

Product Test Report



Product Name	LV-66AD/LV-66AX
Product Version	B
Issued Date	21.Dec.2009
Report Edition	1.1
BIOS Version	1.2
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REVISION HISTORY			
DATE	REVISION NO.	PAGE	DESCRIPTONS
12.Sep.2008	Ver. 1.0	52	New release
21.Dec.2009	Ver. 1.1	70	1. Humidity and boot up test. 2. Increase new OS / HDD / memory / CD-ROM.

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1. Function Test

1.1 Hardware Function

Base Function Test

Item	Description	Result
1	Power Button	PASS
2	Reset	PASS
3	Power LED	PASS
4	HDD LED	PASS
5	SATA1	PASS
6	SATA2	PASS
7	SATA3	PASS
8	SATA4	PASS
9	USB1	PASS
10	USB2	PASS
11	USB3	PASS
12	USB4	PASS
13	DDRII A	PASS
14	DDRII B	PASS
15	Floppy	PASS
16	LPT	PASS
17	COM1	PASS
18	COM2	PASS
19	VGA Port	PASS
20	PS2	PASS`
21	AUDIO	PASS
22	CD_IN	PASS

23	SPDIF	PASS
24	Mini-PCI 1	PASS
25	DIO	PASS
26	CPUFAN	PASS
27	SYSFAN	PASS
28	PCI	PASS
29	IDE	PASS
30	DVI(LV-66AD)	PASS
31	LVDS(LV-66AX)	PASS
32	LAN	PASS
33	IrDA	PASS

Jumper

Item	Description	Result
1	JRTC	PASS
2	JCSEL1	PASS
3	JCSEL2	PASS

1.2 BIOS Function

Item	Description	Result	Remark
1	Press 'Del' to run Setup Utility	PASS	
2	Ctrl-Alt-Del – Soft-Reboot	PASS	
3	Save & Exit Setup	PASS	
4	Date & Time Setting	PASS	
5	Drive A	PASS	
6	Quick Power On Self Test	PASS	
7	Boot Device Setting	PASS	
8	Boot Up Floppy Seek	PASS	
9	ACPI Suspend Type	PASS	
10	Halt On	PASS	
11	Onboard Serial Port	PASS	
12	USB Controller	PASS	
13	USB Keyboard Support	PASS	
14	Onboard FDC Controller	PASS	
15	Soft-Off by PWRBTN	PASS	
16	Power On Function	PASS	
17	ACPI Function	PASS	
18	Hot Key Password	PASS	
19	Wakeup on PCI Card	PASS	
20	RTC Alarm Resume	PASS	
21	Watch Dog Timer Select	PASS	
22	Init Display First	PASS	
23	Onboard Parallel Port	PASS	
24	PWRON After PWR-Fail	PASS	

25	Set Supervisor Password	PASS	
26	Set User Password	PASS	
27	UART Mode Select	PASS	
28	RxD, TxD Active	PASS	
29	IR Transmission Delay	PASS	
30	UR2 duplex Mode	PASS	
31	Use IR Pins	PASS	
32	CPU Warning Temperature	PASS	
33	Shutdown Temperature	PASS	
34	PS2KB Wakeup Key Select	PASS	
35	PS2MB Wakeup Key Select	PASS	
36	RWRON After PWR-Fail	PASS	
37	HDD Power Down	PASS	

1.3 Driver Test

CD Edition : IPCi 2– 1.0

1. Windows 2000 SP4

Item	Description	Result	Version
1	Chipset Driver	PASS	8.1.1.1010
2	VGA Driver	PASS	v2.00.74-0930
3	Audio Driver	PASS	5.10.0.5657
4	LAN Driver	PASS	10.2

2. Windows XP SP2 Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	8.1.1.1010
2	VGA Driver	PASS	v2.00.74-0930
3	Audio Driver	PASS	5.10.0.5657
4	LAN Driver	PASS	10.2

3. Windows Server 2003 Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	8.1.1.1010
2	Audio Driver	PASS	5.10.0.5657
3	LAN Driver	PASS	10.2

4. Windows Vista 32 bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	8.1.1.1010
2	VGA Driver	PASS	v2.00.74-0930
3	Audio Driver	PASS	6.0.1.5473
4	LAN Driver	PASS	12.1

2. Compatibility Test

2.1 CPU Test

Test Environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Spec	CPU Speed	Family	Processor	FSB	L2 Size	Result
---	1.5 GHz	C7	C7 1500/400	400 MHz	128 KB	PASS

2.2 Memory Test

Test Environment:

OS Windows XP professional SP2

Test program : PC MARK 2005

Manufacturer	Chip	DDRII Frequency	Capacity Mbytes	Memory test Score
Transcend	7PEIID9HNL	DDRII 533	2 GB	PASS
Transcend	E1108AA-5C-E	DDRII 533	2 GB	PASS
Kingston	HYB18T512	DDRII 533	1 GB	PASS
Kingston	051209110	DDRII 533	1 GB	PASS
Kingston	E5108AE-6E-E	DDRII 667	1 GB	PASS
Kingston	D6408TR6CGL25U	DDRII 800	1 GB	PASS
Twin MOS	HY5PS12821	DDRII 533	512 MB	PASS
A-DATA	AD20908A8A-25EG	DDRII 800	2 GB	PASS
A-DATA	E5108AB-6E-E	DDRII 667	1 GB	PASS

2.3 VGA Graphic Quality Test

Test Environment:

OS Windows XP professional SP2

Driver version : v2.00.74-0930

Resolution	Color	Result	Remark
800*480	16 /32bit	PASS	
800*600	16 /32bit	PASS	
1024*600	16 /32bit	PASS	
1024*768	16 /32bit	PASS	
1280*720	16 /32bit	PASS	
1280*768	16 /32bit	PASS	
1280*800	16 /32bit	PASS	
1280*960	16 /32bit	PASS	
1280*1024	16 /32bit	PASS	
1366*768	16 /32bit	PASS	
1400*1050	16 /32bit	PASS	
1440*900	16 /32bit	PASS	
1600*1200	16 /32bit	PASS	
1680*1050	16 /32bit	PASS	
1920*1080	16 /32bit	PASS	
1920*1200	16 /32bit	PASS	

2.4 Audio Test

Test Environment:

1. OS Windows XP professional SP2

Driver version : 5.10.0.5657

Item	Description	Result	Remark
1	2 CH	PASS	
2	5.1 CH	PASS	
3	7.1 CH	PASS	
4	Microphone	PASS	
5	LINE	PASS	
6	SPDIF OUT	PASS	
7	CDIN	PASS	

2. OS Windows Server 2003

Driver version : 5.10.0.5657

Item	Description	Result	Remark
1	2 CH	PASS	
2	5.1 CH	PASS	
3	7.1 CH	PASS	
4	Microphone	PASS	
5	LINE	PASS	
6	SPDIF OUT	PASS	
7	CDIN	PASS	

3. OS Windows 2000 SP4

Driver version : 5.10.0.5657

Item	Description	Result	Remark
1	2 CH	PASS	
2	5.1 CH	PASS	
3	7.1 CH	PASS	
4	Microphone	PASS	
5	LINE	PASS	
6	SPDIF OUT	PASS	
7	CDIN	PASS	

4. OS Windows Vista 32 bit

Driver version : 6.0.1.5473

Item	Description	Result	Remark
1	2 CH	PASS	
2	5.1 CH	PASS	
3	7.1 CH	PASS	
4	Microphone	PASS	
5	LINE	PASS	
6	SPDIF OUT	PASS	
7	CDIN	PASS	

2.5 HDD Test

HDD MODEL	Interface	Capacity	HDD Size Detect	HDD Data Transfer	HDD LED Check
IBM DTLA-305010	IDE	10.2 GB	PASS	PASS	PASS
Quantum Fireball Plus LM30 N143		30 GB	PASS	PASS	PASS
Western Digital WD800BB-22JHC0		80 GB	PASS	PASS	PASS
Western Digital WD800BB-00JKC0		80 GB	PASS	PASS	PASS
Western Digital WD2500JB-00REA0		250 GB	PASS	PASS	PASS
Western Digital WD800JD-00LSA0	SATA	80 GB	PASS	PASS	PASS
Western Digital WD1600AAJS-22PSA0		160 GB	PASS	PASS	PASS
Western Digital WD1600AAJS-22B4A0		160 GB	PASS	PASS	PASS
HITACHI HDS721616PLA380		160 GB	PASS	PASS	PASS
Western Digital WD2500JB-00GVC0		250 GB	PASS	PASS	PASS

Western Digital WD10EADS-00L5B1		1000 GB	PASS	PASS	PASS
Western Digital WD6400H1Q-00	USB	640 GB	PASS	PASS	PASS

