

AAEON

ISO-9001/ISO-14001 Certified
Industrial Automation PCs

PCM-5894

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	✓		✓		✓		✓		✓	
QNX 4.22 & Wins	✓		✓		✓		✓		✓	
NOVELL 4.11	✓		✓		✓		✓		✓	
MS-DOS 6.2V	✓		✓		✓		✓		✓	
LINUX 2.0.30	✓		✓		✓		✓		N/A	

B Microsoft Windows & IBM OS/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 S 3.1	✓		✓		✓		✓		✓		✓	
Windows 95	✓		✓		✓		✓		✓		✓	
Windows 98	✓		✓		✓		✓		✓		N/A	
Windows NT 4.0/W	✓		✓		✓		✓		✓		✓	
Windows NT 4.0/S	✓		✓		✓		✓		✓		✓	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		✓	
Windows 95(J)	✓		✓		✓		✓		✓		✓	
Windows NT 4.0 W(J)	✓		✓		✓		✓		✓		✓	
Windows NT 4.0 S(J)	✓		✓		✓		✓		✓		✓	

(J): Japanese

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	
CoreIDRAW 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		AMIDIAG5.1		CHECKIT3.0	
	Result	Note	Result	Note	Result	Note	Result	Note	Result	Note
Main Component	Pass		Pass		Pass		Pass		Pass	
Memory	Pass		Pass		Pass		Pass		Pass	
Video Adapter	Pass		Pass		Pass		Pass		Pass	
Floppy Drive	Pass		Pass		Pass		Pass		Pass	
Hard Drive	Pass		Pass		Pass		Pass		Pass	
Keyboard	Pass		Pass		Pass		Pass		Pass	
Com Port	Pass		Pass		Pass		Pass		Pass	
LPT Port	Pass		Pass		Pass		Pass		Pass	
Plug & Play	Pass		Pass		Pass		Pass		Pass	
Note :										

F. N.O.S. & Application Software Compatibility (On_Board Network)

System Information:

DRAM Capacity & Brand(SIMM Qty)	Brand:NEC <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 16 <input type="checkbox"/> 32M <input checked="" type="checkbox"/> 60ns <input type="checkbox"/> 70ns <input type="checkbox"/> _____ns Qty: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
System BIOS Ver.	<input checked="" type="checkbox"/> AWARD <input type="checkbox"/> AMI Ver:2.0
KB BIOS Version	<input type="checkbox"/> AMI- <input type="checkbox"/> VIA- <input checked="" type="checkbox"/> Internal
Backplane	<input type="checkbox"/> 05P2 <input type="checkbox"/> 08P3 <input type="checkbox"/> 14P3 <input type="checkbox"/> 03 <input type="checkbox"/> 08 <input type="checkbox"/> 14 <input checked="" type="checkbox"/> N/A
O.S. Environment	<input type="checkbox"/> DOS5.0 <input type="checkbox"/> DOS6.0 <input checked="" type="checkbox"/> DOS6.22
VGA Card & BIOS	<input checked="" type="checkbox"/> OnBoard <input type="checkbox"/> BIOS:
Power Supply	<input type="checkbox"/> MPU-250W <input checked="" type="checkbox"/> SSH-250G <input type="checkbox"/> SSH-350G <input type="checkbox"/> ST-250AF
IDE HDD Type	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input checked="" type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM : 1700AT
SCSI HDD Type	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM:
Lan Card	<input checked="" type="checkbox"/> OnBoard: RTL-8139 BIOS:
CPU Type	Intel Pentium MMX 233
CD-ROM Type	<input type="checkbox"/> NEC <input checked="" type="checkbox"/> PANASONIC <input type="checkbox"/> PIONEER <input type="checkbox"/> CREATIVE :
Driver or Utility	<input checked="" type="checkbox"/> VGA <input type="checkbox"/> HDD <input checked="" type="checkbox"/> Others : RTL-8139

Test Result:

