Intel® Server Board SE7210TP1-E Memory List Test Report Summary

int_el

Revision History		
Date	**Rev**	**Modifications**
Jan/04	.5	Pre-release
Feb/04	1.0	Release document. Added Micron 128MB & 256MB parts. Added Infineon 256MB, 512MB & 1G parts.
Feb/04	1.1	Added Infineon 128MB & 1G parts. Added Micron 256MB & 512MB parts. Added Samsung 512MB part.
Mar/04	2.0	Added TRS 256MB and 512MB parts. Added Smart and Avant 1GB parts. (In shaded area)
Mar/04	3.0	Added ATP and Dataram 256MB parts. Added ATP, Dataram, Ventura and Smart 512MB parts. Added Avant 1GB parts. (In shaded area)
Apr/04	4.0	Added Buffalo 256MB, 512MB, and 1GB parts. Added Legend and ATP 256MB parts. Added Ventura 512MB parts. (In shaded area)
May/04	5.0	Added Viking 256MB and 512MB parts. Added Avant, Legend, Micron, Smart, and Legacy 512MB parts. Added ATP & Infineon 1GB parts. (In shaded area)
Jun/04	6.0	Added Avant 256MB part. Added Simple, Transcend and Legend 512MB parts. Added TRS and Legend 1GB parts. (In shaded area)

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 bank on the memory module. Mixing of dissimilar memory manufacturer and similar speeds in each bank on the memory module is NOT recommended*

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Overview of Memory Testing

The following procedure is used to test memory modules for use in the Intel® Server Board SE7210TP1-E. 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.

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[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	Computer Memory Test Lab (CMTL)
Fax (949) 716-8691	24 Hammond Suite F
	Irvine, CA 92618
	http://www.cmtlabs.com/

Qualified Memory for the Intel® Server Board SE7210TP1-E

The memory module on the server board SE7210TP1-E has 4 DIMM sockets, which can hold up to 4 GB of Unbuffered ECC and non-ECC DDR266, DDR333 or DDR400 memory using four 72-bit DIMM modules. The following memory features are supported:

- DDR266, DDR333 and DDR400 Unbuffered ECC and non-ECC compatible 2.5V modules (in compliance with the DDR JEDEC DIMM Specification)
- DIMMs with capacity of 128MB, 256 MB, 512 MB, 1G. Other DRAM sizes may function correctly but will not be validated.
- Minimum configuration is 128MB using one 128MB DIMM.

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

DDR266, DDR333, and DDR400 Unbuffered SDRAM Module Matrix					
DIMM Capacity	DIMM Organization	SDRAM Density	SDRAM Organization	# SDRAM Devices/rows/Banks	# Address bits rows/Banks/column
128MB	16M x 72	128Mbit	16M x 8	9/1/4	12/2/10
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	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	64M x 8	18/2/4	13/2/11

Memory features are detailed in *the Intel® Server Board SE7210TP1-E Technical Product Specification* available on-line at http://support.intel.com/support/motherboards/server/SE7210TP1-E

The following table lists DIMM devices known to be compatible with the Intel Server Board SE7210TP1-E. 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.

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 SE7210TP1-E

Unbuffered, 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
Infineon	HYS72D16000GU-7-A	HYB250D128800AT-7A	Infineon		2/23/04	2	Yes	(16Mx8)*9	

Unbuffered, ECC, DDR333 DIMM Modules
128MB Sizes (16Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL

Unbuffered, ECC, DDR400 DIMM Modules
128MB Sizes (16Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Micron	MT5VDDT1672AG-40BC3	MT46V16M16-5B C	Micron		1/27/04	3	Y	(16Mx8)*9	

Modules shaded in blue are low profile

(+) This vendor is part of the CMTL Certification program. This means this part has/will been 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.*

Server Board SE7210TP1-E

Unbuffered, Non-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

Unbuffered, Non-ECC, DDR333 DIMM Modules
128MB Sizes (16Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL

Unbuffered, Non-ECC, DDR400 DIMM Modules
128MB Sizes (16Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL

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Server Board SE7210TP1-E

Unbuffered, 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	M381L3223ETM-CA2	K4H560838E-TCA2	Samsung		1/19/04	2	Y	(32Mx8)*9	
Infineon	HYS72D32000GU-7-A	HYB25D256800AT-7A	Infineon		1/27/04	2	Y	(32Mx8)*9	
Micron	MT9VDDT3272AG-265B1	MT46V32M8-75 B	Micron		2/9/04	2.5	Y	(32Mx8)*9	
Micron	MT9VDDT3272AG-265C4	MT46V32M8-75 C	Micron		2/23/04	2.5	Y	(32Mx8)*9	

Unbuffered, 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
Micron	MT9VDDT3272AG-335C4	MT46V32M8-6TC	Micron		1/12/04	2.5	Y	(32Mx8)*9	
Infineon	HYS72D32300HU-6-C	HYB25D256800CE-6	Infineon		2/9/04	2.5	Y	(32Mx8)*9	
+ATP Electronics	AG32L72T8SQB3S	K4H560838F-TCB3 rev F	Samsung	SG184T08L1	3/12/04	2.5	Y	(32Mx8)*9	
+Legend	L3272DC7-DR1HDC9B	HY5DU56822BT-D43 rev B	Hyundai	DR720818C1 rev 1	3/17/04	3	Y	(32Mx8)*9	
+ATP Electronics	AG32L72T8SQC4S	K4H560838F-TCCC rev F	Samsung	SG184T08L1 rev 1	3/19/04	3	Y	(32Mx8)*9	
+Avant Technology	AVM7232U39C5333K4-A	MT46V32M8TG(P)-6T rev G	Micron	50-1402-01-B rev B	5/25/04	2.5	Y	(32Mx8)*9	

Unbuffered, ECC, DDR400 DIMM Modules
256MB Sizes (32Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Infineon	HYS72D32300GU-5-B	HYB25D256800BT-5B	Infineon		1/12/04	3	Y	(32Mx8)*9	
Samsung	M381L3223ETM-CCC	K4H560838E-TCCC	Samsung		1/18/04	3	Y	(32Mx8)*9	
Micron	MT18VDDT3272AG-40BB5	MT46V16M8-5B	Micron		2/23/04	3	Y	(16Mx8)*18	
+TRS	TRS20172	HYB25D256800BT-5 rev B	Infineon	M0534LA1 rev 1	2/20/04	3	Y	(32Mx8)*9	
+Dataram	DTM63671B	HYB25D256800BT-5 rev B	Infineon	40570 rev A	3/8/04	3	Y	(32Mx8)*9	
+Viking	VI4CU327228DTPL2	V58C2256804SAT5B rev B	Mosel Vitelic	0000981A	5/6/04	3	Y	(32Mx8)*9	

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Server Board SE7210TP1-E

Unbuffered, Non-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

Unbuffered, Non-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
+Buffalo	DD333-S256/SF	K4H560838F-TCB3 rev F	Samsung	UE0832-AA	4/13/04	2.5	Y	(32Mx8)*8	

Unbuffered, Non-ECC, DDR400 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	L3264DC7-BU1HDC9C	HY5DU56822CT-D43 rev C	Hyundai	B6U808 rev 1	4/9/04	3	Y	(32Mx8)*8	

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Server Board SE7210TP1-E

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

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Micron	MT18VDDT6472AG-265C4	MT64v32M8-75C	Micron		2/24/04	2.5	Y	(32Mx8)*18	
Samsung	M381L6423DTL-CA2	K4H560838D-TCA2	Samsung			2	Y	(32Mx8)*18	

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

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Infineon	HYS72D64320HU-6-C	HYB25D256800CE-6C	Infineon		2/2/04	2.5	Y	(32Mx8)*18	
Micron	MT18VDDT6472AG-335C4	MT46V32M8-6TC	Micron		2/23/04	2.5	Y	(32Mx8)*18	
+ATP Electronics	AG64L72T8SQB3S	K4H560838F-TCB3 rev F	Samsung	SG184T08L1	3/12/04	2.5	Y	(32Mx8)*18	
+Ventura Technology Group	D52XVK29SV	K4H560838E-TCB3 rev E	Samsung	V215	3/10/04	2.5	Y	(32Mx8)*18	
+Avant Technology	AVM7264U39C5333K4-A	MT46V32M8TG(P)-6T rev G	Micron	50-1402-01-B rev B	4/29/04	2.5	Y	(32Mx8)*18	