2.6 CD-ROM Test

CD-ROM MODEL	INTERFACE	CD-ROM Detect	CD-ROM Data Transfer	PLAY DVD
BenQ 652A-6N2	IDE	PASS	PASS	PASS
SONY CDU4811		PASS	PASS	PASS
PIONEER DVD-127P		PASS	PASS	PASS
ATAPI LH-1P52N		PASS	PASS	PASS
TEAC CD-532E		PASS	PASS	PASS
ASUS DVD DRW-1814BLT	SATA	PASS	PASS	PASS
LG DVD GSA-H62L		PASS	PASS	PASS
LG DVD GGW-H20L		PASS	PASS	PASS
PIONEER DVD PVR-212B		PASS	PASS	PASS

2.7 USB Test

1. Windows XP SP2

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

2. Windows Server 2003

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

3. Windows 2000 SP4

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

4. Windows Vista 32 bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

5. Windows Server 2008

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

6. Windows 7

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	

2.8 Serial Port Test

1. MS-DOS

Item	Description	Result	Remark
1	RS-232 Mouse Test	PASS	
2	RS-422 & RS-485	PASS	
3	PC Check	PASS	
4	TS	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	B&B com port test	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	B&B com port test	PASS	

4. Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	B&B com port test	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

7. Windows Server 2008

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	B&B com port test	PASS	

8. Windows 7

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

2.9 PS/2 Keyboard 、 Mouse Test

1. MS-DOS

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

2. Windows 2000 SP4

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

3. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

4. Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

7. Windows Server 2008

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

8. Windows 7

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

2.10 LAN Test

Data Transfer Test Environment:

-CAT 6 UTP 100M

-8 HR. continuous

1. Windows 2000 SP4

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

2. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

3. Windows XP SP2

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

4. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Data Transfer Test	PASS	

2.11 Power Supply Test

Item	TYPE	Description	Result	Remark
1	ATX Power	Seventeam ST-300BLV 300W	PASS	
2	ATX Power	ATX-300 300W	PASS	
3	ATX Power	CWT-300ATX12(PFC) 300W	PASS	
4	ATX Power	CHANNEL WELL TECHNOLOGY CO.,LTD CWT-300BDP-F 300W	PASS	
5	ATX Power	COOLER MASTER RS-390-PMSR-A3 390W	PASS	
6	ATX Power	Seventeam ST-300BKV 300W	PASS	
7	ATX Power	COOBEE0 B-300ATX 300W	PASS	
8	ATX Power	CHANNEL WELL TECHNOLOGY CO.,LTD CWT-300BS 300W	PASS	

2.12 Floppy Drive Test

1. Floppy Drive Test

Floppy	Floppy Drive Detect	Floppy Data Transfer
TEAC FD-05HG	PASS	PASS
MITSUMI D353FUE	PASS	PASS
MITSUMI D353GUE	PASS	PASS

2. Zip Drive Test

HDD MODEL	Interface	Capacity	Average	Burst Rate	Access time
IOMEGA Z100ATAPI	IDE	100MB	0.9 MB/sec	0.8 MB/sec	43.8 ms

2.13 Os Install

	Description	Result	Remark
1	Windows 7	PASS	
2	Windows Server 2008	PASS	
3	Windows Vista 32 bit	PASS	
4	Windows XP SP2	PASS	
5	Windows Server 2003	PASS	
6	Windows 2000 SP4	PASS	
7	Fedora Code 2	PASS	
8	Red Hat 5	PASS	
9	Open Solaris 10 (5.10 Generic_127128-11 i86pc)	PASS	
10	Fedora 8 (2.6.23.1-42.fc8)	PASS	

2.14 Print Port Test

1. MS-DOS

Item	Description	Result	Remark
1	PC Check	PASS	
2	TS	PASS	

2. Window 2000 PS4

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

3. Window 2003

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

4. Window XP SP2

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

5. Windows Vista 32 bit

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

6. Windows Server 2008

Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

7. Windows 7

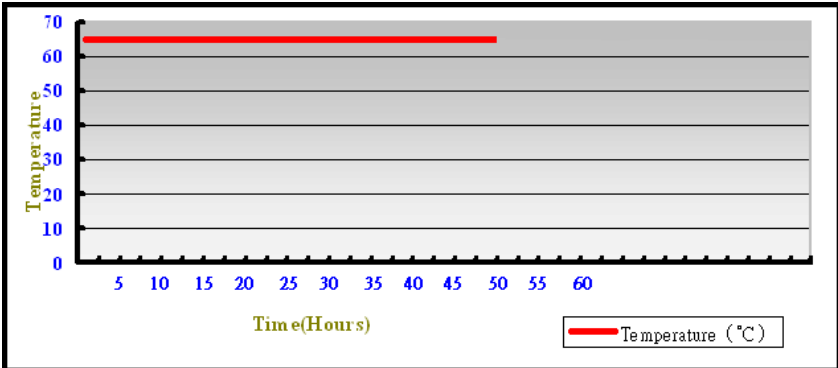
Item	Description	Result	Remark
1	ECP/EPP PRINT TEST	PASS	

