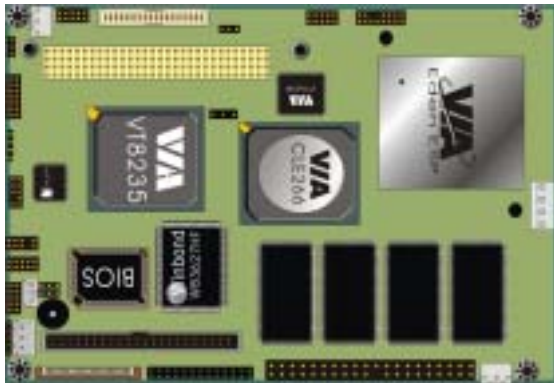


LE-362
Test Report
Edition 1.0



Test Engineer : Jems

Identify: Morgan

Index

1. Function test	4
1.1 Hardware function	4
1.2 BIOS function	6
1.3 Driver	7
2. Compatibility test.....	8
2.1 CPU Test	8
2.2 Memory Test.....	10
2.3 VGA Graphic Test.....	11
2.4 Audio Test.....	13
2.5 HDD Test	15
2.6 USB Test	25
2.7 Serial Port Test	26
2.8 IrDA Test.....	28
2.9 Keyboard Test	29
2.10 Mouse Test	31
2.11 LAN Module Test	33
2.12 Power Supply Test.....	35
2.13 CD-ROM Test	37
2.14 Floppy Drive Test.....	45
2.15 Printer Port Test.....	47
2.16 Boot Up Test.....	48
3. Environmental test	49
3.1 Temperature & Humidity Test	49
4. Reliability Test	50
4.1 Power Consumption Test	50
4.2 Thermal measurements at various points on the board.....	51

5. Performance Test..... 53

5.1 Win Bench 99 53

5.2 Win Stone 99..... 55

5.3 Win Stone 2000..... 57

5.4 Win Stone 2001..... 59

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	IDE Secondary Master	Pass
8	IDE Secondary Slave	Pass
9	Floppy	Pass
10	Cmpact Flash	Pass
11	PC/104+AB (2.0)	Pass
12	PC/104+CD (2.0)	Pass
13	SODIMM: Pass	Pass
14	VGA Port	Pass
15	Keyboard	Pass
16	Mouse	Pass
17	AUDIO Port	Pass
18	COM 1	Pass
19	Printer Port	Pass
20	Printer Port	Pass
21	TVOUT	Pass
22	IRDA	Pass
23	CDIN	Pass
24	CPUFAN	Pass
25	HASFAN	Pass

26	COM2	Pass
----	------	------

2.0 PITCH (DIP)

1	JRTC	PASS
2	LAN1	PASS
3	JLCD	PASS
4	J2	PASS
5	J3	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	IDE Setting	Pass	
6	Drive A	Pass	
7	Drive B	Pass	
8	Quick Power On Self Test	Pass	
9	Boot Device Setting	Pass	
10	Swap Floppy Drive	Pass	
11	Boot Up NumLock Status	Pass	
12	Memory Hole		
13	On Chip USB	Pass	
14	USB Keyboard Support	Pass	
15	ACPI Function	Pass	
16	Soft-Off by PWRBTN	Pass	
17	Frame Buffer Size	Pass	
18	RTC Alarm Resume	Pass	
19	Modem Ring On	Pass	
20	Wake Up On LAN	Pass	
21	OnChip IDE Channel 0/1	Pass	
22	Init Display First	Pass	
23	Onboard FDD Controller	Pass	
24	Onboard Serial Port	Pass	
25	Onboard Parallel Port	Pass	
26	CPU Warring Temperature		
27	CPU Shut Down Temperature	!	

