9/1/4	13/2/11
1GB	128M x 72	256Mbit	64M x 4	36/2/4	13/2/11
1GB	128M x 72	512Mbit	64M x 8	18/2/4	13/2/11
1GB	128M x 72	512Mbit	128M x 4	18/1/4	13/2/12
2GB	256M x 72	512Mbit	128M x 4	36/2/4	13/2/12
DDR333 Registered DRAM Module Configuration Matrix					
256MB	32M x 72	128Mbit	32M x 4	18/1/4	12/2/11
256MB	32M x 72	128Mbit	16M x 8	18/2/4	12/2/10
256MB	32M x 72	256Mbit	32M x 8	9/1/4	13/2/10
512MB	64M x 72	256Mbit	64M x 4	18/1/4	13/2/11
512MB	64M x 72	256Mbit	32M x 8	18/2/4	13/2/10
512MB	64M x 72	512Mbit	64M x 8	9/1/4	13/2/11
1GB	128M x 72	512Mbit	128M x 4	18/1/4	13/2/12
1GB	128M x 72	512Mbit	64M x 8	18/2/4	13/2/11
1GB	128M x 72	1Gbit	128M x 4	9/1/4	14/2/11
2GB	256M x 72	1Gbit	128M x 4	18/1/4	14/2/12
2GB	256M x 72	1Gbit	128M x 8	18/2/4	14/2/11

The memory controller in the SE7501BR2 server board supports memory scrubbing, single-bit error correction, multiple-bit error detection and the Intel® x4 Single Device Data Correction (SDDC) support with x4 DIMMs only. Memory can be implemented with either single sided (one row) or double-sided (two row) DIMMs. The Intel® x4 Single Device Data Correction gives the memory sub-system the ability to withstand a multi-bit failure within a DRAM device, including a failure that causes incorrect data on all data bits of the device.

The following table lists DIMM devices known to be compatible with the Intel Server Board SE7501BR2. Intel recommends that Advanced Tested DIMMs be used to establish reliable system operation. DIMM devices not listed can be used; but, in the event of unreliable system

operation, the DIMM devices should be replaced with functionally Advanced Tested DIMMs to determine whether the DIMM devices are causing the problem.

For a full description of the SE7501BR2 server board memory features refer to the *Intel® Server Board SE7501BR2 Technical Product Specification* available on-line at

<http://support.intel.com/support/motherboards/server/SE7501BR2>

Caution: Third party memory vendors may use the same module part number with different DRAM vendors and die revisions. To insure proper system operation, verify that each DRAM vendor and die revision has been separately tested and qualified. Please notify CMTL if there is a discrepancy.

Note: This list is not intended be all-inclusive. It is provided as a convenience to Intel's general customer base, but Intel does not make any representations or warranties whatsoever regarding the quality, reliability, functionality, or compatibility of these memory modules.

This list is subject to change without notice.

Server Board SE7501BR2

Registered, ECC, DDR266 DIMM Modules 128MB Sizes (16Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Samsung*	M312L1713D T0-CA2	K4H280838D- TCA2	Samsung		11/13/02	2	Yes	16M x 8	
Micron*	MT9VDDT167 2G-265B2	MT46V16M8- 75B	Micron		12/09/02	2.5	Yes	16M x 8	
+Smart Modular Technologies*	SM1672RDD R301-ICB	NT5DS16M8AT -7K	Nanya	P51G184NEB Z6GIB1 rev A	1/2/03	2		16M x 8	EOL
Samsung	M383L1713D TS-CA2	K4H280838D- TCA2	Samsung		1/20/03	2		16M x 8	
+ATP Electronics*	AB16L72A8S EB0S	K4H280838D- TCB0 rev D	Samsung	SB184A08L rev1	1/21/03	2.5		16M x 8	EOL
+Smart Modular Technologies	SM1672RDD R301-ICB	NT5DS16M8AT -7K	Nanya	RCE0005-01	2/5/03	2		16M x 8	EOL
Samsung	M383L1713E TS-CB0	K4H280838E- TCB0	Samsung		3/5/03	2.5		16M x 8	
Micron	MT9VDDT167 2G-265B1	MT46V16M8-75 B	Micron		4/11/03	2.5		16M x 8	
Samsung	M312L1713E TS-CA2	K4H280838E- TCA	Samsung		5/8/03	2	Yes	16M x 8	
+ATP Electronics	AB16L72Q8S EB0S	K4H280838E- TCB0 rev E	Samsung	SB184Q08L1 rev 1	5/12/03	2.5	Yes	16M x 8	EOL
Kingston*	KVR266X72R C25/128	HY5DU28822B T-H	Hynix		8/27/03	2.5	Yes	16Mx 8	

Modules shaded in blue are low profile.

Modules in bold text do not contain Lead.

(+) This vendor is part of the CMTL Certification program. This means this part has/will be tested across all compatible Intel Server Boards. For further information contact CMTL @ <http://cmtlabs.com/>

Caution: Some modules on this list such as "stacked" DRAM parts may have thermal and physical limitations in some chassis configurations. Configurations determined to exceed thermal limitations, may use the optional Intel Memory Cooling Fan Accessory to assist on memory cooling; refer to the platform Configuration Guide for order information.

