

**Intel® Server Board SE7520BD2 and  
SE7520BD2D2  
Memory List Test Report Summary**



Revision 34.0  
March 2006

## Revision History

Date	Rev	Modifications
Aug/04	.5	Preliminary Draft
Aug/04	.6	Added Samsung* 512MB part. (In shaded area)
Sept/04	1.0	Added statement "The E7520 Chipset only supports BGA DRAM module Technology for DDR333". Added Infineon* 256MB part. Added Micron* 512MB parts. Added Smart* 1GB parts. Added Dataram* 2GB parts. (In shaded area)
Sep/04	2.0	Added Legend* 256Mb and 512MB parts. Added TRS* 512MB and 2GB parts. Added Ventura* 512MB parts. Added Micron and Smart 1GB parts. (In shaded area)
Oct/04	3.0	Added TRS, Dataram, Hynix*, Infineon and ATP* 512MB parts. Added Legend, Kingston* and Viking* 1GB parts. Added Smart 2GB parts. (In shaded area)
Oct/04	4.0	Added Samsung and Infineon 256MB parts. Added Infineon, Legend and ATP 512MB parts. Added TRS, Smart, Centon*, and Dataram 1GB parts. (In shaded area)
Oct/04	5.0	Added Smart and Hynix 512MB parts. Added Smart, TRS and ATP 1GB parts. Added Ventura 2GB parts. (In shaded area)
Nov/04	6.0	Added ATP 256MB parts. Added Ventura, TRS and Hynix 1GB parts. (In shaded area)
Dec/04	7.0	Added Kingston* 2GB parts. (In shaded area)
Dec/04	8.0	Added Legacy* 1GB parts. (In shaded area)
Dec/04	9.0	Added Hynix 512MB part. Added Ventura 1GB and Viking 2GB parts. (In shaded area)
Jan/04	10.0	Added Legacy* 512MB and ATP 1GB parts. (In shaded area)
Jan/05	11.0	Added Infineon 1GB and Smart 2GB parts. (In shaded area)
Feb/05	12.0	Added Micron 256MB part. Added Swissbit* and Micron 1GB parts. Added ATP and Dataram 2GB parts. (In shaded area)
Feb/05	13.0	Added Samsung 256MB and 512MB parts. Added Ventura 512MB parts. Added Swissbit 1GB parts. (In shaded area)
Mar/05	14.0	Added Ventura 512MB parts. Added Smart 1GB parts. Added ATP 1GB and 2GB parts. (In shaded area)
Mar/05	15.0	Added note on Lead free modules (these modules are now in bold text). Added Dane-Elec* 512MB parts. Added ATP, Ventura, Legacy and Infineon 1GB parts. Added ATP and Infineon 2GB parts. (In shaded area)
Apr/05	16.0	Added Dane-Elec 1GB parts. Added Micron 512MB and 1GB parts. (In shaded area)
Apr/05	17.0	Added Ventura, Simple*, Samsung and Kingston 512MB parts. Added Simple, Ventura and Wintec* 1GB parts. Added Kingston and Wintec 2GB parts. Added Micron 4GB part. (In shaded area)
May/05	18.0	Added Avant* 512MB and 1GB parts. Added Samsung 1GB part. Added Infineon 256MB and 2GB parts. Added Micron and Hynix 512MB parts. (In shaded area)
May/05	19.0	Added Dataram 1GB parts. Added Avant 2GB parts. (In shaded area)

Date	Rev	Modifications
Jun/05	20.0	Added Samsung 512MB parts. Added Micron 1GB part. Added Infineon and Smart 2GB parts. (In shaded area)
Jun/05	21.0	Added TRS and Wintec 512MB parts. Added Samsung 1GB and 2GB parts. Added Hynix 2GB part. (In shaded area)
July/05	22.0	Added Intel Server Board SE7250BD2D2 utilizing DDR2400 memory. Added DDR2 - Infineon and Samsung 256MB; Hynix, Micron and Samsung 512MB; Hynix, Infineon, Micron and Samsung 2GB modules. Added DDR1 – Samsung 512MB and 1GB modules.
Aug/05	23.0	Added Kingston, Micron, Infineon and Samsung 512MB and 1GB parts. Added TRS and Micron 2GB parts. Hynix 1GB part. (In shaded area)
Aug/05	24.0	Added Samsung 1GB and 4GB parts. Added TRS and Legacy 2GB parts. Added Smart DDR2 1GB parts. Added Kingston, Smart and Legacy DDR2 2GB parts. Added Micron DDR2 256MB part. Added Kingston and Infineon DDR2 512MB parts. (In shaded area)
Sept/05	25.0	Added Legacy 512MB part. Added ATP DDR2 512MB parts. Added Samsung 1GB parts. Added Viking and Samsung 2GB parts. Added Samsung DDR2 2GB part. Added ATP, Smart, and Legacy DDR2 1GB parts. (In shaded area)
Sept/05	26.0	Added Dataram, Micron and Samsung DDR 512MB part. Added Legacy DDR 1GB part. Added Micron DDR 2GB part. Added Virtium, Samsung and Kingston DDR2 1GB parts. Added Ventura DDR2 512MB part. (In shaded area)
Oct/05	27.0	Added Legend 1GB part. Added Kingston 2GB part. Added Dataram, Kingston, Smart and Ventura DDR2 1GB parts. Added Smart DDR2 2GB part. (In shaded area) Updated unleaded parts with correct shading.
Nov/05	28.0	Added Samsung 256MB parts. Added Hynix and Samsung 512MB parts. Added Legacy, Hynix, Samsung and Legend 1GB parts. Added Smart, Samsung and Hynix 2GB parts. Added Infineon 4GB part. (In shaded area)
Nov/05	29.0	Updated two Micron 1GB parts with corrected DRAM part numbers. (in shaded area)
Dec/05	30.0	Added Legacy DDR2 512MB part. (In shaded area)
Jan/06	31.0	Added Kingston DDR2 512MB, 1GB and 2GB parts. Added ATP DDR2 512MB part. (In shaded area)
Jan/06	32.0	Added Nanya DDR2 512MB, 1GB and 2GB parts. Added Legacy DDR2 2GB part. Added Hynix DDR2 512MB & 1G parts Added Samsung DDR2 2G part. Added Samsung DDR1 256MB, 512MB, 1G & 2G parts. (In shaded area)
Feb/06	33.0	Added Kingston and Smart DDR2 1GB parts. Added Infineon DDR1 512MB, 1G & 2G parts. Added Hynix DDR2 1G & 2G parts. (In shaded area)
Mar/06	34.0	Added Legacy, Wintec and SimpleTech DDR2 1GB parts. Added Legend DDR2 2GB part. (In shaded area_

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The Intel® Server Board SE7520BD2 or SE7520BD2D2 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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**Please 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 Rank on the memory module. Mixing of dissimilar memory manufacturer and similar speeds in each Rank on the memory module is NOT recommended.

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# Table of Contents

<b>1. Overview of Memory Testing .....</b>	<b>6</b>
1.1 Paper Qualification .....	6
1.2 Functional Testing .....	6
1.3 Computer Memory Test Lab* .....	6
<b>2. Memory Subsystem .....</b>	<b>7</b>
2.1 Memory Population.....	7
2.2 Identifying “Single Rank” or “Double Ranked” DIMMs .....	10
<b>3. Tested Memory .....</b>	<b>12</b>
Registered ECC, DDR266 DIMM Modules	
256MB Size (32M x 72).....	13
Registered ECC, DDR333 DIMM Modules	
256MB Size (32M x 72).....	13
Registered ECC, DDR2-400 DIMM Modules	
256MB Size (32M x 72).....	13
Registered, ECC, DDR266 DIMM Modules	
512 MB Sizes (64Mx72).....	15
Registered, ECC, DDR333 DIMM Modules	
512 MB Sizes (64Mx72).....	15
Registered, ECC, DDR2-400 DIMM Modules	
512 MB Sizes (64Mx72).....	17
Registered, ECC, DDR266 DIMM Modules	
1GB Size (128M x 72).....	19
Registered, ECC, DDR333 DIMM Modules	
1GB Size (128M x 72).....	19
Registered, ECC, DDR2-400 DIMM Modules	
1GB Size (128M x 72).....	21
Registered, ECC, DDR266 DIMM Modules	
2GB Size (256M x 72).....	24
Registered, ECC, DDR333 DIMM Modules	
2GB Size (256M x 72).....	24
Registered, ECC, DDR2-400 DIMM Modules	
2GB Size (256M x 72).....	25
Registered, ECC, DDR266 DIMM Modules	
4GB Size (256M x 72).....	27
Registered, ECC, DDR2-400 DIMM Modules	
4GB Size (256M x 72).....	27
<b>4. Sales Information .....</b>	<b>28</b>
<b>5. CMTL* (Computer Memory Test Labs) .....</b>	<b>30</b>

## 1. Overview of Memory Testing

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The following test processes are used to qualify Dual In-Line Memory Modules (DIMMs) for use with the Intel® Server Boards SE7520BD2 and SE7520BD2D2. Memory is a vital subsystem in a server. Intel requires that strict guidelines be met before a DIMM vendor is added to the Tested Memory List. To be included on the list as a fully supported DIMM, the memory must undergo rigorous tests to ensure that the product will perform the intended server product functions. Memory qualification for Intel server, workstation, and RAID products is performed both by Intel's Memory Validation Lab (MVL) and by an independent external test lab, Computer Memory Test Lab\* (CMTL).