1.3 Driver

1. Windows NT Driver Test

Item	Description	Result	Remark
1	VGA Driver	N/A	
2	Audio Driver	N/A	
3	LAN Driver	Pass	
5	System Service Pack	Pass	

2. Windows 98 Driver Test

Item	Description	Result	Remark
1	VGA Driver	Pass	
2	Audio Driver	Pass	
3	LAN Driver	Pass	
4	System Service Pack	Pass	

3. Windows 2000 Driver Test

Item	Description	Result	Remark
1	VGA Driver	Pass	
2	Audio Driver	Pass	
3	Lan Driver	Pass	
4	System Service Pack	Pass	

4.Windows XP Driver Test

	Description	Result	Remark
1	VGA Driver	Pass	
2	Audio Driver	Pass	
3	Lan Driver	Pass	
4	System Service Pack	Pass	

2. Compatibility test

2.1 CPU Test

Processor: VIA C3 667A MHz:

O.S: MS-DOS 6.22

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	
4	QAPLus 5.6 Test		

Windows 98

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	
4	WinBench99 Test		
5	WinStone99 Test		

Windows NT 4.0

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	
4	WinBench99 Test		
5	WinStone99 Test		

Windows 2000

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	
5	WinStone2000 Test	Pass	

Windows XP

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	
4	WinStone2000 Test		

Red Hat Linux 8.0

Item	Description	Result	Remark
1	CPU Type Detect	Pass	
2	CPU Speed Detect	Pass	
3	OS Running Stability	Pass	

2.2 Memory Test

1. SAMSUNG 144 Pin PC133 64M

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 98	Pass	
4	Windows NT	Pass	
5	Windows 2000	Pass	
6	Windows XP	Pass	
7	Red Hat Linux 8.0	Pass	

2. SAMSUNG 144 Pin PC133 256M

Item	Description	Result	Remark
1	Boot	Pass	
2	MS-DOS 6.22	Pass	
3	Windows 98	Pass	
4	Windows NT	Pass	
5	Windows 2000	Pass	
6	Windows XP	Pass	
7	Red Hat Linux 8.0	Pass	

2.3 VGA Graphic Test

1. Windows 98

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	Dual View Test		With S3/Sis6326 PCI VGA Card
4	CRT Display Test	Pass	
5	CRT Display Quality Test		
6	Video Memory Test		

2. Windows NT 4.0

Item	Description	Result	Remark
1	Driver Install		Driver not support by VIA
2	Resolution/Color Change		
3	CRT Display Test	Pass	
4	CRT Display Quality Test		
5	Video Memory Test		

3. Windows 2000

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	Dual View Test		With Sis6326/S3 PCI VGA Card
4	CRT Display Test	Pass	
5	CRT Display Quality Test		
6	Video Memory Test		

4. Windows XP

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Resolution/Color Change	Pass	
3	Dual View Test		With Sis6326/S3 PCI VGA Card
4	CRT Display Test	Pass	
5	CRT Display Quality Test		
6	Video Memory Test		

5. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Driver Install		
2	Speaker Left		
3	Speaker Right		
4	Sound Effect		
5	Equalizer		
6	Micphone		

2.4 Audio Test

1. Windows 98

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Microphone	Pass	

2. Windows NT 4.0

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer		
6	Microphone	Pass	

3. Windows 2000

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Micphone	Pass	

4. Windows XP

Item	Description	Result	Remark
1	Driver Install	Pass	
2	Speaker Left	Pass	
3	Speaker Right	Pass	
4	Sound Effect	Pass	
5	Equalizer	Pass	
6	Microphone	Pass	

5. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Driver Install		
2	Speaker Left		
3	Speaker Right		
4	Sound Effect		
5	Equalizer		
6	Microphone		

2.5 HDD Test

Model: Maxtor 6E040LO NAR61590

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	QAPLUS HDD Test		
5	HDD LED Check	Pass	

2. Windows NT 4.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows 98

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: Seagate Medalist 4321 ST34321A

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	QAPLUS HDD Test		
5	HDD LED Check	Pass	

2. Windows 98

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: IBM-DTLA-307030 TX40A60A

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	QAPLUS HDD Test		
5	HDD LED Check	Pass	

2. Windows 98

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: MaxtorD740X-6L

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	QAPLUS HDD Test		
5	HDD LED Check	Pass	

2. Windows 98

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

Model: Western Digital WD400

1. MS-DOS 6.22

Item	Description	Result	Remark
1	HDD Size Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Partition/Format	Pass	
4	QAPLUS HDD Test		
5	HDD LED Check	Pass	

2. Windows 98

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	HDD Detect	Pass	
2	HDD Read/Write	Pass	
3	HDD Data Transfer	Pass	
4	HDD Format	Pass	
5	HDD LED Check	Pass	

