

SBC-597
QE Compatibility Test Report

Release Date: May. 12, 2000

Issue Stamp

QA Manager

QE Manager

Test Engineer

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There are 3 test results in this document; they are described as follows:

Pass: It worked perfectly

Fail: Test failed, and to be modified in the next version

N/A: Outside of specifications or no test equipment

The test report would be tested and updated after version changed.

AAEON TECHNOLOGY INC.

1F, No.6,Alley 6, Lane 45,Pao-Hsin Rd,
Shing-Tien City, Taipei, Taiwan, ROC

Tel: 886-29121234

Fax: 886-29130792

886-29130774

886-2-9130774

1. Software Compatibility

A. O.S. Compatibility

O.S. / Test Item	Install		Boot		Shutdown		Function		KB Function	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
MS-DOS 6.22	✓		✓		✓		✓		✓	
NOVELL 4.11	✓		✓		✓		✓		✓	
MS-DOS 6.2V	✓		✓		✓		✓		✓	
LINUX Slakware4.0	✓		✓		✓		✓		✓	

B Microsoft Windows & IBM O/S 2 Compatibility

Wins / Test Item	Install		Boot		Shutdown		Function		KB Function		Display Driver	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Windows 95	✓		✓		✓		✓		✓		✓	
Windows 98	✓		✓		✓		✓		✓		✓	
Windows NT 4.0/ W	✓		✓		✓		✓		✓		✓	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		N/A	
Windows 95(J)	✓		✓		✓		✓		✓		✓	
Windows NT 4.0 W(J)	✓		✓		✓		✓		✓		✓	

(J): Japanese

C. Windows Application

Application / Test Item	Installation		Function Test	
	Result	Note	Result	Note
Ami Pro 3.1	Pass		Pass	
MS Word 6.0c	Pass		Pass	
WordPerfect 6.1	Pass		Pass	
MS Works 3.0b	Pass		Pass	
Lotus 1-2-3 R5	Pass		Pass	
MS Excel 5.0c	Pass		Pass	
Quattro Pro 6.01	Pass		Pass	
PageMaker 5.0a	Pass		Pass	
CorelDraw 5.0E2	Pass		Pass	
PowerPoint 4.0c	Pass		Pass	
Dbase 5.0	Pass		Pass	
Paradox 5.0	Pass		Pass	
Access 2.0	Pass		Pass	

D. DOS Utility Compatibility Testing

Application / Test Result	Result	Note
Norton Utility 8.0	Pass	
Norton Commander 5.0	Pass	

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E. Diagnostics Software Testing

Test Item / Software	Qaplug5.29		Amidiag4.5		Amidiag5.11		Winplus6			
	Result	Note	Result	Note	Result	Note	Result	Note		
Main Component	Fail		Fail		Fail		Pass			
Memory	Pass		Pass		Pass		Pass			
Video Adapter	Pass		Pass		Pass		Pass			
Floppy Drive	Pass		Pass		Pass		Pass			
Hard Drive	Pass		Pass		Pass		Pass			
Keyboard	Pass		Pass		Pass		Pass			
COM Port	Pass		Pass		Pass		Pass			
LPT Port	Pass		Pass		Pass		Pass			
Plug & play	Pass		Pass		Pass		Pass			

Note : QAPLUS5.29 interval timer fail
 AMIDIAG4.5 Calibrate timer fail
 AMIDIAG5.11 RTC periodic interrupt not coming

F. N.O.S. & Application Software Compatibility (On_Board Network)

System Information:

DRAM Capacity & BRAND(SIMM Qty)	Brand: LGX PC100 <input type="checkbox"/> 4 <input type="checkbox"/> 8 <input type="checkbox"/> 16 <input type="checkbox"/> 32 <input checked="" type="checkbox"/> 64 <input type="checkbox"/> 128M Qty: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
SYSTEM BIOS Ver.	<input checked="" type="checkbox"/> AWARD <input type="checkbox"/> AMI Ver:2.0
KB BIOS Version	<input type="checkbox"/> AMI- <input type="checkbox"/> VIA- <input checked="" type="checkbox"/> Internal
BACKPLANE	<input type="checkbox"/> 05P2 <input type="checkbox"/> 08P3 <input type="checkbox"/> 14P3 <input type="checkbox"/> 03 <input type="checkbox"/> 08 <input type="checkbox"/> 14 <input checked="" type="checkbox"/> N/A
O.S. Environment	<input type="checkbox"/> DOS5.0 <input type="checkbox"/> DOS6.0 <input checked="" type="checkbox"/> DOS6.22
VGA Card & BIOS	<input checked="" type="checkbox"/> OnBoard: C&T69000 <input type="checkbox"/> BIOS:
POWER SUPPLY	<input type="checkbox"/> MPU-250W <input checked="" type="checkbox"/> SSG-250G <input type="checkbox"/> SSH-350G <input type="checkbox"/> ST-250AF
IDE HDD TYPE	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input checked="" type="checkbox"/> Fuj <input type="checkbox"/> IBM : MPC3032AT
SCSI HDD TYPE	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM:
LAN CARD	<input checked="" type="checkbox"/> OnBoard: RTL-8139 BIOS:
CPU Type	K6-2 300MHZ
CD-ROM TYPE	<input type="checkbox"/> NEC <input checked="" type="checkbox"/> PANASONIC <input type="checkbox"/> PIONEER <input type="checkbox"/> CREATIVE :
Driver or Utility	<input checked="" type="checkbox"/> VGA <input type="checkbox"/> HDD <input checked="" type="checkbox"/> Others : RTL-8139

Test Result:

SUBJECT	Network Operation System Function Testing		
Test Item	Pass	Fail	Note
NetWare 4.11	√		
Windows NT 4.0	√		
SUBJECT	Workstation Application Function Testing		
Windows 95 for IPX/SPX	√		
Windows 95 for NetBEUI	√		
Windows 95 for TCP/IP	√		
Windows 98 for IPX/SPX	√		
Windows 98 for NetBEUI	√		
Windows 98 for TCP/IP	√		

Windows NT 4.0 for IPX/SPX	√		
Windows NT 4.0 for NetBEUI	√		
Windows NT 4.0 for TCP/IP	√		

2. Hardware Compatibility

A. Component Compatibility- CPU

CPU Device List:

Brand	Device Model	Result	Note
Intel	Pentium MMX 200	Pass	
Intel	Pentium MMX 233	Pass	
Intel	Tillamook 266	Pass	
AMD	K6-233	Pass	
AMD	K6-266	Pass	
AMD	K6-300	Pass	
AMD	K6/2 300	Pass	100x3
AMD	K6/2 400	Pass	100x4,Install 95 protect error, but98 NT pass
Cyrix	M2 PR200	Pass	
Cyrix	M2 PR233	Pass	
Cyrix	M2 PR300	Pass	
IDT	Winchip 225	Pass	
IDT	Winchip 240	Pass	
Rise	MP6-266	Fail	Install 95,98,NT fail

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
MT	48LC2M8A1TG-10S 32MB	Pass	
NEC	D4564841G5-A10-9JF 64MB	Pass	
NEC	D4564841G5-A10-9JF 32MB	Pass	
SIEMENS	HYB39S16800AT-10 32MB	Pass	
KOREA	HY57V168010D TC-10S 32MB	Pass	
LGS	GM72V661641CT7J 64MB	Pass	
KOREA	HY57V658020TC-10 128MB	Pass	
HITACHI	HM5216805TT10H 16MB	Pass	
KINGMAX	KSV884T4A0-08 8C0032 64MB	Pass	

C. Adapter Compatibility- VGA

VGA Adapter List:

Brand	Device Model	Result	Note
PCI Bus			
On_board	C&T69000	Pass	

D. Adapter Compatibility- LAN**LAN Adapter List:**

Brand	Device Model	Result	Note
PCI Bus			
On-board	RTL8139	Pass	
D-LINK	530-TX	Pass	
3COM	905B	Pass	
INTEL	SB82558B	Pass	
ISA Bus			
Intel	Ether Express TM PRO/100	Pass	