Unbuffered, ECC, DDR400 DIMM Modules
512MB Sizes (64Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Micron	MT18VDDT6472AG-40BC4	MT46V32M8-5BC	Micron		1/24/04	3	Y	(32Mx8)*18	
Micron	MT9VDDT6472AG-40BC1	MT46V64M8-5BC	Micron		1/18/04	3	Y	(64Mx8)*9	
+TRS	TRS20173	HYB25D256800BT-5 rev B	Infineon	M0524LA1 rev 1	2/18/04	3	Y	(32Mx8)*18	
+Smart Modular Technologies	SM6472DDR2N1	HYB25D256800BT-5 rev B	Infineon	L-DIM-184-31-1	3/3/04	3	Y	(32Mx8)*18	
+ATP Electronics	AG64L72T8SQC4S	K4H560838F-TCCC rev F	Samsung	SG184T08L1	3/8/04	3	Y	(32Mx8)*18	
+Dataram	DTM63672B	HYB25D256800BT-5 rev B	Infineon	40570 rev A	3/4/04	3	Y	(32Mx8)*18	
+Legend	L6472DC7-DR1HDC9B	HY5DU56822BT-D43 rev B	Hyundai	DR720818C rev 1	4/19/04	3	Y	(32Mx8)*18	
+Smart Modular Technologies	SM6472DDR2N1-SF	K4H560838F-TCCC rev F	Samsung	M381L3313DTM	4/23/04	3	Y	(32Mx8)*18	
+Viking	VI4CU647228DTPL2	V58C2256804SAT5B rev B	Mosel Vitelic	000981A	5/4/04	3	Y	(32Mx8)*18	
Micron	MT9VDDT6472AG-40BD1	MT46V64M8-5BD	Micron		5/3/04	3	Y	(64Mx8)*9	
Micron	MT18VDDT6472AG-40BG4	MT46V32M8-5BG	Micron		5/6/04	3	Y	(32Mx8)*18	

Unbuffered, ECC, DDR400 DIMM Modules 512MB Sizes (64Mx72)									
Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
SimpleTech	ST72C8F64-A05AS	K4H560838E-TCCC rev E	Samsung	1077 rev B	5/17/04	3	Y	(32Mx8)*18	
Transcend Information	TS64MLD72V4F3 (HU)	V58C2256804S AT5B	Mosel Vitelic	09-1835	5/24/04	3	Y	(32Mx8)*18	

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Unbuffered, Non-ECC, DDR266 DIMM Modules
512MB Sizes (64Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL

Unbuffered, Non-ECC, DDR333 DIMM Modules
512MB Sizes (64Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Ventura Technology Group	D51XVK29SV	K4H560838E-TCB3 rev E	Samsung	V215	3/19/04	2.5	Y	(32Mx8)*16	
+Buffalo	DD333-512/SF	K4H560838F-TCB3 rev F	Samsung	UE0532-AA	4/13/04	2.5	Y	(32Mx8)*16	

Unbuffered, Non-ECC, DDR400 DIMM Modules
512MB Sizes (64Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
+Legacy Electronics Inc.	88S5HDL0-1UDG	HYB25D256800BT-5 rev B	Infineon	LE18DDT1848 rev A	4/19/04	3	Y	(32Mx8)*16	
+Legend	L6464DC7-DE6HDC5B	HY5DU56822BT-D43 rev B	Hyundai	DE640816 A rev 6	5/10/04	3	Y	(32Mx8)*16	
+Legend	L6464DC7-BU1HDC9C	HY5DU56822CT-D43 rev C	Hyundai	B6U808 rev 1	5/27/04	3	Y	(32Mx8)*16	

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Server Board SE7210TP1-E

Unbuffered, 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
Infineon	HYS72D128020GU-7-A	HYB25D512800AT-7A	Infineon		2/9/04	2	Y	(64Mx8)*18	

