

LE-364

Test Report
Version: 1.0

Test Engineer :

Identify:

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1. Function test

1.1 Hardware function Base Function Test

1	Power Button	PASS
2	Reset	PASS
3	Power LED	PASS
4	HDD LED	PASS
5	IDE Primary Master	PASS
6	IDE Primary Slave	PASS
7	DIMM	PASS
8	Floppy	PASS
9	Keyboard	PASS
10	Mouse	PASS
11	VGA Port	PASS
12	LVDS	PASS
13	AUDIO	PASS
14	LAN	PASS
15	USB	PASS
16	Serial Port	PASS
17	Parallel Port	PASS
18	IrDA	PASS
19	GPIO	PASS
20	Compact Flash	PASS
21	CPUFAN	PASS
22	SYSFAN	PASS
23	MiniPCI (with MP-323)	PASS

24	PCI Golden Finger(with PCI-3P)	PASS
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2.0 PITCH (DIP)

1	JRTC	PASS
2	JVLCD	PASS
3	JBITSEL	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	Boot Up NumLock Status	PASS	
10	VGA Share Memory Size	PASS	
11	Select Display Device	PASS	
12	Init Display First	PASS	
13	OnChip IDE Channel 0	PASS	
14	REALTEK AC97 Audio	PASS	
15	VIA OnChip LAN	PASS	
16	OnChip USB Controller	PASS	
17	USB Keyboard Support	PASS	

18	USB Mouse Support	PASS	
19	Onboard FDC Controller	PASS	
20	Watch Dog Timer Select	PASS	
21	ACPI Function	PASS	
22	ACPI Suspend Type	PASS	
23	PS2KB Wakeup Select	PASS	
24	PS2KB Wakeup from S3	PASS	
25	PS2MS Wakeup from S3	PASS	
26	Wake-Up On LAN / Ring	PASS	

27	RTC Alarm Resume	PASS	
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1.3 Driver

1. Windows 98 Driver Test

Item	Description	Result	Remark
1	Chipset Driver	PASS	
2	VGA Driver	PASS	
3	Audio Driver	PASS	
4	LAN Driver	PASS	

2. Windows 2000 Driver Test

Item	Description	Result	Remark
1	Chipset Driver	PASS	
2	VGA Driver	PASS	
3	Audio Driver	PASS	
4	LAN Driver	PASS	

3. Windows Server 2000 Driver Test

Item	Description	Result	Remark
1	Chipset Driver	PASS	
2	VGA Driver	PASS	
3	Audio Driver	PASS	
4	LAN Driver	PASS	

4.Windows XP Driver Test

Item	Description	Result	Remark
1	Chipset Driver	PASS	
2	VGA Driver	PASS	
3	Audio Driver	PASS	
4	LAN Driver	PASS	

2. Compatibility test

2.1 Memory Test

DDR DRAM	DDR Freq	Capacity Mbytes	Operating System	Result
Micron (MT8VDDT1664AG-265A1)	DDR266	128MB	Win98 · Win2000 WinXP	PASS
HYUNDAI (HY5DU28822T-H)	DDR266	256MB	Win98 · Win2000 WinXP	PASS
NANYA (NT5DS16M8AT-7K)	DDR266	256MB	Win98 · Win2000 WinXP	PASS

Winbond (W942508AH-75)	DDR266	256MB	Win98 、Win2000 WinXP	PASS
SAMSUNG (K4H280838B-TCB0)	DDR266	256MB	Win98 、Win2000 WinXP	PASS
Infineon (HYB25D256800BT-6)	DDR333	512MB	Win98 、Win2000 WinXP	PASS
KINGMAX (KDL388P4EA-60)	DDR333	512MB	Win98 、Win2000 WinXP	PASS
SEITEC (DDR32M8AT-7)	DDR333	512MB	Win98 、Win2000 WinXP	PASS
SAMSUNG (K4H560838D-TCB3)	DDR333	512MB	Win98 、Win2000 WinXP	PASS
Kingston HYNIX (HY5DU12822AT-D43)	DDR400	1GB	Win98 、Win2000 WinXP	PASS
Kingston HYNIX (HY5DU12822BT-D43)	DDR400	1GB	Win98 、Win2000 WinXP	PASS