Server Board SE7501BR2

Registered, ECC, DDR266 DIMM Modules 256MB Sizes (32Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Samsung	M312L3310DT0-CA2	K4H280438D-TCA2	Samsung		11/14/02	2	Yes	32M x 4	
Micron	MT9VDDT3272G-265B2	MT46V32M8-75B	Micron		11/26/02	2.5	Yes	32M x 8	
+MSC Vertriebs GmbH*	MSC 512M00098	MT46V32M8TG-75 rev B	Micron	PCB M0481LA2	12/23/02	2.5		32M x 8	EOL
+MSC Vertriebs GmbH	MSC 512M00094	HYB25D256800BT-7 rev B	Infineon	PCB M0481LA2	12/30/02	2		32M x 8	EOL
+ATP Electronics	AB32L72A8S4B0	NT5DS16M8AT-7K rev D	Nanya	SB184A08L rev1	1/21/03	2.5		16M x 8	EOL
+Aved Memory Products*	AMP383D3313BT1-CA2/MI	MT46V16M8-75Z rev B	Micron	105601 rev A	1/29/03	2		16M x 8	EOL
+Buffalo*	DD266-R256/SD	K4H280838D-TCB0 rev D	Samsung	RCE0501-AB	1/17/03	2.5		16M x 8	
Infineon*	HYS72D32001GR-7-A	HYB25D128400AT-7A	Infineon		1/20/03	2		32M x 4	
+Dataram*	DTM63640A	HYB25D128400AT-7 rev A	Infineon	40581A rev A	1/23/03	2.5	Yes	32M x 4	EOL
Samsung	^M312L3223DT0-CAA	K4H560838D-TCAA	Samsung		3/5/03	2	Yes	32M x 8	
Infineon	^HYS72D32300GBR-7F-B	HYB25D256800BC-7F	Infineon		3/5/03	2	Yes	32M x 8	
Infineon	HYS72D32500GR-7-B	HYB25D256800BT-7	Infineon		3/13/03	2	Yes	32M x 8	
+ATP Electronics	AB32L72Q8SQB0S	K4H560838D-TCB0 rev D	Samsung	SB184Q08L1	3/19/03	2.5	Yes	32M x 8	EOL
+Centon Electronics*	TOP02-D004D	MT46V32M4TG-75 rev B	Micron	LE36DDT1844R rev A	3/17/03	2.5	Yes	32M x 4	EOL
+Viking*	VI4CR327228DTHL1	K4H560838D-TCB0 rev D	Samsung	0000905A	4/4/03	2.5	Yes	32M x 8	EOL
+Centon Electronics	TOP02-D007G	MT46V32M4TG-75 rev B	Micron	LE36DDT1844R rev A	4/14/03	2.5	Yes	32M x 4	EOL
+Viking	VI4CR327228DTHL2	MT46V32M8TG-75 rev B	Micron	0000905A	4/17/03	2.5	Yes	32M x 8	EOL
+Dataram	DTM63640B	MT46V32M4TG-75 rev B	Micron	40581A rev A	4/17/03	2.5	Yes	32M x 4	
+Buffalo	DD266L-RS256/SD	K4H560838D-TCB0 rev D	Samsung	1D188EF-AA	4/22/03	2.5	Yes	32M x 8	
+Viking	VI4CR327224CTHL1	K4H280438D-TCB0 rev D	Samsung	03-0291 Rev A	4/9/03	2.5	Yes	32M x 4	EOL
+Viking	VI4CR327228DTHL3	MT46V32M8TG-75 rev C	Micron	0000905A	4/30/03	2.5	Yes	32M x 8	
+Buffalo	DD266-R256/SE	K4H280838E-TCB0 rev E	Samsung	RCE0502-AA	5/2/03	2.5		16M x 8	
+TRS* Tele-Radio-Space GmbH	TRS21150	HYB25D256800BT-7 rev B	Infineon	M0529LA1 rev 1	6/16/03	2	Yes	32M x 8	
ITAUCOM*	256E2665R28	ICM4L560807-65	Micron	0247 A	6/24/03	2.5	Yes	32M x 8	

**Registered, ECC, DDR266 DIMM Modules
256MB Sizes (32Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Samsung	M312L3223ET S-CA2	K4H560838E- TCCA2	Samsung		7/15/03	2	Yes	32M x 8	
Micron	MT9VDDT327 2G-265C3	MT46V32M8-75 C	Micron		7/23/03	2.5	Yes	32M x 8	
Kingston	KVR266X72R C25/256	MT46V32M8- 75C	Micron	2025128- 001A00	7/25/03	2.5	Yes		
Infineon	HYS72D32300 GBR-7-B	HYB25D256800 BC-7	Infineon		9/25/03	2	Yes	32M x 8	
+Apacer*	77.10609.112	HYB25D256800 BT-7 rev B	Infineon	48.18115.0 12 rev 2	10/3/03	2	Yes	32M x 8	
+Apacer	77.10109.111	HYB25D128400 AT-7 rev A	Infineon	48.18121.0 11 rev 1	10/15/03	2	Yes	32M x 4	
+Legend*	L3272YC5- RU1HDC5B	HY5DU56822BT -J rev B	Hyundai	DRR1U081 8-A rev 1	10/29/03	2.5	Yes	32M x 8	
+Dane-Elec*	ODLD266R07 2325I-1MC	MT46V32M8TG- 6T rev C	Micron	DR1G872- A rev A	1/30/04	2.5	Yes	32M x 8	
+Viking	VI4CR327228 DTHL4	MT46V32M8TG(P)-6T rev G	Micron	0000985A	4/29/04	2.5	Yes	32M x 8	
Micron	MT9VDDT327 2G-265G3	MT46V32M8-6T G	Micron		6/10/04	2.5	Yes	32M x 8	

**Registered, ECC, DDR333 DIMM Modules
256MB Sizes (32Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Legend	L3272YC6- RU1HDC5B	HY5DU56822BT -D43 rev B	Hyundai	DRR1U081 8-A rev 1	9/24/04	2.5	Yes	32M x 8	

Modules shaded in blue are low profile.

Modules in bold text do not contain Lead.

(^) This is a 2-2-2 part.

(+) This vendor is part of the CMTL Certification program. This means this part has/will be tested across all compatible Intel Server Boards. For further information contact CMTL @ <http://cmtlabs.com/>

Caution: Some modules on this list such as “stacked” DRAM parts may have thermal and physical limitations in some chassis configurations. Configurations determined to exceed thermal limitations, may use the optional Intel Memory Cooling Fan Accessory to assist on memory cooling; refer to the platform Configuration Guide for order information.