3. Environmental test

3.1 Temperature Test

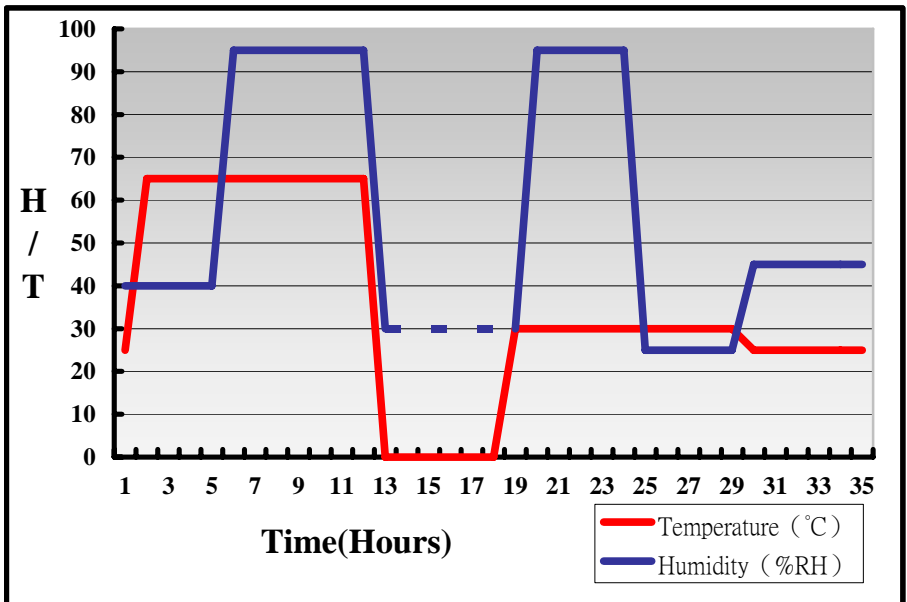
Hardware Device list:

System Board	LV-66AX
CPU	VIA C7 1.5GHz processor
Memory	A-DATA DDRII 667 1GB (AD29608A8A)
HDD	HITACHI HDT722525DLA 380 250GB
Operating OS	Windows XP
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3DMark 2003



Hardware Device list:

System Board	LV-66A
CPU	VIA C7 1.5GHz processor
Memory	A-DATA DDRII 667 1GB (E5108AB-66E-E)
Operating OS	Windows XP
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark 2003



Definition : When the temperature is 30 degrees below arrive, humidity measurements have not, so by the dashed line express.

Boot Up Test:

Hardware Device list:

System Board	LV-66A
CPU	VIA C7 1.5GHz processor
Memory	A-DATA DDRII 800 2GB (AD20908A8A-25EG)
HDD	Western Digital WD800BB-00JKC0 80GB

Temperature	Result	Remark
85°C	PASS	50 Times

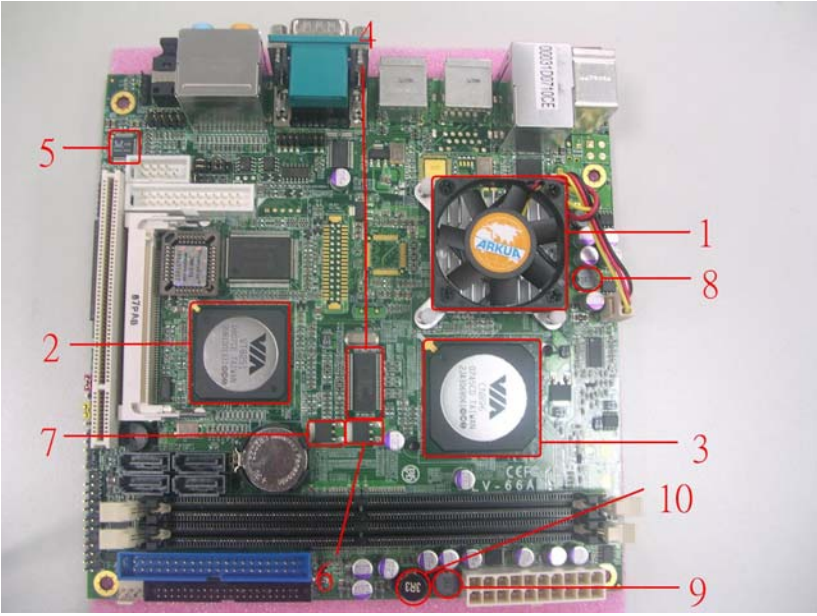
3.2 Thermal measurements at various points on the board

