AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

<u>SBC-590</u>
QE Compatibility Test Report

Release Date: Aug. 20, 1999

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Issue Stamp   **QA Manager**   **QE Manager**   **Test Engineer**

Contents

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		Keyboard Function	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Ms-Dos 6.22	Pass		Pass		Pass		Pass		Pass	

B Microsoft Windows & IBM O/S 2 Compatibility

Wins / Test Item	Install		Boot		Shutdown		Function		Keyboard Function		Display Driver	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Windows 3.1	Pass		Pass		Pass		Pass		Pass		Pass	
Windows 95	Pass		Pass		Pass		Pass		Pass		Pass	
Windows NT 4.0 W/S	Pass		Pass		Pass		Pass		Pass		N/A	
Windows NT 4.0 SRV	Pass		Pass		Pass		N/A		N/A		N/A	
OS/2 Warp 4.0	Pass		Pass		Pass		Pass		Pass		N/A	

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
ET 3.53	16 * 15 Font Mode	Pass	
	24 * 24 Font Mode	Pass	
ET 2000 (For DOS)	16 * 15 Font Mode	Pass	
	24 * 24 Font Mode	Pass	

E. Diagnostics Software Testing

Test Item / Software	QAFE5.29		AMIDIAG4.5/5.1		CHECKIT3.0			
	Result	Note	Result	Note	Result	Note		
Main Component	Pass		Pass		Pass			
Memory	Pass		Pass		N/A			
Video Adapter	Pass		Pass		Pass			
Floppy Drive	Pass		Pass		Pass			
Hard Drive	N/A		Pass		Pass			
Keyboard	Pass		Pass		Pass			
COM Port	Pass		Pass		Pass			
LPT Port	Pass		Pass		Pass			

2. Hardware Compatibility

A. Component Compatibility- CPU
586 CPU Device List:

Brand	Device Model	Result	Note
AMD	K5-100	Pass	
INTEL	PENTIUM-133	Pass	
INTEL	PENTIUM-166	Pass	
INTEL	PENTIUM-200	Pass	

B. Component Compatibility- DRAM SIMM Module
DRAM SIMM Module List:

Brand	Device Model	Result	Note
SIEMENS	HYB5117405BJ-60 32M EDO RAM	Pass	
NPNX	NN514405J-60 8M EDO RAM	Pass	
VITELIC	V53C408HK45 8M EDO RAM	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
VANGUARD	VG264400BJ-6 8M	Pass	
NEC	424100-70 16M	Pass	
NEC	424400-70L 8M/NEC 421000-7PR	Pass	
NEC	424400-70 8M(*4)EDP RAM	Pass	
TOSHIBA	TC514256AJJ-70 1M	Pass	

C. Adapter Compatibility- VGA
VGA Adapter List:

Brand	Device Model	Result	Note
PCI BUS			
TopView	ET 4000 W32P	Pass	
TopView	S3 86801	Pass	
On_board		Pass	
ISA BUS			
TopView	ET 4000 ISA	Pass	

D. Adapter Compatibility- LAN
LAN Adapter List:

Brand	Device Model	Result	Note
ISA			
3COM	3C509	Pass	
Novell	NE2000	Pass	

E. Adapter Compatibility- SCSI CARD
SCSI Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
AHA	1542CF	Pass	

F. Adapter Compatibility- Industry Control Card
Industry Control Adapter List:

Brand	Device Model	Result	Note
104 Module			
AAEON	PCM-3820 rev. C (SSD)	Pass	
AAEON	PCM-3820C (SSD)	Pass	
AAEON	PCM-3110 (PCMCIA MASTER)	Pass	
AAEON	PCM-3200(SOUND)	Pass	
AAEON	PCM-3600(FAX/MODEM)	Pass	
AAEON	PCM-3810	Pass	
AAEON	PCM-3115(PCMCIA 2 SLOTS)	Pass	