Server Board SE7501BR2

**Registered, ECC, DDR266 DIMM Modules
512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Samsung	M312L6420DT0-CA2	K4H560438D-TCA2	Samsung		11/19/02	2	Yes	64M x 4	
Samsung	M383L6420DT S-CA2	K4H560438D-TCA2	Samsung		11/11/02	2		64M x 4	
Infineon	HYS72D64500 GR-7-A	HYB25D25640 0AT-7	Infineon		12/02/02	2	Yes	64M x 4	
Infineon	HYS72D64500 GR-7-A	HYB25D25640 0AT-7	Infineon		12/10/02	2	Yes	64M x 4	
Infineon	HYS72D64500 GR-7-B	HYB25D25640 0BT-7	Infineon		12/17/02	2	Yes	64M x 4	
Infineon	HYS72D64500 GR-7F-B	HYB25D25640 0BT-7F	Infineon		12/17/02	2	Yes	64M x 4	
+Dane-Elec	D1D266R07264 2H	HYB25D25640 0AT-7 rev A	Infineon	DE042036 rev B	1/6/03	2	Yes	64M x 4	EOL
Infineon	HYS72D64320 GBR-7-B	HYB25D25680 0BC-7	Infineon		1/7/2003	2	Yes	32M x 8	
Samsung	^M312L6420D T0-CAA	K4H560438D-TCAA	Samsung		1/7/2003	2	Yes	64M x 4	
+Avant Technology*	AVM7264R39C 2266K1-A	NT5DS32M8A T-7K rev A	Nanya	50-1411-01-A rev A	1/17/03	2	Yes	32M x 8	EOL
+Aved Memory Products	AMP383D6420 CT3-CB0/S	K4H560438C-TCB0 rev C	Samsung	105611 rev A	1/13/03	2.5	Yes	64M x 4	EOL
+Buffalo	DD266-R512/MB	46V32M8-75 rev B	Micron	RCE0501-AB	1/17/03	2.5		32M x 8	
+Dataram	DTM63641G	MT46V64M4T G-75 rev C	Micron	40581A rev A	1/14/03	2.5	Yes	64M x 4	
+Dataram	DTM63641E	HYB25D25640 0BT-7 rev B	Infineon	40581A rev A	1/23/03	2.5	Yes	64M x 4	EOL
+Legend	L6472TC5-RR2HDC5A	HY5DU56822 AT-H rev A	Hyundai	DRR720818A rev 2	1/29/03	2.5		32M x 8	EOL
+Smart Modular Technologies	SM6472RDDR3 01B-ICA	K4H560438D-TCA2	Samsung	P512184NVS Z6GAX rev A	1/13/03	2		64M x 4	EOL
+Viking	VI4CR647228D THL1	K4H560838D-TCB0 rev D	Samsung	0000905AG	1/21/03	2.5	Yes	32M x 8	EOL
+ATP Electronics	AB64L72Q8S8 B0S	K4H560838D-TCB0 rev D	Samsung	SB184Q08L1 rev 1	2/11/03	2.5	Yes	32M x 8	EOL
+Dane-Elec	D1D266R07264 5I	K4H560838C-TCB0 rev C	Samsung	DR513872 rev A	2/5/03	2.5		32M x 8	EOL
+Ventura Technology Group*	D52WPK31SV	K4H560438D-TCB0 rev D	Samsung	V218	2/3/03	2.5	Yes	64M x 4	EOL
+Viking	VI4CR647224D THL1	K4H560438D-TCB0 rev D	Samsung	03-0291 rev A	2/18/03	2.5	Yes	64M x 4	EOL
+Buffalo	DD266-R512/SD	K4H560838D-TCB0 rev D	Samsung	RCE0501-AB	2/11/03	2.5		32M x 8	
SimpleTech*	ST72E4K64-A75EC	MT46V64M4T G-75 rev B	Micron	00853 rev B	3/3/03	2.5	Yes	64M x 4	EOL
+ATP Electronics	AB64L72A8S8 B0S	K4H560838D-TCB0 rev D	Samsung	SB184A08L rev1	3/19/03	2.5		32M x 8	EOL

**Registered, ECC, DDR266 DIMM Modules
512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+ATP Electronics	AB64L72R4S8B0S	K4H560438D-TCB0 rev D	Samsung	SB184R04L1	3/12/03	2.5	Yes	64M x 4	EOL
+Viking	VI4CR647228DTHL2	K4H560838D-TCB0	Samsung	0000905A	3/14/03	2.5	Yes	32M x 8	EOL
+Smart Modular Technologies	SM6472RDDR3H1LP-N	NT5DS64M4AT-7K	Nanya	P52G184N ESZ6G001 rev A	4/4/03	2.5	Yes	64M x 4	
Peripheral Enhancements*	INTEL00512MSE7501BR2	K4H560438D-TCB0	Samsung	GR-75000 rev A	4/1/03	2.5	Yes	64M x 4	
+SimpleTech	ST72E4K64-A75EC	MT46V64M4TG-75 rev C	Micron	00853 rev B	4/24/03	2.5	Yes	64M x 4	
+Viking	VI4CR647224DTHL2	MT46V64M4TG-75 rev B	Micron	03-0291 rev A	4/30/03	2.5	Yes	64M x 4	EOL
+Buffalo	DD266L-R512/SD	K4H560838D-TCB0 rev D	Samsung	1D188EF-AA	5/2/03	2.5	Yes	32M x 8	
+Viking	VI4CR647228DTHL3	MT46V32M8TG-75 rev B	Micron	0000905A	5/7/03	2.5	Yes	32M x 8	
+Viking	VI4CR647228DTHL4	MT46V32M8TG-75 rev C	Micron	0000905A rev A	5/2/03	2.5	Yes	32M x 8	
+ATP Electronics	AB64L72A8S8B0	NT5DS32M8AT rev D	Nanya	SB184A08L rev1	4/30/03	2.5		32M x 8	EOL
+TRS Tele-Radio-Space GmbH	TRS21151	HYB25D25640BT-7 rev B	Infineon	M0530LA1 rev 1	6/16/03	2	Yes	64M x 4	
+Legend	L6472YC5-PPASDC5D	K4H560438D-TCB0 rev D	Samsung	18-25141A rev A	6/11/03	2.5	Yes	64M x 4	EOL
Micron	MT18VDDT6472G-265C3	MT46V64M4-75C	Micron		6/17/03	2.5	Yes	64M x 4	EOL
+TRS Tele-Radio-Space GmbH	TRS21152	HYB25D25680BT-7 rev B	Infineon	M0529LA1 rev 1	6/18/03	2	Yes	32M x 8	
ITAUCOM	512E2665R24	ICM4L560407-65	Micron	0269 A	6/23/03	2.5	Yes	64M x 4	
Samsung	M312L6420ETS-CA2	K4H560438E-TCA2	Samsung		7/15/03	2	Yes	64M x 4	
+Ventura Technology Group	D52WPK31RV	NT5DS64M4BT-75 rev B	Nanya	V218	7/24/03	2.5	Yes	64M x 4	
Kingston	KVR266X72RC25/512	HYB25D25640BT-7	Infineon	2025127-001A00	7/10/03	2.5	Yes		
Infineon	HYS72D64000GR-7-B	HYB25D25640BT-7	Infineon		9/2/03	2		64M x 4	
Samsung	M312L6420ETS-CAA	K4H560438E-TCAA	Samsung		9/2/03	2	Yes	64M x 4	
+Ventura Technology Group	D52WVK25SV	K4H560838E-TCB3 rev E	Samsung	V208	9/26/03	2.5	Yes	32M x 8	
+Centon Electronics	TOP02-D019S	MT46V32M8TG-6 rev C	Micron	DR1G872-A	10/3/03	2.5	Yes	32M x 8	
+Apacer	77.10409.111	HYB25D25640OAT-7 rev A	Infineon	48.18121.011 rev 1	9/30/03	2	Yes	64M x 4	
+Apacer	77.10709.112	HYB25D25680BT-7 rev B	Infineon	48.18115.012 rev 2	10/8/03	2	Yes	32M x 8	
+Legend	L6472YC5-RU1HDC5B	HY5DU56822BT-J rev B	Hyundai	DRR1U0818-A rev 1	10/29/03	2.5	Yes	32M x 8	

