

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-557 **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 | | KB Function | |
|-------------------|---------|------|------|------|----------|------|----------|------|-------------|------|
| | Pass | Fail | Pass | Fail | Pass | Fail | Pass | Fail | Pass | Fail |
| MS-DOS 6.22 | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| NOVELL 4.11 | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| MS-DOS 6.2V | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| LINUX slakware4.0 | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| | | | | | | | | | | |

B Microsoft Windows & IBM O/S 2 Compatibility

| Wins / Test Item | Install | | Boot | | Shutdown | | Function | | KB Function | | Display Driver | |
|----------------------|---------|------|------|------|----------|------|----------|------|-------------|------|----------------|------|
| | Pass | Fail | Pass | Fail | Pass | Fail | Pass | Fail | Pass | Fail | Pass | Fail |
| Windows 95(E) | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| Windows 98(E) | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| Windows NT 4.0/ W(E) | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | |
| 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 | |

E. Diagnostics Software Testing

| Test Item / Software | Qaplus5.29 | | AMIDIAG5.11 | | | | | | |
|---|------------|------|-------------|------|--|--|--|--|--|
| | Result | Note | Result | Note | | | | | |
| MAIN COMPONENT | Fail | | Fail | | | | | | |
| MEMORY | Pass | | Pass | | | | | | |
| VIDEO ADAPTER | Pass | | Pass | | | | | | |
| FLOPPY DRIVE | Pass | | Pass | | | | | | |
| HARD DRIVE | Pass | | Pass | | | | | | |
| KEYBOARD | Pass | | Pass | | | | | | |
| COM PORT | Pass | | Pass | | | | | | |
| LPT PORT | Pass | | Pass | | | | | | |
| Plug & play | Pass | | Pass | | | | | | |
| <p>Note :QAPLUS5.29 interval timer fail AMIDIAG5.11 RTC periodic interrupt not coming AMIDIAG4.5 Calibrate timer fail</p> | | | | | | | | | |

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 | |
| Intel | Pentium Tillamook 266 | Pass | |
| AMD | K6-233 | Fail | Run winstone99 hi-end fail |
| AMD | K6-266 | Pass | |
| AMD | K6-300 | Fail | Run winstone99 hi-end fail |
| AMD | K6/2 300 | Pass | 100x3 |
| AMD | K6/2 400 | Pass | 100x4 |
| AMD | K6/3 450 | Pass | 100x4.5 |
| Cyrix | M2 PR200 | Fail | Run winstone99 hi-end fail |
| Cyrix | M2 PR233 | Pass | |
| Cyrix | M2 PR300 | Pass | |
| IDT | Winchip 225 | Pass | |
| IDT | Winchip 240 | Fail | Install95,98,NT fail |
| Rise | mP266 | Fail | install NT fail |
| | | | |
| | | | |

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

| Brand | Device Model | Result | Note |
|--------|--------------------------|--------|------|
| MT | 48LC2M8A1TG-10S 32MB | Pass | |
| NEC | D4564841G5-A10-9JF 64MB | Pass | |
| NEC | D4564841G5-A10-9JF 128MB | Pass | |
| LGS | GM72V661641CT7J 64MB | Pass | |
| HYNDAI | HY57V658020TC-10 128MB | Pass | |
| HYNDAI | HY57V168010D TC-10S 32MB | Pass | |
| NEC | D4564841G5-A80-9JF 64MB | Pass | |
| NEC | D4516821AG5-A10-9NF 32MB | Pass | |
| NEC | D4564841G5-A80-9JF 128MB | Pass | |
| | | | |

C. Adapter Compatibility- VGA

VGA Adapter List:

| Brand | Device Model | Result | Note |
|----------|--------------|--------|------|
| PCI Bus | | | |
| On_board | C&T69000 | Pass | |
| ISA Bus | | | |
| Tseng | ET4000S/W32 | Pass | |
| | | | |

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

| Brand | Device Model | Result | Note |
|----------------|--------------------------|--------|------|
| ISA Bus | | | |
| Intel | Ether Express TM PRO/100 | Pass | |
| 3com | Etherlink III ISA 3c509b | Pass | |