G. Peripheral Compatibility-HDD Device
HDD List:

Brand	Device Model	Result	Note
Maxtor	7850AV 850M	Pass	
Seagate	ST31276R	Pass	
CONNER	CFS425A 425M	Pass	
Seagate	ST32123A	Pass	
Quantum	850AT	Pass	

H. Peripheral Compatibility- Storage Device
Device List:

Brand	Device Model	Result	Note
CD/ROM			
Philips	PCA123CD	Pass	
Acer	8X SPEED	Pass	
Tape Streamer			
HP	LaserJet III	Pass	

I. Peripheral Compatibility- Input Device
Input Device List:

Brand	Device Model	Result	Note
Keyboard			
BTC	5140	Pass	
ACER	6511	Pass	
Mouse			
Microsoft	Serial Mouse	Pass	
IBM	PS/2 Mouse	Pass	
Logitech	First Mouse	Pass	
Logitech	MouseMan (PS/2,Serial)	Pass	

3. Stability Testing

A. Burn-In Stability Testing
Test Condition: Room Temp. 48 hours

Test Software	Result	Note
AMIDIAG4.5	Pass	

B. Booting Stability Testing

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%	

C. Continuous Burn-In Booting Stability Testing
Test Condition: Burn-In Under Temp. 60℃

Test Method		Actual	Successful	Fail Rate	Note
Power On/Off	1000 Times	1000	999	0.1%	
H/W Reset	1000 Times	1000	1000	0%	

4. Performance Testing

System Information:

DRAM Type & Capacity	Panassonic 32MBX2	
VGA Card	OnBoard (ALG 2032)	
HDD Type	Segate ST51270A(Mode4)	
VGA Testing Mode	1024X768X256 colors	(For WinStone & WinBench)
O.S.	DOS V 6.22 & Windows 95	

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys dos=high files=35 Buffers=40	Prompt pg c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration					Unit
	AMD K5-100	INTEL P-133	INTEL P-166	INTEL P-200		
LandMark Speed 2.0						
CPU	896.28	770.01	962.44	1155.24		Mhz
FPU	1141.26	2584.86	3230.58	3878.06		Mhz
VIDEO	5748	8936	8936	8936		Chs/sec
Norton 8.0 SI	3963	422.8	528.4	634.2		ID
Power Meter 2.02	50.8	63.2	74.8	81.3		Mips
PcBench 9.0 CPUmark16	165.25	180.53	123.87	355.85		
WinStone 96 1.0	37.3	24.4	42.3	43.3		
WinBench 96						
Graphic WinMark 96	4.67	4.11	5.92	6.12		MP/s
CPUmark 16	1.37	138	197	221		
CPUmark 32	1.39	130	171	183		
CORTST3.0						
DTR (Buffered Read)	9216	6000	11472	14848		KB/sec
Performance ID	60.19	39.63	73.47	93.66		
WINTECH 1.2	11.83	7.37	6.56	15.22		
Note						

5. Power Consumption Data

System Information:

DRAM Type & Capacity	Panasonic MN4117405CSJ-06 EDO RAM 32MBx2
VGA Card	OnBoard C&T65550
Floppy Type	Teac FD-235HF
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 pg c:\dos\smartdrv.exe /x

The Application of Software

Brand	Landmark System Speed Test Version 2.0

Test Result

Processor Type / Mode Type	Normal Mode	Suspend Mode	Unit
AMD K5 100	4	1	Amp/Max
Intel Pentium -133	3.5	1.2	Amp/Max
Intel Pentium -166	3.8	1.2	Amp/Max
Intel Pentium -200	4.4	1.4	Amp/Max

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

6. Margin Testing

A. Temperature Test (AMIDIAG 4.5)

Testing Condition	Result	Note
High temperature Margin (Burn-In 2 Hours)	70℃	
Low temperature Margin (Burn-In 2 Hours)	-35℃	

B. DC Voltage Test (AMIDIAG 4.5)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.6V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.4V	

C. IDE Drive Capability
Test Equipment:
Primary IDE Port:

Master Device: Segate ST51270A
Slave Device: CD-ROM SAMPO-36X

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