**Registered, ECC, DDR266 DIMM Modules
512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Ventura Technology Group	D52WVK25MV	MT46V32M8TG-75 rev C	Micron	V208	10/24/03	2.5		32M x 8	
+Legend	L6472YC5-182HDD5A	HY5DU56422A T-K rev A	Hyundai	184RL rev 2	10/13/03	2.5	Yes	64M x 4	
+ATP Electronics	AB64L72Q8S8B0S	K4H560838E-TCB3 rev E	Samsung	SB184Q08 L1	10/23/03	2.5	Yes	32M x 8	
+Legacy Electronics Inc.*	88L6JDLR-1LDG	LED64408TA-6	Legacy	LE36DDT1 844R rev A	12/08/03	2.5	Yes	64M x 4	
+Swissbit*	SDR06472D1B22IN-75	HYB25D25680 0BT-6 rev B	Infineon	BRDA80A	2/13/04	2	Yes	32M x 8	
+Legacy Electronics Inc.	88S6JDLR-1JDG	HYB25D25640 0BT-7 rev B	Infineon	LE36DDT1 844R rev A	3/10/04	2	Yes	64M x 4	
+Viking	VI4CR647228DTH L5	MT46V32M8TG (P)-6T rev G	Micron	0000985A	5/6/04	2.5	Yes	32M x 8	
+Ventura Technology Group	D52WVK42SV	K4H560838E-TCB3 rev E	Samsung	DR1G872-A	5/20/04	2.5	Yes	32M x 8	
+Legend	L6472YC5-PPASDD5D	K4H560438D-TCB3 rev D	Samsung	18-25141A Rev A	8/23/04	2.5	Yes	64M x 4	
+TRS	TRS21202	HYB25D25640 0CE-7 rev C	Infineon	M0530LA1 rev 1	8/19/04	2	Yes	64M x 4	
+Dane-Elec	DLD266R072642H	HYB25D25640 0BT-7 rev B	Infineon	0303	7/26/04	2	Yes	64M x 4	
+Smart Modular Technologies	SM6472RDDR325 LP-S	K4H560438E-TCB0 rev E	Samsung	M312L331 0ETS	11/24/04	2.5	Yes	64M x 4	
+Dataram	DTM63662C	HYB25D25640 0CE-7 rev C	Infineon	40581A rev A	1/27/05	2	Yes	64M x 4	
+Apacer	77.10709.332	HYB25D25680 0CE-6 rev C	Infineon	48.18115.0 12 rev 2	3/11/05	2	Yes	32M x 8	

**Registered, ECC, DDR333 DIMM Modules
512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Buffalo	DD333L-R512/MG	MT46V32M8TG (P)-6T rev G	Micron	1D188EF-AA	11/10/04	2.5	Yes	32M x 8	
+Buffalo	DD333L-R512/SF	K4H560838F-TCB3 rev F	Samsung	1D188EF-AA	11/11/04	2.5	Yes	32M x 8	
+Dane-Elec	DLD266R072642 H	MT46V64M4TG (P)-6T rev G	Micron	0303	11/15/04	2	Yes	64M x 4	
+Avant Technology	AVM7264R52C53 33K1-MTD	MT46V64M8TG (P)-6T rev D	Micron	50-1411-01-A rev A	4/5/05	2.5	Yes	64M x 8	
+Kingston	KVR333S4R25/51 2I	K4H560438E-GCB3 rev E	Samsung	2025161-001.B00 na	7/26/05	2.5	Yes	64M x 4	
+Kingston	KVR333S4R25/51 2I	HYB25D25640 OCC-6 rev C	Infineon	2025161-001.B00	08/04/05	2.5	Yes	64M x 4	
+Legend	L6472YC6-RU1HDHSC	HY5DU12822C TP-J rev C	Hynix	DDR1U081 8 rev A	12/22/05	2.5	Yes	64M x 8	

Modules shaded in blue are low profile.

Modules in bold text do not contain Lead.

(A) This is a 2-2-2 part.

(+) This vendor is part of the CMTL Certification program. This means this part has/will be tested across all compatible Intel Server Boards. For further information contact CMTL @ <http://cmtlabs.com/>

Caution: Some modules on this list such as "stacked" DRAM parts may have thermal and physical limitations in some chassis configurations. Configurations determined to exceed thermal limitations, may use the optional Intel Memory Cooling Fan Accessory to assist on memory cooling; refer to the platform Configuration Guide for order information.