Test Environment:

CPU	VIA C7 1.5GHz processor
Memory	Transcend DDRII 533 2GB (E1108AA-5C-E) A-DATA DDRII 800 2GB (AD20908A8A-25EG)
HDD	Western Digital WD800BB-00JKC0 80GB
Power	Seventeam ST-300BKV
Operating System	Windows XP SP2
Test Program	3D WinMark2003

Test Result:

Item	Environmental temperature	28.1°C
1	CPU	43.4°C
2	Southbridge (VT8251)	46.1°C
3	Northbridge (CN896)	52.6°C
4	U6 (ICS953002DF)	53.4°C
5	U14 (ALC888)	44°C
6	Q19 (CEU3700(TO252))	43.1°C
7	Q21 (CEU3700(TO252))	43.9°C
8	Lc5 (3R3(L0705,SMD))	40.5°C
9	Lc6 (IR0(L0705,SMD))	45.8°C
10	Lc7 (LLC3.3UH/1311G)	54.6°C



4. Reliability Test

4.1 Power Consumption Test

1. Test Environment:

CPU	VIA C7 1.5GHz processor
Memory	Kingston DDRII 667 1GB (051209110)
HDD	Quantum Fireball Plus LM30 N143 30GB
Test OS	Windows 2000 PS4
Test Program	3DMARK 2001
Power Supply	Seventeam ST-300WBLV
LVDS	AUO M170EG01 V.D

Test Result

Voltage	Current (A)	Power (W)	Remark
12V	2.74	32.88	
5V	3.58	17.9	
3.3V	1.01	3.333	
5VSB	0	0	

2. Test Environment:

CPU	VIA C7 1.5GHz processor
Memory	Kingston DDRII 667 1GB (051209110)
HDD	Quantum Fireball Plus LM30 N143 30GB
Test OS	Windows 2000 PS4
Test Program	3DMARK 2003
Power Supply	Seventeam ST-300WBLV
LVDS	AUO M170EG01 V.D

Test Result

Voltage	Current (A)	Power (W)	Remark
12V	2.62	31.44	
5V	3.28	16.4	
3.3V	1.02	3.366	
5VSB	0.01	0.05	

3. Test Environment:

CPU	VIA C7 1.5GHz processor
Memory	Kingston DDRII 667 1GB (051209110)
HDD	Quantum Fireball Plus LM30 N143 30GB
Test OS	Windows 2000 PS4
Test Program	PCMARK 2002
Power Supply	Seventeam ST-300WBLV
LVDS	AUO M170EG01 V.D

Test Result

Voltage	Current (A)	Power (W)	Remark
12V	2.75	33	
5V	3.18	15.9	
3.3V	1.06	5.28	
5VSB	0.03	0.15	

4. Test Environment:

Motherboard	LV-66AX
CPU	VIA C7 1.5GHz processor
Memory	Kingston DDRII 667 1GB (051209110)
HDD	Quantum Fireball Plus LM30 N143 30GB
Power Supply	Seventeam ST-300WBLV

Test Result

Voltage	Current (A)	Power (W)	Remark
12V	1.01	12.24	Boot Up
5V	2.81	14.05	Boot Up
3.3V	1.02	3.366	Boot Up
5VSB	0	0	Boot Up

5. Test Environment:

Motherboard	LV-66AX
CPU	VIA C7 1.5GHz processor
Memory	Kingston DDRII 667 1GB (051209110)
HDD	Quantum Fireball Plus LM30 N143 30GB
Power Supply	Seventeam ST-300WBLV
LVDS	AUO M170EG01 V.D

Test Result

Voltage	Current (A)	Power (W)	Remark
12V	2.92	35.04	Boot Up
5V	3.3	16.5	Boot Up
3.3V	1.01	3.333	Boot Up
5VSB	0	0	Boot Up

6. Test Environment:

Motherboard	LV-66A
CPU	VIA C7 1.5GHz processor
Memory	Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821)

