

1. Stability Test:

CPU Test:

Procedure:

(i) Install O.S.

(ii) Run 3DMark 2006 Professional Edition Build Ver. 1.2.0 BenchMark - 3 times.

(iii) Run S1/S3/S4/S5 - 3 times.

No.	CPU	Type	Result
1	Intel / 3.5GHz	Xeon Processor E3-1275 (Ivy Bridge/-QBZK) / LGA1155	Pass
2	Intel / 3.3GHz	Xeon Processor E3-1245 (SandyBridge/D2-SR00L) / LGA1155	Pass
3	Intel / 3.1GHz	Xeon Processor E3-1225 (SandyBridge/D2-SR00G) / LGA1155	Pass
4	Intel / 3.4GHz	Core i7-3770 (IvyBridge/E0-QC1W) / LGA1155	Pass
5	Intel / 3.3GHz	Core i3-3220 (IvyBridge/E0-QC8H) / LGA1155	Pass
6	Intel / 3.0GHz	Core i5-3550S (IvyBridge/E0-QC14) / LGA1155	Pass
7	Intel / 3.4GHz	Core i7-2600 (SandyBridge/D2-SR00B) / LGA1155	Pass
8	Intel / 3.3GHz	Core i5-2500K (SandyBridge/D2-SR008) / LGA1155	Pass
9	Intel / 3.3GHz	Core i5-2500 (SandyBridge/D2-SR00T) / LGA1155	Pass
10	Intel / 3.1GHz	Core i5-2400 (SandyBridge/D2-SR00Q) / LGA1155	Pass
11	Intel / 2.7GHz	Core i5-2390T (SandyBridge/Q0-SR065) / LGA1155	Pass
12	Intel / 2.9GHz	Core i5-2310 (SandyBridge/D2-SR02K) / LGA1155	Pass
13	Intel / 2.8GHz	Core i5-2300 (SandyBridge/D2-SR00D) / LGA1155	Pass
14	Intel / 3.3GHz	Core i3-2120 (SandyBridge/Q0-SR05Y) / LGA1155	Pass
15	Intel / 3.1GHz	Core i3-2105 (SandyBridge/Q0-SR0BA) / LGA1155	Pass
16	Intel / 3.1GHz	Core i3-2100 (SandyBridge/Q0-SR05C) / LGA1155	Pass
17	Intel / 2.9GHz	Pentium-G850 (SandyBridge/Q0-SR05Q) / LGA1155	Pass
18	Intel / 2.8GHz	Pentium-G840 (SandyBridge/Q0-SR05P) / LGA1155	Pass
19	Intel / 2.6GHz	Pentium-G620 (SandyBridge/Q0-SR05R) / LGA1155	Pass

DDR3 Module Test:

Procedure:

(i) Install O.S.

(ii) Run 3DMark 2006 Professional Edition Build Ver. 1.2.0 BenchMark - 3 times.

(iii) Run S1/S3/S4/S5 - 3 times.

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Apacer	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	78.B1GE3.AF10C 1.5V	Pass
2	Hynix	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT351U6BFR8C-PBNO 1.5V	Pass
3	Hynix	Hynix	2GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT325U6BFR8C-PBNO 1.5V	Pass
4	Panram	NB	8GB	PC3-10600 (DDR3-1333)	KLBBBGSF	240D38G328 1.5V	Pass
5	DSL	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3UH56082XH15AA 1.5V	Pass
6	Kingston	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	KVR1333D3N9/4G 1.5V	Pass
7	Transcend	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	TS512MLK64V3N 1.5V	Pass
8	Transcend	Micron	4GB	PC3-10600 (DDR3-1333)	ICD77D9LGK	TS512MLK64V3N 1.5V	Pass
9	Transcend	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83CFR H9C	TS512MLK64V3N 1.5V	Pass
10	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MLK64V3N 1.5V	Pass
11	Apacer	ELPIDA	4GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.B1GEG.4210C 1.35V	Pass
12	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B1G0846D	TS256MLK64V3U 1.5V	Pass
13	Kingston	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	KVR1333D3N9/2G 1.5V	Pass
14	Kingston	Kingston	2GB	PC3-10600 (DDR3-1333)	D1228JEHFNGD9U	KVR1333D3N9/2G 1.5V	Pass
15	A-Data	A-Data	2GB	PC3-10600 (DDR3-1333)	AD30908C8D-151G	AD31333002GOU (AD631B16)	Pass
16	A-Data	Micron	2GB	PC3-10600 (DDR3-1333)	OWD77D9LGK	AD3U1333C2G9-R	Pass
17	Transcend	Transcend	2GB	PC3-10600 (DDR3-1333)	TK243WAF3	JM1333KLU-2G 1.5V	Pass
18	Elixir	Elixir	2GB	PC3-10600 (DDR3-1333)	M2Y2G64CB8HA9N-CG 1.5V	M2Y2G64CB8HA9N-CG 1.5V	Pass
19	INNODISK	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	M3UN-2GHFAC09-B 1.5V	Pass