2.2 VGA Graphic Test

1. Windows 98 SE

Item	Description	Result	Remark
1	Resolution/Color Change	PASS	
2	CRT Display Test	PASS	
3	CRT Display Quality Test	PASS	
4	LVDS Display Test	PASS	

2. Windows 2000

Item	Description	Result	Remark
1	Resolution/Color Change	PASS	

2	CRT Display Test	PASS	
3	CRT Display Quality Test	PASS	
4	LVDS Display Test	PASS	

3. Windows Server 2000

Item	Description	Result	Remark
1	Resolution/Color Change	PASS	
2	CRT Display Test	PASS	
3	CRT Display Quality Test	PASS	

4. Windows XP

Item	Description	Result	Remark
1	Resolution/Color Change	PASS	
2	CRT Display Test	PASS	
3	CRT Display Quality Test	PASS	
4	LVDS Display Test	PASS	

5. VGA Card

VGA Card	Operating System	Result	Remark
ATI 3D RAGE PRO	Win98 、 WinXP	PASS	
S3 Trio64V2/DX 86C775	Win98 、 WinXP	PASS	

2.3 Audio Test

1. Windows 98 SE

Item	Description	Result	Remark
1	Sound Effect	PASS	

2	Equalizer	PASS	
3	Microphone	PASS	

2. Windows 2000

Item	Description	Result	Remark
1	Sound Effect	PASS	
2	Equalizer	PASS	
3	Microphone	PASS	

3. Windows Server 2000

Item	Description	Result	Remark
1	Sound Effect	PASS	
2	Equalizer	PASS	
3	Microphone	PASS	

4. Windows XP

Item	Description	Result	Remark
1	Sound Effect	PASS	
2	Equalizer	PASS	
3	Microphone	PASS	

5. Sound Card

Sound Card	Operating System	Result	Remark
Yamaha YMF724-C	Windows XP	PASS	
Yamaha YMF754-R	Windows XP	PASS	
ESS ES1989S	Windows XP	PASS	

2.4 HDD Test

HDD Type	Operating System	HDD Size Detect	HDD Data Transfer	HDD LED Check
Maxtor 6E040L0 40GB	MS-DOS Win98 SE Win2000 WinXP	PASS	PASS	PASS
WD WD400EB 40GB		PASS	PASS	PASS
Seagate ST340014A 40GB		PASS	PASS	PASS
WD 2500JB-00EVA0 250GB		PASS	PASS	PASS

2.5 CD-ROM Test

CD-ROM Type	Operating System	CD-ROM Detect	CD-ROM Data Transfer	PLAY DVD
ASUS CD-S400/A	MS-DOS Win98 SE Win2000	PASS	PASS	
AOPEN DVD1648/LKY		PASS	PASS	PASS
SONY DDU1621		WinXP	PASS	PASS

2.6 USB Test

1. Windows98 SE

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	External USB Keyboard Test	PASS	
3	External USB Mouse Test	PASS	
4	Hot plugging test	PASS	

2. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	External USB Keyboard Test	PASS	
3	External USB Mouse Test	PASS	
4	Hot plugging test	PASS	

3. Windows Server 2000

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	External USB Keyboard Test	PASS	
3	External USB Mouse Test	PASS	
4	Hot plugging test	PASS	

4. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	External USB Keyboard Test	PASS	
3	External USB Mouse Test	PASS	

4	Hot plugging test	PASS	
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2.7 Serial Port Test

1. MS-DOS

Item	Description	Result	Remark
1	MS-DOS PCCheck TEST	PASS	
2	MS-DOS QuickTech Pro TEST	PASS	