Power Supply : Seventeam ST-300BKV

Voltage	MS-DOS Boot up		Windows XP SP2 3DMARK 2003	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	0.6	7.2	0.65	7.8
5V	2.36	11.8	2.62	13.1
3.3V	0.86	2.838	0.84	2.772
5VSB	0.181	0.905	0.003	0.015

7. Test Environment:

Motherboard	LV-66A
CPU	VIA C7 1.5GHz processor
Memory	Transcend DDRII 533 2GB (E1108AA-5C-E) A-DATA DDRII 800 2GB (AD20908A8A-25EG)

Power Supply : Seventeam ST-300BKV

Voltage	MS-DOS Boot up		Windows XP SP2 3DMARK 2003	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	0.58	6.96	0.64	7.68
5V	2.47	12.35	2.64	13.2
3.3V	0.88	2.904	0.83	2.739
5VSB	0.185	0.925	0.005	0.025

5. Performance Test

5.1 Business Winstone 2001

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2001	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	23.7 22 23.6 23.4

5.2 Business Win Stone 2002

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2002	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	13.4 13.3 13.3 13.3
Business Win stone2002	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) Western Digital WD800BB-00JKC0 80GB	PASS	18.2 18.7 18.9 18.7
Business Win stone2002	VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB	PASS	17.8 18.4 18.5 17.9
Business Win stone2002	VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB	PASS	20 20.1 20.1 19.9

5.3 Business Win Stone 2004

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2004	VIA C7 1.5GHz processor A-DATA DDRII 667 1G (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	7.5 7.3 7.5 7.2
Business Win stone2004	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) Western Digital WD800BB-00JKC0 80GB	PASS	6.8 8.2 10.3 10.8
Business Win stone2004	VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB	PASS	10.4 10.2 10.2 10.1
Business Win stone2004	VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB	PASS	10.9 11 10.6 10.9

5.4 Content Creation Winstone 2001

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Content Creation Winstone 2001	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	31.2 31.2 31.2 31.3

5.5 Multimedia Content Creation Winstone 2003

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Content Creation Winstone 2003	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	9.2 9.2 10 9.3

5.6 Content Creation Winstone 2004

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
Content Creation Winstone 2004	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Quantum Fireball Plus LM30 N143 30GB	PASS	5.5 5.5 5.3 5.4
Content Creation Winstone 2004	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) Western Digital WD800BB-00JKC0 80GB	PASS	9.3 10 9.5 9.5
Content Creation Winstone 2004	VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB	PASS	9.5 9.5 9.3 9.5
Content Creation Winstone 2004	VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB	PASS	9.7 9.6 9.7 9.7

5.7 3D MARK(2000、2001、2003、2005)

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (7TE17D9HNL) Quantum Fireball Plus LM30 N143 30GB	PASS	1447
3DMARK2001 Scores		PASS	916
3DMARK2003 Scores		PASS	308
3DMARK2005 Scores		PASS	124

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Western Digital WD1600AAJS-22PSA0 160GB	PASS	1207
3DMARK2001 Scores		PASS	742
3DMARK2003 Scores		PASS	231
3DMARK2005 Scores		PASS	111

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) HITACHI HDS721616PLA380 160GB	PASS	2101
3DMARK2001 Scores		PASS	1358
3DMARK2003 Scores		PASS	382
3DMARK2005 Scores		PASS	197

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB	PASS	2224
3DMARK2001 Scores		PASS	1419
3DMARK2003 Scores		PASS	432
3DMARK2005 Scores		PASS	205

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (E5108AB-6E-E) Western Digital WD800BB-00JKC0 80GB	PASS	2192
3DMARK2001 Scores		PASS	1364
3DMARK2003 Scores		PASS	401
3DMARK2005 Scores		PASS	198

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB	PASS	2129
3DMARK2001 Scores		PASS	1369
3DMARK2003 Scores		PASS	394
3DMARK2005 Scores		PASS	189

Windows XP SP2

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2000 Scores	VIA C7 1.5GHz processor Kingston DDRII 800 1GB (D6408TR6CGL25U) Western Digital WD800BB-00JKC0 80GB	PASS	2235
3DMARK2001 Scores		PASS	1373
3DMARK2003 Scores		PASS	396
3DMARK2005 Scores		PASS	197

5.8 3D MARK2006

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor Kingston DDRII 800 512MB (V59C1512804Q4BF25) Quantum Fireball Plus LM30 N143 30GB	PASS	87
2	SM2.0 Score		PASS	N/A
3	HDR/SM3.0 Score		PASS	40
4	CPU Score		PASS	245