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
20	Apacer	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	78.A1GDE.AF00C	Pass
21	DSL	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3UH56081XH15AA 1.5V	Pass
22	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BDBG-DJ-F	TS256MLK64V3U 1.5V	Pass
23	Crucial	Micron	2GB	PC3-10600 (DDR3-1333)	MT8JTF25664AZ-1G4D1	CT25664BA1339.8FD 1.5V	Pass
24	Transcend	Micron	2GB	PC3-10600 (DDR3-1333)	IND22D9LGK	TS256MLK64V3N 1.5V	Pass
25	Transcend	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	TS256MLK64V3N 1.5V	Pass
26	Apacer	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J2108ECSE-DJ-F	78.A1GEG.4200C 1.5V	Pass
27	Transcend	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83CFR H9C	TS256MLK64V3N 1.5V	Pass
28	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS256MLK64V3N 1.5V	Pass
29	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)/ECC	J1108BDBG-DJ-F	TS256MLK72V3U 1.5V	Pass
30	APLUS	SEC	2GB	PC3-10600 (DDR3-1333)/ECC	K4B1G0846E	A+D3DE1333/2G 1.5V	Pass
31	Apacer	ELPIDA	2GB	PC3-10600 (DDR3-1333)/ECC	J1108BABG-DJ-E	78.A1GC8.423 1.5V	Pass
32	A-Data	SEC	2GB	PC3-10600 (DDR3-1333)/ECC	K4B1G0846D	AD1333002GME (SC0311B18) 1.5V	Pass
33	Transcend	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BASE-DJ-E	TS128MLK64V3U 1.5V	Pass
34	Kingston	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	KVR1333D3N9/1G 1.5V	Pass
35	A-Data	A-Data	1GB	PC3-10600 (DDR3-1333)	AD30908C8D-151G	AD3133300210U(AD6311A08)	Pass
36	DSL	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	D3UH28081XH15AA 1.5V	Pass
37	Apacer	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	78.01GC6.AF0 1.5V	Pass
38	Transcend	SEC	1GB	PC3-10600 (DDR3-1333)	K4B1G0846G	TS128MLK64V3U 1.5V	Pass
39	Transcend	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83TFR H9C	TS128MLK64V3U 1.5V	Pass
40	Transcend	ELPIDA	1GB	PC3-10600 (DDR3-1333)/ECC	J1108BDBG-DJ-F	TS128MLK72V3U 1.5V	Pass

41	Apacer	ELPIDA	1GB	PC3-10600 (DDR3-1333)/ECC	J1108BABG-DJ-E	78.01GC8.422 1.5V	Pass
No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
42	Kingston	Hynix	4GB	PC3-8500 (DDR3-1066)	H5TQ2G83AFR	KVR1066D3N7/4G 1.5V	Pass
43	Transcend	SEC	2GB	PC3-8500 (DDR3-1066)	K4B1G0846D	TS256MLK64V1U 1.5V	Pass
44	Transcend	ELPIDA	2GB	PC3-8500 (DDR3-1066)	J1108BDBG-DJ-F	TS256MLK64V1U 1.5V	Pass
45	INNODISK	Hynix	2GB	PC3-8500 (DDR3-1066)	H5TQ1G83BFR H9C	M3UN-2GHFACM7-B 1.5V	Pass
46	Transcend	Hynix	2GB	PC3-8500 (DDR3-1066)	K4B1G0846G	TS256MLK64V1U 1.5V	Pass
47	Transcend	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ1G83BFRG7C	TS256MLK72V1U 1.5V	Pass
48	APLUS	SEC	2GB	PC3-8500 (DDR3-1066)/ECC	K4B1G0846E	A+D3DE1066/2G 1.5V	Pass
49	A-Data	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ1G83BFRH9C	HY0YG1B18C1ZM 1.5V	Pass
50	INNODISL	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ2G83BFR H9C	M3CN-2GHJ1CM7-B 1.5V	Pass
51	Kingston	ELPIDA	1GB	PC3-8500 (DDR3-1066)	J1108BDBG-DJ-F	KVR1066D3N7/1GB 1.5V	Pass
52	Transcend	SEC	1GB	PC3-8500 (DDR3-1066)	K4B1G0846D	TS128MLK64V1U 1.5V	Pass
53	A-Data	ELPIDA	1GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	SU3U1066B1G7-B 1.5V	Pass
54	TEAM	TEAM	1GB	PC3-8500 (DDR3-1066)	Xtreem TXD31024M1066HC7 1.5V	Xtreem TXD31024M1066HC7 1.5V	Pass

*Each memory module tested at room temperature.