Server Board SE7501BR2

Registered, ECC, DDR266 DIMM Modules 1GB Sizes (128Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Samsung	M312L2828DT0-CA2	K4H560438D-TCA2	Samsung		11/08/02	2	Yes	64M x 4	
Samsung	M383L2828DT1-CA2	K4H560438D-TCA2	Samsung		10/29/02	2		64M x 4	
+Dataram	DTM63621F	HYB25D256400BT-7 rev B	Infineon	40556 rev B	1/2/03	2	Yes	64M x 4	EOL
+Smart Modular Technologies	SM12872RDDR301-ICB	K4H560438C-TCA2	Samsung	P52G184NVS ZKGOX rev A	1/8/03	2		128M x 4	EOL
+Avant Technology	AVM7228R82C2266K1-A	NT5DS64M4AT-7K rev A	Nanya	50-1416-01-A rev A	1/23/03	2	Yes	64M x 4	EOL
+ATP Electronics	AB28L72T4SQB0S	K4H560438D-TCB0 rev D	Samsung	SB184T04L2 rev 2	2/6/03	2.5		64M x 4	EOL
+Viking	VI4CR287224DYHL1	K4H560438D-TCB0 rev D	Samsung	03-0291 Rev A	2/21/03	2.5	Yes	64M x 4	EOL
+ATP Electronics	AB28L72P4SUB0S	K4H560438D-TCB0 rev D	Samsung	SB184P04L1	2/17/03	2.5	Yes	64M x 4	EOL
+ATP Electronics	AB28L72P4SMB0S	K4H560438D-TCB0 rev D	Samsung	SB184P04L1	2/19/03	2.5	Yes	64M x 4	EOL
+MSC Vertriebs GmbH	MSC001G00096	HYB25D512800AT-7 rev A	Infineon	M0481LA2	2/10/03	2		64M x 8	EOL
+Aved Memory Products	AMP383D2827DT1-CB0/S	K4H560438D-TCB0 rev D	Samsung	105605 rev A	2/12/03	2.5		64M x 4	EOL
+Avant Technology	AVM7228R38C5266K3-A	K4H560438D-TCB0 rev D	Samsung	BRDB45A rev A	2/24/03	2.5		64M x 4	EOL
+Dataram	DTM63653B	HYB25D256400BC-7 rev B	Infineon	40599A rev A	3/3/03	2.5	Yes	64M x 4	EOL
SimpleTech	ST72E4L128-A75EC	MT46V64M4TG-75 rev B	Micron	00853 rev B	3/10/03	2.5	Yes	64M x 4	EOL
Micron	MT36VDDT12872G-265C2	MT46V64M4TG-75 rev C	Micron		7/23/02	2.5	Yes	64M x 4	EOL
+Avant Technology	AVM7228R38C5266K3-A	MT46V64M4TG-75 B rev B	Micron	BRDB45A rev A	4/16/03	2.5		64M x 4	EOL
SimpleTech	ST72E4L128-A75EC	MT46V64M4TG-75 rev C	Micron	00853 rev B	4/22/03	2.5	Yes	64M x 4	
MA Labs*	D1GE266RLS	K4H560438D-TCB0	Samsung	M8015	4/7/03	2.5	Yes	64M x 4	EOL
+Centon Electronics	TOP02-D006F	MT46V64M4TG-75C rev C	Micron	LE36DDT1844R rev A	4/9/03	2.5	Yes	128M x 4	EOL
+Avant Technology	AVM7228R82C5266K1-A	MT46V64M4TG-75 B rev B	Micron	50-1416-01-A rev A	5/7/03	2.5	Yes	64M x 4	EOL
+Smart Modular Technologies	SM12872RDDR301LP-N	17329-02	Nanya	P51G184NES ZK002 rev A	5/19/03	2	Yes	64M x 4	
+Avant Technology	AVM7228R82C5266K1-A	MT46V64M4TG-75 rev C	Micron	50-1416-01-A rev A	6/3/03	2.5	Yes	64M x 4	
+Buffalo	DD266L-RW1G/SD	K4H560438D-TCB0 rev D	Samsung	4D248EF-AA	6/11/03	2	Yes	64M x 4	
+Smart Modular Technologies	SM12872RDDR3H1LP-S	K4H510638D-TCB0 rev D	Samsung	M312L2828T0	7/16/03	2.5	Yes	64M x 4	

**Registered, ECC, DDR266 DIMM Modules
1GB Sizes (128Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
ITAUCOM	01GE2665R24	MT46V64M4TG-75 rev C	Micron	0232 A	7/9/03	2.5	Yes	64M x 4	
Samsung	M312L2828ET0-CA2	K4H510638E-TCA2	Samsung		7/23/03	2	Yes	64M x 4	
+Viking	VI4CR287224DYHL3	MT46V64M4TG-75 rev C	Micron	03-0291 rev A	7/28/03	2.5	Yes	64M x 4	
+TRS Tele-Radio-Space GmbH	TRS21153	HYB25D256400BT-7 rev B	Infineon	M0531LA1 rev 1	7/28/03	2	Yes	64M x 4	
+Centon Electronics	TOP02-D023W	HYB25D256400BT-7 rev B	Infineon	LE36DDT1844 R rev A	9/19/03	2.5	Yes	64M x 4	
+Ventura Technology Group	D54WPK28SV	K4H560438E-TCB0 rev E	Samsung	V213	10/8/03	2.5		64M x 4	
+Wintec Industries	35952756L	HYB25D256400AT-7 rev A	Infineon	ZK2048M84R BYJ	10/9/03	2.5	Yes	64M x 4	
+Apacer	77.11109.112	HYB25D512800AT-7 rev A	Infineon	48.18115.012 rev 2	10/3/03	2	Yes	64M x 8	
Samsung	M312L2920MT0-CB0	K4H510438M-TCB0	Samsung		10/8/03	2.5	Yes	128M x 4	
+ATP Electronics	AB28L72P4SM B0S	K4H560438E-TCB0 rev E	Samsung	SB184P04L1	11/5/03	2.5	Yes	64M x 4	
+Apacer	77.11342.112	HYB25D256400BT-7 rev B	Infineon	48.18121.012 rev 2	10/15/03	2	Yes	64M x 4	
+Legend	L1272YC5-183HDD5A	HY5DU56422A S-H rev A	Hyundai	184RL rev 3	10/16/03	2.5	Yes	64M x 4	
+ATP Electronics	AB28L72U4SQ B0S	K4H560438E-TCB0 rev E	Samsung	SB184U04L1	11/17/03	2.5		64M x 4	
+Legend	L1272YC5-RU1HHD5A	HY5DU12822A T-H rev A	Hyundai	DRR1U0818-A rev 1	12/09/03	2.5	Yes	64M x 8	
+Legacy Electronics Inc.	89L6MDLR-1LDG	LED128408TA-6	Legacy	LE36DDT1844 R rev A	12/03/03	2.5	Yes	128M x 4	
+Smart Modular Technologies	SM12872RDDR 301BG-I	HYB25D256400BC-6 rev B	Infineon	P54G184NES ZBRCD rev A	12/22/03	2	Yes	64M x 4	
+Dataram	DTM63686A	HYB25D256400BT-7 rev B	Infineon	40028A rev A	2/11/04	2		64M x 4	
+Swissbit	SDR12872C1A2 2IN-70	HYB25D256400BC-7 rev B	Infineon	B6R400	2/5/04	2	Yes	64M x 4	
+Smart Modular Technologies	SM12872RDDR 301HP-I	HYB25D256400BT-7 rev B	Infineon	P58G184NES ZKGA1	2/20/04	2		64M x 4	
+TRS	TRS21174	HYB25D512800AT-7 rev A	Infineon	M0529LA1 rev 1	2/18/04	2	Yes	64M x 8	
+TRS	TRS21171	HYB25D256400BC-7 rev B	Infineon	M0533LA1 rev 1	3/3/04	2	Yes	64M x 4	
+Legacy Electronics Inc.	89L6JDGR-1LDG	LED64408TA-6 rev B	Legacy	LE36DDF1844 RLP rev A	3/16/04	2.5	Yes	64M x 4	
+Ventura Technology Group	D54WYK25SV	K4H510838B-TCB3 rev B	Samsung	V208	4/12/04	2.5		64M x 8	
Kingston	KVR266X72RC 25/1024	K4H510438B-TCB0 rev B	Samsung	2025127-001.A00	4/9/04	2.5	Yes	128M x 4	