The Tested Memory Lists for Intel's server board, workstation board, and RAID controller products categorize memory modules as advanced tested. The advanced testing process includes a standard paper qualification and then is followed by two levels of functional testing. DIMMs that have completed and passed advanced testing are considered to be compatible with the product on which they were tested, and with the test software and operating systems that were used during the test process.

### 1.1 Paper Qualification

A paper qualification is performed to verify that the specifications of a given DIMM meet Intel's memory specifications for a given product. Specification criteria reviewed include: critical timings, electrical characteristics, timing requirements, environmental requirements, and packaging requirements.

### 1.2 Functional Testing

After a given DIMM passes the standard paper qualification, functionality of the DIMM is then tested with the intended Intel product. Two levels of functional testing are performed; standard and advanced.

Standard functional testing requires that the given DIMM and Intel product combination operate with no failures for a period of no less than 24 hours for both minimum and maximum DIMM configurations. Testing is performed using a Microsoft\* Windows\* operating system and a custom test package. The test systems operate with standard voltage at room temperature.

Advanced functional testing requires that the given DIMM and Intel product combination operate with no failures for a period of no less than 24 hours for both minimum and maximum DIMM configurations. Testing is performed with multiple operating systems and various custom test packages. Each test configuration is tested with various voltages and temperature margin conditions.

### 1.3 Computer Memory Test Lab\*

Computer Memory Test Lab, also known as CMTL\*, is a leading memory test organization responsible for testing a broad range of memory products. A memory product, which receives a "PASS" after being tested by CMTL, means it functions correctly and consumers can use the product 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 Intel supplied equipment and procedures defined by Intel's various functional testing levels.

CMTL Contact Info:

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

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

## 2. Memory Subsystem

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The Intel® Server Board SE7520BD2 is capable of supporting either DDR266 or DDR333 memory technologies. The Intel® Server Board SE7520BD2D2 is capable of supporting DDR2400 memory technologies.

NOTE: Industry naming conventions for equivalent memory technologies include the following:

- DDR266 = PC2100
- DDR333 = PC2700
- DDR2400 = PC23200

The following maximum memory capacities are supported based on the number of DIMM slots provided and maximum supported memory loads by the chipset:

- 24GB maximum capacity for DDR266
- 16GB maximum capacity for DDR333
- 16GB maximum capacity for DDR2400

The minimum memory supported with the system running in single channel memory mode is:

- 256MB for DDR266, DDR333 and DDR2400.

Supported DIMM capacities are as follows:

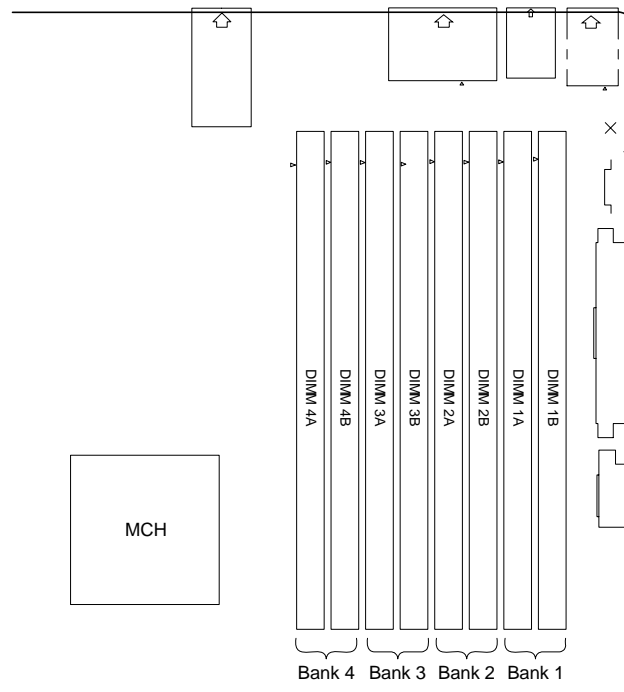
- 256MB, 512MB, 1GB, 2GB, and 4GB.

### 2.1 Memory Population

The Server Board SE7520BD2 has eight DIMM slots, or four DIMM banks. Both DIMMs in a bank should be identical (same manufacturer, CAS latency, number of rows, columns and devices, timing parameters etc.). Although DIMMs within each bank must be identical, the BIOS supports various DIMM sizes and configurations allowing the banks of memory to be different. Memory sizing and configuration is guaranteed only for qualified DIMMs approved by Intel.

Mixing of DDR266 and DDR333 DIMMs is supported between banks of memory. However, when mixing DIMM types, DDR333 will run at DDR266 speeds.

The memory controller is capable of supporting up to 4 loads per channel for DDR333. Memory technologies are classified as being either single rank or dual rank depending on the number of DRAM devices that are used on any one DIMM. A single rank DIMM is a single load device, i.e., Single Rank = 1 Load. Dual rank DIMMs are dual load devices, i.e., Dual Rank = 2 loads.



**Figure 1. Identifying Banks of Memory**

**DDR266, DDR333 and DDR2400 DIMM population rules are as follows:**

- (1) DIMM banks must be populated in order starting with the slots furthest from MCH.
- (2) Single rank DIMMs must be populated before dual rank DIMMs.
- (3) A maximum of four DIMMs can be populated when all four DIMMs are dual rank DDR333 DIMMs.

**The following tables show the supported memory configurations:**

- s/r = single rank
- d/r = dual rank
- E = Empty



**Table 1: Supported DDR266 DIMM Populations**

MCH	Bank 3 – DIMMs 3A, 3B	Bank 2 – DIMMs 2A, 2B	Bank 1 – DIMMs 1A, 1B
	S/R	S/R	S/R
	E	S/R	S/R
	E	E	S/R
	D/R	D/R	D/R
	E	D/R	D/R
	E	E	D/R
	D/R	S/R	S/R
	D/R	D/R	S/R
E	D/R	S/R	

**Table 2: Supported DDR333 DIMM Populations**

MCH	Bank 3 – DIMMs 3A, 3B	Bank 2 – DIMMs 2A, 2B	Bank 1 – DIMMs 1A, 1B
	S/R	S/R	S/R
	E	S/R	S/R
	E	E	S/R
	E	D/R	D/R
	E	E	D/R
	D/R	S/R	S/R
E	D/R	S/R	

**Table 3: Supported DDR2400 DIMM Populations**

MCH	Bank 4 – DIMMs 4A, 4B	Bank 3 – DIMMs 3A, 3B	Bank 2 – DIMMs 2A, 2B	Bank 1 – DIMMs 1A, 1B
	S/R	S/R	S/R	S/R
	E	E	S/R	S/R
	E	E	E	S/R
	E	E	D/R	D/R
	E	E	E	D/R
	E	D/R	S/R	S/R
E	E	D/R	S/R	

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**Note:** On the Server Boards SE7520BD2 and SE7520BD2D2, when using all dual rank DDR333 or DDR2400 DIMMs, a total of four DIMMs can be populated. Configuring more than four dual rank DDR333 or DDR2400 DIMMs will result in the BIOS generating a memory configuration error.

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## 2.2 Identifying “Single Rank” or “Double Ranked” DIMMs

- **x8SR** = x8 *Single-Ranked modules* - have 5 DRAM's on the front and 4 DRAM's on the back with empty spots in between the DRAM's or have 9 DRAM's on one side and none on the backside.
- **x8DR** = x8 *Double-Ranked modules* - have 9 DRAM's on each side for a total of 18 (no empty slots)
- **x4SR** = x4 *Single-Ranked modules* - have 9 DRAM's on each side for a total of 18 – and look similar to x8 Double-Ranked
- **x4DR** = x4 *Double-Ranked modules* - have 18 (stacked) DRAM's on each side for a total of 36

The following tables list the current supported memory types:

<b>DDR266 Registered SDRAM Module Matrix</b>						
<b>DIMM Capacity</b>	<b>DIMM Organization</b>	<b>SDRAM Density</b>	<b>SDRAM Organization</b>	<b># SDRAM Devices/rows/Ranks</b>	<b># Address bits rows/Ranks/column</b>	<b>Ranked</b>
256MB	32M x 72	128Mbit	32M x 4	18/1/4	12/2/11	Single Ranked
256MB	32M x 72	128Mbit	16M x 8	18/2/4	12/2/10	Double Ranked
256MB	32M x 72	256Mbit	32M x 8	9/1/4	13/2/10	Single Ranked
512MB	64M x 72	256Mbit	64M x 4	18/1/4	13/2/11	Single Ranked
512MB	64M x 72	256Mbit	32M x 8	18/2/4	13/2/10	Double Ranked
512MB	64M x 72	512Mbit	64M x 8	9/1/4	13/2/11	Single Ranked
1GB	128M x 72	256Mbit	64M x 4	36/2/4	13/2/11	Double Ranked
1GB	128M x 72	512Mbit	64M x 8	18/2/4	13/2/11	Double Ranked
1GB	128M x 72	512Mbit	128M x 4	18/1/4	13/2/12	Single Ranked
2GB	256M x 72	512Mbit	128M x 4	36/2/4	13/2/12	Double Ranked
<b>DDR333 Registered SDRAM Module Matrix</b>						
<b>Note: The E7520 Chipset only supports BGA DRAM module Technology for DDR333</b>						
<b>DIMM Capacity</b>	<b>DIMM Organization</b>	<b>SDRAM Density</b>	<b>SDRAM Organization</b>	<b># SDRAM Devices/rows/Ranks</b>	<b># Address bits rows/Ranks/column</b>	<b>Ranked</b>
256MB	32M x 72	128Mbit	32M x 4	18/1/4	12/2/11	Single Ranked
256MB	32M x 72	128Mbit	16M x 8	18/2/4	12/2/10	Double Ranked
256MB	32M x 72	256Mbit	32M x 8	9/1/4	13/2/10	Single Ranked
512MB	64M x 72	256Mbit	64M x 4	18/1/4	13/2/11	Single Ranked
512MB	64M x 72	256Mbit	32M x 8	18/2/4	13/2/10	Double Ranked
512MB	64M x 72	512Mbit	64M x 8	9/1/4	13/2/11	Single Ranked
1GB	128M x 72	512Mbit	128M x 4	18/1/4	13/2/12	Single Ranked
1GB	128M x 72	512Mbit	64M x 8	18/2/4	13/2/11	Double Ranked
1GB	128M x 72	1Gbit	128M x 4	9/1/4	14/2/11	Single Ranked
2GB	256M x 72	1Gbit	128M x 4	18/1/4	14/2/12	Single Ranked
2GB	256M x 72	1Gbit	128M x 8	18/2/4	14/2/11	Double Ranked
4GB	TBD	TBD	TBD	TBD	TBD	TBD

## DDR2-400 Registered SDRAM Module Matrix

DIMM Capacity	DIMM Organization	SDRAM Density	SDRAM Organization	# SDRAM Devices/rows/Ranks	# Address bits rows/Ranks/column	Ranked
256MB	32M x 72	256Mbit	32M x 8	9/1/4	13/2/10	Single Ranked
512MB	64M x 72	256Mbit	64M x 4	18/1/4	13/2/11	Single Ranked
512MB	64M x 72	256Mbit	32M x 8	18/2/4	13/2/10	Double Ranked
512MB	64M x 72	512Mbit	64M x 8	9/1/4	14/2/10	Single Ranked
1GB	128M x 72	512Mbit	128M x 4	18/1/4	14/2/11	Single Ranked
1GB	128M x 72	512Mbit	64M x 8	18/2/4	14/2/10	Double Ranked
1GB	128M x 72	1Gbit	128M x 8	9/1/8	14/3/10	Single Ranked
2GB	256M x 72	1Gbit	256M x 4	18/1/8	14/3/11	Single Ranked
2GB	256M x 72	1Gbit	128M x 8	18/2/8	14/3/10	Double Ranked
2GB	256M x 72	2Gbit	256M x 8	9/1/8	15/3/10	Single Ranked
4GB	512M x 72	2Gbit	256M x 8	18/2/8	15/3/10	Double Ranked
4GB	512M x 72	2Gbit	512M x 4	18/1/8	15/3/11	Single Ranked
4GB	512M x 72	4Gbit	512M x 8	9/1/8	TBD	Single Ranked

### 3. Tested Memory

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The following tables list DIMM devices tested to be compatible with the Intel® Server Boards SE7520BD2 and SE7520BD2D2. The list of tested memory is periodically updated as qualified memory is added during the production life of the Intel product.

Intel strongly recommends the use of ECC memory in all server products.

Memory modules not listed in the following tables have not been tested for compatibility and their use with the Server Boards SE7520BD2 or SE7520BD2D2 may result in unpredictable operation and data loss.

**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. This list is subject to change without notice.

**Note:** This list is not intended to 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.

**Server Board SE7520BD2**  
**Registered ECC, DDR266 DIMM Modules**  
**256MB Size (32M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Legend*	L3272YC5-RU1HDC5B	HY5DU56822BT-J rev B	Hyundai	DDR1U0818-A rev 1	9/3/04		(32Mx8) <sup>*</sup> 9	SR	
Micron*	MT9VDDT3272G-265G3	MT46V32M8-6T G	Micron		1/20/05		(32Mx8) <sup>*</sup> 9	SR	

**Registered ECC, DDR333 DIMM Modules**  
**256MB Size (32M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Micron	MT9VDDF3272G-335G3	MT46V32M8FG-6	Micron		8/3/04		(32Mx8) <sup>*</sup> 9	SR	
Infineon*	HYS72D32300GB R-6-C	HYB25D256800CC-6	Infineon		8/30/04		(32Mx8) <sup>*</sup> 9	SR	
Samsung*	M312L3223EG0-CB3	K4H560838E-GCB3	Samsung		10/4/04		(32Mx8) <sup>*</sup> 9	SR	
Infineon	HYS72D32300GB R-6-B	HYB25D256800BC-6	Infineon		10/6/04		(32Mx8) <sup>*</sup> 9	SR	
+ATP Electronics*	AB32L72V8BFB3 S	K4H560838E-GCB3 rev E	Samsung	SB184V08L1	10/26/04		(32Mx8) <sup>*</sup> 9	SR	
<b>Samsung</b>	<b>M312L3223EZ0-CB3</b>	<b>K4H560838E-ZCB3</b>	<b>Samsung</b>		<b>2/24/05</b>	<b>Yes</b>	<b>(32Mx8)<sup>*</sup> 9</b>	<b>SR</b>	
Samsung	M312L3223EG3-CB3	K4H560838E-GCB3	Samsung		11/15/05		(32Mx8) <sup>*</sup> 9	SR	
<b>Samsung</b>	<b>M312L3223EZ3-CB3</b>	<b>K4H560838E-ZCB3</b>	<b>Samsung</b>		<b>11/15/05</b>	<b>Yes</b>	<b>(32Mx8)<sup>*</sup> 9</b>	<b>SR</b>	

**Registered ECC, DDR2-400 DIMM Modules**  
**256MB Size (32M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Infineon	HYS72T32000HR-5-A	HYB18T256800AF5-A	Infineon		5/2/05	Yes	(32Mx8) <sup>*</sup> 9	SR	
Samsung	M393T3253FG0-CCC	K4T56083QF-GCCC	Samsung		5/24/05		(32Mx8) <sup>*</sup> 9	SR	
<b>Samsung</b>	<b>M393T3253FZ0-CCC</b>	<b>K4T56083QF-ZCCC</b>	<b>Samsung</b>		<b>5/24/05</b>	<b>Yes</b>	<b>(32Mx8)<sup>*</sup> 9</b>	<b>SR</b>	
<b>Micron</b>	<b>MT9HTF3272Y-40EB2</b>	<b>MT47H32M8BP-37E</b>	<b>Micron</b>		<b>8/31/05</b>	<b>Yes</b>	<b>(32Mx8)<sup>*</sup> 9</b>	<b>SR</b>	
Samsung	M393T3253FG3-CCC	K4T56083QF-GCCC	Samsung		11/4/05		(32Mx8) <sup>*</sup> 9	SR	

<b>Registered ECC, DDR2-400 DIMM Modules 256MB Size (32M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
<b>Samsung</b>	<b>M393T3253FZ3-CCC</b>	<b>K4T56083QF-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(32Mx8)* 9</b>	<b>SR</b>	

**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 may contain "stacked" DRAM parts. These parts may have thermal & physical limitations in some chassis configurations. It is advised to verify that your chassis configuration will support "stacked" parts before purchase.