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) HITACHI HDS721616PLA380 160GB	PASS	103
2	SM2.0 Score		PASS	48
3	HDR/SM3.0 Score		NO SUPPLY	N/A
4	CPU Score		PASS	248

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB	PASS	112
2	SM2.0 Score		PASS	52
3	HDR/SM3.0 Score		NO SUPPLY	N/A
4	CPU Score		PASS	248

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (E5108AB-6E-E) Western Digital WD800BB-00JKC0 80GB	PASS	106
2	SM2.0 Score		PASS	49
3	HDR/SM3.0 Score		NO SUPPLY	N/A
4	CPU Score		PASS	248

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB	PASS	104
2	SM2.0 Score		PASS	48
3	HDR/SM3.0 Score		NO SUPPLY	N/A
4	CPU Score		PASS	247

Windows XP SP2

Item	WEIGHTED SUITE	Test Environment	Result	Remark
1	3DMARK Score	VIA C7 1.5GHz processor Kingston DDRII 800 1GB (D6408TR6CGL25U) Western Digital WD800BB-00JKC0 80GB	PASS	92
	SM2.0 Score		PASS	43
3	HDR/SM3.0 Score		NO SUPPLY	N/A
4	CPU Score		PASS	248

5.9 PC MARK2002

Test Environment
VIA C7 1.5GHz processor Transcend DDRII 533 2GB (7TE17D9HNL) Quantum Fireball Plus LM30 N143 30GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1407
2	Memory test Score	PASS	1529
3	HDD test Score	PASS	535

PC MARK2002 Pro

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1024
2	Memory test Score	PASS	1624
3	HDD test Score	PASS	820

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Quantum Fireball Plus LM30 N143 30GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1052
2	Memory test Score	PASS	1631
3	HDD test Score	PASS	300

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	N/A
2	Memory test Score	PASS	2074
3	HDD test Score	PASS	677

Test Environment
VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1933
2	Memory test Score	PASS	2038
3	HDD test Score	PASS	1699

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1915
2	Memory test Score	PASS	2025
3	HDD test Score	PASS	685

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (E5108AB-6E-E) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1940
2	Memory test Score	PASS	2058
3	HDD test Score	PASS	694

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1940
2	Memory test Score	PASS	2078
3	HDD test Score	PASS	1681

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 800 1GB (D6408TR6CGL25U) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Score	PASS	1939
2	Memory test Score	PASS	2076
3	HDD test Score	PASS	669

5.10 PC MARK2004 v1.30

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	639
4	Graphic test Score	PASS	357
5	HDD test Score	PASS	2501

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Quantum Fireball Plus LM30 N143 30GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	657
4	Graphic test Score	PASS	386
5	HDD test Score	PASS	2762

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	844
4	Graphic test Score	PASS	399
5	HDD test Score	PASS	N/A

Test Environment
VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	1202
2	CPU test Score	PASS	1259
3	Memory test Score	PASS	882
4	Graphic test Score	PASS	399
5	HDD test Score	PASS	5218

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	1185
2	CPU test Score	PASS	1251
3	Memory test Score	PASS	871
4	Graphic test Score	PASS	429
5	HDD test Score	PASS	N/A

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (E5108AB-6E-E) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	1187
2	CPU test Score	PASS	1257
3	Memory test Score	PASS	863
4	Graphic test Score	PASS	413
5	HDD test Score	PASS	3408

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	1198
2	CPU test Score	PASS	1262
3	Memory test Score	PASS	885
4	Graphic test Score	PASS	418
5	HDD test Score	PASS	4769

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 800 1GB (D6408TR6CGL25U) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PC Mark Score	PASS	1198
2	CPU test Score	PASS	1258
3	Memory test Score	PASS	894
4	Graphic test Score	PASS	420
5	HDD test Score	PASS	3402

5.11 PC MARK2005

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 553 1GB (051209110) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	N/A
2	CPU Score	PASS	499
3	Memory Score	PASS	601
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	5608

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (AD29608A8A) Western Digital WD1600AAJS-22PSA0 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	N/A
2	CPU Score	PASS	848
3	Memory Score	PASS	847
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	N/A

Test Environment
VIA C7 1.5GHz processor Transcend DDRII 533 2GB (E1108AA-5C-E) Twin MOS DDRII 533 512MB (HY5PS12821) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	N/A
2	CPU Score	PASS	925
3	Memory Score	PASS	880
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	6025

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 800 2GB (AD20908A8A-25EG) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	N/A
2	CPU Score	PASS	930
3	Memory Score	PASS	869
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	2960