Unbuffered, 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
+Avant Technology	AVM7228U52C5333K4-A	MT46V64M8TG-5B rev C	Micron	50-1402-01-B rev B	2/27/04	2.5	Y	(64Mx8)*18	
+ATP Electronics	AG28L72T8SHB3S	K4H510838B-TCB3 rev B	Samsung	SG184T08L1 rev 1	5/6/04	2.5	Y	(64Mx8)*18	
Infineon	HYS72D128320HU-6-B	HYB25D512800BE-6B	Infineon		4/28/04	2.5	Y	(64Mx8)*18	

Unbuffered, ECC, DDR400 DIMM Modules
1GB Sizes (128Mx72)

Manufacturer	Part Number	DRAM Part Number	DRAM Vendor	PCB Part Number	Date	CAS Latency	Low Profile	DRAM Organization	EOL
Micron	MT18VDDT12872AG-40BC1	MT46V64M8-5BC	Micron		1/18/04	3	Y	(64Mx8)*18	
Infineon	HYS72D128320HU-5-B	HYB25D512800BE-5B	Infineon		2/23/04	3	Y	(64Mx8)*18	
+Smart Modular Technologies	SM12872DDR2N1	K4H510838B-TCCC rev B	Samsung	M381L3313DTM	2/27/04	3	Y	(64Mx8)*18	
+Avant Technology	AVM7228U52C3400K4-A	MT46V64M8TG(P)-5B rev C	Micron	50-1402-01-B rev B	3/10/04	3	Y	(64Mx8)*18	
+ATP Electronics	AG28L72T8SHC4M	MT46V64M8TG(P)-5B rev C	Micron	SG184T08L1 rev 1	4/23/04	3	Y	(64Mx8)*18	
+TRS	TRS20193	MT46V64M8TG(P)-5B rev C	Micron	M0524LA1 rev 1	5/18/04	3	Yes	(64Mx8)*18	

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Server Board SE7210TP1-E

Unbuffered, Non-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

Unbuffered, Non-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

Unbuffered, Non-ECC, DDR400 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	DD4333-1G/SB	K4H510838B-TCCC rev B	Samsung	UE0532-AA	4/7/04	3	Y	(64Mx8)*16	
+Buffalo	DD4333-1G/MC	MT46V64M8TG(P)-5B rev C	Micron	UE0532-AA	3/17/04	3	Y	(64Mx8)*16	
+ATP Electronics	AG28L64T8SHC4S	K4H510838B-TCCC rev B	Samsung	SG184T08L1	4/29/04	3	Y	(64Mx8)*16	
+Legend	L1264DC7-DE6HDH9A	HY5DU12822AT-D43 rev A	Hyundai	DE640816A rev 6	5/12/04	3	Yes	(64Mx8)*16	
+Legend	L1264DC7-BU1HDH9A	HY5DU12822AT-D43 rev A	Hyundai	B6U808 rev 1	6/1/04	3	Yes	(64Mx8)*16	

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Sales Information

Vendor Name	Web URL	Vendor Direct Sales Info
ATP Electronics	http://www.atpusa.com/	Florence Hsieh Tel 408-732-5831 Fax 408-732-5055 sales@atpusa.com
ATP Electronics -- Taiwan Inc.	http://www.atpusa.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 phenke@dataram.com Peter Jauss, +49-69-680-9070 in EMEA pjauss@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.hea.com/	
Infineon	http://www.infineon.com/business/distribut/index.htm	
ITAUCOM	http://www.itaucom.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: Keri Albers 888 466 3853 ext. 307 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
Netlist, Inc	http://www.netlistinc.com	Christopher Lopes 949.435.0025 tel 949.435.0031 fax sales@netlistinc.com

Vendor Name	Web URL	Vendor Direct Sales Info
Peripheral Enhancements	http://www.peripheral.com/	
PNY	http://www.pny.com/internet_explorer/LPB.HTML	
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	Leo Alafriz 949-753-0116 ext. 125 leo.alafriz@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