**Verify that the DRAM part number matches the DRAM on this list before purchasing.**

**Server Board SE7520BD2**  
**Registered, ECC, DDR266 DIMM Modules**  
**512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Ventura Technology Group*	D52WVK42SV	K4H560838E-TCB3 rev E	Samsung	DR1G872-A	9/2/04		(32Mx8)*18	DR	
+Legend	L6472YC5-PPASDD5D	K4H560438D-TCB3 rev D	Samsung	18-25141A Rev A	8/31/04		(64Mx4)*18	SR	
+TRS*	TRS21151	HYB25D256400BT-7 rev B	Infineon	M0530LA1 rev 1	9/8/04		(64Mx4)*18	SR	
+TRS	TRS21152	HYB25D256800BT-7 rev B	Infineon	M0529LA1 rev 1	9/22/04		(32Mx8)*18	DR	
+Legend	L6472YC5-RU1HDC5B	HY5DU56822BT-J rev B	Hyundai	DRR1U0818-A rev 1	10/4/04		(32Mx8)*18	DR	
Hynix*	HYMD264G726D4 M-H AA	HY5DU56422DT-H	Hynix		12/22/04		(64Mx4)*18	SR	
Micron	MT18VDDT6472G-265G3	MT46V64M4-75 G	Micron		4/11/05		(32Mx8)*18	DR	
Samsung	M312L6420ETS-CB0	K4H560438E-TCB0	Samsung		4/13/05		(64Mx4)*18	SR	
<b>Samsung</b>	<b>M312L6420EUS-CB0</b>	<b>K4H560438E-UCB0</b>	<b>Samsung</b>		<b>4/13/05</b>	<b>Yes</b>	<b>(64Mx4)*18</b>	<b>SR</b>	
+TRS	TRS21202	HYB25D256400CE-7 rev C	Infineon	M0530LA1 rev 1	6/8/05		(64Mx4)*18	SR	
+Legacy Electronics Inc.*	88M6JDFR-1JDG	MT46V64M4TG-75 rev C	Micron	LE18DDT18 44RRM rev B	9/12/05		(64Mx4)*18	SR	

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

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Infineon	HYS72D64300GB R-6-C	HYB25D256400CC-6	Infineon		7/20/04		(64Mx4)*18	SR	
Samsung	M312L6420EG0-CB3	K4H560438E-GCB3	Samsung		8/16/04		(64Mx4)*18	SR	
Micron	MT18VDDF6472G-335C1	MT46V64M4FB-6	Micron		8/30/04		(32Mx8)*18	DR	
Micron	MT18VDDF6472G-335G3	4AGII D9BJR	Micron		8/31/04		(64Mx8)*9	SR	
+ATP Electronics	AB64L72L4BFB3C	HYB25D256400BC-5 rev B	Infineon	SB184L04L1	9/14/04		(64Mx4)*18	SR	
Hynix	HYMD264G72DF4 N-J AA	HY5DU564220-F-J	Hynix		9/17/04		(64Mx4)*18	SR	
+Dataram*	DTM63676D	HYB25D256400CC-6 rev C	Infineon	40018A rev A	9/20/04		(64Mx4)*18	SR	
Infineon	HYS72D64320GB R-6-C	HYS72D64320GBR-6-C	Infineon		9/22/04		(32Mx8)*18	DR	
+ATP Electronics	AB64L72L4BFB3S	K4H560438E-GCB3 rev E	Samsung	SB184L04L1	10/8/04		(64Mx4)*18	SR	
Infineon	HYS72D64320GB R-6-B	HYB25D256800BC-6	Infineon		10/6/04		(32Mx8)*18	DR	

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

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Smart Modular Technologies*	SM6472RDDR6H1 BGBC	HYB25D256400CC-6 rev C	Infineon	184-22-2	10/14/04		(64Mx4)* *18	SR	
Hynix	HYMD564G72BF8 N-J AA	HY5DU12822BF-J	Hynix		10/27/04		(64Mx8)* 9	SR	
+Legacy Electronics Inc.	88S6JDGR-1NDG	HYB25D256400BC6 rev B	Infineon	LE36DDF18 44RC rev B	12/20/04		(64Mx4)* *18	SR	
+Ventura Technology Group	D52YCK44SV	K4H560438E-GCB3 rev E	Samsung	DR1G472B	2/10/05		(64Mx4)* *18	SR	
<b>Samsung</b>	<b>M312L6420EZ0-CB3</b>	<b>K4H560438E-ZCB3</b>	<b>Samsung</b>		<b>2/24/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
+Ventura Technology Group	D52YCK44SV	K4H560438E-GCB3 rev E	Samsung	DR1G472B	2/10/05		(64Mx4)* 18	SR	
+Dane-Elec*	DLD333R072645H	MT46V64M4FG-5B rev G	Micron	DR1G472B	3/1/05		(64Mx4)* 18	SR	
+Ventura Technology Group	D52YCK44MV	MT46V64M4FG-6 rev G	Micron	DR1G472B	3/29/05		(64Mx4)* 18	SR	
+SimpleTech*	ST72E4K64ML-D06E	HYB25D256400CC-6 rev C	Infineon	01269 rev A	4/13/05		(64Mx4)* 18	SR	
<b>Samsung</b>	<b>M312L6420EUS-CB0</b>	<b>K4H560438E-UCB0</b>	<b>Samsung</b>		<b>4/13/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
+Kingston*	KVR333S4R25/51 2I	HYB25D256400CC-6 rev C	Infineon	2025161-001.B00	4/5/05		(64Mx4)* 18	SR	
+Avant Technology*	AVM7264R38C533 3K6-MTG	MT46V64M4FG-5B rev G	Micron	RCE0020-01 rev 1	4/27/05		(64Mx4)* 18	SR	
+Wintec Industries*	3C944646-L	HYB25D256400CC-5 rev C	Infineon	DR1G472B	6/14/05		(64Mx4)* 18	SR	
<b>+Kingston</b>	<b>KVR333S4R25/51 2I</b>	<b>K4H560438E-GCB3 rev E</b>	<b>Samsung</b>	<b>2025161-001.B00 na</b>	<b>7/18/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
<b>Samsung</b>	<b>M312L6523CZ0-CB3</b>	<b>K4H510838C-ZCB3</b>	<b>Samsung</b>		<b>9/28/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
Micron	MT9VDDF6472G-335D3	MT46V64M8FG	Micron		9/26/05		(64Mx8)* 9	SR	
Hynix	HYMD564G726CF P8N-J	HY5DU12822CFP-J	Hynix		10/24/05		(64Mx8)* 9	SR	
Samsung	M312L6420EG3-CB3	K4H560438E-GCB3	Samsung		11/15/05		(64Mx4)* 18	SR	
<b>Samsung</b>	<b>M312L6420EZ3-CB3</b>	<b>K4H560438E-ZCB3</b>	<b>Samsung</b>		<b>11/15/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
<b>Samsung</b>	<b>M312L6523CZ3-CB3</b>	<b>K4H510838C-ZCB3</b>	<b>Samsung</b>		<b>11/15/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
<b>Infineon</b>	<b>HYS72D64301HB R-6-C</b>	<b>HYB25D512800CF-6</b>	<b>Infineon</b>		<b>1/31/06</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	



**Registered, ECC, DDR2-400 DIMM Modules  
512 MB Sizes (64Mx72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Hynix	HYMP564R728-E3-AA	HY5PS12821-F-E3-AA	Hynix		5/2/05		(64Mx8)* 9	SR	
<b>Micron</b>	<b>MT18HTF6472Y-40EB2</b>	<b>MT47H64M4BP-37E</b>	<b>Micron</b>		<b>5/2/05</b>	<b>Yes</b>			
Samsung	M393T6450FG0-CCC	K4T56043QF-GCCC	Samsung		6/6/05		(64Mx4)* 18	SR	
<b>Samsung</b>	<b>M393T6450FZ0-CCC</b>	<b>K4T56043QF-ZCCC</b>	<b>Samsung</b>		<b>6/6/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
Samsung	M393T6450FG0-CCC	K4T56043QF-GCCC	Samsung		6/6/05		(64Mx4)* 18	SR	
<b>Samsung</b>	<b>M393T6450FZ0-CCC</b>	<b>K4T56043QF-ZCCC</b>	<b>Samsung</b>		<b>6/6/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
<b>Micron</b>	<b>MT9HTF6472Y-40EB2</b>	<b>MT47H64M8CB-5E</b>	<b>Micron</b>		<b>7/18/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
<b>Samsung</b>	<b>M393T6453FZ0-CCC</b>	<b>K4T56083QF-ZCCC</b>	<b>Samsung</b>		<b>6/27/05</b>	<b>Yes</b>	<b>(32Mx8)* 18</b>	<b>DR</b>	
Samsung	M393T6453FG0-CCC	K4T56083QF-GCCC	Samsung		6/27/05		(32Mx8)* 18	DR	
<b>Samsung</b>	<b>M393T6553CZ0-CCC</b>	<b>K4T51083QC-ZCCC</b>	<b>Samsung</b>		<b>8/3/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
<b>Samsung</b>	<b>M393T6450FZ0-CCC</b>	<b>K4T56043QF-ZCCC</b>	<b>Samsung</b>		<b>8/3/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
<b>Infineon</b>	<b>HYS72T64020HR-5-A</b>	<b>HYB18T256800AF5-A</b>	<b>Infineon</b>		<b>8/3/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
+Kingston	KVR400D2S8R3/512I	HYB18T512800AF37 rev A	Infineon	2025263-001.C00 na	08/10/05		(64Mx8)* 9	SR	
<b>Infineon</b>	<b>HYS72T64001HR-5-A</b>	<b>HYB18T256400AF5-A</b>	<b>Infineon</b>		<b>8/30/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
+ATP Electronics*	AH64K72N8BHC4S	K4T51083QC-ZCD5 rev C	Samsung	SH240N08K1 na	9/15/05		(64Mx8)* 9	SR	
+Dataram	DTM63311C	K4T56043QF-(Z)GCCC rev F	Samsung	40011A rev A	9/19/05		(64Mx4)* 18	SR	
+Ventura Technology Group	D2-52KC53SV-333	K4T56043QF-ZCD5 rev F	Samsung	D2R472 na	9/23/05		(64Mx4)* 18	SR	
<b>Samsung</b>	<b>M393T6450FZ3-CCC</b>	<b>K4T56043QF-ZCCC</b>	<b>Samsung</b>		<b>10/24/05</b>	<b>Yes</b>	<b>(64Mx4)* 18</b>	<b>SR</b>	
<b>Samsung</b>	<b>M393T6553CZ3-CCC</b>	<b>K4T51083QC-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
Samsung	M393T6453FG3-CCC	K4T56083QF-GCCC	Samsung		11/4/05		(32Mx8)* 18	DR	
<b>Samsung</b>	<b>M393T6453FZ3-CCC</b>	<b>K4T56083QF-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(32Mx8)* 18</b>	<b>DR</b>	
Samsung	M393T6450FG3-CCC	K4T56043QF-GCCC	Samsung		11/4/05		(64Mx4)* 18	SR	
+Legacy Electronics Inc.	B557K4C2AAA-50	K4T51083QC-ZCCC rev C	Samsung	LE9DD2F2408RRA rev A	11/14/05		(64Mx8)* 9	SR	