**Registered, ECC, DDR266 DIMM Modules
1GB Sizes (128Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
RamTek Technology Inc*	KBL12L648T0-B0	K4H560438E-TCB0 rev E	Samsung	BRDB40A	4/23/04	2.5	Yes	64M x 4	
+Viking	VI4CR287228E THL2	MT46V64M8TG (P)-6T rev C	Micron	0000985A	4/29/04	2.5	Yes	64M x 8	
+Dataram	DTM63653H	HYB25D25640 0BC-6 rev B	Infineon	40599A rev A	4/16/04	2	Yes	64M x 4	
+Ventura Technology Group	D54WCK34SV	K4H560438E-GCB3 rev E	Samsung	V223	4/20/04	2.5	Yes	64M x 4	
+ATP Electronics	AB28L72Q8SH B0S	K4H510838B-TCB3 rev B	Samsung	SB184Q08L1 rev 1	5/20/04	2.5	Yes	64M x 8	
+Ventura Technology Group	D54WYK42SV	K4H510838B-TCB3 rev B	Samsung	DR1G872-A	6/3/04	2.5	Yes	64M x 8	
+Smart Modular Technologies	SM12872RDDR 301BGAS	K4H560438E-GCB3 rev E	Samsung	P54G184NES ZBRCD	6/24/04	2	Yes	64M x 4	
+Viking	VI4CR287228E THL1	MT46V64M8TG (P)-75 rev D	Micron	0000985A	6/30/04	2.5	Yes	64M x 8	
+Legacy Electronics Inc.	89S6JDLC-1JDG	HYB25D25640 0BT-7 rev B	Infineon	LE36DDT1844 R rev A	6/28/04	2	Yes	64M x 4	
+Dataram	DTM63698B	HYB25D51240 0BE-7 rev B	Infineon	40581A rev A	7/15/04	2	Yes	128M x 4	
+Apacer	76.02220.013	HYB25D51280 0BE-6 rev B	Infineon	48.18115.012 rev 2	8/26/04	2	Yes	64M x 8	
+Smart Modular Technologies	SM12872RDDR 301BGIC	HYB25D25640 0CC-6 rev C	Infineon	P54G184NES ZBRCD	8/4/04	2	Yes	64M x 4	
+Wintec Industries	3C952681-L	HYB25D51280 0BE-5 rev B	Infineon	85616649	8/6/04	2.5	Yes	64M x 8	
+Wintec Industries	3C953641-L	HYB25D25640 0BC-6 rev B	Infineon	ZK4096M84R CJB	8/17/04	2.5	Yes	64M x 4	
+Smart Modular Technologies	SX12872RDDR 308BTIB	HYB25D51280 0BE-6 rev B	Infineon	P52G184NEB Z6RCL rev B	10/1/04	2	Yes	64M x 8	
+TRS	TRS21203	HYB25D51240 0BE-7 rev B	Infineon	M0530LA1 rev 1	10/26/04	2	Yes	128M x 4	
+Dane-Elec	DLD266R07228 5M	MT46V128M4T G(P)-75 rev D	Micron	0303	11/16/04	2.5	Yes	128M x 4	
Corsair*	CM72SD1024R LP-2100/M	MT46V64M8TG (P)-6T rev C	Micron	50-00123 rev A	11/23/04	2.5	Yes	64M x 8	
+Swissbit	SDR12872K1A3 2IN-70	HYB25D25640 0CC-5 rev C	Infineon	B6R404 rev 1	2/1/05	2	Yes	64M x 4	
Kingston	KVR266D4R25/1GI	HYB25D25640 0BT-7 rev B	Infineon	2025148-001.A00	3/8/05	2.5	Yes	64M x 4	
SimpleTech	ST72E4L128-C75E	K4H560438E-TCB0 rev E	Samsung	01183 rev A	3/31/05	2.5	Yes	64M x 4	

**Registered, ECC, DDR333 DIMM Modules
1GB Sizes (128Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Viking	VI4CR287224D BKL2	K4H560438E-GCB3 rev E	Samsung	0000972B	10/18/04	2.5	Yes	64M x 4	
+TRS	TRS21197	HYB25D25640 0CC-6 rev C	Infineon	M0533LA1 rev 1	11/3/04	2.5	Yes	64M x 4	

