

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-455B

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. Margin Testing

A. Temperature Test (AMIDIAG 4.5)

Testing Condition	Result	Note
High temperature Margin (Burn-In 2 Hours)	75°C	
Low temperature Margin (Burn-In 2 Hours)	-35°C	

B. DC Voltage Test (AMIDIAG 4.5)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	6.0V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.4V	

C. IDE Drive Capability

Test Equipment

Master Device:

HDD Quantum FB1280A

Slave Device: CD-ROM Creative CD620E

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

2. 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°C

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

3. Performance Testing

System Information:

DRAM Type & Capacity	16 MB
VGA Card	OnBoard (C&T 65545)
HDD TYPE	Seagate 51080A
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 \$p\$g c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration					Unit
	AMD 5X86-133	CYRIX 5X86-100	AMD DX4-100	INTEL DX4-100		
LandMark Speed 2.0						
CPU	443.98	420.88	332.97	358.06		Mhz
FPU	1171.15	1113.26	878.21	879.31		Mhz
VIDEO	18204.00	18204.00	18204.00	16384.00		Chs/sec
Norton 8.0 SI	286.7	262.7	215	211.4		ID
Power Meter 2.02	40.6	17.2	31.6	23.9		Mips
PcBench 9.0 CPUmark16	101.11	43.65	57.85	61.75		
H.E. WinStone 96 1.0	28.7	13.2	18.4	18.9		
WinBench 96 Ver 1.0						
Graphic WinMark 96	4.14	3.23	2.33	6.7		MP/s
CPUmark 16	77.2	65.9	61.0	56		
CPUmark 32	71.7	62.6	58.6	54.4		
Coretest 3.02						
DTR (Buffered Read)	1008	1008	1168	3200		KB/sec
Performance ID	11.50	12.11	12.45	24.65		
WINTECH 1.2	4.57	3.06	4.52	6.76		
Power consumption (+5V in normal mode)	1.71	1.65	1.66	1.60		A
Note						

4. Hardware Compatibility

A. Component Compatibility- CPU

486 CPU Device List:

Brand	Device Model	Result	Note
Intel	486DX2-66M	Pass	
Intel	486DX4-100M	Pass	
Cyrix	486DX2-66M	Pass	
Cyrix	486DX2-80M	Pass	
Cyrix	5X86-100M	Pass	
AMD	486DX2-66M	Pass	
AMD	486DX4-100M	Pass	
AMD	5X86-P75	Pass	
ST	486DX2-66M	Pass	
ST	486DX4-100(33M)	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
TOSHIBA	TC514256AJ-70 1M	Pass	
PANASONIC	MN4117400BSJ-06 32M	Pass	
PANASONIC	MN4117400CSJ-06 16M	Pass	
MITSUBISHI	M5M417400CJ-7 16M	Pass	
VITELIC	V53C408HK45 8M EDO RAM	Pass	
SIEMENS	HYB5117405BJ-60 32M EDO RAM	Pass	
NPX	NN514405J-60 8M EDO RAM	Pass	
HYNDAI	HY5117400AJ-70 16M	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
SAMSUNG	KM44C4104AK-6 16M EDO RAM	Pass	
SAMSUNG	KM41C16000BK-6 64M	Pass	
VANGUARD	VG264400BJ-6 8M	Pass	
NEC	4217405-60 16M EDO RAM	Pass	
NEC	424100-70 16M	Pass	
NEC	424400-70 4M	Pass	
NEC	4218165-60 8M(x 4) EDO RAM	Pass	
NEC	4217400-60 16M	Pass	

C. Adapter Compatibility- VGA

VGA Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
on-board	65548	Pass	

D. Adapter Compatibility- LAN

LAN Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
3COM	3C509	Pass	
Novell	NE2000	Pass	
Novell	NE2000 +	Pass	
SVAC	ETHER 16	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-3810 (SSD)	Pass	
AAEON	PCM-3110 (PCMCIA MASTER)	Pass	
AAEON	PCM-3600(FAX/MODEM)	Pass	
AAEON	PCM-3115(PCMCIA 2 SLOTS)	Pass	

G. Peripheral Compatibility-HDD Device

HDD List:

Brand	Device Model	Result	Note
Conner	CFS425A 425M	Pass	
WD	22100	Pass	
Fujitsu	M1638TAU	Pass	
Quantum	850AT	Pass	
Quantum	TB540S SCSI	Pass	
Maxtor	7540AV 540M	Pass	
Seagate	ST 51270A	Pass	
Seagate	ST 32132A 2.1GB	Pass	

H. Peripheral Compatibility- Storage Device

Device List:

Brand	Device Model	Result	Note
CD/ROM			
Creative	CD 620E	Pass	
Creative	CD 820E	Pass	
Panasonic	CR-585B	Pass	
Philips	PCA123CD	Pass	
VUGEO	624A-204	Pass	
Printer			
HP	Laser jet iii	Pass	

I. Peripheral Compatibility- Input Device

Input Device List:

Brand	Device Model	Result	Note
Keyboard			
BTC	5140	Pass	
ACER	6511	Pass	
FOCUS	101KB	Pass	
Mouse			
Microsoft	Serial Mouse	Pass	
IBM	PS/2 Mouse	Pass	
Logitech	First Mouse	Pass	
Logitech	MouseMan (PS/2,Serial)	Pass	

5. 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 3.12	✓		✓		✓		✓		✓	

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	✓		✓		✓		✓		✓		N/A	
WINDOWS NT 4.0 SRV	✓		✓		✓		✓		✓		N/A	
Windows NT3.51	✓		✓		✓		✓		✓		N/A	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		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	
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	
ET 3.53	16 * 15 Font Mode	Pass	
	24 * 24 Font Mode	Pass	

E. Diagnostics Software Testing

Test Item / Software	QAFE5.29		AMIDIAG5.11		AMIDIAG5.1		CHECKIT3.0	
	Result	Note	Result	Note	Result	Note	Result	Note
Main Component	Pass		Pass		Pass		Pass	
Memory	Pass		Pass		Pass		Pass	
Video Adapter	Pass		Pass		Pass		Pass	
Floppy Drive	Pass		Pass		Pass		Pass	
Hard Drive	N/A		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		N/A	