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

| Brand | Device Model | Result | Note |
|----------------|--------------|--------|------|
| ISA Bus | | | |
| AHA | 1520B | Pass | |

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

| Brand | Device Model | Result | Note |
|----------------------------|--------------|--------|------|
| Sound Card(ISA Bus) | | | |
| Creative | AWE64 | Pass | |
| Creative | SB16 | Pass | |

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

| Brand | Device Model | Result | Note |
|-------------------|--------------|--------|-----------|
| 104 Module | | | |
| AAEON | PCM-3820-2 | Pass | SSD 2M |
| AAEON | PCM-3820-4 | Pass | SSD 4M |
| AAEON | PCM-3110 | Pass | PCMCIA |
| AAEON | PCM-3115B | Pass | PCMCIA |
| AAEON | PCM-3200 | Pass | Sound |
| AAEON | PCM-3600 | Pass | Fax/modem |

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

| Brand | Device Model | Result | Note |
|----------|------------------|--------|------|
| Hitachi | DK226A-21U | Pass | |
| Seagate | ST34520A | Pass | |
| Fujitsu | MPC3032AT | Pass | |
| Mxtor | 90648D3 | Pass | |
| Quantium | Bigfoot TX4.0 | Pass | |
| Quantium | Fireball TM1700A | Pass | |

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

I. Peripheral Compatibility- Storage Device

Device List:

| Brand | Device Model | Result | Note |
|------------------|-----------------------|--------|------|
| CD/ROM | | | |
| TEAC | 532E | Pass | |
| SAMPO | CDM-T631 | Pass | |
| NEC | 282 | Pass | |
| FAX/Modem | | | |
| LEMEL | 33.6 FAX/MODEM | Pass | |
| Rockware | Cyber lander 2000 56K | Pass | |

J. Peripheral Compatibility- Input Device

Input Device List:

| Brand | Device Model | Result | Note |
|---------------------|-----------------|--------|---------------|
| Keyboard | | | |
| BTC | 5140 | Pass | |
| ACER | 6511-TW1C/B | Pass | |
| USB Keyboard | | | |
| BTC | 7932 | Pass | |
| Mouse | | | |
| Microsoft | Serial Mouse | Pass | |
| IBM | PS/2 Mouse | Pass | |
| RS485 | | | |
| Advantech | ADAM 4011 | Pass | COM2/RS-485 |
| USB Mouse | | | |
| DEXIN | A2U800A | Pass | |
| PRINT | | | |
| EPSON | Style color 740 | Pass | USB |
| PC CAMERA | | | |
| Vcam | CU-98 | Pass | USB |
| Tekcam | P35U | Pass | USB |
| ZIP | | | |
| IOMEGA | ZIP 100 | Pass | Parallel port |

3. Stability Testing

A. Burn-In Stability Testing

Test Condition : Burn-In Under Temp. -10°C ~ 70°C (IEC-68-2-61)

| Test Software | Result | Note |
|---------------|--------|----------|
| Qaplus529 | Pass | K6/2 300 |
| | | |

B. Booting Stability Testing

Test Condition : Burn-In Under Temp. -10°C ~ 70°C (IEC-68-2-30)

| Test Method | Actual | Successful | Fail Rate | Note |
|-------------------------|--------|------------|-----------|----------|
| Power On/Off 1000 Times | 1433 | 1433 | 0% | K6/2 300 |

C. Booting Stability Testing

Test Condition : Room Temp.

| Test Method | Actual | Successful | Fail Rate | Note |
|-------------------------|--------|------------|-----------|----------|
| Power On/Off 1000 Times | 1433 | 1433 | 0% | K6/2 300 |
| KB Reset 20 Times | 20 | 20 | 0% | |
| H/W Reset 1000 Times | 1868 | 1868 | 0% | K6/2 400 |

4. Performance Testing

System Information:

| | |
|----------------------|---|
| DRAM Type & Capacity | NEC D4564841G5-A10-9JF 64MB |
| VGA Card | OnBoard C&T 69000 |
| HDD TYPE | Quantum bigfootTX4.0 |
| VGA Testing Mode | 1024X768X256 colors (For WinStone & WinBench) |
| O.S. | DOS 6.22 , Windows 98 and Windows NT4.0 |

