AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-410A
QE Compatibility Test Report

Release Date: Aug. 23, 1999

_____   _____   _____   _____
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.

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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℃	
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)	5.8V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.4V	

C. IDE Drive Capability 1
Test Equipment :

Master Device: HDD Fujitsu M1638TAU
Slave Device: CD-ROM Creative CD820E

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

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℃

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 pg c:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration					Unit
	IBM 5X86 100	AMD 5X86 133	AMD DX4 100			
LandMark Speed 2.0						
CPU	420.91	443.97	332.90			Mhz
FPU	1113.38	1171.07	878.07			Mhz
VIDEO	1989.00	1989.00	1989.00			Chs/sec
Norton 8.0 SI	262.7	286.7	215.0			ID
Power Meter 2.02	26.8	40.6	30.9			Mips
PcBench 9.0 CPUmark16	80.19	68.49	57.84			
H.E. WinStone 96 1.0	24	*23.3*	15.1			
WinBench 96 Ver 1.0						
Graphic WinMark 96	4.63	4.61	4.18			MP/s
CPUmark 16	71.3	75.5	63.3			
CPUmark 32	68.1	70.6	60.5			
Coretest 3.02						
DTR (Buffered Read)	1008	1008	1008			KB/sec
Performance ID	11.50	9.64	11.50			
WINTECH 1.2	2.36	2.96	2.27			
Power consumption (+5V in normal mode)	2.09	2.26	2.19			A
Note						

4. Hardware Compatibility

A. Component Compatibility- CPU
486 CPU Device List:

Brand	Device Model	Result	Note
Intel	486DX4-100M	Pass	
Cyrix	486DX2-66M	Pass	
Cyrix	486DX2-80M	Pass	
AMD	5X86-P75	Pass	
ST	486DX4-100(33M)	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	
HYNDAI	HY5117400AJ-70 16M	Fail	
SAMSUNG	KM44C4104AK-6 16M EDO RAM	Fail	
NEC	4217405-60 16M EDO RAM	Pass	
NEC	424100-70 16M	Fail	
NEC	424400-70 4M	Pass	

C. Adapter Compatibility- VGA
VGA Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
TopView	ET 4000 ISA	Pass	

D. Adapter Compatibility- LAN
LAN Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
3COM	3C509	Pass	
Novell	NE2000	Pass	
Novell	NE2000 +	Pass	
IBM	Token 16	Pass	

E. Adapter Compatibility- SCSI CARD
SCSI Adapter List:

Brand	Device Model	Result	Note
ISA BUS			
AHA	1542CP	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	
Creative	SB 16 Basic Edition	Pass	

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

Brand	Device Model	Result	Note
104 Module			
AAEON	PCM-3520 (VGA)	Pass	
AAEON	PCM-3820 rev. C (SSD)	Pass	
AAEON	PCM-3820C (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	

H. Peripheral Compatibility-HDD Device
HDD List:

Brand	Device Model	Result	Note
Quantum	FB1280AT	Pass	
MAXTOR	7540 AV	Pass	

I. Peripheral Compatibility- Storage Device
Device List:

Brand	Device Model	Result	Note
CD/ROM			
Creative	CD 820E	Pass	
Philip	PCA123CD	Pass	
NEC	CDR1400A	Pass	
Pioneer	DR-U124X SCSI	Pass	

J. Peripheral Compatibility- Input Device
Input Device List:

Brand	Device Model	Result	Note
Keyboard			
Chicony	KB-5311	Pass	
FOCUS	101KB	Pass	
Mouse			
IBM	PS/2 Mouse	Pass	
Logitech	First Mouse SUPER	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 2.51 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	
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	N/A	
ET 2000 (For DOS)	16 * 15 Font Mode	N/A	
	24 * 24 Font Mode	N/A	

E. Diagnostics Software Testing

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