E. On_Board Network Hardware (physical) Compatibility**System Information:**

DRAM Capacity & BRAND(SIMM Qty)	Brand:LGX PC100 <input type="checkbox"/> 4 <input type="checkbox"/> 8 <input type="checkbox"/> 16 <input type="checkbox"/> 32 <input checked="" type="checkbox"/> 64 <input type="checkbox"/> 32M Qty: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
SYSTEM BIOS Ver.	<input checked="" type="checkbox"/> AWARD <input type="checkbox"/> AMI Ver:
KB BIOS Version	<input type="checkbox"/> AMI- <input type="checkbox"/> VIA- <input checked="" type="checkbox"/> Internal
BACKPLANE PCA-61xx	<input type="checkbox"/> 05P2 <input type="checkbox"/> 08P3 <input checked="" type="checkbox"/> 14P3 <input type="checkbox"/> 03 <input type="checkbox"/> 08 <input type="checkbox"/> 14 <input type="checkbox"/> N/A
O.S. Environment	<input type="checkbox"/> DOS5.0 <input type="checkbox"/> DOS6.0 <input checked="" type="checkbox"/> DOS6.22
VGA Card & BIOS	<input checked="" type="checkbox"/> OnBoard <input type="checkbox"/> BIOS:
POWER SUPPLY	<input checked="" type="checkbox"/> MPU-250W <input type="checkbox"/> SSG-250G <input type="checkbox"/> SSH-350G <input type="checkbox"/> ST-250AF
IDE HDD TYPE	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input checked="" type="checkbox"/> Fuj <input type="checkbox"/> IBM :MPC3032AT
SCSI HDD TYPE	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM:
LAN CARD	<input checked="" type="checkbox"/> OnBoard: RTL8139 BIOS:
CD-ROM TYPE	<input type="checkbox"/> NEC <input type="checkbox"/> PANASONIC <input checked="" type="checkbox"/> TEAC <input type="checkbox"/> CREATIVE
Driver or Utility	<input type="checkbox"/> VGA <input type="checkbox"/> HDD <input checked="" type="checkbox"/> Others : RTL-8139

Test Result:

Test Item	Pass	Fail	Note
SUBJECT	Network Hardware Function Testing		
Transceiver	√		
Receiver	√		
Auto-negotiation	√		
100M Base-TX full duplex	√		
100M Base-TX half duplex	√		
10M Base-T full duplex	√		
10M Base-T half duplex	√		

F. Adapter Compatibility- SCSI CARD**SCSI Adapter List:**

Brand	Device Model	Result	Note
PCI Bus			
AHA	2940UW	Pass	
ISA Bus			
AHA	1520B	Pass	

G. Adapter Compatibility- Other Card**Adapter Card List:**

Brand	Device Model	Result	Note
Sound Card(ISA Bus)			
Creative	AWE64	Pass	
Creative	SB16	Pass	

I. Peripheral Compatibility-HDD Device**HDD List:**

Brand	Device Model	Result	Note
HITACHI	DK226A-21U	Pass	
Seagate	ST34520A	Pass	
FUJITSU	MPC3032AT	Pass	
Mxtor	90648D3	Pass	

J. Peripheral Compatibility- Storage Device**Device List:**

Brand	Device Model	Result	Note
CD/ROM			
TEAC	532E	Pass	
SAMPO	CDM-T631	Pass	
FAX/Modem			
LEMEL	33.6 FAX/MODEM	Pass	

K. Peripheral Compatibility- Input Device**Input Device List:**

Brand	Device Model	Result	Note
Keyboard			
BTC	5140	Pass	
USB Keyboard			
BTC	7932	Pass	
Mouse			
Microsoft	Serial Mouse	Pass	
IBM	PS/2 Mouse	Pass	
RS485			
Adventech	ADAM 4011	Pass	
USB Mouse			
DEXIN	A2U800A	Pass	

3. Stability Testing

A. Burn-In Stability Testing

Test Condition : Burn-In Under Temp. -10°C ~ 70°C (IEC-68-2-61)

Test Software	Result	Note
AMIDIAG4.5	Pass	

B. Booting Stability Testing

Test Condition : Burn-In Under Temp. -10°C ~ 70°C (IEC-68-2-30)

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 1000 Times	1000	1000	0%	

C. Booting Stability Testing

Test Condition : Room Temp.