<b>Registered, ECC, DDR2-400 DIMM Modules 512 MB Sizes (64Mx72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
+Kingston	KVR400D2S8R3/5 12l	NT5TU64M8AE-37B rev A	Nanya	2025263- 001.C00 na	12/8/05		(64Mx8)* 9	SR	
<b>+ATP Electronics</b>	<b>AH64K72F8BHC4 S</b>	<b>K4T51083QC-ZCD5 rev C</b>	<b>Samsung</b>	<b>SH240F08K 1 na</b>	<b>12/20/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
Nanya Technology Corporation	NT512T72U89A0B V-5A	NT5TU64M8AE-5A rev A	Nanya	NTPCB0002 0P (0509) na	1/9/06		(64Mx8)* 9	SR	
<b>Hynix</b>	<b>HYMP564R72P8- E3</b>	<b>HY5PS12821FP-E3</b>	<b>Hynix</b>		<b>12/13/05</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	
<b>Hynix</b>	<b>HYMP564R72BP8 -E3</b>	<b>HY5PS12821BFP-E3</b>	<b>Hynix</b>		<b>1/10/06</b>	<b>Yes</b>	<b>(64Mx8)* 9</b>	<b>SR</b>	

**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 may contain "stacked" DRAM parts. These parts may have thermal & physical limitations in some chassis configurations. It is advised to verify that your chassis configuration will support "stacked" parts before purchase.

**Verify that the DRAM part number match the DRAM on this list before purchasing.**

**Server Board SE7520BD2**  
**Registered, ECC, DDR266 DIMM Modules**  
**1GB Size (128M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Legend	L1272YC5-RU1HHDH5A	HY5DU12822AT-H rev A	Hyundai	DRR1U0818-A rev 1	9/16/04		(64Mx8)*18	DR	
+TRS*	TRS21174	HYB25D512800A T-7 rev A	Infineon	M0529LA1 rev 1	9/28/04		(64Mx8)*18	DR	
+TRS	TRS21171	HYB25D256400B C-7 rev B	Infineon	M0533LA1 rev 1	10/13/04		(64Mx4)*36	DR	
+TRS	TRS21203	HYB25D512400B E-7 rev B	Infineon	M0530LA1 rev 1	10/22/04		(128Mx4)*18	SR	
+Ventura Technology Group	D54WYK42SV	K4H510838B-TCB3 rev B	Samsung	DR1G872-A	11/4/04		(64Mx8)*18	DR	
Hynix	HYMD512G726B4M-HAA	HY5DU12422BT-H	Hynix		11/15/04		(128Mx4)*18	SR	
+Swissbit*	SDR12872K1A32IN-70	HYB25D256400C C-5 rev C	Infineon	B6R404 rev 1	2/4/05		(64Mx4)*36	DR	
Micron	MT18VDDT12872G-265D2	MT46V128M4TG-6T	Micron		4/1/05		(128Mx4)*18	SR	
Samsung	M312L2828ET0-CB0	K4H510638E-TCB0	Samsung		6/27/05		(64Mx4)*36	DR	
<b>Samsung</b>	<b>M312L2828EZ0-CB0</b>	<b>M312L2828EZ0-CB0</b>	<b>Samsung</b>		<b>7/25/05</b>	<b>Yes</b>	<b>(64Mx4)*36</b>	<b>DR</b>	
<b>Samsung</b>	<b>M312L2920CUS-CB0</b>	<b>K4H510438C-UCB0</b>	<b>Samsung</b>		<b>9/21/05</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
+Legend	L1272YC5-183HDD5A	HY5DU56422AS-H rev A	Hyundai	184RL rev 3	10/12/05		(64Mx4)*36	DR	

**Registered, ECC, DDR333 DIMM Modules**  
**1GB Size (128M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Infineon	HYS72D128320GBR-6-C	HYB25D256400C C-6	Infineon		7/21/04		(64Mx4)*36	DR	
Samsung	M312L2820EG0-CB3	K4H560438E-GCB3	Samsung		8/3/04		(64Mx4)*36	DR	
+Smart Modular Technologies	SM12872RDDR6H1BGAI	HYB25D512400B C-6 rev B	Infineon	P52G184NESZBGAX rev A	8/26/04		(128Mx4)*18	SR	
+Smart Modular Technologies	SM12872RDDR6H2BGIC	HYB25D256400C C-6 rev C	Infineon	P54G184NESZBRCD rev B	8/31/04		(64Mx4)*36	DR	
Micron	MT18VDDF12872G-335D3	MT46V128M4FN-6	Micron		9/3/04		(128Mx4)*18	SR	
Kingston	KVR333X72RC25/1G	HYB25D256400C C-6 rev C	Infineon	2025247-001.A00	9/24/04		(64Mx4)*36	DR	
+Viking	VI4CR287224DBKL2	K4H560438E-GCB3 rev E	Samsung	0000972B	9/21/04		(64Mx4)*36	DR	
+Smart Modular Technologies	SM12872RDDR6H2BGAS	K4H560438E-GCB3 rev E	Samsung	P54G184NESZBRCD rev B	10/7/04		(64Mx4)*36	DR	

