

96SD3-8G1333NN-TR

Test Report

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Revision History:

Revision Date	Revision	Description	Creator
2011/08/17	1.0	First version released	Jier.liu

Content

Test Result Definition:	4
Test Item List Summary	5
1. Product Information:	6
2. Test Platform	8
3. Test Software	8
4. Test Item	8
4.1 Function test	8
4.1.1 Socket combination and Power on/off test	8
4.1.2 Cpu-Z	9
4.1.3 MemTest86+ test	10
4.1.4 OS installation	10
4.2 Performance test	10
4.2.1 Sisoftware Sandra	10
4.2.2 PCMark05	10
4.3 Reliability test	11
4.3.1 Room temperature	11
5. Appendix	11

Test Result Definition:

Item	Description
Pass	Compatibility test properly without any problem.
Fail	Compatibility test can't work properly and can't meet the product spec, please describe issue to the "Remark" item detailedly.
No test	No test (no test tool or device or driver not ready), please write reason to the "Remark" item.
N/A	Spec not support.
Limitation	Compatibility issue Limitation, it needs formal approval mail or other formal reply from PM or Applicant or Manufacturer.

Test Item List Summary**Motherboard or CPU card compatibility test result**

MB/SBC	Core Chipset	Result	Remark
AIMB-272	Intel Cougar Point-M QM67	Pass	
UNO-2184	Intel Cougar Point-M QM67	Pass	

1. Product Information:

Advantech Part Number	96SD3-8G1333NN-TR
Manufacturer	Transcend
Module Part NO.	TS1GSK64V3H
Transcend DB P/N	TS9KSH28440-3M
PCB Part NO.	09-2844
IC Brand(chip model)	Micron 1WD27 D9PBC
Memory Category	DDR3
Socket type	204Pin
Size	8GB
ECC&REG	No
Bandwidth	10.6GB/sec
Speed Grade	1333Mbps
Max Frequency	666MHz
CAS Latency	CL9
Organization	1G x 72bits
Component Composition	512Mx8*18
Number of Rank	2
Power supply(VDD)	1.5V ± 0.075V
Operating Temperature	0 to 85°C
Dimension (W x H x D)	67.60x30x1
RoHS Status (Yes/No)	Yes

Photo:




2. Test Platform

MB/SBC	UNO-2184		
PCB version	A101-1	CPU	Intel i7-2715QE 2.10GHz
BIOS version	2184X008	DRAM	Transcend DDR3 1333 8GBX2
Core Chipset	Intel Cougar Point-M QM67	Backplane	NA
VGA Chipset	CPU integrated VGA Controller	Other	

MB/SBC	AIMB-272		
PCB version	A101-3	CPU	Intel Celeron B810 1.60GHz
BIOS version	A272X014	DRAM	Transcend DDR3 1333 8GBX2
Core Chipset	Intel Cougar Point-M QM67	Backplane	NA
VGA Chipset	CPU integrated VGA Controller	Other	

3. Test Software

Utilities	Version / Description
Power On/Off (For Reliability test)	
Passmark BurnIn Test Pro (For Reliability test)	V6.0 build 1029
MemTest86+ (For Function test)	V4.20
Sisoftware Sandra2010.SP3(for Performance test)	V16.67
PCMark05(for Performance test)	V1.20

4. Test Item

4.1 Function test

4.1.1 Socket combination and Power on/off test

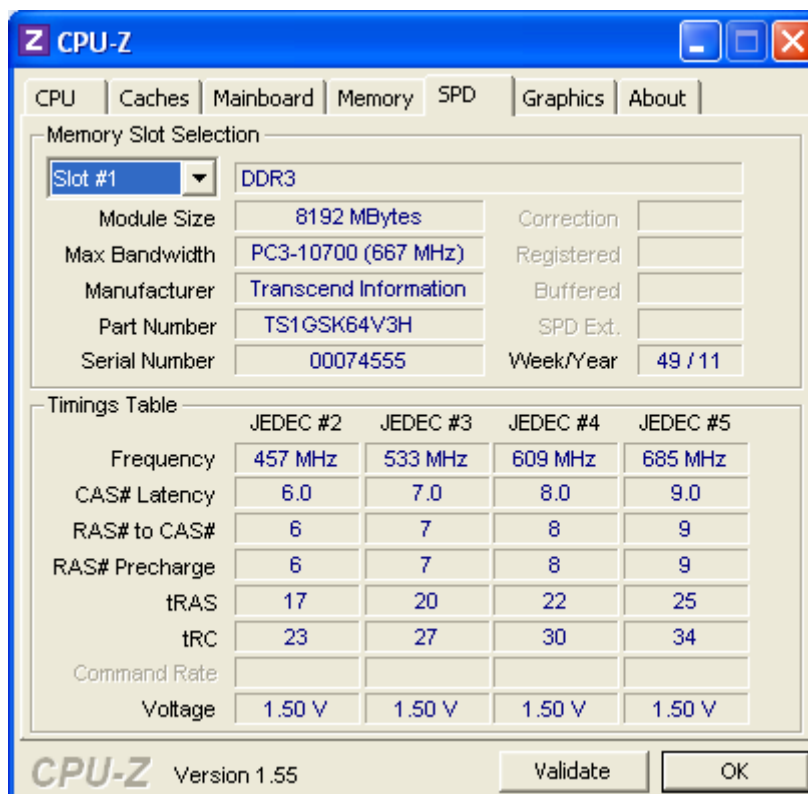
Pass Criteria: Power on/off 10 times, successful boot rate 100% when memory in different socket combination as below, then record memory size and frequency information on the boot screen display.