2. Windows 98 SE

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

3. Windows 2000

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

4. Windows XP

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

2.8 Keyboard \ Mouse Test

1. MS-DOS

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

2. Windows 98 SE

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

3. Windows 2000

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

4. Windows Server 2000

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

5. Windows XP

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

2.9 LAN Test

1. Windows98 SE

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

2. Windows 2000

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

3. Windows Server 2000

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

4. Windows XP

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

5. LAN Card

LAN Card	Operating System	Result	Remark
D-link DFE-530TX	Windows XP	PASS	
Realtek RTL8029AS	Windows XP	PASS	

2.10 Power Supply Test

1. MS-DOS 6.22

Item	Description	Verification	
		Result	Remark

1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	AOpen FSP300-60ATV

2. Windows 98 SE

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	AOpen FSP300-60ATV

3. Windows 2000

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	AOpen FSP300-60ATV

4. Windows Server 2000

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	AOpen FSP300-60ATV

5. Windows XP

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seventeam ST-300BLV
2	ATX Power On/Off	Pass	AOpen FSP300-60ATV

2.11 Floppy Test Model: SAMSUNG SFD321S

1. MS-DOS 6.22

Item	Description	Result	Remark
1	Floppy Drive Detect	PASS	
2	Boot from Floppy	PASS	

3	Floppy Data Transfer	PASS	
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2. Windows 98 SE

Item	Description	Result	Remark
1	Floppy Drive Detect	PASS	
2	Floppy Data Transfer	PASS	

3. Windows 2000

Item	Description	Result	Remark
1	Floppy Drive Detect	PASS	
2	Floppy Data Transfer	PASS	

4. Windows Server 2000

Item	Description	Result	Remark
1	Floppy Drive Detect	PASS	
2	Floppy Data Transfer	PASS	

5. Windows XP

Item	Description	Result	Remark
1	Floppy Drive Detect	PASS	
2	Floppy Data Transfer	PASS	

2.12 Boot Up Test

Item	Description	Result	Remark
1	Soft boot from HDD	PASS	Times
2	Soft boot from CD-ROM	PASS	Times
3	Soft boot from Floppy	PASS	Times
4	Reboot test with Win98 SE	PASS	Times
5	Reboot test with Win 2000	PASS	Times
6	Reboot test with Win Server 2000	PASS	Times

7	Reboot test with Win XP	PASS	Times
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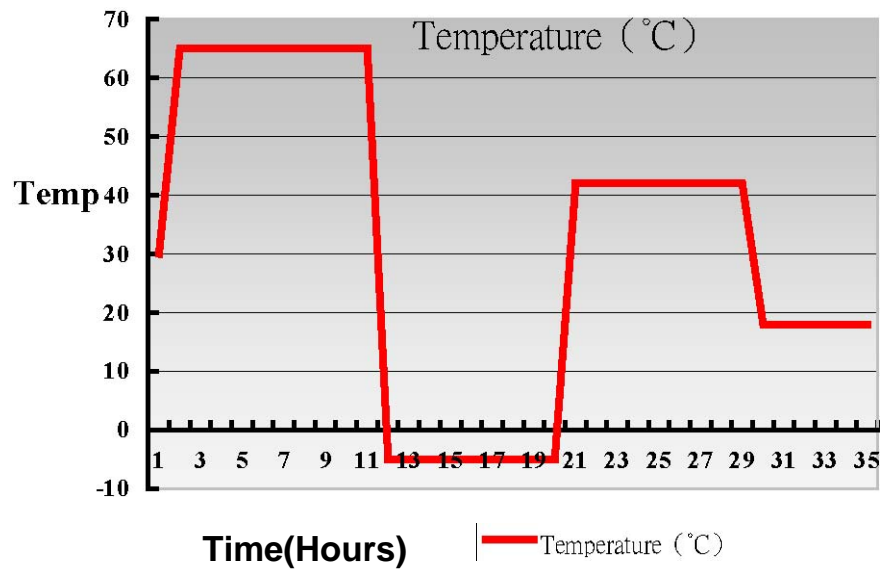
3. Environmental test