SUBJECT Network Operation System Function Testing				
	Test Item	Pass	Fail	Note
	NetWare 4.11	√		
	NetWare 5.0	N/A		
	Windows NT 4.0	√		
	Windows NT 5.0	N/A		
	SCO Unix	N/A		
	Linux Unix	√		
	NetBench 5.01	√		Figure 1
SUBJECT Workstation Application Function Testing				
	Dos 6.22 for IPXODI	√		
	Dos 6.22 for package driver	√		
	Windows 3.1 for IPXODI	√		
	Windows 3.1 for package driver	√		
	WFW 3.11 for NDIS 2.0/3.0	N/A		
	WFW 3.11 for NDIS 3.0/ODI	N/A		
	Windows 95 for IPX/SPX	√		
	Windows 95 for NetBEUI	√		
	Windows 95 for TCP/IP	√		
	Windows 98 for IPX/SPX	√		
	Windows 98 for NetBEUI	√		
	Windows 98 for TCP/IP	√		
	Windows NT 4.0 for IPX/SPX	√		
	Windows NT 4.0 for NetBEUI	√		
	Windows NT 4.0 for TCP/IP	√		
	Windows NT 5.0 for IPX/SPX	N/A		
	Windows NT 5.0 for NetBEUI	N/A		
	Windows NT 5.0 for TCP/IP	N/A		

2. Hardware Compatibility

A. Component Compatibility- CPU

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	
Intel	PENTIUM-233 MMX	Pass	
Cyrix	6X86-110M(M1)	Pass	
Cyrix	6X86-120M(M1)	Pass	
Cyrix	6X86-133M(M1)	Pass	
Cyrix	6X86-150M(M1)	Pass	
Cyrix	6X86-200M(M2)	Pass	
Cyrix	6X86-233M(M2)	Pass	
Cyrix	6X86-300M(M2)	Pass	
AMD	5K86-75	Pass	
AMD	5K86-100	Pass	
AMD	K6-200	Pass	
AMD	K6-233	Pass	
AMD	K6-266	Pass	

B. Component Compatibility- DRAM SIMM Module**DRAM SIMM Module List:**

Brand	Device Model	Result	Note
NEC	4217405 16M EDO RAM	Pass	
HITACHI	HM5118165AJ6R 8M EDO RAM	Pass	
SIEMENS	HYB5117405BJ-60 32M EDO RAM	Pass	
PANASONIC	MN4117400BSJ-06 32M EDO RAM	Pass	
NPNX	NN514405J-60 8M EDO RAM	Pass	
HYNDAI	HY5118164BJC 8M EDO RAM	Pass	
HYNDAI	HY5117400AJ-70 16M FPM RAM	Pass	
MITSUBISHI	M5M417400CJ-7 16M FPM RAM	Pass	
SAMSUNG	KM44C4000AK-6 16M EDO RAM	Pass	
SAMSUNG	KM41C16000BK-6 64M	Pass	
LGS	GM71C17403CJ 32M EDO RAM	Pass	
LGS	GM71C18163CJ 8M EDO RAM	Pass	
TI	TMS417409ADJ 16M EDO RAM	Pass	
PANASONIC	MN414400BSJ 8M FPM RAM	Pass	
MICRON	MT4C4M4E8DJ 16M EDO RAM	Pass	
SIEMENS	HYB5118165BSJ 8M EDO RAM	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
On_board	CHIPS B65554	Pass	

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

Brand	Device Model	Result	Note
PCI Bus			
SVEC	AM79C970AKC PCI 10MBPS	Pass	
3COM	3C905-TX PCI 100/10BPS	Pass	
Intel	Pro-100 PILA 8465 PCI 100/10BPS	Pass	
Surecom	EP-320X Rev.3B PCI 100/10BPS	Pass	
On-board	RTL8139	Pass	

E. On_Board Network Hardware (physical) Compatibility

System Information:

DRAM Capacity & Brand(SIMM Qty)	Brand:NEC <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 16 <input type="checkbox"/> 32M <input checked="" type="checkbox"/> 60ns <input type="checkbox"/> 70ns <input type="checkbox"/> ____ns Qty: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
System BIOS Ver.	<input checked="" type="checkbox"/> AWARD <input type="checkbox"/> AMI Ver:
KB BIOS Version	<input type="checkbox"/> AMI- <input type="checkbox"/> VIA- <input checked="" type="checkbox"/> Internal
Backplane PCA-61xx	<input type="checkbox"/> 05P2 <input type="checkbox"/> 08P3 <input type="checkbox"/> 14P3 <input type="checkbox"/> 03 <input type="checkbox"/> 08 <input type="checkbox"/> 14 <input checked="" type="checkbox"/> N/A
O.S. Environment	<input type="checkbox"/> DOS5.0 <input type="checkbox"/> DOS6.0 <input checked="" type="checkbox"/> DOS6.22
VGA Card & BIOS	<input checked="" type="checkbox"/> OnBoard <input type="checkbox"/> BIOS:
Power Supply	<input checked="" type="checkbox"/> MPU-250W <input type="checkbox"/> SSH-250G <input type="checkbox"/> SSH-350G <input type="checkbox"/> ST-250AF
IDE HDD Type	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input checked="" type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM : 1700AT
SCSI HDD Type	<input type="checkbox"/> Max <input type="checkbox"/> Sea <input type="checkbox"/> Con <input type="checkbox"/> Qua <input type="checkbox"/> Fuj <input type="checkbox"/> IBM:
Lan Card	<input checked="" type="checkbox"/> OnBoard: BIOS:
CD-ROM Type	<input type="checkbox"/> NEC <input checked="" type="checkbox"/> PANASONIC <input type="checkbox"/> PIONEER <input type="checkbox"/> CREATIVE :
Driver or Utility	<input type="checkbox"/> VGA <input type="checkbox"/> HDD <input checked="" type="checkbox"/> Others : RTL-8139

