

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-770

QE Compatibility Test Report

Release Date: May. 12, 2000

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	N/A		N/A		N/A		N/A		N/A	
NOVELL 4.11	✓		✓		✓		✓		✓	

B. Microsoft Windows & IBM O/S 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 II 300	Pass	100*3
Intel	Pentium II 400	Pass	100*4
Intel	Pentium II 450	Pass	100*4.5
Intel	Pentium III 450	Pass	100*4.5
Intel	Celeron 300A/66	Pass	66*4.5
Intel	Celeron 366	Pass	66*5.5
Intel	Celeron 400	Pass	66*5.5
Intel	Celeron 433	Pass	66*5.5
Intel	Celeron 466	Pass	66*5.5

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
NEC	SDNX64M 64MB SDRAM	Pass	PC-100
NEC	SDNX128M 128MB SDRAM	Pass	PC-100
MICON	MT48LC2M8A1 32MB SDRAM	Pass	PC-100
HYUNDA	HY57V658020 TC-10 128M SDRAM	Pass	PC-100
LGS	GM72V661641CT7J 64MB	Pass	PC-100

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 RTL8139 A	Pass	
Surecom	Digital 21140-AF	Pass	
3COM	3C905B	Pass	
3COM	3C905	Pass	
Realtek	RTL8139	Pass	
Intel	SB 82558B	Pass	
ISA Bus			
Intel	PRO 100 ISA	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- Modem Card**Modem Adapter Card List:**

Brand	Device Model	Result	Note
PCI Bus			
SMART_LINK	ESS ES2898S	Pass	
GVC	LUCENT 1646T00	Pass	

G. 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	
Quantum	ST3240 AT	Pass	
Quantum	TM17A012	Pass	
Fujitsu	MPC3032AT	Pass	
IBM	DHEA-34330	Pass	
MAXTOR	851204B	Pass	

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

Brand	Device Model	Result	Note
CD/ROM			
VUGEO	624A-004 24X	Pass	
SAMPO	CDM-T631 36X	Pass	
NEC	CDR-1901A 32X	Pass	
PHILIPS	PCA123CD 8X	Pass	
PANASONIC	CR-585-B 24X	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	
Adam (RS-485)			

Advantech	ADAM-4011	Pass	
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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: -10°C ~ 70°C Humidity: 0% ~ 95% Burn-In 48 Hours

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 42 Hours	4726	4726	0%	
H/W Reset 42 Hours	1000	1000	0%	

D. Burn-In Stability Testing

Test Condition: -10°C ~ 70°C Humidity: 0% ~ 90% Burn-In 24 Hours

Test Software	Result	Note
AMIDIAD 4.5 32 Hours	Pass	

4. Performance Testing

System Information:

DRAM Type & Capacity	NEC D4564841G5-A80-9JF 64MBx2 SDRAM
VGA Card	On Board (C&T 69000)
HDD TYPE	Quantum ST32A013
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=high Files=35 Buffers=40	Prompt \$p\$g C:\dos\smartdrv.exe /x

Testing Software

Testing Utility	CPU Configuration								Unit
	Penitum II 300MMX	Pentium II 400MMX	Pentium II 450MMX	Celeron 300MMX	PentiumIII 450MMX	Celeron 366	Celeron 400	Celeron 433	
LandMark Speed 2.0									
CPU	1873.85	2498.58	2810.94	1873.88	2810.91	2290.32	2498.56	2706.77	Mhz
FPU	5842.25	7790.05	8763.80	5815.30	8723.25	7107.73	7753.92	8400.13	Mhz
VIDEO	16384.0	17246.0	16948.0	14894.0	16948	16384	16384	16384	Chs/sec
Norton 8.0 SI	752.1	1002.9	1128.2	752.1	1128.2	919.3	1002.9	1086.4	ID
Power Meter 2.02	142.2	189.6	218.8	142.2	218.8	177.7	189.6	218.8	Mips
WinStone 98									
Business Winstone	25.6	30.3	31.1	25.5	31.9	27.7	28.5	29.1	
High-End Winstone	30.1	35.9	37.3	30	38.1	32.7	33.3	34.8	
WinBench 98									
High-End Graphics WinMark98	143	202	217	160	225	190	202	215	
Business Graphics WinMark98	113	153	164	126	168	145	153	161	MP/s
CPUmark 32	657	988	1090	599	1140	667	702	734	
Coretest 3.02									
DTR (Buffered Read)	6928	8608	8720	7040	8672	7408	7472	7472	KB/sec
Performance ID	48.28	58.28	58.95	48.86	58.4	51.23	51.26	51.35	
Note									

System Information:

DRAM Type & Capacity	NEC D4564841G5-A80-9JF 64MBx2 SDRAM	
VGA Card	On Board (C&T 69000)	
HDD TYPE	Quantum ST32A013	
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	Prompt \$p\$g
Dos=hing	C:\dos\smartdrv.exe /x
Files=35	
Buffers=40	

Testing Software

Testing Utility	CPU Configuration						Unit
	Celeron 466	Celeron 500	Celeron 533	Pentium II 500MMX	Pentium II 550MMX		
LandMark Speed 2.0							
CPU	2915.02	3163.5	3373.92	3163.11	3479.42		Mhz
FPU	9046.36	7998.14	8531.29	7998.31	8798.18		Mhz
VIDEO	16384	20915	20915	21370	21370		Chs/sec
Norton 8.0 SI	1170	1253.6	1337.1	1253.6	1379		ID
Power Meter 2.02	237	237	258.5	237	284.4		Mips
WinStone 98							
Business Winstone	29.6	31.9	33.1	35.4	36.5		
High-End Winstone	35.4	36.6	37.1	40.5	41.7		
WinBench 98							
High-End Graphics WinMark98	226	227	234	236	253		
Business Graphics WinMark98	169	173	178	180	191		MP/s
CPUMark 32	751	777	790	1250	1360		
Coretest 3.02							
DTR (Buffered Read)	7728	7632	7632	8800	8848		KB/sec
Performance ID	52.79	53.63	53.63	60.46	60.75		
Notes : CPU type of Intel Celeron 500MHz / 533MHz & PentiumIII 500MHz / 553MHz HDD is IBM DPTA-372050							

5. Power Consumption Data

System Information:

DRAM Type & Capacity	NEC D4564841G5-A10-9JF 64M
VGA Card	OnBoard C&T 69000
Floppy	Teac FD-235HF
VGA Testing Mode	640x480x16 colors
O.S.	DOS 6.22

Operating System Environment (DOS Only)

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

Processor Type \ Mode Type	Normal Mode	Suspend Mode	Unit
Pentium II MMX-300	8.4	2	Amp/Max
Pentium II MMX-400	5.6	2.4	Amp/Max
Pentium II MMX-450	6.2	2.4	Amp/Max
Pentium III MMX-450	4.4	2	Amp/Max
Celeron 300a	4.4	2	Amp/Max
Celeron 366	5.2	2	Amp/Max
Celeron 400	5.2	2	Amp/Max
Celeron 433	5.6	2	Amp/Max
Celeron 466	5.4	2	Amp/Max
Celeron 500	5.7	2.3	Amp/Max
Celeron 533	6	2.3	Amp/Max
Pentium III MMX-500	6.4	2.6	Amp/Max
Pentium III MMX-550	7	2.6	Amp/Max

Note:

- 1.Power supply voltage : +5V
- 2.SUSPEND Model all function off

5. Margin Testing

A. 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	

B. 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)	4.71V	

C. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HDD Quantum Bigfoot TX4.0AT

Slave Device: CD-ROM NEC CDR-1901A

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	