Test Environment
VIA C7 1.5GHz processor A-DATA DDRII 667 1GB (E5108AB-6E-E) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	N/A
2	CPU Score	PASS	930
3	Memory Score	PASS	880
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	3016

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 667 1GB (E5108AE-6E-E) HITACHI HDS721616PLA380 160GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCMARK Score	PASS	946
2	CPU Score	PASS	898
3	Memory Score	PASS	887
4	Graphic Score	PASS	261
5	HDD Score	PASS	5644

Test Environment
VIA C7 1.5GHz processor Kingston DDRII 800 1GB (D6408TR6CGL25U) Western Digital WD800BB-00JKC0 80GB

Windows XP SP2

Item	WEIGHTED SUITE	Result	Remark
1	PCM()ARK Score	PASS	N/A
2	CPU Score	PASS	931
3	Memory Score	PASS	877
4	Graphic Score	PASS	N/A
5	HDD Score	PASS	3016

5.12 Storage Performance

5.12.1 HDD

Test Environment:

OS Windows XP professional SP2

Program (HD Tune)

HDD MODEL	Interface	Capacity	Average	Burst Rate	Access Time
HITACHI S320413A	IDE	20 GB	20.8 MB/sec	27 MB/sec	18.5 ms
QUANTUM FIREBALLP LM		30 GB	21.3 MB/sec	46.1 MB/sec	11.8 ms
Western Digital WD800BB-22JH C0		80 GB	27.9 MB/sec	29.4 MB/sec	14.1 ms
Western Digital WD800BB-00JK C0		80 GB	27.7 MB/sec	29.1 MB/sec	13.8 ms
HITACHI HDS721616PLA 380	SATA	160 GB	59.4 MB/sec	150.5 MB/sec	14.1 ms
HITACHI HTS543216L9A		160 GB	46.5 MB/sec	124.9 MB/sec	17.6 ms
Western Digital WD800JD -0LSA0		80 GB	46.7 MB/sec	116.8 MB/sec	14.7 ms

Western Digital WD1600AAJS -22PSA0		160 GB	58.6 MB/sec	111.2 MB/sec	13.1 ms
Western Digital WD1600AAJS-2 2B4A0		160 GB	88.1 MB/sec	121.1 MB/sec	15.8 ms
Western Digital WD2500JB -00GVC0		250 GB	27.4 MB/sec	27.5 MB/sec	13.8 ms
Western Digital WD10EADS-00 L5B1		1000 GB	70.1 MB/sec	124.9 MB/sec	14.2 ms
Western Digital WD6400H1Q-00	USB	640 GB	24.8 MB/sec	27.5 MB/sec	14.8 ms
USB 2.0 Flash Drive		8 GB	14.7 MB/sec	13.2 MB/sec	0.7 ms
TDK LoR Trans-It Drive		4 GB	16.6 MB/sec	17.9 MB/sec	0.8 ms
Apacer USB FLASH DRIVE		515 MB	9 MB/sec	4.6 MB/sec	1.8 ms
ACTIONS USB DISK DEVICE		261MB	0.5 MB/sec	0.5 MB/sec	5.9 ms

5.12.2 CD-ROM

Test Environment:

OS Windows XP professional SP2

Program (NERO)

CD-ROM MODEL	Interface	Average speed	Full READ	Burst Rate	CD
BenQ 652A-6N2	IDE	15.59 x	206 ms	3 MB/s	52 X CD-R
SONY CDU4811		16.92 x	176 ms	3 MB/s	
PIONEER DVD-127P		28.95 x	153 ms	23 MB/s	
ATAPI LH-1P52N		12.23 x	172 ms	3 MB/s	
TEAC CD-532E		14.81 x	192 ms	3 MB/s	
LITE-ON SHW-1635S		36.06 x	194 ms	22 MB/s	
ASUS DVD DRW-1814BLT		36.30 x	222 ms	52 MB/s	
LITEON DVD SOSC-2485KX	USB	18.13 x	171 ms	19 MB/s	
LITEON DVD SOSW-833SX		14.83 x	175 ms	18 MB/s	

5.13 Vibration Test

Motherboard	LV-66A		
Test Equipment	VS-5060L		
Amplitude	Frequency	Time (1min/1Time)	Result
0.75mm	5 → 55 → 5 Hz	10	PASS
1.00mm	5 → 55 → 5 Hz	10	PASS
1.25mm	5 → 55 → 5 Hz	10	PASS
1.5mm	5 → 55 → 5 Hz	10	PASS
1.5mm	5 → 55 → 5 Hz	120	PASS