**Registered, ECC, DDR333 DIMM Modules
1GB Sizes (128Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Buffalo	DD333L-R1G/SB	K4H510838B-TCB3 rev B	Samsung	1D188EF-AA	11/19/04	2.5	Yes	64M x 8	
+Avant Technology	AVM7228R38C5333K3-A	MT46V64M4TG(P)-6T rev C	Micron	BRDB45A rev A	12/2/04	2.5		64M x 4	
+Buffalo	DD333L-R1G/MD	MT46V64M8TG(P)-6T rev D	Micron	1D188EF-AA	12/7/04	2.5	Yes	64M x 8	
+Swissbit	SDR12872C1A22IN-60	HYB25D256400BC-6 rev B	Infineon	B6R400 rev A	12/10/04	2.5	Yes	64M x 4	
+Swissbit	SDR12872K1A32IN-60	HYB25D256400CC-5 rev C	Infineon	B6R404 rev 1	2/7/05	2.5	Yes	64M x 4	
+Kingston	KVR333D4R25/1GI	K4H560438E-GCB3 rev E	Samsung	2025247-001.A00 na	7/20/05	2.5	Yes	64M x 4	
+Kingston	KVR333D4R25/1GI	HYB25D256400CC-6 rev C	Infineon	2025247-001.A00	7/5/05	2.5	Yes	64M x 4	
+Legend	L1272YC6-PPXSDD2E	K4H560438E-GCB3 rev E	Samsung	DR2G472B na	12/12/05	2.5	Yes	64M x 4	
+Legend	L1272YC6-PPXSDD1B	K4H510438B-GCB3 rev B	Samsung	M312L6420G0 na	2/10/06	2.5	Yes	128M x 4	
+Kingston	KVR333D4R25/1GI	HYB25D256400CF-5 rev C	Infineon	2025247-001.A00 na	3/16/06	2.5	Yes	64M x 4	

Modules shaded in blue are low profile.

Modules in bold text do not contain Lead.

(+) This vendor is part of the CMTL Certification program. This means this part has/will be tested across all compatible Intel Server Boards. For further information contact CMTL @ <http://cmtlabs.com/>

Caution: Some modules on this list such as “stacked” DRAM parts may have thermal and physical limitations in some chassis configurations. Configurations determined to exceed thermal limitations, may use the optional Intel Memory Cooling Fan Accessory to assist on memory cooling; refer to the platform Configuration Guide for order information.

Server Board SE7501BR2

Registered, ECC, DDR266 DIMM Modules 2GB Sizes (256Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Infineon	HYS72D256520 GR-7-A	HYB25D51240 0AT-7	Infineon		11/12/02	2	Yes	128M x 4	
Samsung	M312L5628MT0 -CB0	K4H1G0638M- TCB0	Samsung		1/7/03	2.5	Yes	128M x 4	
+ATP Electronics	AB56L72P4SM B0S	K4H510438M- TCB0	Samsung	SB184P04L1	3/17/03	2.5	Yes	128M x 4	EOL
+Smart Modular Technologies	SM25672RDDR 301LP-I	HYB25D51240 0AT-7 rev A	Infineon	P54G184NE SZKRCN rev A	5/19/03	2	Yes	128M x 4	
+TRS Tele-Radio-Space GmbH	TRS21155	HYB25D51240 0AT-7 rev A	Infineon	M0531LA1 rev 1	9/26/03	2	Yes	128M x 4	
Netlist*, Incorporated	NL9257RD1204 2-D21JIA	HYB25D51240 0AT-7 rev A	Infineon	0142-10 rev C	10/31/03	2		128M x 4	
+Dataram	DTM63663B	HYB25D51240 0AT-7 rev A	Infineon	40556 rev B	11/21/03	2	Yes	128M x 4	
+Legacy Electronics Inc.	8AL6MDLC- 1LDG	LED128408TA -6	Legacy	LE36DDT184 4R rev A	12/04/03	2.5	Yes	128M x 4	
+Legacy Electronics Inc.	8AS6MDLC- 1JDG	HYB25D51240 0AT-7 rev A	Infineon	LE36DDT184 4R	3/19/04	2	Yes	128M x 4	
+Ventura Technology Group	D56WXK28SV	K4H510438B- TCB3 rev B	Samsung	V213	4/16/04	2.5		128M x 4	
+Kingston	KVR266X72RC 25/2G	K4H510438B- TCB0 rev B	Samsung	2025148- 001.A00	6/30/04	2.5	Yes	128M x 4	
+TRS	TRS21218	HYB25D51240 0BE-7 rev B	Infineon	M0531LA1 rev 1	08/01/05	2	Yes	128M x 4	

Registered, ECC, DDR333 DIMM Modules 2GB Sizes (256Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Legend	L2572YC6- PPXSMD5B	K4H510438B- TCB3 rev B	Samsung	18-21040B rev B	9/21/04	2.5	Yes	128M x 4	
+Kingston	KVR333D4R25/ 2GI	HYB25D51240 0BC-6 rev B	Infineon	2025294- 001.A00	4/8/05	2.5	Yes	128M x 4	
+Kingston	KVR333D4R25/ 2GI	MT46V128M4 FN-6 rev D	Micron	2025294- 001.A00 na	10/14/05	2.5	Yes	128M x 4	
+Legend	L2572YC6- PPXSMDMB	K4H510438B- TCB3 rev B	Samsung	18-21040B rev B (0403)	12/7/05	2.5	Yes	128M x 4	

Modules shaded in blue are low profile.

Modules in bold text do not contain Lead.

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Caution: Some modules on this list such as "stacked" DRAM parts may have thermal and physical limitations in some chassis configurations. Configurations determined to exceed thermal limitations, may use the optional Intel Memory Cooling Fan Accessory to assist on memory cooling; refer to the platform Configuration Guide for order information.

