

AAEON

**ISO-9001/ISO-14001 Certified
Industrial Automation PCs**

SBC-357

QE Compatibility Test Report

Release Date: Aug. 23, 1999

Issue Stamp

QA Manager

QE Manager

Test Engineer

Contents

1. Software compatibility -----	3
Includes various OS and application software tests.	
2. Hardware compatibility -----	6
Includes CPU, DRAM, adapter card and HDD compatibility tests.	
3. Stability -----	13
Includes burn-in and booting tests.	
4. Performance -----	14
Includes performance indexes using various performance test software programs.	
5. Margin -----	15
Includes temperature, DC voltage and IDE cable length tests.	

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

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	✓		✓		✓		✓		✓	
QNX 4.22 & Wins	N/A		N/A		N/A		N/A		N/A	
NOVELL 4.11	N/A		N/A		N/A		N/A		N/A	
MS-DOS 6.2V	✓		✓		✓		✓		✓	

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 S 3.1	✓		✓		✓		✓		✓		✓	
Windows 95	✓		✓		✓		✓		✓		✓	
Windows NT 4.0/W	N/A		N/A		N/A		N/A		N/A		N/A	
Windows NT 4.0/S	N/A		N/A		N/A		N/A		N/A		N/A	
OS/2 Warp 4.0	N/A		N/A		N/A		N/A		N/A		N/A	
Windows 95(J)	N/A		N/A		N/A		N/A		N/A		N/A	
Windows NT 4.0 W(J)	N/A		N/A		N/A		N/A		N/A		N/A	
Windows NT 4.0 S(J)	N/A		N/A		N/A		N/A		N/A		N/A	

(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	
CoreIDRAW 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	
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		QAPLUS4.8		AMIDIAG4.5		AMIDIAG5.1		CHECKIT3.0	
	Result	Note	Result	Note	Result	Note	Result	Note	Result	Note
Main Component	Pass		Pass		Pass		Pass		Pass	
Memory	Pass		Pass		Pass		Pass		Pass	
Video Adapter	Pass		Pass		Pass		Pass		Pass	
Floppy Drive	Pass		Pass		Pass		Pass		Pass	
Hard Drive	Pass		Pass		Pass		Pass		Pass	
Keyboard	Pass		Pass		Pass		Pass		Pass	
COM Port	Pass		Pass		Pass		Pass		Pass	
LPT Port	Pass		Pass		Pass		Pass		Pass	
Plug & play	N/A		N/A		N/A		N/A		N/A	
Note :										

2. Hardware Compatibility

A. Component Compatibility- CPU

CPU Device List:

Brand	Device Model	Result	Note
ALI	M6117C	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
NEC	4217405 16M EDO RAM	Pass	05/21 TEST OK
HYUNDAI	HY5117400AJ-70 16M FPM RAM	Pass	05/21 TEST OK
PANASONIC	MN4117400CSJ-06 16M EDO W/O PARITY	Pass	05/21 TEST OK
PANASONIC	MN4117400CSJ-06 16M EDO W/PARITY	Pass	05/21 TEST OK
LGS	GM71C17403CJ 16M EDO RAM	Pass	05/21 TEST OK
TI	TMS417409ADJ 16M EDO RAM	Pass	05/21 TEST OK
MICRON	MT4C4M4E8DJ 16M EDO RAM	Pass	05/21 TEST OK
SIEMENS	HYB5117405BJ-60 16M EDO RAM	Pass	05/21 TEST OK

C. Adapter Compatibility- VGA

VGA Adapter List:

Brand	Device Model	Result	Note
Onboard	CHIPS B65545	Pass	

D. Adapter Compatibility- LAN

LAN Adapter List:

Brand	Device Model	Result	Note
3COM	3C509 ISA	Pass	
Intel	Ether Express PRO100B	Pass	

E. Adapter Compatibility- SCSI CARD

SCSI Adapter List:

Brand	Device Model	Result	Note
AHA	1520B ISA	Pass	

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

Brand	Device Model	Result	Note
MPEG Card(ISA Bus)			
LEMEL Magic	MPEG Card	Pass	
Sound Card(ISA Bus)			
Creative	SB 16 Value PnP	Pass	
Creative	AWE64 PnP	Pass	

H. Adapter Compatibility- Industry Control Card**Industry Control Adapter List:**

Brand	Device Model	Result	Note
AAEON	PCM-3660 (ETHERNET)	Pass	
AAEON	PCM-3420 (SCSI)	Pass	
AAEON	PCD-894A	Pass	
AAEON	RDM-1010A	Pass	
AAEON	RDM-1020N	Pass	
AAEON	PCM-3110B	Pass	
AAEON	PCD-895A	Pass	
AAEON	PCD-896	Pass	

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

Brand	Device Model	Result	Note
Seagate	ST51270A	Pass	
Seagate	ST32132A	Pass	
Maxtor	83240D4(3.2GB)	Pass	
Quantum	Big_Foot TX4000 AT	Pass	
Quantum	ST32A013	Pass	

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

Brand	Device Model	Result	Note
CD/ROM			
SAMPO		Pass	
VUGEO	624A-004	Pass	
SAMPO	COM-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	5121	Pass	
ACER	6311-TW	Pass	
ACER	6511-TW	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: Burn-In under Temp. $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ (IEC-68-2-30)

Test Software	Result	Note
AMIDIAG4.5	Pass	

B. Booting Stability Testing

Test Condition: Burn-In Under Temp. $0^{\circ}\text{C} \sim 60^{\circ}\text{C}$ (IEC-68-2-30)

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	Mitsubish M5M417400CJ 16M*2
VGA Card	onboard (C&T 65545)
HDD TYPE	Quantum ST3240
VGA Testing Mode	640X480X256 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 \$p\$g c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration									Unit
	ALI M6117 C									
LandMark Speed 2.0										
CPU	32.41									MHz
FPU	N/A									MHz
VIDEO	2580									Chs/sec
Norton 8.0 SI	24.2									ID
Power Meter 2.02	3.6									Mips
PcBench 9.0 CPUmark16	15.01									
WinStone 96										
Business Winstone	N/A									
High-End Winstone	6.1									
WinBench 96										
High-End Graphic WinMark	0.853									MP/s
CPUmark 16	N/A									
CPUmark 32	N/A									
Coretest 3.02										
DTR (Buffered Read)	2112									KB/sec
Performance ID	16.93									
WINTECH 1.2 (1024*768*256)	1.46									
Power Consumption(+5V in normal mode)	1.32									A

5. Margin Testing

A. Temperature Test (Software: AMIDIAG 4.5)

Testing Condition	Result	Note
High Temperature Margin (Burn-In 2 Hours)	85°C	
Low Temperature Margin (Burn-In 2 Hours)	-40°C	

B. DC Voltage Test (Software: AMIDIAG 4.5)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.25V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.6V	

C. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HDD BIGFOOT TX4000 AT

Slave Device: CD-ROM SAMPO COM-T631

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