**Registered, ECC, DDR333 DIMM Modules  
1GB Size (128M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Centon Electronics*	TOP02-E150	K4H560438E-GCB3 rev E	Samsung	CPCB/00571 rev G	10/5/04		(64Mx4)* 36	DR	
+Dataram	DTM63677F	HYB25D256400C C-6 rev C	Infineon	40599A rev A	10/6/04		(64Mx4)* 36	DR	
+Smart Modular Technologies	SM12872RDDR6 H8BGIB	HYB25D512800B C-6 rev B	Infineon	P51G184NE BZBIB1 rev A	10/22/04		(64Mx8)* 18	DR	
+ATP Electronics	AB28L72Y4BFB3 C	HYB25D256400B C-5 rev B	Infineon	SB184Y04L1	10/18/04		(64Mx4)* 36	DR	
+TRS	TRS21197	HYB25D256400C C-6 rev C	Infineon	M0533LA1 rev 1	11/3/04		(64Mx4)* 36	DR	
+Legacy Electronics Inc.	89S6MDZR-1NDG	HYB25D512400B C-6 rev B	Infineon	LE18DDF18 44R rev A	12/2/04		(128Mx4) *18	SR	
+Ventura Technology Group	D54YCK34SV	K4H560438E-GCB3 rev E	Samsung	V223	12/13/04		(64Mx4)* 36	DR	
+ATP Electronics	AB28L72L4BFB3 C	HYB25D512400B C-6 rev B	Infineon	SB184L04L1	1/6/05		(128Mx4) *18	SR	
Infineon	HYS72D128321 GBR-6-B	HYB25D512800B C-6 B	Infineon		1/10/05		(64Mx8)* 18	DR	
+Swissbit	SDR12872K1A3 2IN-60	HYB25D256400C C-5 rev C	Infineon	B6R404 rev 1	1/24/05		(64Mx4)* 36	DR	
Micron	MT36VDDF1287 2G-335G3	MT46V64M4FG-6	Micron		1/20/05		(64Mx4)* 36	DR	
+Smart Modular Technologies	SM12872RDDR6 H1BGBI	HYB25D512400B C-6 rev B	Infineon	184-22-2	2/14/05		(128Mx4) *18	SR	
+ATP Electronics	AB28L72L4BFB3 M	MT46V128M4FN-5B rev D	Micron	SB184L04L1	2/18/05		(128Mx4) *18	SR	
+ATP Electronics	AB28L72L4BFB3 S	K4H510438C-ZCB3 rev C	Samsung	SB184L04L1	3/8/05		(128Mx4) *18	SR	
+Ventura Technology Group	D54YFK44MV	MT46V128M4FN-6 rev D	Micron	DR1G472B	3/10/05		(128Mx4) *18	SR	
+Legacy Electronics Inc.	89S6JDGM-1NDG	HYB25D256400B C6 rev B	Infineon	LE36DDF18 44RRF rev A	3/3/05		(128Mx4) *18	SR	
Infineon	HYS72D128300 GBR-6-B	HYB25D512400B C-6 B DRAM date code 0514	Infineon		3/21/05		(128Mx4) *18	SR	
+Dane-Elec	DLD333R072285 M	MT46V128M4FN-5B rev D	Micron	DR1G472B	3/18/05		(128Mx4) *18	SR	
SimpleTech	ST72E4L128ML-D06E	HYB25D512400B C-6 rev B	Infineon	01269 rev A	4/13/05		(128Mx4) *18	SR	
+Ventura Technology Group	D54YFK44SV	K4H510438C-ZCB3 rev C	Samsung	DR1G472B	4/11/05		(128Mx4) *18	SR	
+Wintec Industries	3C954641D-L	HYB25D256400C C-5 rev C	Infineon	ZK4096M84 RCJB	4/11/05		(64Mx4)* 36	DR	
+Avant Technology	AVM7228R38C5 333K4-MTG	MT46V64M4FG-6 rev G	Micron	B6R400 rev 1	4/25/05		(64Mx4)* 36	DR	
+Avant Technology	AVM7228R53C5 333K6-MTD	MT46V128M4FN-6 rev D	Micron	RCE0020-01 rev 1	4/25/05		(128Mx4) *18	SR	
<b>Samsung</b>	<b>M312L2920CZ0-CB3</b>	<b>K4H510438C-ZCB3</b>	<b>Samsung</b>		<b>5/3/05</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
Dataram	DTM63694B	K4H510438C-ZCB3 rev C	Samsung	40018A rev A	5/9/05		(128Mx4) *18	SR	

**Registered, ECC, DDR333 DIMM Modules  
1GB Size (128M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Samsung	M312L2820EZ0-CB3	K4H560438E-GCB3	Samsung		6/22/05	Yes	(64Mx4)*36	DR	
+Kingston	KVR333D4R25/1 GI	K4H560438E-GCB3 rev E	Samsung	2025247-001.A00 na	7/21/05	Yes	(64Mx4)*36	DR	
Hynix	HYMD512G726B F4N-J	HY5DU12422B-F-J	Hynix		7/25/05		(64Mx4)*18	DR	
Samsung	M312L2923CZ0-CB3	K4H510838C-ZCB3	Samsung		8/26/05	Yes	(64Mx8)*18	DR	
+Legacy Electronics Inc.	89L6MDZR-1PDG	BGA128MX4DDRN C na	Legacy	LE18DDF1844R rev A	9/27/05		(128Mx4)*18	SR	
+Legacy Electronics Inc.	89B6MDZR-1NDG	K4H510438C-ZCB3 rev C	Samsung	LE18DDF1844R rev A	10/24/05		(128Mx4)*18	SR	
Hynix	HYMD512G726C FP4N-J	HY5DU12422CFP-J	Hynix		10/24/05		(128Mx4)*18	SR	
Samsung	M312L2920CZ3-CB3	K4H510438C-ZCB3	Samsung		11/15/05	Yes	(128Mx4)*18	SR	
Samsung	M312L2923CZ3-CB3	K4H510838C-ZCB3	Samsung		11/15/05	Yes	(64Mx8)*18	DR	
Samsung	M312L2820EG3-CB3	K4H510438B-GCB3	Samsung		11/15/05		(64Mx4)*36	DR	
Samsung	M312L2820EZ3-CB3	K4H510438B-ZCB3	Samsung		11/15/05	Yes	(64Mx4)*36	DR	
Infineon	HYS72D128321H BR-6-C	HYB25D512800CF-6	Infineon		1/31/06	Yes	(64Mx8)*18	DR	
Infineon	HYS72D128300H BR-6-C	HYB25D512400CF-6	Infineon		1/31/06	Yes	(128Mx4)*18	SR	

**Registered, ECC, DDR2-400 DIMM Modules  
1GB Size (128M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Micron	MT18HTF12872Y-40EA2	MT47H64M8BT-5E	Micron		6/6/05	Yes	(128Mx4)*18	SR	
Infineon	HYS72T128000H R-5-A	HYB18T512400AF5	Infineon		5/12/05	Yes	(128Mx4)*18	SR	
Samsung	M393T2950BG0-CCC	K4T51043QB-GCCC	Samsung		5/12/05		(128Mx4)*18	SR	
Samsung	M393T2950CZ0-CCC	K45T1043QC-ZCCC	Samsung		7/8/05	Yes	(128Mx4)*18	SR	
Samsung	M393T2953BG0-CCC	K4T510830B-GCCC	Samsung		6/27/05		(64Mx8)*18	DR	
Samsung	M393T2953BZ0-CCC	K4T51083QB-ZCCC	Samsung		6/27/05	Yes	(64Mx8)*18	DR	
Samsung	M393T2953CZ0-CCC	K4T510830C-ZCCC	Samsung		7/25/05	Yes	(64Mx8)*18	DR	
Micron	MT18HTF12872Y-40EB3	MT47H64M8BT-5E	Micron		7/25/05	Yes	(128Mx4)*18	SR	
Infineon	HYS72T128020H R-5-A	HYB18T512800AF5-A	Infineon		7/25/05	Yes	(64Mx8)*18	DR	

<b>Registered, ECC, DDR2-400 DIMM Modules 1GB Size (128M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
<b>Samsung</b>	<b>M393T2950BZ0-CCC</b>	<b>K4T51043QB-ZCCC</b>	<b>Samsung</b>		<b>8/3/05</b>	<b>Yes</b>	(128Mx4)*18	SR	
+Smart Modular Technologies	SB1287RDR2124 3-5-H	HY5PS12421FP-E3 A 1st Generation	Hynix	E72369 na	08/19/05		(128Mx4)*18	SR	
+ATP Electronics	AH28K72M4BHC 4S	K4T51043QC-ZCCC rev C	Samsung	SH240M04K 1 na	8/29/05		(128Mx4)*18	SR	
+Smart Modular Technologies	SB1287RDR2124 35IA	HYB18T512400AF5 rev A	Infineon	PB54G240N ESUBRCC1 rev A	8/29/05		(128Mx4)*18	SR	
+Legacy Electronics Inc.	S512872M20A-50A	HYB18T512400AF(C)5 rev A	Infineon	LE18DD2F2 404RRH rev A	9/1/05		(128Mx4)*18	SR	
Virtium Technology Inc*	VL393T2953-CCS	K4T51083QC-ZCD5 rev C	Samsung	D2R872	9/19/05		(64Mx8)*18	DR	
+Kingston	KVR400D2S4R3/1GI	E5104AE-5C-E rev E	Elpida	2025248-001.B00	9/27/05		(128Mx4)*18	SR	
Virtium Technology Inc	VL393T2950-CCM	MT47H128M4BT-37E rev A	Micron	D2R472	9/22/05		(128Mx4)*18	SR	
<b>Samsung</b>	<b>M393T2950CZ3-CCC</b>	<b>K4T51043QC-ZCCC</b>	<b>Samsung</b>		<b>9/30/05</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
+Dataram	DTM63310A	HYB18T512400AF5 rev A	Infineon	40011A rev A	10/6/05		(128Mx4)*18	SR	
+Kingston	KVR400D2S8R3/1GI	HYB18T1G800AF-5 rev A	Infineon	2025263-001.C00	9/29/05		(128Mx4)*18	SR	
+Smart Modular Technologies	SB1287RDR2124 3-5-E	E5104AB-4A-E rev B	Elpida	Z10 026A na	10/3/05		(128Mx4)*18	SR	
+Ventura Technology Group	D2-54KF53SV-333	K4T51043QB-ZCCC rev B	Samsung	D2R472	9/30/05		(128Mx4)*18	SR	
+Legend	L12723C7-RC AH2HBF	HY5PS12821F-E3 rev A	Hynix	B62RRCA rev A	11/3/05		(64Mx8)*18	DR	
Hynix	HYMP512R724-E3	HY5PS12421-F-E3	Hynix		10/24/05		(128Mx4)*18	SR	
<b>Samsung</b>	<b>M393T2953CZ3-CCC</b>	<b>K4T510830C-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(64Mx8)*18</b>	<b>DR</b>	
+Kingston	KVR400D2S4R3/1GI	HYB18T512400AF5 rev A	Infineon	2025248-001.B00 na	12/7/05		(128Mx4)*18	SR	
Nanya Technology Corporation	NT1GT72U4PA0 BV-5A	NT5TU128M4AE-5A rev A	Nanya	NTPCB0001 9 (0519, 0515) na	1/6/06		(128Mx4)*18	SR	
<b>Hynix</b>	<b>HYMP512R72P4-E3</b>	<b>HY5PS12421FP-E3</b>	<b>Hynix</b>		<b>1/10/06</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
Hynix	HYMP512R72P8-E3	HY5PS12821FP-E3	Hynix		11/15/05		(64Mx8)*18	DR	
<b>+Kingston</b>	<b>KVR400D2S4R3/1GI</b>	<b>HYB18T512400AF3 7 rev A</b>	<b>Infineon</b>	<b>2025248-001.B00 na</b>	<b>1/18/06</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
+Smart Modular Technologies	SG1287RDR2648 35IA	HYB18T512800AF3 7 rev A	Infineon	PG58G240 NEBUB2RB rev A	1/23/06		(64Mx8)*18	DR	