2. Stability Test: Rev.021/0A1

2.1 CPU Test:

Procedure:

- (1) Install O.S.**
- (2) Run 3DMark 2006 Demo Edition Build Ver. 1.2.0 BenchMark - 3 times.**
- (3) Run S1/S3/S4/S5 - 3 times.**

No.	CPU	Type	Result
1	Intel / 3.4GHz	Core i7-3770 (IvyBridge/E0-QC1W) / LGA1155	Pass
2	Intel / 3.3GHz	Core i3-3220 (IvyBridge/E0-QC8H) / LGA1155	Pass
3	Intel / 3.0GHz	Core i5-3550S (IvyBridge/E0-QC14) / LGA1155	Pass
4	Intel / 3.4GHz	Core i7-2600 (SandyBridge/D2-SR00B) / LGA1155	Pass
5	Intel / 3.3GHz	Core i5-2500K (SandyBridge/D2-SR008) / LGA1155	Pass
6	Intel / 3.3GHz	Core i5-2500 (SandyBridge/D2-SR00T) / LGA1155	Pass
7	Intel / 3.1GHz	Core i5-2400 (SandyBridge/D2-SR00Q) / LGA1155	Pass
8	Intel / 2.9GHz	Core i5-2310 (SandyBridge/D2-SR02K) / LGA1155	Pass
9	Intel / 2.8GHz	Core i5-2300 (SandyBridge/D2-SR00D) / LGA1155	Pass
10	Intel / 3.3GHz	Core i3-2120 (SandyBridge/Q0-SR05Y) / LGA1155	Pass
11	Intel / 3.1GHz	Core i3-2105 (SandyBridge/Q0-SR0BA) / LGA1155	Pass
12	Intel / 2.9GHz	Pentium-G850 (SandyBridge/Q0-SR05Q) / LGA1155	Pass
13	Intel / 2.8GHz	Pentium-G840 (SandyBridge/Q0-SR05P) / LGA1155	Pass
14	Intel / 2.6Hz	Pentium-G620 (SandyBridge/Q0-SR05R) / LGA1155	Pass
15	Intel / 3.5GHz	Xeon Processor E3-1275 (Ivy Bridge/-QBZK) / LGA1155	Pass

The screenshot displays a Windows 7 desktop environment. On the left, a system information window shows the following details:

- Current Date/Time: Monday, February 06, 2012, 9:41:02 AM
- Computer Name: DQV-PC
- Operating System: Windows 7 Ultimate 64-bit (6.1, Build 7601)
- Language: English (Regional Setting: English)
- System Manufacturer: To be filled by O.E.M.
- System Model: To be filled by O.E.M.
- BIOS: BIOS Date: 01/20/12 09:03:28 Ver: 04.06.05
- Processor: Intel(R) Xeon(R) CPU E3-1275 V2 @ 3.50GHz (8 CPUs), ~3.5GHz
- Memory: 16384MB RAM
- Page file: 1574MB used, 30952MB available
- DirectX Version: DirectX 11

In the center, the 3DMark06 Professional Edition benchmark results are shown:

Tests	Settings	System	Results
SM2.0 Graphics Tests: 2 of 2	Resolution: 1280 x 1024	GFx: Intel(R) HD Graphics P4000	3DMark Score: 7186
CPU Test: 2 of 2	Anti-Aliasing: None	CPU: Intel(R) Xeon(R) CPU E3-1275 V2 @ 3.50GHz @ 3492MHz	SM2.0 Score: 2295
HDR/SM3.0 Graphics Tests: 2 of 2	Filtering: Optimal	MEM: 16256 MB	HDR/SM3.0 Score: 2925
Feature Tests: 7 of 7	HLSL VS Target: 3_0	OS: Windows 7 Ultimate	CPU Score: 6738
Batch Size Tests: 6 of 6	HLSL PS Target: 3_0		
	Repeat Tests: 3 times		

Below the 3DMark results, a '3DMark Score' window displays a total score of 7201 3DMarks, with sub-scores for SM2.0 (2284), HDR/SM3.0 (2944), and CPU (6794).

On the right, the CPU-Z application provides detailed processor information:

- Processor: Intel Core i3/i5/i7
- Code Name: Ivy Bridge
- Package: 22 nm
- Technology: 22 nm
- Core Voltage: 0.880 V
- Specification: Intel(R) Xeon(R) CPU E3-1275 V2 @ 3.50GHz (ES)
- Family: 6
- Model: A
- Ext. Family: 6
- Ext. Model: 3A
- Instructions: MMX, SSE (1, 2, 3, SS, 4, 1, 4, 2), EM64T, VT-x, AES, AVX
- Clocks (Core #0): Core Speed 1596.5 MHz, Multiplier x 16.0 (16 - 35), Bus Speed 99.8 MHz
- Cache: L1 Data 4 x 32 KBytes, L1 Inst. 4 x 32 KBytes, Level 2 4 x 256 KBytes, Level 3 8 MBytes

The taskbar at the bottom shows the system clock at 9:41 AM on 2/6/2012.

