

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-456E QE Compatibility Test Report

Release Date: Jun. 08, 1999

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.

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1. Software Compatibility

A. O.S. Compatibility

O.S. / Test Item	Install		Boot		Shutdown		Function		K/B Function	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
MS-DOS 6.22	✓		✓		✓		✓		✓	
QNX 4.22 & Wins	✓		✓		✓		✓		✓	
NOVELL 4.11	✓		✓		✓		✓		✓	

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	✓		✓		✓		✓		✓		✓	
WINDOWS 95	✓		✓		✓		✓		✓		✓	
WINDOWS NT 4.0 W/S	✓		✓		✓		✓		✓		✓	
WINDOWS NT 4.0 SRV	✓		✓		✓		✓		✓		✓	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		✓	

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	
Telix 3.2x	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		Qaplus5.5		Amidiag4.5		Amidiag5.11		Pccheck3.02		Checkit3.0	
	Result	Note	Result	Note	Result	Note	Result	Note	Result	Note	Result	Note
Main Component	✓		✓		✓		✓		✓		✓	
Memory	✓		✓		✓		✓		✓		✓	
Video Adapter	✓		✓		✓		✓		✓		✓	
Floppy Drive	✓		✓		✓		✓		✓		✓	
Hard Drive	✓		✓		✓		✓		✓		✓	
Keyboard	✓		✓		✓		✓		✓		✓	
Com Port	✓		✓		✓		✓		✓		✓	
LPT Port	✓		✓		✓		✓		✓		✓	
Plug & play	N/A		N/A		N/A		N/A		N/A		N/A	
Note :												

2. Hardware Compatibility

A. Component Compatibility- CPU

486 CPU Device List:

Brand	Device Model	Result	Note
AMD	ON BOARD 5X86-133	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
PANASONIC	MN4117400BSJ-06 32M FPM RAM	Pass	
MITSUBISHI	M5M417400CT-7 16M FPM RAM	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
SAMSUNG	KM44C4000AK-6 16M FPM RAM	Pass	
SIEMENS	HYB5117405BJ-60 32M EDO RAM	Pass	
HYUNDAI	HY5117400AJ-70 16M FPM RAM	Pass	
NPNX	NN514405J-60 8M EDO RAM	Pass	
VITELIC	V53C408HK45 8M EDO RAM	Pass	
SAMSUNG	KM41C16000BK-6 64M FPM RAM	Pass	
PANASONIC	PP716M66 16M W/PARITY	Pass	
NEC	NX716-6 16M EDO RAM	Pass	
SIEMENS	HYB5118165BSJ-60 8M EDO RAM	Pass	
SIEMENS	HYB5117405BSJ-60 8M EDO RAM	Pass	
PANASONIC	MN414400BSJ-07 16M FPM RAM	Pass	
LGS	GM71C17403CJ6 32M EDO RAM	Pass	
NEC	421865-60 8M EDO RAM	Pass	
MICON	MT4C4M4E8DJ-6 16M EDO RAM	Pass	
TI	TMS417409ADJ-6 16M EDO RAM	Pass	
MITSUBISHI	M5M418165CJ 8M EDO RAM	Pass	
LGS	GM71C17403CJ6 16M EDO RAM	Pass	
LGS	GM71C18163CJ6 8M EDO RAM	Pass	
HYUNDAI	HY5118164B 8M EDO RAM	Pass	

C. Adapter Compatibility- VGA

VGA Adapter List:

Brand	Device Model	Result	Note
PCI BUS			
On_board	CHIPS 65550	Pass	

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

Brand	Device Model	Result	Note
PCI BUS			
On-board	RTL-8029	Pass	SBC-456E only
ISA BUS			
3COM	3C509	Pass	
Novell	NE2000	Pass	
Novell	NE2000 +	Pass	
SVAC	ETHER 16	Pass	
On-board		N/A	

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

Brand	Device Model	Result	Note
ISA BUS			
AHA	1520K ISA	Pass	

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

Brand	Device Model	Result	Note
Sound Card			
Creative	AWE 32	Pass	
Creative	SB 16 Value PNP	Pass	
ON BOARD		N/A	

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

Brand	Device Model	Result	Note
ISA CARD			
AAEON	RDM-1020N	Pass	
AAEON	RDM-1010A	Pass	
104 Module			
AAEON	PCM-3820C (SSD)	Pass	
AAEON	PCM-3110 (PCMCIA MASTER)	Pass	
AAEON	PCM-3420 (SCSI)	Pass	
AAEON	PCM-3600(FAX/MODEM)	Pass	
AAEON	PCD-895	Pass	
AAEON	PCD-896	Pass	

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

Brand	Device Model	Result	Note
Seagate	ST33232A	Pass	
Seagate	ST32132A	Pass	
Seagate	ST51270A	Pass	
IBM	DHEA-34330	Pass	
WD	WDAC33100	Pass	
Quantum	TM17A012	Pass	
Quantum	TM1700A	Pass	
Maxtor	83240D4	Pass	

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

Brand	Device Model	Result	Note
CD/ROM			
Creative	CD 820E	Pass	
Philips	PCA123CD	Pass	
VUGEO	624A-004	Pass	
Panasonic	CR-585-B	Pass	
Pioneer	DR-A24X	Pass	
FAX/Modem			
LEMEL	急速33.6 HIGH SPEED MODEM	Pass	

J. 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 SUPER	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 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	

C. Burn-In Stability Testing

Test Condition: Burn-In Under Temp. 60°C 48 hours

Test Software	Result	Note
AMIDIAG4.5	Pass	

D. Continuous Burn-In Booting Stability Testing

Test Condition: Burn-In Under Temp. 60°C

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

4. Performance Testing

System Information:

DRAM Type & Capacity	NEC 4217405 16MX2 60NS
VGA Card	OnBoard (C&T 65550)
HDD TYPE	Quantum(Mode4)
VGA Testing Mode	640X480X16 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
	AMD 5X86-133			
LandMark Speed 2.0				
CPU	447.06			Mhz
FPU	1139.58			Mhz
VIDEO	7504			Chs/sec
Norton 8.0 SI	288			ID
Power Meter 2.02	41.8			Mips
PcBench 9.0 CPUmark16	103.62			
WinStone 96 1.0	31.5			
WinBench 96				
Graphic WinMark 96	10.6			MP/s
CPU mark 16	77			
CPU mark 32	71.8			
Coretest 3.02				
DTR (Buffered Read)	1360			KB/sec
Performance ID	12.9			
WINTECH 1.2	83.68			
Note				

5. Power Consumption Data

System Information:

DRAM Type & Capacity	Siemens HY85117405BJ-60 16MB*2
VGA Card	Onboard C&T F65550
DOC Type	M-Systems Md-2800-D08
O.S.	DOS V 6.22

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

The Application of Software

Brand	Landmark System Speed Test Version 2.0
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Test Result

Mode Type Processor Type	Normal Mode	Suspend Mode	Unit
AMD 5X86-133	2.6	0.9	Amp/Max

Note :

- 1.Power supply voltage : +5V.
- 2.Normal Model Is measured while open system.
- 3.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)	85°C	
Low temperature Margin (Burn-In 2 Hours)	-40°C	

B. Temperature Test (BOOT UP)

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

C. DC Voltage Test (AMIDIAG 4.5)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.30V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.55V	

D. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: W/D 22100

Slave Device: CD-ROM/VUGEO-624A-004

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