MB/SBC	CPU	Socket	Remark	Result
UNO-2184	i7-2715QE 2.10GHz	DIMM1	Speed :1333,Size:8192MB	Pass
		DIMM2	Speed :1333,Size:8192MB	Pass
		FULL	Speed :1333,Size:16384MB	Pass
AIMB-272	Celeron B810 1.60GHz	DIMM A1	Spec cann't support displaying memory information in the post and BIOS, but cpu-z detect the information is DDR3 1333 8GB.	Pass
		DIMM B1	Spec cann't support displaying memory information in the post and BIOS, but cpu-z detect the information is DDR3 1333 8GB.	Pass
		FULL	Spec cann't support displaying memory information in the post and BIOS, but cpu-z detect the information is DDR3 1333 8GB x2.	Pass

4.1.2 Cpu-Z

Pass Criteria: CPU-Z for SPD detect the correct Memory information.

Picture:



4.1.3 MemTest86+ test

Pass Criteria: MemTest86+ V4.20 should show the correct Memory size and Run 3 Cycles No error.

(note: Memory must be full loading)

MB/SBC	CPU	Remark	Result
UNO-2184	i7-2715QE 2.10GHz	Speed :1333,Size:16384MB	Pass
AIMB-272	Celeron B810 1.60GHz	Speed :1333,Size:16384MB(cpu-z detect)	Pass

4.1.4 OS installation

Pass Criteria: Windows OS can be installed and boot into OS properly.

MB&SBC: UNO-2184

OS	Version	Result
Windows XP	Windows XP professional with X32 SP3(English)	Pass
Windows XP	Windows XP professional with X64 SP3(English)	Pass
Windows 7	Windows 7 Ultimate X32(English)	Pass
Windows 7	Windows 7 Ultimate X64(English)	Pass

4.2 Performance test

4.2.1 Sisoftware Sandra

Pass Criteria: Run software “Sisoftware Sandra 2010”, Recording the benchmark score and compare the score with other product. The Memory performance can reach the average value.

(note: The CPU must be Select Max core with Max FSB.)

MB/SBC	Sisoftware Sandra2010.SP3 (16.67)				Result
	Memory Bandwidth-Int Buff'd (GB/s)	Memory Bandwidth Float Buff'd (GB/s)	Memory (Random Access) Latency (ns)	Memory Latency-Speed Factor	
UNO-2184	17.27	17	92.6	43	Pass
AIMB-272	15.36	15.35	108.5	43	Pass

4.2.2 PCMark05

Pass Criteria: Run software “PCMark05 V1.20”, Recording the benchmark score and compare the score with other product. The Memory performance can reach the average value.

(note: The CPU must be Select Max core with Max FSB.)

MB/SBC	PCMark05 V1.20						Result
	Memory score	Item	Memory read (MB/S)	Memory write (MB/S)	Memory copy (MB/S)	Memory latency-Random (Maccesses/s)	
UNO-2184	5703	16MB	9849.625	8732.409	8829.701	9.614	Pass
		8MB	9935.803	8736.823	8792.751	10.353	
		192KB	21077.045	14517.440	14475.310	131.185	
		4KB	35534.457	23413.313	23152.934	398.707	
AIMB-272	6964	16MB	12834.170	10085.485	9308.249	10.196	Pass
		8MB	13893.869	9766.374	9502.231	13.459	
		192KB	25162.814	16762.758	14819.910	243.470	
		4KB	40732.359	26811.033	23747.682	747.494	

4.3 Reliability test

4.3.1 Room temperature

MB/SBC: UNO-2184

OS: Windows XP professional with X32 SP3 (English)

(Note: The CPU must be Select Max core with Max FSB,and Memory Full Loading.)

Item	Pass Criteria	Result
Power on/off	Power on/off 100 times, successful boot rate 100%;	Pass
Burn_inV6.0	Set CPU/2D/3D/Memory loading 100%; The result should be passed when running Burn_in V6.0 for 12 hours.	Pass

5. Appendix