3.1 Temperature Test Hardware Device list:

System Board	HE-364
CPU	VIA Eden / 800MHZ
Memory	SAMSUNG DDR333 512MB
HDD	IBM DTLA-307030 30.7GB

Operating OS	Windows XP
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3D WinMark 2003

Test Result:



4. Reliability Test

4.1 Power Consumption Test 1. Test Environment:

CPU	VIA Eden / 800 MHZ
Memory	HYNIX 184 Pin DDR400 1GB
HDD	Seagate ST340014A 40G

CDROM	Aopen DVD1648/LKY
Operating System	Windows XP
Test Program	3DwinMark 2001

Voltae	Current (A)	Power (W)	Remark
12V	2.33	27.96	

2.Test Environment:

CPU	VIA Eden/ 800 MHZ
Memory	HYNIX 184 Pin DDR400 1GB
HDD	Seagate ST340014A 40G
CDROM	Aopen DVD1648/LKY
Operating System	Windows XP
Test Program	3DwinMark 2003

Voltae	Current (A)	Power (W)	Remark
12V	2.3	27.6	

4.2 Thermal measurements at various points on the board Test Environment :

CPU	VIA Eden / 800 MHz
Memory	DDR333 512MB
HDD	Seagate ST340014A 40G
CD-ROM	ASUS CD-S400 / A
Power	Seventeam ST-300BLV
Operating System	Windows XP
Test Program	3D WinMark2003

Test Result:

CPU (with heat sink)	62.4°C
CN400 (with heat sink)	62.4°C
VT8237 (Southbridge)	63.9°C
LC1	65.8°C
LX1	60.4°C
U10	69.9°C
U3	56.9°C
U24	70.4°C
L2	63.9°C

5. Performance Test

5.1 Business Win Stone 2001

1. Windows 98

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2001	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	24.5 26.6 26.3 25 26.5

2. Windows 2000

WEIGHTED SUITE	Test Environment	Result	Remark
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Business Win stone2001	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	26.9 27.6 27.5 27.6 27.6
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5.2 Business Win Stone 2002

1. Windows 98

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2002	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	13.8 13.8 13.8 13.9 13.7

2. Windows XP

WEIGHTED SUITE	Test Environment	Result	Remark
Business Win stone2002	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	14.6 14.5 14.6 14.6 14.5

5.3 Winstone Content Creation 2001

1. Windows 98

WEIGHTED SUITE	Test Environment	Result	Remark
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Winstone Content Creation2001	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	22.2 23.8 23.6 23.8 23.8
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2. Windows 2000

WEIGHTED SUITE	Test Environment	Result	Remark
Winstone Content Creation2001	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	27.5 30.1 30 30.1 30

3. Windows XP

WEIGHTED SUITE	Test Environment	Result	Remark
Winstone Content Creation2001	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	25.1 24.8 24.8 24.9 24.9

5.4 Winstone Content Creation 2003

1. Windows 98

WEIGHTED SUITE	Test Environment	Result	Remark
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Winstone Content Creation2003	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	7.3 7.3 7.4 7.4 7.5
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2. Windows 2000

WEIGHTED SUITE	Test Environment	Result	Remark
Winstone Content Creation2003	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	8.5 8.6 8.6 8.6 8.6

3. Windows XP

WEIGHTED SUITE	Test Environment	Result	Remark
Winstone Content Creation2003	SEITEC DDR400 1G Seagate ST340014A 40GB AOPEN DVD1648/LKY	Pass	7.6 7.7 7.7 7.5 7.8

5.5 3D MARK

1. Windows 98

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	SEITEC DDR400 1G	Pass	657

3DMARK2003 Scores	Seagate ST340014AAOPEN DVD1648/LKY 40GB	Pass	29
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2. Windows 2000

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	SEITEC DDR400 1G 40GB Seagate ST340014AAOPEN DVD1648/LKY	Pass	751
3DMARK2003 Scores		Pass	41

3. Windows XP

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	SEITEC DDR400 1G 40GB Seagate ST340014AAOPEN DVD1648/LKY	Pass	741
3DMARK2003 Scores		Pass	39