

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

MB-562C

QE Compatibility Test Report

Release Date: Aug. 17, 1999

Issue Stamp

QA Manager

QE Manager

Test Engineer

Contents

1. Software compatibility -----	3
Includes various OS and application software tests.	
2. Hardware compatibility -----	5
Includes CPU, DRAM, adapter card and HDD compatibility tests.	
3. Stability -----	9
Includes burn-in and booting tests.	
4. Performance -----	10
Includes performance indexes using various performance test software programs.	
5. Margin -----	11
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

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	✓		✓		✓		✓		✓	
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	✓		✓		✓		✓		✓		✓	
WINDOWS NT 4.0 SRV	✓		✓		✓		✓		✓		✓	
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	
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
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		AMIDIAG4.5/5.1		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	Pass		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		Pass	

2. Hardware Compatibility

A. Component Compatibility- CPU

586 CPU Device List:

Brand	Device Model	Result	Note
Intel	PENTIUM-75	Pass	
Intel	PENTIUM-100	Pass	
Intel	PENTIUM-120	Pass	
Intel	PENTIUM-133	Pass	
Intel	PENTIUM-150	Pass	
Intel	PENTIUM-166	Pass	
Intel	PENTIUM-200	Pass	
Intel	PENTIUM-200 MMX	Pass	
Cyrix	6X86-133M	Pass	
Cyrix	6X86-200M	Pass	
AMD	5K86-75	Pass	
AMD	5K86-100	Pass	
AMD	K6	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
PANASONIC	MN4117400BSJ-06 32M	Pass	
MITSUBISHI	M5M417400CT-7 16M	Pass	
SIEMENS	HYB5117405BJ-60 32M EDO RAM	Pass	
NPNX	NN514405J-60 8M EDO RAM	Pass	
VITELIC	V53C408HK45 8M EDO RAM	Pass	
HYNDAI	HY5117400AJ-70 16M	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
SAMSUNG	KM41C16000BK-6 64M	Pass	
VANGUARD	VG264400BJ-6 8M	Pass	
NEC	SDRAM 32M 168PIN	Pass	CMOS setup: SDRAM CAS latency must be set to 2T.
NEC	EDO 16M 168PIN	N/A	
HITACHI	SDRAM 16M	Pass	

C. Adapter Compatibility- VGA**VGA Adapter List:**

Brand	Device Model	Result	Note
PCI BUS			
CARDEX	ET-6000	Pass	
TopView	S3 86C968	Pass	
TopView	S3 Trio64 V2	Pass	
TopView	S3 VERGE	Pass	
On_board		Pass	
ISA BUS			
ORCHID	KELVIN 64 ISA (CIRRUS 5429)	Pass	
TopView	ET 4000 ISA	Pass	
AAEON	PCA-6653(C&T 65545)	Pass	
On board VGA chipset disabled.			

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

Brand	Device Model	Result	Note
On-board	RTL-8029	Pass	

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

Brand	Device Model	Result	Note
PCI BUS			
AHA	2940UW PCI	Pass	
ISA BUS			
AHA	1520K ISA	Pass	

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

Brand	Device Model	Result	Note
MPEG Card			
LEMELMagic	MPEG Card	Pass	
Sound Card			
On Board		Pass	

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	
AAEON	RDM-211A	Pass	
104 Module			
AAEON	PCM-3820C-4 (SSD)	Pass	
AAEON	PCM-3110 (PCMCIA MASTER)	Pass	
AAEON	PCM-3420 (SCSI)	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
Seagate	ST31230N SCSI	Pass	
Seagate	ST32155W/P	Pass	
Seagate	ST51270A	Pass	
Seagate	ST32123A	Pass	
WD	WDAC22100	Pass	
Fujitsu	M1638TAU	Pass	
Quantum	840AT	Pass	
Quantum	CD820E	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	
Disk on Chip			
M-Systems	Disk on chip 2000 series 2MB	Pass	
Tape Streamer			
HP	LaserJet III	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	

K. Peripheral Compatibility - Display Device**Display Device List:**

Brand	Device Model	Result	Note
Monitor			
NEC	MULTISYNC XV15+	Pass	
TATUNG	CNS14SBS	Pass	
MAG	15" 1280*1024	Pass	
Panel			
TOSHIBA	LTM10C209	Pass	

3. Stability Testing

A. Burn-In Stability Testing

Test Condition: Temp.60°C 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 1000 Times	1000	1000	0%	
H/W Reset 1000 Times	1000	1000	0%	

4. Performance Testing

System Information:

DRAM Type & Capacity	Siemens 32MBX2		
VGA Card	OnBoard (C&T 65550)		
HDD TYPE	Seagate ST51270A(Mode4)		
VGA Testing Mode	600X 800X 256 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
	INTEL P-166	INTEL P-200	INTEL P200MMX	CYRIX P-200	AMD K6-200	AMD K6-2 300	
LandMark Speed 2.0							
CPU	958.72	1150.48	1304.14	2044.62	1809.67	3020.36	Mhz
FPU	3218.40	3862.15	3987.28	3256.95	1968.15	4712.51	Mhz
VIDEO	6922	7504	6922	6971	8474	7072	Chs/sec
Norton 8.0 SI	526.3	631.6	676.6	1183.5	1018.1	5052.2	ID
Power Meter 2.02	81.3	98.1	98.1	149.7	101.6	218.8	Mips
WinStone 96 1.0	79.6	84.9	88.8	94.4	84.8	94.4	
WinBench 96							
Graphic WinMark 96	17.3	19.6	22.9	23.5	21.1	32.2	MP/s
CPUmark 16	301	366	379	413	337	487	
CPUmark 32	290	375	363	500	341	527	
Coretest 302							
DTR (Buffered Read)	13312	13312	13360	13744	12576	15008	KB/sec
Performance ID	84.52	84.68	84.85	87.09	80.19	94.08	
Power consumption (+5V in normal mode)	3.46	4.11	4.29	5.45	7.08		A
Note							

5. Margin Testing

A. Temperature Test (AMIDIAG 4.5)

Testing Condition	Result	Note
High temperature Margin (Burn-In 2 Hours)	80°C	
Low temperature Margin (Burn-In 2 Hours)	-30°C	

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

Test Equipment

Primary IDE Port:

Master Device: HD Caviar WDC AC22100H

Slave Device: CD-ROM Pioneer ATAPI Model DR -A24X 0101

Secondary IDE Port:

Master Device: HD Seagate ST32132A

Slave Device: HD Quantum FIREBALL-TM1700A

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