Intel / Xeon Processor E3-1275 (Ivy Bridge/-QBZK) / 3.5GHz

2.2 DDR3 Approved List:

Procedure:

(1) Install O.S.

(2) Run 3DMark 2006 Demo Edition Build Ver. 1.2.0 BenchMark - 3 times.

(3) Run S1/S3/S4/S5 - 3 times.

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Apacer	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	78.B1GE3.AF10C 1.5V	Pass
2	Hynix	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT351U6BFR8C-PBNO 1.5V	Pass
3	Hynix	Hynix	2GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT325U6BFR8C-PBNO 1.5V	Pass
4	Panram	NB	8GB	PC3-10600 (DDR3-1333)	KLBBBGSF	240D38G328 1.5V	Pass
5	DSL	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3UH56082XH15AA 1.5V	Pass
6	Kingston	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	KVR1333D3N9/4G 1.5V	Pass
7	Transcend	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83CFR H9C	TS512MLK64V3N 1.5V	Pass
8	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MLK64V3N 1.5V	Pass
9	Apacer	ELPIDA	4GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.B1GEG.4210C 1.35V	Pass
10	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B1G0846D	TS256MLK64V3U 1.5V	Pass
11	Kingston	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	KVR1333D3N9/2G 1.5V	Pass
12	A-Data	A-Data	2GB	PC3-10600 (DDR3-1333)	AD30908C8D-151G	AD31333002GOU(AD63I1B16)	Pass
13	A-Data	Micron	2GB	PC3-10600 (DDR3-1333)	OWD77D9LGK	AD3U1333C2G9-R	Pass
14	Transcend	Transcend	2GB	PC3-10600 (DDR3-1333)	TK243WAF3	JM1333KLU-2G 1.5V	Pass
15	INNODISK	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	M3UN-2GHFAC09-B 1.5V	Pass
16	Apacer	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	78.A1GDE.AF00C	Pass
17	DSL	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3UH56081XH15AA 1.5V	Pass
18	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BDBG-DJ-F	TS256MLK64V3U 1.5V	Pass
19	Crucial	Micron	2GB	PC3-10600 (DDR3-1333)	MT8JTF25664AZ-1G4D1	CT25664BA1339.8FD 1.5V	Pass
20	Transcend	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83CFR H9C	TS256MLK64V3N 1.5V	Pass

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
21	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS256MLK64V3N 1.5V	Pass
22	APLUS	SEC	2GB	PC3-10600 (DDR3-1333)/ECC	K4B1G0846E	A+D3DE1333/2G 1.5V	Pass
23	Apacer	ELPIDA	2GB	PC3-10600 (DDR3-1333)/ECC	J1108BABG-DJ-E	78.A1GC8.423 1.5V	Pass
24	A-Data	SEC	2GB	PC3-10600 (DDR3-1333)/ECC	K4B1G0846D	AD1333002GME(SC03I1B18) 1.5V	Pass
25	Kingston	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	KVR1333D3N9/1G 1.5V	Pass
26	A-Data	A-Data	1GB	PC3-10600 (DDR3-1333)	AD30908C8D-151G	AD3133300210U(AD63I1A08)	Pass
27	DSL	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	D3UH28081XH15AA 1.5V	Pass
28	Apacer	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	78.01GC6.AF0 1.5V	Pass
29	Transcend	SEC	1GB	PC3-10600 (DDR3-1333)	K4B1G0846G	TS128MLK64V3U 1.5V	Pass
30	Transcend	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83TFR H9C	TS128MLK64V3U 1.5V	Pass
31	Apacer	ELPIDA	1GB	PC3-10600 (DDR3-1333)/ECC	J1108BABG-DJ-E	78.01GC8.422 1.5V	Pass
32	Transcend	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ1G83BFRG7C	TS256MLK72V1U 1.5V	Pass
33	APLUS	SEC	2GB	PC3-8500 (DDR3-1066)/ECC	K4B1G0846E	A+D3DE1066/2G 1.5V	Pass
34	A-Data	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ1G83BFRH9C	HY0YG1B18C1ZM 1.5V	Pass
35	INNODISL	Hynix	2GB	PC3-8500 (DDR3-1066)/ECC	H5TQ2G83BFR H9C	M3CN-2GHJ1CM7-B 1.5V	Pass