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 |

Testing Software

| Testing Utility | CPU Configuration | | | | | | | | |
|-----------------------------|--------------------|--------------------|-----------------|---------------|---------------|---------------|-----------------|-----------------|---------|
| | Pentium MMX-200 | Pentium MMX-233 | Tilamook 266 | AMD K6-233 | AMD K6-266 | AMD K6-300 | AMD K6/2 300 | AMD K6/2 400 | |
| LandMark Speed 2.0 | | | | | | | | | |
| CPU | 1131.76 | 1530.39 | 1749.03 | 2399.12 | 2741.86 | 3084.56 | 3084.56 | 4111.11 | Mhz |
| FPU | 4010.86 | 4679.23 | 5247.79 | 3829.08 | 4376.09 | 4923.15 | 4923.15 | 6626.51 | Mhz |
| VIDEO | 11843 | 11843 | 11843 | 10922 | 10922 | 10922 | 10922 | 20915 | Chs/sec |
| Norton 8.0 SI | 680.6 | 794 | 907.4 | 1388.7 | 1587.1 | N/A | N/A | 484.7 | ID |
| Power Meter 2.02 | 105.3 | 123.6 | 135.4 | 167.3 | 189.6 | 218.8 | 218.8 | 284.4 | Mips |
| WinStone 99 | | | | | | | | | |
| Business Winstone | 13.6 | 13.7 | 14.9 | 15.8 | 15.4 | 16.6 | 17.5 | 19.2 | |
| High-End Winstone | 11.8 | 12.1 | 13.6 | Fail | 13.4 | Fail | 15.5 | 17.7 | |
| WinBench 99 | | | | | | | | | |
| High-End Graphic WinMark | 168 | 185 | 201 | 194 | 214 | 227 | 248 | 327 | MP/s |
| Business Graphic WinMark | 60.5 | 65.1 | 69.8 | 67.3 | 73.9 | 76.9 | 84.4 | 104 | |
| CPUMark 32 | 433 | 470 | 484 | 572 | 620 | 600 | 785 | 803 | |
| Coretest 3.02 | | | | | | | | | |
| DTR (Buffered Read) | 9888 | 9888 | 9856 | 9744 | 9744 | 9744 | 9824 | 9680 | KB/sec |
| Performance ID | 63.43 | 63.47 | 63.21 | 62.70 | 62.74 | 62.70 | 63.17 | 62.56 | |
| Notes | | | | | | | | | |

System Information:

| | |
|----------------------|---|
| DRAM Type & Capacity | NEC D4564841G5-A10-9JF 64MB |
| VGA Card | OnBoard C&T 69000 |
| HDD TYPE | Quantum bigfootTX4.0 |
| VGA Testing Mode | 1024X768X256 colors (For WinStone & WinBench) |
| O.S. | DOS 6.22 , Windows 98 and Windows NT4.0 |