2.6 USB Test

1. Windows 98

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Fully load all USB connectors	Pass	
7	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	
5	Direct Connect by USB Test	Pass	
6	Fully load all USB connectors	Pass	
7	Hot plugging test	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	External USB Keyboard Test	Pass	
3	External USB Mouse Test	Pass	
5	Direct Connect by USB Test	Pass	
6	Fully load all USB connectors	Pass	
7	Hot plugging test	Pass	

2.7 Serial Port Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	RS-232 Mouse Test	Pass	
2	RS-232 Modem Test	Pass	
3	QAPLUS COM Port RS-232 Test (W/Loop-Back)		
4	SFT COM Port RS-232 Test (W/Loop-Back)		
5	SIOTEST COM Port RS-232 Test (W/Loop-Back)		
6	SIOTEST COM Port RS-422 Test (W/Loop-Back)		
7	SIOTEST COM Port RS-485 Test (W/Loop-Back)		

2. Windows 98

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	Win-QAPLUS COM Port RS-232 Test (W/Loop-Back)		

3. Windows NT 4.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test	Pass	
4	RS-232 Modem Test	Pass	
5	Win-QAPLUS COM Port RS-232 Test (W/Loop-Back)		

4. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	Win-QAPLUS COM Port RS-232 Test (W/Loop-Back)		

5. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Driver Install	Pass	
3	RS-232 Mouse Test (PNP)	Pass	
4	RS-232 Modem Test (PNP)	Pass	
5	Win-QAPLUS COM Port RS-232 Test (W/Loop-Back)		

2.8 IrDA Test

1. Windows 98

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test	Pass	
3	SIR Data Transfer Quality Test	Pass	
4	SIR Loop-Back Test	Pass	

2. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test	Pass	
3	SIR Data Transfer Quality Test	Pass	
4	SIR Loop-Back Test	Pass	

3. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test	Pass	
3	SIR Data Transfer Quality Test	Pass	
4	SIR Loop-Back Test	Pass	

4. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	SIR Mode Data Transfer Test		
3	SIR Data Transfer Quality Test		
4	SIR Loop-Back Test		

2.9 Keyboard Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	QAPLUS Keyboard Test		
2	Keyboard LED Status Test	Pass	
3	Keyboard Command Test	Pass	
4	Keyboard Typing Test	Pass	

2. Windows 98

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

5. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard LED Status Test	Pass	
3	Keyboard Typing Test	Pass	

2.10 Mouse Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	QAPLUS Mouse Test		
2	Mouse Detect Test	Pass	
3	DOS Edit Test (Use Microsoft Mouse Driver)	Pass	

2. Windows 98

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test	Pass	
3	Dos Mode Mouse Test	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

5. Windows XP

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Mouse Detect Test (PNP)	Pass	
3	Dos Mode Mouse Test		

2.11 LAN Module Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	LAN Module Install Test	N/A	
2	Driver Install	N/A	
3	Device Manager Check	N/A	
4	Data Transfer Test	N/A	

2. Windows 98

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	
5	Server Simulation Test		

4. Windows 2000

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	
5	Server Simulation Test		

5. Windows XP

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	
5	Server Simulation Test		

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	LAN Module Install Test	Pass	
2	Driver Install	Pass	
3	Device Manager Check	Pass	
4	Data Transfer Test	Pass	
5	Server Simulation Test		

2.12 Power Supply Test

1. MS-DOS 6.22

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off	Pass	ICP CH0049315-2000

2. Windows 98

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off	Pass	ICP CH0049315-2000

3. Windows NT 4.0

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Seven team ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off	Pass	ICP CH0049315-2000

4. Windows 2000

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Sevenyeam ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off	Pass	ICP CH0049315-2000

5. Windows XP

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Sevenyeam ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off	Pass	ICP CH0049315-2000

6. Red Hat Linux 8.0

Item	Description	Verification	
		Result	Remark
1	ATX Power On/Off	Pass	Sevenyeam ST-300BLV
2	ATX Power On/Off	Pass	Enhance ATX-1125B
3	AT Power On/Off		ICP CH0049315-2000

2.13 CD-ROM Test

Model: YAMAHA CRW2100E

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	
5	QAPLUS CD-ROM Test		

2. Windows 98

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: TEAC CD-532E 1.0A

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	
5	QAPLUS CD-ROM Test		

2. Windows 98

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: ASUS CD-S520/A

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	
5	QAPLUS CD-ROM Test		

2. Windows 98

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

Model: CODE DVD116

1. MS-DOS 6.22

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Bootable	Pass	
4	CD-ROM Data Transfer	Pass	
5	QAPLUS CD-ROM Test		

