

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

MB-564 QE Compatibility Test Report

Release Date: Aug. 10, 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	✓		✓		✓		✓		✓	
MS-DOS 6.2/V (Japan)	✓		✓		✓		✓		✓	
QNX 4.22 & Wins	✓		✓		✓		✓		✓	
NOVELL 4.11	✓		✓		✓		✓		✓	

B. Microsoft Windows & IBM OS/ 2 Compatibility

Wins / Test Item	Install		Boot		Shutdown		Function		Keyboard Function		Display Driver		Ethernet Driver	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Windows 3.1	✓		✓		✓		✓		✓		✓		✓	
Windows 95 (English)	✓		✓		✓		✓		✓		✓		✓	
Windows 95 (Japan)	✓		✓		✓		✓		✓		✓		✓	
Windows 98 (English)	✓		✓		✓		✓		✓		✓		✓	
Windows Nt4.0w/S (English)	✓		✓		✓		✓		✓		✓		✓	
Windows Nt4.0w/S (Japan)	✓		✓		✓		✓		✓		✓		✓	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		N/A		✓	

C. Windows Application

Application / Test Item	Installation		Function Test	
	Result	Note	Result	Note
Business/Access 97	Pass		Pass	
Business/Corel DRAW! 7	Pass		Pass	
Business/Excel 97	Pass		Pass	
Business/Lotus 1-2-3 97	Pass		Pass	
Business/Navigator	Pass		Pass	
Business/Power Point 97	Pass		Pass	
Business/Quattro Pro 7	Pass		Pass	
Business/Task Switching 1	Pass		Pass	
Business/Task Switching 2	Pass		Pass	
Business/Word 97	Pass		Pass	
Business/Word Perfect 7	Pass		Pass	
High-End/AVS/Express 3.1	Pass		Pass	
High-End/Front Page 97	Pass		Pass	
High-End/Microstation 97	Pass		Pass	
High-End/Photoshop 4.0	Pass		Pass	
High-End/Premiere 4.2	Pass		Pass	
High-End/PV-WAVE 6.1	Pass		Pass	
High-End/Visual C++ 5.0	Pass		Pass	

D. DOS Utility Compatibility Testing

Application / Test Result	Result	Note
Norton Utility 8.0	Pass	
Norton Commander 5.0	Pass	

E. Diagnostics Software Testing

Test Item / Software	Qafe5.29		Amidiag4.5							
	Result	Note	Result	Note	Result	Note	Result	Note	Result	Note
Main Component	Pass		Pass							
Memory	Pass		Pass							
Video Adapter	Pass		Pass							
Keyboard	Pass		Pass							
COM Port	Pass		Pass							
LPT Port	Pass		Pass							
Note :										

2. Hardware Compatibility

A. Component Compatibility- CPU

CPU Device List:

Brand	Device Model	Result	Note
Intel	Pentium MMX-200	Pass	
Intel	Pentium MMX-233	Pass	
AMD	K6-233	Pass	
AMD	K6-266	Pass	
AMD	K6-300	Pass	
AMD	K6-2 300	Pass	
AMD	K6-2 366	Pass	
Cyrix	6X86 MX-PR200	Pass	
Cyrix	6X86 MX-PR233	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
MITSUBISHI	M5M417400CJ-7 16M FPM RAM	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
HYUNDA	HY5117400AJ-70 16M FPM RAM	Pass	
NEC	4217405-60 16M EDO RAM	Pass	
MICON	MT4C4M4E8DJ-6 16M EDO RAM	Pass	
TI	TMS417409ADJ-6 16M EDO RAM	Pass	
MITSUBISHI	M5M418165CJ-6 8M EDO RAM	Pass	
LGS	GM71C17403CJ6 16M EDO RAM	Pass	
LGS	GM71C18163CJ6 8M EDO RAM	Pass	
NEC	0456484105 64M SDRAM	Pass	
HYUNDA	HY57V658020 128M SDRAM	Pass	
NEC	D4564841G5-A10 64M SDRAM	Pass	
NEC	D4564841G5-A10-9JF 128M SDRAM	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
On Board	C&T 65554	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
On Board	Realtek RTL8139	Pass	
Surecom	Digital 21140-AF	Pass	
3COM	3C905B	Pass	
Realtek	RTL8139	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
AHA	2940UW	Pass	
ISA Bus			
AHA	1520B	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
Creative	ENSONIQ Audio PCI	Pass	
ISA Bus			
Creative	SB 16 Value PNP	Pass	
Creative	AWE64 PNP	Pass	

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

Brand	Device Model	Result	Note
MPEG CARD			
LEMEL Magic	MPEG Card	Pass	

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

Brand	Device Model	Result	Note
ISA Card			
AAEON	PCD-894A	Pass	
AAEON	PCD-895A	Pass	
AAEON	RDM-1010A	Pass	
AAEON	RDM-1020N	Pass	

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

Brand	Device Model	Result	Note
Seagate	ST34520A	Pass	
WD	WDAC33100	Pass	
Quantum	Big-Foot TX4.0AT	Pass	
Fujitsu	MPC3032AT	Pass	

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

Brand	Device Model	Result	Note
CD/ROM			
VUGEO	624A-004	Pass	
SAMPO	CDM-T631	Pass	
FAX/Modem			
LEMEL	33.6 HIGH SPEED MODEM	Pass	
ZIP (ECP/EPP/SPP)			
IOMEGA	ZIP 100M	Pass	
MO			
FUJTSU	MCB3064SS	Pass	
DiskOnChip			
Flushdisk	M-Systems DiskOnChip2000 24M	Pass	

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

Brand	Device Model	Result	Note
Keyboard			
ACER	6311-TW	Pass	
LEMEL	KB-5122	Pass	
BTC	7932 (USB)	Pass	
Mouse			
Microsoft	Serial Mouse	Pass	
Logitech	Mouse Man (PS/2,Serial)	Pass	
DEXIN	A2U800A (USB)	Pass	
Scanner			
UMAX	Astra1200s	Pass	

3. Stability Testing

A. Burn-In Stability Testing

Test Condition: Room Temp. 48 hours

Test Software	Result	Note
AMIDIAG 4.5	Pass	

B. Booting Stability Testing

Test Condition: Room Temp.

