

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-675 QE Compatibility Test Report

Release Date: Aug. 10, 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 -----	8
Includes burn-in and booting tests.	
4. Performance -----	9
Includes performance indexes using various performance test software programs.	
5. Power consumption data -----	10
Includes +5V current rate.	
6. 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.

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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)	✓		✓		✓		✓		✓	
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	✓		✓		✓		✓		✓		N/A		✓	
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		Amidiag5.11							
	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	Socket 370 Celeron 300	Pass	
Intel	Socket 370 Celeron 366	Pass	
Intel	Socket 370 Celeron 400	Pass	
Intel	Socket 370 Celeron 433	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
SIEMENS	HYB39S16800AT -10 32M SDRAM	Pass	
NEC	0456484105 64M SDRAM	Pass	
NEC	D4564841G5- A10 64M SDRAM	Pass	
NEC	D4564841G5-A10-9JF 128M SDRAM	Pass	
HYUNDA	HY57V658020 128M SDRAM	Pass	

C. Adapter Compatibility- VGA Card

VGA Adapter List:

Brand	Device Model	Result	Note
PCI Bus			
On Board	C&T 69000	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
On Board	Realtek RTL8139A	Pass	
Surecom	Digital 21140-AF	Pass	
3COM	3C905 -TX	Pass	
3COM	3C905B -TX	Pass	
Intel	Ether Express PRO/100+	Pass	
ISA Bus			
Intel	Ether Express PRO/100B	Pass	
3COM	3C509	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
AHA	2940UW	Pass	
AHA	2940U	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. Peripheral Compatibility-HDD Device**HDD List:**

Brand	Device Model	Result	Note
Seagate	ST34520A	Pass	
Seagate	ST51270A	Pass	
Seagate	ST31276A	Pass	
Quantum	ST32A013	Pass	
Maxtor	83500D4	Pass	
WD	WDAC33100	Pass	

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

Brand	Device Model	Result	Note
CD-ROM			
VUGEO	624A-004	Pass	
Creative	CD2423E	Pass	
FAX/Modem			
LEMEL	33.6 HIGH SPEED MODEM	Pass	
ESS	ES56T-PI Data Fax Voice Modem	Pass	
ZIP (ECP/EPP/SPP)			
IOMEGA	ZIP 100M	Pass	
MO			
FUJTSU	MCB3064SS	Pass	
DiskOnChip			
Flushdisk	M-Systems DiskOnChip2000 24M	Pass	

J. 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	
Logitech	First Mouse		
DEXIN	A2U800A (USB)	Pass	
Scanner			
UMAX	Astra1200s	Pass	
Adam (RS-485)			
Adam		Pass	

3. Stability Testing

A. Burn-In Stability Testing

Test Condition: Room Temp. 48 hours

Test Software	Result	Note
AMIDIAG 5.11	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.: -10°C ~ 70°C Humidity: 0% ~ 90%

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 48 Hours	4212	4212	0%	

D. Burn-In Stability Testing

Test Condition: Burn-In Between -10°C ~ 70°C Humidity: 0% ~ 90%

Test Software	Result	Note
AMIDIAD 5.11 24 Hours	Pass	

4. Performance Testing

System Information:

DRAM Type & Capacity	NEC D4564841G5-A80-9JF 64MB SDRAM
VGA Card	On Board (C&T 69000)
HDD TYPE	WD AC28400
VGA Testing Mode	1024X768X256 colors (For WinStone98 & WinBench98)
O.S.	DOS 6.22 ,Windows 95 & Windows NT

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
	Intel Celeron MMX 300	Intel Celeron MMX 366	Intel Celeron MMX 400	Intel Celeron MMX 433	Intel Celeron MMX 466	Intel Celeron MMX 500	Intel Celeron MMX 533		
LandMark Speed 2.0									
CPU	1897.75	2319.55	2530.44	2741.31	2952.21	3163.02	3373.92		Mhz
FPU	5377.48	6572.69	7170.25	7767.80	3865.34	7998.06	8531.29		Mhz
VIDEO	16115	16115	16115	16115	16115	16115	16115		Chs/sec
Norton 8.0 SI	752.1	919.3	1002.8	1086.4	1170	1253.6	1337.1		ID
Power Meter 2.02	142.2	177.7	189.6	218.8	237	237	258.5		Mips
WinStone 98									
Business Winstone98	26	28.2	29.1	30.1	30.9	23.4	23.7		
High-End Winstone98	30.9	33.7	34.7	35.7	36.5	21.9	22.4		
WinBench 98									
High-End/Business Graphics WinMark98	158/126	185/144	196/151	205/158	215/165	362/115	371/119		MP/s
CPUMark 32	602	676	714	720	760	762	797		
Coretest 3.02									
DTR (Buffered Read)	5078	5374	5432	5390	5654	7632	7632		KB/sec
Performance ID	36.62	38.38	38.72	38.47	40.04	53.63	53.63		
PS. 1. CPU type of Intel Celeron 500MHz / 533MHz HDD is IBM DPTA-372050									
2.CPU type of Intel Celeron 500MHz / 533MHz O.S. & test AP is Windows 98 & Winstone 99 / Winbench 99									

5.Power Consumption

System Information:

DRAM Type & Capacity	NEC D456484LG5 –A80 –9JF 64MB*2 & NEC D451682LAG5 –A10 –9 32MB *1
VGA Card	Onboard C&T69000
Disk-on-chip	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

The Application of Software

Brand	Landmark System Speed Test Version 2.0
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Test Result

Mode Type	CPU Type					Unit
	Celeron 300	Celeron 366	Celeron 400	Celeron 433	Celeron 466	
Normal Mode(+5V)	4.5	4.8	5.2	5.3	5.6	Amp/Max
Suspend Mode(+5V)	2.2	2.2	2.2	2.2	2.2	Amp/Max

Mode Type	CPU Type				Unit
	Celeron 500	Celeron 533			
Normal Mode(+5V)	5.8	6.1			Amp/Max
Suspend Mode(+5V)	2.2	2.2			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: AMIDIAG 5.11)

Testing Condition	Result	Note
High Temperature Margin (Burn-In 2 Hours)	70°C	
Low Temperature Margin (Burn-In 2 Hours)	-10°C	

B. Temperature Test (Power On/Off)

Testing Condition	Result	Note
High temperature Margin (Burn-In 2 Hours)	70°C	
Low temperature Margin (Burn-In 2 Hours)	-10°C	

C. Humidity Test (Power On/Off)

Testing Condition	Result	Note
High humidity Margin (Burn-In 2 Hours)	90%	
Low humidity Margin (Burn-In 2 Hours)	0%	

D. DC Voltage Test (Software: Qaplusfe 5.29)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.25	
VDC Low Voltage Margin (Burn-In 2 Hours)	4.85	

E. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HDD WDAC 33100

Slave Device: CD-ROM VUGEO 624A-004

Secondary IDE Port:

Master Device: HDD MAXTOR 83500D4

Slave Device: HDD Seagate ST31276A

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