2. Windows 98

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

5. Windows XP

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	CD-ROM Detect	Pass	
2	CD-ROM Read	Pass	
3	CD-ROM Data Transfer	Pass	

2.14 Floppy Drive Test

Model: SAMSUNG SFD-321S

1. MS-DOS 6.22

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Boot from Floppy	Pass	
4	Floppy Data Transfer	Pass	
5	QAPLUS Floppy Drive Test		

2. Windows 98

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

5. Windows XP

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	Floppy Drive Detect	Pass	
2	Floppy Read/Write	Pass	
3	Floppy Data Transfer	Pass	

2.15 Printer Port Test

1. MS-DOS 6.22

Item	Description	Result	Remark
1	EPP		
2	ECP		
3	EPP+ECP		

2. Windows 98

Item	Description	Result	Remark
1	HCT LPT PnP Enumeration TEST	Pass	

3. Windows NT 4.0

Item	Description	Result	Remark
1	HCT ECP/EPP TEST	Pass	

4. Windows 2000

Item	Description	Result	Remark
1	HCT ECP/EPP TEST	Pass	

5. Windows XP

Item	Description	Result	Remark
1	HCT ECP/EPP TEST	Pass	

6. Red Hat Linux 8.0

Item	Description	Result	Remark
1	HCT ECP/EPP TEST		

2.16 Boot Up Test

Item	Description	Result	Remark
1	Power On/Off with AX power	Pass	50 Times
2	Power On/Off with ATX power	Pass	50 Times
3	Boot from disk on chip	Pass	Times
4	Soft boot from HDD	Pass	Times
5	Soft boot from CD-ROM	Pass	Times
6	Reboot test with Win 98	Pass	Times
7	Reboot test with Win NT	Pass	Times
8	Reboot test with Win 2000	Pass	Times
9	Reboot test with Win XP	Pass	Times
10	Reboot test with Red Hat Linux 8.0	Pass	Times

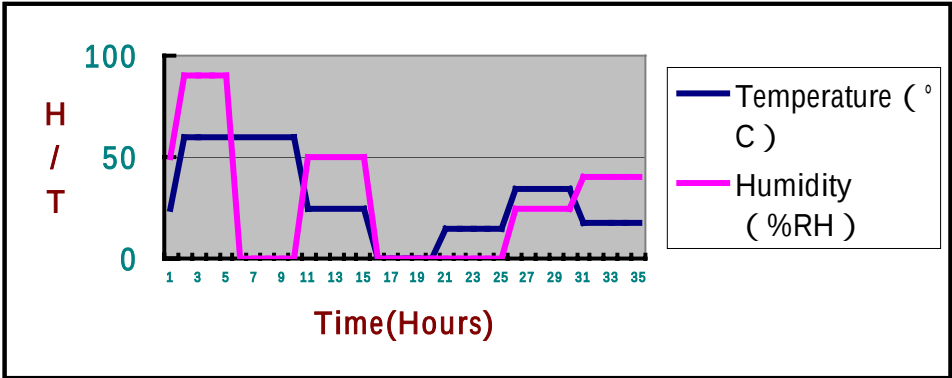
3. Environmental test

3.1 Temperature & Humidity Test

Hardware Device list:

System Board	LE-362
CPU	VIA C3 667A
Memory	Onboard Memory
HDD	IBM 30.7GB Model:DTLA 307030
KEYBOARD	MAGITRONIC KB-6923
MOUSE	Logitech M-CAA43
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	BCM

Test Result:



4. Reliability Test

4.1 Power Consumption Test

Test Environment:

CPU	VIA C3 667A
Memory	Onboard Memory
HDD	Western Digital WD400
Test Program	HCT 9.5

Test Result:

Current	3.3 A
Power	15 W

4.2 Thermal measurements at various points on the board

Test Environment A:

CPU	VIA C3 667A (without fan (big heat sink))
Memory	Onboard Memory
HDD	Western Digital WD400
Test Program	HCT 9.5

Test Result:

NB	61°C
SB	67°C
Q9	82°C
Q18	72°C
Q19	71°C
Q20	71°C
Q21	72°C
CPU	63°C

Test Environment B:

CPU	VIA C3 667A (without fan (small heat sink))
Memory	Onboard Memory
HDD	Western Digital WD400
Test Program	HCT 9.5