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 1000 Times	1000	1000	0%	
KB Reset 20 Times	20	20	0%	
H/W Reset 1000 Times	1000	1000	0%	

4. Performance Testing

System Information:

DRAM Type & Capacity	KOREA HY57V168010D 32M
VGA Card	OnBoard C&T 69000
HDD TYPE	FUJITSU MPC3032AT
VGA Testing Mode	1024X768X256 colors (For WinStone & WinBench9)
O.S.	DOS 6.22 , Windows 95 and Windows NT4.0

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys Dos=high,umb Files=35 Buffers=40	Prompt \$p\$g c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration								
	Pentium MMX-200	Pentium MMX-233	Tillamook 266	AMD K6-233	AMD K6-266	AMD K6-300	AMD K6-2 300	AMD K6-2 400	
LandMark Speed 2.0									
CPU	1311.77	1530.40	1749.01	2399.10	2741.84	3084.56	3084.59	4111.55	Mhz
FPU	4010.86	4679.38	5347.74	3829.04	4376.09	4923.15	4923.60	6626.45	Mhz
VIDEO	14043	14043	14043	12288	12288	12288	33	12288	Chs/sec
Norton 8.0 SI	680.6	794	907.4	1388.7	1587.1	5062.3	N/A	484.7	ID
Power Meter 2.02	105.3	123.6	135.4	167.3	189.6	218.8	218.8	284.4	Mips
WinStone 98									
Business Winstone	17.7	18.6	16.4	19.8	18.8	19.2	20.5	23.7	
High-End Winstone	17.6	18.7	17.1	19	20	17.8	18.8	22.7	
WinBench 98									
High-End Graphic WinMark	112	124	104	125	136	142	158	186	MP/s
Business Graphic WinMark	86.7	94.6	76.8	99.7	108	111	126	144	
CPUmark 32	420	459	381	555	624	617	709	879	
Coretest 3.02									
DTR (Buffered Read)	10032	10016	10032	9744	9792	9808	9856	9952	KB/sec
Performance ID	64.41	64.31	66.18	62.74	62.98	63.08	63.36	65.70	

System Information:

DRAM Type & Capacity	KOREA HY57V168101D 32M
VGA Card	OnBoard C&T 69000
HDD TYPE	FUJITSU MPC3032AT
VGA Testing Mode	1024X768X256 colors (For WinStone & WinBench)
O.S.	DOS 6.22 , Windows 95 and Windows NT4.0

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys Dos=high,umb Files=35 Buffers=40	Prompt \$p\$g c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration						
	Cyrix M2 PR 200	Cyrix M2 PR 233	Cyrix M2 PR 300	IDT WinChip 225	IDT WinChip 240	AMD K6/3 450	
LandMark Speed 2.0							
CPU	2072.81	2323.71	2900.92	1068.82	1141.96	4625.44	Mhz
FPU	2398.89	2669.09	3343.54	2192.84	2342.85	7454.79	Mhz
VIDEO	192.75	192.75	192.75	13107	13284	12288	Chs/sec
Norton 8.0 SI	1133.9	1271.4	1235.1	485.7	518.9	N/A	ID
Power Meter 2.02	113.8	129.3	167.3	94.8	101.6	355.5	Mips
WinStone 98							
Business Winstone	17.9	18.1	18.8	20.5	19.4	21.3	
High-End Winstone	17.3	17.7	17.7	22	20.4	Fail	
WinBench 98							
High-End Graphic WinMark	128	127	161	130	134	238	MP/s
Business Graphic WinMark	99.7	100	123	105	106	190	
CPUMark 32	438	445	527	459	466	1480	
Coretest 3.02							
DTR (Buffered Read)	10080	8992	10064	9088	9104	9936	KB/sec
Performance ID	64.74	58.26	64.6	60.56	60.66	65.61	

System Information:

DRAM Type & Capacity	NEC D4564841G5-A10-9JF 64M
VGA Card	OnBoard C&T 69000
HDD TYPE	DPTA-372050
VGA Testing Mode	1024X768X256 colors (For WinStone & WinBench)
O.S.	DOS 6.22 , Windows 98 and Windows NT4.0

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys Dos=high,umb Files=35 Buffers=40	Prompt \$p\$g c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration						
	AMD K6-2 450	AMD K6-2 500	AMD K6-2 550				
LandMark Speed 2.0							
CPU	4625.49	5139.43	5653.36				Mhz
FPU	7393.43	8214.95	9036.41				Mhz
VIDEO	11988	11988	12443				Chs/sec
Norton 8.0 SI	781.7	1081.9	1381.1				ID
Power Meter 2.02	355.5	406.3	406.3				Mips
WinStone 98							
Business Winstone	21.4	22.2	23.1				
High-End Winstone	20.8	21.5	22.5				
WinBench 98							
High-End Graphic WinMark	314	335	345				MP/s
Business Graphic WinMark	94.2	97.3	100				
CPUMark 32	905	961	987				
Coretest 3.02							
DTR (Buffered Read)	10240	10272	10272				KB/sec
Performance ID	69.03	69.22	69.22				

5. Power Consumption Data

System Information:

DRAM Type & Capacity	KOREA HY57V168010D 32MB SDRAM
VGA Card	OnBoard C&T 69000
FLOPPY	Teac FD-235HF
HDD TYPE	N/A
VGA Testing Mode	640x480x16 colors
O.S.	DOS 6.22

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys Dos=high,umb Files=35 Buffers=40	Prompt \$p\$g c:\dos\smartdrv.exe /x

The Application of Software

Brand	Landmark System Speed Test Version 2.0
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Test Result

Processor Type / Mode Type	Normal Mode	Doze Mode	Standby Mode	Suspend Mode	Unit
PENTIUM MMX-200	4	3.4	2.8	2	Amp/Max
PENTIUM MMX-233	4	3.4	2.8	2	Amp/Max
PENTIUM Tillamook 266	3	2.6	2.4	2	Amp/Max
AMD K6-233	7	5.4	3.6	2	Amp/Max
AMD K6-266	3.2	2.8	2.2	1.6	Amp/Max
AMD K6-300	4	3.4	2.8	2	Amp/Max
AMD K6/2 300	4.2	3.4	2.8	2	Amp/Max
AMD K6/2 400	6.4	4.8	3.2	2	Amp/Max
AMD K6/2 450	6.4	4.6	3.1	2.3	Amp/Max
AMD K6/2 500	6.8	4.9	3.2	2.3	Amp/Max
AMD K6/2 550	8.2	5.9	4	2.6	Amp/Max
AMD K6/3 450	6.8	5.4	3.2	2	Amp/Max
Cyrix M2 PR-200	5.8	4.5	3	2	Amp/Max
Cyrix M2 PR-233	5.8	4.6	3	2	Amp/Max
Cyrix M2 PR-300	6	4.9	3.2	2	Amp/Max
IDT Winchip 225	4	3.6	3	2.5	Amp/Max
IDT Winchip 240	4	3.6	3	2.4	Amp/Max

Note: AMD K6-2 450/ AMD K6-2 500/ AMD K6-2 550. FDD type : M-System DOC 16MB

- 1.Power supply voltage : +5V
- 2.Suspend Model all function off

6. Margin Testing

A. Temperature Test (Software: AMIDIAG 4.5)

Testing Condition	Result	Note
High Temperature Margin (Burn-In 2 Hours)	70° C	
Low Temperature Margin (Burn-In 2 Hours)	-10° C	

B. DC Voltage Test (Software: Qaplus5.29)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	Pass	
VDC Low Voltage Margin (Burn-In 2 Hours)	Pass	

C. IDE Drive Capability

Test Equipment

Primary IDE Port

Master Device: HD FUJITSU MPC3032AT

Slave Device: N/A

Secondary IDE Port

Master Device: SAMPO-36X CDM-T631

Slave Device: N/A

Testing Condition	Result	Note
Primary IDE Port Flat-Cable Length Margin	75CM	
Secondary IDE Port Flat-Cable Length Margin	75CM	