Sales Information

Vendor Name	Web URL	Vendor Direct Sales Info
ATP Electronics	http://www.atpinc.com/	Albert Chung Tel: (1) 408-732-5831, Ext 5858 Fax: (1) 408-732-5055 sales@atpinc.com
ATP Electronics -- Taiwan Inc.	http://www.atpinc.com/	Patty Kuo Tel 011-886-2-2659-6368 Fax 886-2-2659-4982
Avant Technology	http://www.avanttechnology.com	Brad Scoggins Phone: (512)491-7411 Fax: (512)491-7412 brads@avanttechnology.com
Aved Memory Products	http://www.avedmemory.com/	
Buffalo Technology	http://www.buffalotech.com/	(800) 967-0959 memory@buffalotech.com
Centon Electronics	http://www.centon.com	Tel: 949-855-9111 Fax: 949-855-6035
Corsair	http://www.corsairmicro.com/	Tel: 510-657-8747 Fax: 510-657-8748
Dane-Elec	http://www.dane-memory.com/	Michal Hassan @ (949)450-2941 or email @ Michal@Dane-memory.com
Dataram	http://www.dataram.com/	Paul Henke, 800-328-2726 x2239 in USA 609-799-0071 phenke@dataram.com
GoldenRAM	http://www.goldenram.com	Jason M. Barrette @ 800-222-861 x7546 jasonb@goldenram.com or Michael E. Meyer @800-222-8861 x7512 michaelm@goldenram.com
Hitachi	http://semiconductor.hitachi.com/pointer/	
Hyundai/Hynix Semiconductor	http://www.heacom.com/	
Infineon	http://www.infineon.com/business/distribut/index.htm	
ITAUCOM	http://www.itauc.com.br	
JITCO CO LTD	http://www.jitco.net/	Seong Jeon Tel: 82-32-817-9740 s.jeon@jitco.net
Kingston	http://www.kingston.com	US.- Call (877) 435-8726 Asia – Call 886-3-564-1539 Europe – Call +44-1932-755205
Legacy Electronics Inc.	http://www.legacyelectronics.com	U.S. Contact: Gary Ridenour, 949-498-9600, Ext 350 European Contact: 49 89 370 664 11
Legend	http://www.legend.com.au	
Micron	http://silicon.micron.com/mktg/ http://silicon.micron.com/mktg/mbqual/qual_data.cfm	
MSC Vertriebs GmbH	http://www.msc-ge.com	William Perrigo 49-7249-910-417 Fax: 49-7249-910-229 wpe@msc-ge.com

Vendor Name	Web URL	Vendor Direct Sales Info
Netlist, Inc	http://www.netlistinc.com	Christopher Lopes 949.435.0025 tel 949.435.0031 fax sales@netlistinc.com
Peripheral Enhancements	http://www.peripheral.com/	
Samsung	http://www.korea.samsungsemi.com/locate/buy/list_na.html	For US customers go to: http://www.mymemorystore.com/
Silicon Tech	http://www.silicontech.com/contact/salescontacts.shtml	
Simple Tech	http://www.simpletech.com	Ron Darwish @ (949) 260-8230 or email @ Rdarwish@Simpletech.com
SMART Modular Technologies	http://www.smartm.com	Gene Patino (949) 753-0116 Gene.Patino@Smartm.com
Swissbit	http://www.swissbit.com	Tony Cerreta Tel: 914-935-1400 x240 Fax: 914-935-9865 tony.cerreta@swissbitna.com
TechnoLinc Corporation	http://www.technolinc.com	David Curtis 510-445-7400 davidc@technolinc.com
TRS* Tele-Radio-Space GmbH	http://www.certified-memory.com http://www.certified-memory.de	Vendor Direct Sales Info: Andreas Gründl, Pho.: +49(0)89/94553234, Fax.: +49(0)89/94553293, agruendl@trs-space.de
Unigen	http://www.unigen.com	
Ventura Technology Inc	http://www.venturatech.com	Don Hummel @ 805-581-0800 x 108 or email @ don@venturatech.com
Viking InterWorks	http://www.vikinginterworks.com	
Virtium Technology Inc	http://www.virtium.com	Tod Skelton @ (949) 460-0020 ext. 146 or email @ tod.skelton@virtium.com
Legend	http://www.legend.com.au	Tel: 800-338-2361 Fax: 949-459-8577 orderdesk@vikingcomponents.com
Wintec Industries	http://www.wintecindustries.com	Tel 510-360-6300 Fax 510-770-9338

CMTL* (Computer Memory Test Labs)

CMTL is a privately owned and operated memory testing organization responsible for testing a broad range of memory products. Memory devices tested by CMTL must undergo a rigorous battery of tests to ensure that the product will perform the intended server functions. Memory capability is a major factor your customers consider. CMTL has the ability to test and certify memory on Intel-based server platforms. The list of memory modules, which have undergone testing through the CMTL facility, should be referenced when considering modules for integration into this Intel server product. Stringent standards with regard to manufacturing procedures and quality must be met to pass the exacting tests required for qualification through the independent testing facility. Testing is performed by CMTL with Intel server products and test procedures defined by Intel's Memory Validation Lab. Intel routinely audits the CMTL facility to ensure all procedures, process handling, and testing methodologies are met.

IMPORTANT NOTE

DIMM devices with gold contacts should NOT be placed into DIMM sockets with tin-lead contacts or vice-versa. Mixing dissimilar metal contact types has been shown to result in unreliable memory operation. Intel recommends similar manufacturer and similar speeds in each bank on the memory module. Mixing of dissimilar device type or dissimilar memory device speeds is not recommended. This document contains information which is the proprietary property of Intel Corporation. Nothing in this document constitutes a guaranty, warranty, or license, express or implied. Intel has tested the following DIMMs for minimum electrical and functional compatibility with boxed processors. This listing is not intended to be all inclusive; it only represents the DIMMs Intel or CMTL has tested. Users of this list are reminded to check with the DIMM manufacturer or Distributor to ensure that a particular DIMM model is adequate for the intended purpose on the boxed processor baseboard. Intel provides no indemnities for and expressly disclaims all liabilities for any and all such guaranties, representations, and warranties (oral or written) whether express or implied, related to DIMMs in a Intel® Server Board product, including without limitation to: fitness for a particular purpose; merchantability; noninfringement of intellectual property or other rights of any third party or of Intel. The reader is advised that third parties may have intellectual property rights which may be relevant to this document and the technologies discussed herein, and is advised to seek the advice of competent legal counsel, without obligation of Intel. Intel retains the right to make changes to this document at any time, without notice. Intel makes no warranty or representation with respect to the use of this document or reliance by the reader upon its contents, and assumes no responsibility for any errors which may appear in the document nor does it make a commitment to update the information contained herein.

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