<b>Registered, ECC, DDR2-400 DIMM Modules 1GB Size (128M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
Hynix	<b>HYMP112R72P8-E3</b>	<b>HY5PS1G831FP-E3</b>	Hynix		1/31/06	Yes	(128Mx8)*9		
Hynix	<b>HYMP512R72BP4-E3</b>	<b>HY5PS12421BFP-E3</b>	Hynix		1/31/06	Yes	(128Mx4)*18	SR	
Hynix	<b>HYMP512R72BP8-E3</b>	<b>HY5PS12821BFP-E3</b>	Hynix		1/31/06	Yes	(64Mx8)*18	DR	
+Legacy Electronics Inc.	B517M4C2AHA-50	K4T51043QC-ZCCC rev C	Samsung	LE18DD2F2404RRH rev A	2/9/06		(128Mx4)*18	SR	
<b>+Wintec Industries</b>	<b>39S931341A-L</b>	<b>HYB18T512400AF5 rev A</b>	<b>Infineon</b>	<b>D2R472</b>	<b>2/16/06</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	
<b>SimpleTech</b>	<b>SL72P4M128M8M-B05AYU</b>	<b>HYB18T512400AF5 rev A</b>	<b>Infineon</b>	<b>01235 rev B</b>	<b>2/23/06</b>	<b>Yes</b>	<b>(128Mx4)*18</b>	<b>SR</b>	

**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 may contain "stacked" DRAM parts. These parts may have thermal & physical limitations in some chassis configurations. It is advised to verify that your chassis configuration will support "stacked" parts before purchase.

**Verify that the DRAM part number matches the DRAM on this list before purchasing.**

**Server Board SE7520BD2**  
**Registered, ECC, DDR266 DIMM Modules**  
**2GB Size (256M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+TRS	TRS21155	HYB25D512400AT-7 rev A	Infineon	M0531LA1 rev 1	9/7/04		(128Mx4)*36	DR	
+Ventura Technology Group	D56WXK28SV	K4H510438B-TCB3 rev B	Samsung	V213	10/15/04		(128Mx4)*36	DR	
Kingston	KVR266X72RC25/2G	K4H510438B-TCB0 rev B	Samsung	2025148-001.A00	11/22/04		(128Mx4)*36	DR	
+Viking	VI4CR567224EY HL3	K4H510438B-TCB3 rev B	Samsung	03-0307 rev B	12/17/04		(128Mx4)*36	DR	
+Dataram	DTM63710A	HYB25D512400BE-7 rev B	Infineon	40028A rev A	1/20/05		(128Mx4)*36	DR	
+ATP Electronics	AB56L72T4SHB0S	K4H510438B-TCB3 rev B	Samsung	SB184T04L3	1/28/05		(128Mx4)*36	DR	
Samsung	M312L5628BT0-CB0	K4H1G0638B-TCB0	Samsung		6/20/05		(128Mx4)*36	DR	
<b>+TRS</b>	<b>TRS21218</b>	<b>HYB25D512400BE-7 rev B</b>	<b>Infineon</b>	<b>M0531LA1 rev 1</b>	<b>7/28/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
+TRS	TRS21218	HYB25D512400BE-7 rev B	Infineon	M0531LA1 rev 1	07/28/05		(128Mx4)*36	DR	
<b>Samsung</b>	<b>M312L5628CU0-CB0</b>	<b>K4H1G0638C-UCB0</b>	<b>Samsung</b>		<b>9/6/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
Micron	MT36VDDF25672G-265D2	MT46V128M4FN	Micron		9/23/05		(128Mx4)*36	DR	

**Registered, ECC, DDR333 DIMM Modules**  
**2GB Size (256M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
Micron	MT36VDDF25672G-335D2	MT46V128M4FN	Micron		8/3/04		(128Mx4)*36	DR	
+Dataram	DTM63680F	HYB25D512400BF-6 rev B	Infineon	40020A rev A	8/27/04		(128Mx4)*36	DR	
+Smart Modular Technologies	SM25672RDDR6H2BGAI	HYB25D512400BC-6 rev B	Infineon	P54G184NE SZB1RF rev A	9/23/04		(128Mx4)*36	DR	
+Smart Modular Technologies	SM25672RDDR6H2BGBI	HYB25D512400BC-6 rev B	Infineon	184-25-2	1/11/05		(128Mx4)*36	DR	
+ATP Electronics	AB56L72Z4BFB3C	HYB25D512400BC-6 rev B	Infineon	SB184Z04L1	1/26/05		(128Mx4)*36	DR	
+ATP Electronics	AB56L72Z4BFB3S	K4H510438C-ZCB3 rev C	Samsung	SB184Z04L1	2/25/05		(128Mx4)*36	DR	
Infineon	HYS72D256320G BR-6-B	HYB25D512400BC-6 B	Infineon		3/2/05		(128Mx4)*36	DR	
+Kingston	KVR333D4R25/2GI	HYB25D512400BC-6 rev B	Infineon	2025294-001.A00	4/6/05		(128Mx4)*36	DR	



**Registered, ECC, DDR333 DIMM Modules  
2GB Size (256M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
+Wintec Industries	35964741-L	HYB25D51 2400BC-6 rev B	Infineon	85616658	4/15/05		(128Mx4)*36	DR	
+Avant Technology	AVM7256R53C53 33K7-MTD	MT46V128 M4FN-6 rev D	Micron	B6R404 rev 1	5/6/05		(128Mx4)*36	DR	
+Smart Modular Technologies	SG25672RDDR6 H2BGSC	K4H510438 C-ZCB3 rev C	Samsung	PG54G184 NESZB1RF rev A	5/19/05		(128Mx4)*36	DR	
+Legacy Electronics	8AB6MDGM- 1NDG	K4H510438 C-ZCB3 rev C	Samsung	LE36DDF18 44RRF rev B	08/04/05		(128Mx4)*36	DR	
+Viking	VR4CR567224EB KL1	HYB25D51 2400CF-6 rev C	Infineon	0001010B rev B	8/29/05		(128Mx4)*36	DR	
<b>Samsung</b>	<b>M312L5720CZ0- CB3</b>	<b>K4H510438 C-ZCB3</b>	<b>Samsung</b>		<b>9/21/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
+Kingston	KVR333D4R25/2 GI	MT46V128 M4FN-6 rev D	Micron	2025294- 001.A00 na	10/4/05		(128Mx4)*36	DR	
<b>Samsung</b>	<b>M312L5720CZ3- CB3</b>	<b>K4H510438 C-ZCB3</b>	<b>Samsung</b>		<b>11/15/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
<b>Infineon</b>	<b>HYS72D256320H BR-6-C</b>	<b>HYB25D51 2400CF-6</b>	<b>Infineon</b>		<b>1/31/06</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	

**Registered, ECC, DDR2-400 DIMM Modules  
2GB Size (256M x 72)**

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	Lead-Free	DRAM Organization	Rank	EOL
<b>Infineon</b>	<b>HYS72T256000H R-5-A</b>	<b>HYB18T1G 400AF-5</b>	<b>Infineon</b>		<b>5/4/05</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	
<b>Infineon</b>	<b>HYS72T256220H R-5-A</b>	<b>HYB18T51 2400AF5</b>	<b>Infineon</b>		<b>6/6/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
Hynix	HYMP125R724- E3	HY5PS1G4 31F-E3	Hynix		6/21/05		(256Mx4)*18	SR	
<b>Micron</b>	<b>MT36HTF25672Y -40EB1</b>		<b>Micron</b>		<b>7/8/05</b>	<b>Yes</b>			
<b>Samsung</b>	<b>M393T5660MZ0- CCC</b>	<b>K4T1G044 QM-ZCCC</b>	<b>Samsung</b>		<b>6/8/05</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	
<b>Micron</b>	<b>MT18HTF25672Y -40EA2</b>		<b>Micron</b>		<b>7/25/05</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	
+Kingston	KVR400D2D8R3/ 2GI	HYB18T1G 800AF-5 rev A	Infineon	2025302- 001.A00 na	8/24/05		(128Mx8)*18	DR	
+Smart Modular Technologies	SG2567RDR2128 35IA	HYB18T51 2400AF5 rev A	Infineon	PG52G240 NESUB1RJ rev A	8/15/05		(128Mx4)*36	DR	
+Legacy Electronics Inc.	S525672M20A- 50A	HYB18T51 2400AF5 rev A	Infineon	LE36DD2F2 404RRJ rev B	8/12/05		(128Mx4)*36	DR	
<b>Samsung</b>	<b>M393T5750CZ0- CCC</b>	<b>K45T1043 QC-ZCCC</b>	<b>Samsung</b>		<b>9/20/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	