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 1000 Times	1000	1000	0%	
H/W Reset 1000 Times	1000	1000	0%	
KB Reset 20 Times	20	20	0%	

C. Continuous Burn-In Booting Stability Testing

Test Condition: Temp.: -40°C ~ 85°C Humidity: 0% ~ 95%

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 42 Hours				
H/W Reset 42 Hours				

D. Burn-In Stability Testing

Test Condition: Burn-In Between -40°C ~ 85°C Humidity: 0% ~ 90%

Test Software	Result	Note
AMIDIAD 4.5 32 Hours		

4. Performance Testing

System Information:

DRAM Type & Capacity	NEC D4564841G5-A10-9JF 128MB SDRAM
VGA Card	On Board (C&T 65554)
HDD TYPE	Quantum Bigfoot TX4.0AT
VGA Testing Mode	1024X768X256 colors (For WinStone98 & WinBench98)
O.S.	DOS 6.22 & Windows 95

Operating System Environment (DOS Only)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys Dos=hing Files=35 Buffers=40	Prompt \$p\$g C:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration								Unit
	Pentium MMX-200	Pentium MMX-233	AMD K6-233	AMD K6-266	AMD K6-300	AMD K6-2 366	Cyrix M2 PR200	Cyrix M2 PR-233	
LandMark Speed 2.0									
CPU	1311.80	1530.42	2399.21	2741.97	3084.71	3769.06	2072.85	2325.89	Mhz
FPU	4010.94	4679.43	3829.23	4376.31	4923.35	6074.54	2395.57	2670.61	Mhz
VIDEO	6971	6971	6922	6922	6922	6971	8474	8474	Chs/sec
Norton 8.0 SI	680.6	794.0	1388.7	1587.1	5062.4	N/A	1133.9	1272.5	ID
Power Meter 2.02	105.3	123.6	177.7	203.1	237.0	258.5	113.8	129.3	Mips
PcBench 96 CPUmark16	461.46	524.6	689.80	775.59	855.72	999.73	505.51	542.41	
WinStone 98									
Business Winstone	18	18.9	19.8	20.9	18.9	21.5	Fail	Fail	
High-End Winstone	20.3	21.4	22.2	23.2	24.1	24.1	Fail	Fail	
WinBench 98									
High-End/Business Graphics WinMark98	105/68.2	115/73.2	122/79.1	130/82.8	139/87.4	145/87.3	120/76.8	Fail	MP/s
CPUmark 32	411	451	512	595	619	622	442	Fail	
Coretest 3.02									
DTR (Buffered Read)	12752	12752	13088	14424	14016	12768	12032	13408	KB/sec
Performance ID	80.56	80.85	82.6	89.66	88.37	80.70	76.31	84.50	
WINTech 1.2	212.98	231.69	237.64	244.87	257.12	283.18	208.39	Fail	
Note									

5. Power Consumption Data

System Information:

DRAM Type & Capacity	NEC D4564841G5 –A80 –9JF 32M*1
VGA Card	OnBoard C&T65554
DiskOnChip	MD2200-D08
O.S.	DOS Mode

Operating System Environment (DOS Mode)

Config.sys	Autoexec.bat
Device=c:\dos\himem.sys dos=high,umb files=35 Buffers=40	Prompt \$p\$g c:\dos\smartdrv.exe /x

Test Software (DOS Mode):

Test Software	Landmark Speed V.2.0(Speed200.exe)
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Test Result:

Mode Type	CPU Type								Unit
	Pentium MMX200	Pentium MMX233	AMD K6 233	AMD K6 266	AMD K6 300	Cyrix M2 200	Cyrix M2 233	Cyrix M2 300	
Normal Mode(+5V)	4.6	5	8.1	3.8	4.4	7	7.6	8.6	Amp/Max
Suspend Mode(+5V)	1.9	2	1.6	1.5	1.6	1.5	1.5	1.5	Amp/Max

Note:

- 1.Suspend Model all function off.
- 2.Power supply voltage: +5V
- 3.Normal Model is measured while run landmark speed Rev.2.0 in DOS

6. Margin Testing

A. Temperature Test (Software: AMIDIAG4.5)

Testing Condition	Result	Note
High Temperature Margin (Burn-In 2 Hours)		
Low Temperature Margin (Burn-In 2 Hours)		

B. Temperature Test / Humidity Test (Power On/Off)

Testing Condition	Result	Note
High temperature Margin (Burn-In 2 Hours)		
Low temperature Margin (Burn-In 2 Hours)		

C. DC Voltage Test (Software: Qaplus/fe 5.29)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.25V	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.75V	

D. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HDD Quantum Bigfoot TX4.0AT

Slave Device: CD-ROM Vugeo 624A-004

Secondary IDE Port:

Master Device: HDD WD WDAC33100

Slave Device: HDD Seagate ST34520A

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