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 |

Testing Software

| Testing Utility | CPU Configuration | | | | | | | | |
|--|-------------------|-----------------|-----------------|-------------|-------------|--------------|--------------|--------------|---------|
| | Cyrix M2 PR 200 | Cyrix M2 PR 233 | Cyrix M2 PR 300 | Winchip 225 | Winchip 240 | AMD K6-3 450 | AMD K6-2 450 | AMD K6-2 500 | |
| LandMark Speed 2.0 | | | | | | | | | |
| CPU | 2072.93 | 2323.71 | 2901 | 1068.82 | 1141.95 | 4625.49 | 4625.49 | 5139.43 | Mhz |
| FPU | 2396.43 | 2665.90 | 3353.88 | 2192.82 | 2342.85 | 7454.71 | 7393.38 | 8214.87 | Mhz |
| VIDEO | 17873 | 17554 | 18204 | 11170 | 11170 | 20915 | 10922 | 10922 | Chs/sec |
| Norton 8.0 SI | 1133.9 | 1271.4 | 1235.1 | 485.7 | 518.9 | N/A | 785.9 | N/A | ID |
| Power Meter 2.02 | 113.8 | 129.3 | 167.3 | 94.8 | 101.6 | 355.5 | 355.5 | 406.3 | Mips |
| WinStone 99 | | | | | | | | | |
| Business Winstone | Fail | 8.12 | 8.78 | 8.25 | Fail | 23.1 | 21.7 | 22.6 | |
| High-End Winstone | Fail | 8.05 | 9.1 | 8.66 | Fail | 20.8 | 20.9 | 21.9 | |
| WinBench 99 | | | | | | | | | |
| High-End Graphic WinMark | 197 | 202 | 248 | 198 | 203 | 410 | 301 | 324 | MP/s |
| Business Graphic WinMark | 67.6 | 68.6 | 81.6 | 71.7 | 72.6 | 129 | 98.9 | 103 | |
| CPUmark 32 | 449 | 474 | 558 | 474 | 463 | 1340 | 914 | 965 | |
| Coretest 3.02 | | | | | | | | | |
| DTR (Buffered Read) | 10064 | 8992 | 10080 | 8992 | 9056 | 9664 | 10288 | 10288 | KB/sec |
| Performance ID | 64.64 | 58.22 | 64.74 | 58.22 | 58.60 | 62.43 | 69.44 | 69.56 | |
| Notes : CPU type of AMD K6-2 450 & / K6-2 500 HDD is IBM DPTA-372050 | | | | | | | | | |

5. Power Consumption Data

System Information:

| | |
|----------------------|-------------------------|
| DRAM Type & Capacity | KOREA HY57V168010D 32MB |
| 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 |
|-------|--|

Test Result

| Process Type \ Mode Type | Normal Mode | Doze Mode | Standby | Suspend Mode | Unit |
|--------------------------|-------------|-----------|---------|--------------|---------|
| | | | Mode | | |
| PENTIUM MMX-200 | 4 | 3.2 | 2 | 1.6 | Amp/Max |
| PENTIUM MMX-233 | 4.4 | 3.4 | 2.2 | 1.6 | Amp/Max |
| PENTIUM Tillamook 266 | 2.8 | 2.4 | 1.7 | 1.4 | Amp/Max |
| AMD K6-233 | 8.4 | 5.6 | 2.8 | 1.4 | Amp/Max |
| AMD K6-266 | 3.4 | 2.6 | 1.8 | 1.4 | Amp/Max |
| AMD K6-300 | 3.2 | 2.6 | 1.7 | 1.4 | Amp/Max |
| AMD K6/2 300 | 4.3 | 3.2 | 2 | 1.4 | Amp/Max |
| AMD K6/2 400 | 5.2 | 3.8 | 2.2 | 1.4 | Amp/Max |
| AMD K6/2 450 | 5.6 | 4.1 | 2.5 | 1.6 | Amp/Max |
| AMD K6/2 500 | 6.4 | 4.5 | 2.8 | 1.7 | Amp/Max |
| AMD K6/3 450 | 6.4 | 4.2 | 2.8 | 1.8 | Amp/Max |
| Cyrix M2 PR-200 | 6.4 | 4.4 | 2.4 | 1.4 | Amp/Max |
| Cyrix M2 PR-233 | 6.8 | 4.8 | 2.6 | 1.4 | Amp/Max |
| Cyrix M2 PR-300 | 8 | 5.8 | 2.8 | 1.2 | Amp/Max |
| IDT Winchip 225 | 3.2 | 2.8 | 2 | 1.8 | Amp/Max |
| IDT Winchip 240 | 3.5 | 3 | 2.2 | 1.8 | Amp/Max |

Note :

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

6. Margin Testing

A. Temperature Test (Software: AMIDIAG 4.5)

| 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: AMIDIAG 4.5)

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

C. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HD Quantum bigfootTX4.0

Slave Device: CD-ROM NEC CDR-1901A

| Testing Condition | Result | Note |
|---|--------|------|
| Primary IDE Port Flat-Cable Length Margin | 75CM | |
| Secondary IDE Port Flat-Cable Length Margin | N/A | |