<b>Registered, ECC, DDR2-400 DIMM Modules 2GB Size (256M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
+Smart Modular Technologies	SB2567RDR2128351A	HYB18T512400AF5 rev A	Infineon	PB52G240N ESUB1RJ rev A	10/14/05		(128Mx4)*36	DR	
<b>+Smart Modular Technologies</b>	<b>SG2567RDR21283-5-H</b>	<b>HY5PS1G421MP-E3 rev A</b>	<b>Hynix</b>	<b>(0504-5,-3,-1),(0518-1,-2,-3,-4,-6),(0516-1,-3)</b>	<b>10/20/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
Hynix	HYMP125R72P4-E3	HY5PS1G431FP-E3	Hynix		10/24/05		(256Mx4)*18	SR	
<b>Samsung</b>	<b>M393T5750CZ3-CCC</b>	<b>K45T1043QC-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
<b>Samsung</b>	<b>M393T5660MZ3-CCC</b>	<b>K4T1G044QM-ZCCC</b>	<b>Samsung</b>		<b>11/4/05</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	
+Kingston	KVR400D2D4R3/2GI	HYB18T512400AF5 rev A	Infineon	2025292-001.B00 na	12/16/05		(128Mx4)*36	DR	
+Legacy Electronics Inc.	B527M4C2BJA-50	K4T51043QC-ZCCC rev C	Samsung	LE36DD2F2404RRJ rev B	12/22/05		(128Mx4)*36	DR	
Nanya Technology Corporation	NT2GT72U4NA1BV-5A	NT5TU128M4AE-5A rev A	Nanya	NTPCB00037P (0514) na	1/12/06		(128Mx4)*36	DR	
<b>Samsung</b>	<b>M393T5660AZ3-CCC</b>	<b>K4T1G044QA-ZCCC</b>	<b>Samsung</b>		<b>12/13/05</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	
<b>Hynix</b>	<b>HYMP125R72P8-E3</b>	<b>HY5PS1G831FP-E3</b>	<b>Hynix</b>		<b>1/31/06</b>	<b>Yes</b>	<b>(128Mx8)*18</b>		
<b>Hynix</b>	<b>HYMP525R72BP4-E3</b>	<b>HY5PS12421BFP-E3</b>	<b>Hynix</b>		<b>1/31/06</b>	<b>Yes</b>	<b>(128Mx4)*36</b>	<b>DR</b>	
<b>+Legend</b>	<b>L25723C7-R41H2W2F</b>	<b>HY5PS1G421MP-E3 rev 1st Gen.</b>	<b>Hynix</b>	<b>0536</b>	<b>3/2/06</b>	<b>Yes</b>	<b>(256Mx4)*18</b>	<b>SR</b>	

**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 may contain "stacked" DRAM parts. These parts may have thermal & physical limitations in some chassis configurations. It is advised to verify that your chassis configuration will support "stacked" parts before purchase.

**Verify that the DRAM part number matches the DRAM on this list before purchasing.**

<b>Server Board SE7520BD2</b>									
<b>Registered, ECC, DDR266 DIMM Modules</b>									
<b>4GB Size (256M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
Micron	MT36VDDT51272 G-265A2	MT46V256M4TG- 75A	Micron		4/15/05		(256Mx4) *36	DR	
Samsung	M312L5128MT0- CB0	K4H2G0638M- TCB0	Samsung		8/29/05		(256Mx4) *36	DR	
<b>Registered, ECC, DDR2-400 DIMM Modules</b>									
<b>4GB Size (256M x 72)</b>									
<b>Manufacturer</b>	<b>Part Number</b>	<b>DRAM Part Number</b>	<b>DRAM Vendor</b>	<b>PCB Part Number</b>	<b>Date</b>	<b>Lead-Free</b>	<b>DRAM Organization</b>	<b>Rank</b>	<b>EOL</b>
<b>Infineon</b>	<b>HYS72T512022H R-5-A</b>	<b>HYB18T2G402AF- 5-A</b>	<b>Infineon</b>		<b>11/1/05</b>	<b>Yes</b>	<b>(256Mx4) *18</b>		
<b>Hynix</b>	<b>HYMP351R72MP 4-E3</b>	<b>HY5PS2G431MP- E3</b>	<b>Hynix</b>		<b>11/17/05</b>	<b>Yes</b>	<b>(256Mx4) *36</b>		

*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 may contain "stacked" DRAM parts. These parts may have thermal & physical limitations in some chassis configurations. It is advised to verify that your chassis configuration will support "stacked" parts before purchase.

**Verify that the DRAM part number matches the DRAM on this list before purchasing.**

## 4. Sales Information

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

Vendor Name	Web URL	Vendor Direct Sales Info
Netlist, Inc	<a href="http://www.netlistinc.com">http://www.netlistinc.com</a>	Christopher Lopes 949.435.0025 tel 949.435.0031 fax <a href="mailto:sales@netlistinc.com">sales@netlistinc.com</a>
Peripheral Enhancements Samsung	<a href="http://www.peripheral.com/">http://www.peripheral.com/</a> <a href="http://www.korea.samsungsemi.com/locate/buy/list_na.html">http://www.korea.samsungsemi.com/locate/buy/list_na.html</a>	For US customers go to: <a href="http://www.mymemorystore.com/">http://www.mymemorystore.com/</a>
Silicon Tech	<a href="http://www.silicontech.com/contact/salescontacts.shtml">http://www.silicontech.com/contact/salescontacts.shtml</a>	
Simple Tech	<a href="http://www.simpletech.com">http://www.simpletech.com</a>	Ron Darwish @ (949) 260-8230 or email @ <a href="mailto:Rdarwish@Simpletech.com">Rdarwish@Simpletech.com</a>
SMART Modular Technologies	<a href="http://www.smartm.com/channel">http://www.smartm.com/channel</a>	Gene Patino (949) 439-6167 <a href="mailto:Gene.Patino@Smartm.com">Gene.Patino@Smartm.com</a>
Swissbit	<a href="http://www.swissbit.com">http://www.swissbit.com</a>	Tony Cerreta Tel: 914-935-1400 x240 Fax: 914-935-9865 <a href="mailto:tony.cerreta@swissbitna.com">tony.cerreta@swissbitna.com</a>
TechnoLinc Corporation	<a href="http://www.technolinc.com">http://www.technolinc.com</a>	David Curtis 510-445-7400 <a href="mailto:davidc@technolinc.com">davidc@technolinc.com</a>
TRS* Tele-Radio-Space GmbH	<a href="http://www.certified-memory.com">http://www.certified-memory.com</a> <a href="http://www.certified-memory.de">http://www.certified-memory.de</a>	Vendor Direct Sales Info: Andreas Gründl, Pho.: +49(0)89/94553234, Fax.: +49(0)89/94553293, <a href="mailto:agruendl@trs-space.de">agruendl@trs-space.de</a>
Unigen	<a href="http://www.unigen.com">http://www.unigen.com</a>	
Ventura Technology Inc	<a href="http://www.venturatech.com">http://www.venturatech.com</a>	Don Hummel @ 805-581-0800 x 108 or email @ <a href="mailto:don@venturatech.com">don@venturatech.com</a>
Viking InterWorks	<a href="http://www.vikinginterworks.com">http://www.vikinginterworks.com</a>	
Virtium Technology Inc	<a href="http://www.virtium.com">http://www.virtium.com</a>	Tod Skelton @ (949) 460-0020 ext. 146 or email @ <a href="mailto:tod.skelton@virtium.com">tod.skelton@virtium.com</a>
Legend	<a href="http://www.legend.com.au">http://www.legend.com.au</a>	Tel: 800-338-2361 Fax: 949-459-8577 <a href="mailto:orderdesk@vikingcomponents.com">orderdesk@vikingcomponents.com</a>
Wintec Industries	<a href="http://www.wintecindustries.com">http://www.wintecindustries.com</a>	Tel 510-360-6300 Fax 510-770-9338

## 5. CMTL\* (Computer Memory Test Labs)

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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 Qualification 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 Rank on the memory module. Mixing of dissimilar memory manufacturer devices 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 the Intel® Server RAID Controller. 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 Intel® Server RAID Controller. 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 RAID Controller 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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