Test Result:

NB	61°C
SB	63°
Q9	91°C
Q18	61°C
Q19	56°C
Q20	56°C
Q21	80°C
CPU	71°C

Test Environment C:

CPU	VIA C3 667A (with fan)
Memory	Onboard Memory
HDD	Western Digital WD400
Test Program	HCT 9.5

Test Result:

NB	37°C
SB	32°C
Q9	43°C
Q18	28°C
Q19	30°C
Q20	28°C
Q21	31°C
CPU	26°C

5. Performance Test

5.1 Win Bench 99

1.Windows 98

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark32	Pass	36.4
2	FPU Win Mark	Pass	1300
3	Business Disk Win Mark 99	Pass	7030 Thousand Bytes/Sec
4	High-End Disk Win Mark 99	Pass	18000 Thousand Bytes/Sec
5	Business Graphics Win Mark 99		
6	High-End Graphics Win Mark 99	Pass	490
7	Compare test results with the performance of other equal level products	N/A	

2. Windows NT 4.0

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark32		
2	FPU Win Mark		
3	Business Disk Win Mark 99		
4	High-End Disk Win Mark 99		
5	Business Graphics Win Mark 99		
6	High-End Graphics Win Mark 99		
7	Compare test results with the performance of other equal level products	N/A	

3. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark32	Pass	2050
2	FPU Win Mark	Pass	4580
3	Business Disk Win Mark 99	Pass	2810 Thousand Bytes/Sec
4	High-End Disk Win Mark 99	Pass	7900 Thousand Bytes/Sec
5	Business Graphics Win Mark 99	Pass	95.9
6	High-End Graphics Win Mark 99	Pass	514
7	Compare test results with the performance of other equal level products		

4. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	CPUmark32	Pass	39.9
2	FPU Win Mark	Pass	1300
3	Business Disk Win Mark 99	Pass	6880
4	High-End Disk Win Mark 99	Pass	22900
5	Business Graphics Win Mark 99	Pass	118
6	High-End Graphics Win Mark 99	Pass	326
7	Compare test results with the performance of other equal level products		

5.2 Win Stone 99

1. Windows 98 (With VIA C3 667A)

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 99 Win stone 99 Scores	Pass	24.8 25.4 25 25.3 25
2	High-End Win stone 99		
3	Compare test results with the performance of other equal level products		

2. Windows NT 4.0

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 99 Win stone 99 Scores		
2	High-End Win stone 99		
3	Compare test results with the performance of other equal level products		

3. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 99 Win stone 99 Scores	Pass	29.3 29.1 29 28.7 29.1
2	High-End Win stone 99		
3	Compare test results with the performance of other equal level products		

4. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 99 Win stone 99 Scores		
2	High-End Win stone 99		
3	Compare test results with the performance of other equal level products		

5.3 Win Stone 2000

1. Windows 98 (With VIA C3 667A)

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2000 Win stone 2000 Scores	Pass	18.8 18.9 18.8 18.9 19.1
2	High-End Win stone 2000		
3	Compare test results with the performance of other equal level products		

2. Windows NT 4.0

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2000 Win stone 2000 Scores		
2	High-End Win stone 2000		
3	Compare test results with the performance of other equal level products		

3. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2000 Win stone 2000 Scores	Pass	21.5 21.8 21.5 21.6 21.4
2	High-End Win stone 2000		
3	Compare test results with the performance of other equal level products		

4. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2000 Win stone 2000 Scores	Pass	18.9 19 19.2 19.2 19
2	High-End Win stone 2000		
3	Compare test results with the performance of other equal level products		

5.4 Win Stone 2001

1. Windows 98

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores	Pass	17 17.3 17.2 17.2 17.1
2	High-End Win stone 2001		
3	Compare test results with the performance of other equal level products		

2. Windows NT 4.0

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores		
2	High-End Win stone 2001		
3	Compare test results with the performance of other equal level products		

3. Windows 2000

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores	Pass	17.9 18 17.7 18.1 18.1
2	High-End Win stone 2001		
3	Compare test results with the performance of other equal level products		

4. Windows XP

Item	WEIGHTED SUITE	Result	Remark
1	Business Win stone 2001 Win stone 2001 Scores		
2	High-End Win stone 2001		
3	Compare test results with the performance of other equal level products		