Test Result:

SUBJECT	Network Hardware Function Testing		
Test Item	Pass	Fail	Note
Transceiver	√		
Receiver	√		
CRC error	N/A		
Collision back-off generation	N/A		
Auto-negotiation	√		
100M Base-TX full duplex	√		
100M Base-TX half duplex	√		
10M Base-T full duplex	√		
10M Base-T half duplex	√		

F. Adapter Compatibility- SCSI CARD

SCSI Adapter List:

Brand	Device Model	Result	Note
PCI Bus			
AHA	2940UW PCI	Pass	

G. Adapter Compatibility- Other Card

Adapter Card List:

Brand	Device Model	Result	Note
Sound Card(PCI Bus)			
Creative	Audio PCI 4001043201 Rev.A	Pass	

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

Brand	Device Model	Result	Note
104 Module			
AAEON	PCM-3820 rev. C (SSD)	Pass	
AAEON	PCM-3820C (SSD)	Pass	
AAEON	PCM-3110 (PCMCIA MASTER)	Pass	
AAEON	PCM-3660 (ETHERNET)	Pass	
AAEON	PCM-3420 (SCSI)	Pass	
AAEON	PCM-3200(SOUND)	Pass	
AAEON	PCM-3600(FAX/MODEM)	Pass	

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

Brand	Device Model	Result	Note
Hitachi	DK226A-21U	Pass	
Seagate	ST312768	Pass	
Seagate	ST33232A	Pass	
Seagate	ST51270A	Pass	
Seagate	ST32132A	Pass	
Maxtor	72700AP(2.7GB)	Pass	
Maxtor	63500D4(3.5GB)	Pass	
Maxtor	63240D4(3.2GB)	Pass	
Maxtor	85120A8(5.1GB)	Pass	
Fujitsu	M1638TAU	Pass	
Quantum	1700AT TM17A012 Rev.02-D	Pass	
Quantum	850AT TR85A351 REV.02-B A450E	Pass	
WD	WDAC22100	Pass	
WD	WDAC33100	Pass	
IBM	DHEA-34330	Pass	

J. 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	33.6 FAX/MODEM	Pass	

K. 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	Pass	
Logitech	MouseMan (PS/2,Serial)	Pass	

3. Stability Testing

A. Burn-In Stability Testing

Test Condition: Burn-In Under Temp. -40°C ~ 85°C (IEC-68-2-30)

Test Software	Result	Note
AMIDIAG4.5	Pass	Pentium 233 MMX

B. Booting Stability Testing

Test Condition: Burn-In Under Temp. 0°C ~ 60°C (IEC-68-2-30)

Test Method	Actual	Successful	Fail Rate	Note
Power On/Off 1000 Times	1000	1000	0	Pentium 233 MMX
KB Reset 20 Times	20	20	0	Pentium 233 MMX
H/W Reset 1000 Times	1000	1000	0	Pentium 233 MMX

4. Performance Testing

System Information:

DRAM Type & Capacity	Mitsubish M5M417400CJ 16M*2
VGA Card	OnBoard (C&T 65554)
HDD TYPE	Quantum ST3240
VGA Testing Mode	1024X768X256 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
	Pentium MMX-200	Pentium MMX-233	Cyrix 6X86 M1 PR200	Cyrix 6X86 M2 PR200	Cyrix 6X86 M2 PR233	Cyrix 6X86 M2 PR300	AMD K6-200	AMD K6-233	AMD K6-266	
LandMark Speed 2.0										
CPU	1311.80	1530.42	1813.87	2072.87	2331.10	2900.97	2025.13	2056.46	2741.97	Mhz
FPU	4010.90	4677.80	1966.51	2396.41	2646.92	3357.29	3221.68	3282.16	4376.26	Mhz
VIDEO	6922	6922	8474	8474	8623	8623.00	6971	6971	6922.00	Chs/sec
Norton 8.0 SI	680.6	794	1020.4	1133.9	1275.4	1235.1	1190.3	1190.3	1587.1	ID
Power Meter 2.02	94.8	109.4	101.6	113.8	129.3	167.3	149.7	149.7	203.1	Mips
PcBench 9.0 CPUmark16	454.73	514.33	404.74	503.74	540.65	672.89	590.88	594.46	743.74	
WinStone 98										
Business Winstone										
High-End Winstone	14.9	16.1	13.2	15.7	19.1	20.7	14.5	17.9	19.7	
WinBench 98										
High-End Graphic WinMark	75.4	79.4	65.3	109	124	104	79.1	82.8	77.5	MP/s
CPUmark 32	256	267	245	297	436	504	296	467	518	
Coretest 3.02										
DTR (Buffered Read)	12656	12752	11056	13184	12400	14512	13392	13904	13728	KB/sec
Performance ID	80.83	81.45	71.30	85.43	80.43	92.42	85.26	89.30	87.82	
WINTECH 1.2 (1024*768*256)	162.08	172.37	150.45	211.84	207.43	189.21	164.49	193.84	173.08	
PS.CPU type of Cyrix PR-233/PR-300 & AMD K6-266 HDD is Segate ST34520A										

System Information:

DRAM Type & Capacity	HITACHI 5165165FLTT6 32M*2
VGA Card	OnBoard (C&T 65554)
HDD TYPE	IBM DPTA-372050
VGA Testing Mode	1024X768X256 colors (For WinStone & WinBench)
O.S.	DOS V 6.22 & Windows 95 / Windows NT4.0

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
	AMD K6-2 300								
LandMark Speed 2.0									
CPU	3037.72								Mhz
FPU	4786								Mhz
VIDEO	6971								Chs/sec
Norton 8.0 SI	5062.4								ID
Power Meter 2.02	237.0								Mips
PcBench 9.0 CPUmark16	853.99								
WinStone 98									
Business Winstone	22.8								
High-End Winstone	25.5								
WinBench 98									
High-End Graphic WinMark	139								MP/s
CPUmark 32	590								
Coretest 3.02									
DTR (Buffered Read)	15408								KB/sec
Performance ID	99.91								
WINTECH 1.2 (1024*768*256)	262.14								
Note :									

5.Power Consumption

System Information:

DRAM Type & Capacity	Panasonic MN4117405CSJ-06 32M*2
VGA Card	OnBoard C&T6554
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

The Application of Software

Brand	Landmark System Speed Test Version 2.0
-------	--

Test Result:

Processor Type \ Mode Type	Normal Mode(+5V)	Suspend Mode(+5V)	Unit
Intel Pentium MMX-200	4.4	2	Amp/Max
Intel Pentium MMX-233	4.8	2	Amp/Max
Cyrix M1 PR200	8	3.8	Amp/Max
Cyrix M2 PR200	7.2	1.6	Amp/Max
Cyrix M2 PR233	7.2	1.6	Amp/Max
Cyrix M2 PR300	9	1.6	Amp/Max
AMD K6 200	6	1.7	Amp/Max
AMD K6 233	8.8	1.8	Amp/Max
AMD K6 266	3.9	1.6	Amp/Max
AMD K6-2 300	3.3	3.2	Amp/Max

Note :

- 1.Suspend Model all function off.

5. Margin Testing

A. Temperature Test (Software: AMIDIAG 4.5)

Testing Condition	Result	Note
High Temperature Margin (Burn-In 2 Hours)	85°C	Pentium 233 MMX
Low Temperature Margin (Burn-In 2 Hours)	-40°C	Pentium 233 MMX

B. DC Voltage Test (Software: AMIDIAG 4.5)

Testing Condition	Result	Note
VDC High Voltage Margin (Burn-In 2 Hours)	5.25V	Pentium 233 MMX
VDC Low Voltage Margin (Burn-In 2 Hours)	4.7V	Pentium 233 MMX

C. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device : HD Seagate ST33232A

Slave Device : CD-ROM VUGEO 624A-204

Secondary IDE Port:

Master Device : N/A

Slave Device : N/A

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