

PCM-6890 **QE Compatibility Test Report**

Release Date: May. 12, 2000

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 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^{\cdot} Outside of specifications or no test equipment

The test report would be tested and updated after version changed.

AAEON TECHNOLOGY INC.

1F, No.6,Alley 6, Lane 45,Pao-Hsin Rd, Shing-Tien City, Taipei, Taiwan, ROC

Tel: 886-29121234 Fax: 886-29130792 886-29130774 886-2-9130774

1. Software Compatibility

A. O.S. Compatibility

O.S. / Test Item	. / 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

	D. Microsoft Windows & IDM OS/ 2 Companioney													
Wins / Test Item	Ins	tall	Вс	ot	Shutc	lown	Fund	ction	Keybo	oard	Disp	olay	Ethe	rnet
									Func	tion	Driv	ver	Driv	ver
	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)	✓		V		✓		✓		√		✓		✓	
Windows Nt4.0w/S (Japan)	✓		V		✓		✓		✓		✓		✓	
OS/2 Warp 4.0	✓		✓		✓		✓		✓		N/A		✓	

C. Windows Application

Application / Test Item		Installation	F	unction 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 /	Qafe	5.29	Amidi	ag4.5						
Software	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 :			<u> </u>		<u> </u>					

2. Hardware Compatibility

A. Component Compatibility- CPU

CPU Device List:

Brand	Device Model	Result	Note
Intel	Celeron 300	Pass	
Intel	Celeron 366	Pass	
Intel	Celeron 400	Pass	
Intel	Celeron 433	Pass	
Intel	Celeron 466	Pass	

B. Component Compatibility- DRAM SIMM Module

DRAM SIMM Module List:

Brand	Device Model	Result	Note
SIEMENS	HYB39S16800 AT SDRAM 32M	Pass	
MT	MT48LCM8A1 SDRAM 32M	Pass	
LGX	GM72V661641CT7J SDRAM 64M	Pass	
NEC	D4564841G5 SDRAM 64M	Pass	
NEC	D4564841G5 SDRAM 128M	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 RTL8139	Pass	
INTEL	S82557	Pass	
Surecom	Digital 21140-AF	Pass	
3COM	3C905-TX	Pass	
3COM	3C905B-TX	Pass	
INTEL	SB82558B	Pass	

E. Adapter Compatibility- SCSI Card

SCSI Adapter List:

Brand	Device Model	Result	Note
PCI Bus			
AHA	2940UW	Pass	

F. Adapter Compatibility- SOUND Card

SOUND Adapter Card List:

Brand	Device Model	Result	Note
PCI Bus			
Creative	ENSONIQ Audio PCI	Pass	
On Board	CREATIVE ES1373	Pass	

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

Brand	Device Model	Result	Note
104 Module			
AAEON	PCM-3820/C-4	Pass	The PC-104 add-on card is in conflict with CRT, SOUND, LPT connectors.
AAEON	PCM-3820-2	Pass	"
AAEON	PCM-3110B	Pass	"
AAEON	PCM-3111	Pass	"
AAEON	PCM-3115B	Pass	"
AAEON	PCM-3200	Pass	"
AAEON	PCM-3600	Pass	"
AAEON	PCM-3660	Pass	"

H. Peripheral Compatibility-HDD Device HDD List:

Brand	Device Model	Result	Note
Quantum	Big-Foot	Pass	
Hitachi	DK226A-21U	Pass	
Fujitsu	MPC3032AT	Pass	
WD	AC-28400	Pass	

I. Peripheral Compatibility- Storage Device Device List:

Brand	Device Model	Result	Note
CD/ROM			
SAMPO	CDM-T631	Pass	
TEAC	CD-532E	Pass	
NEC	CDR-3001A	Pass	
FAX/Modem			
LEMEL	33.6 HIGH SPEED MODEM	Pass	
ZIP (ECP/EPP/	SPP)		
IOMEGA	ZIP 100M	Pass	
MO			
FUJITSU	MCB3064SS	Pass	
DiskOnChip			
Flushdisk	M-Systems DiskOnChip2000 24M	Pass	

J. Peripheral Compatibility- Input Device Input Device List:

Brand	Device Model	Result	Note
Keyboard			
LEMEL	KB-5121	Pass	
BTC	KB (USB)	Pass	
Mouse			
Logitech	Serial Mouse	Pass	
IBM	Mouse (PS/2)	Pass	
DEXIN	Mouse (USB)	Pass	
Adam (RS-4	185)		
RS-485	COM2	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 Me	ethod	Actual	Successful	Fail Rate	Note
Power On/Off	1000 Times	1000	1000	0%	
KB Reset	20 Times	20	20	0%	

C. Continuous Burn-In Booting Stability Testing

Test Condition: Temp.: -10° C $\sim 70^{\circ}$ C Humidity: 0° $\sim 95^{\circ}$

Test Me	ethod	Actual	Successful	Fail Rate	Note
Power On/Off 24 Hours		1000	1000	0%	

D. Burn-In Stability Testing

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

Test Software		Result	Note
AMIDIAD 4.5	32 Hours	Pass	

4. Performance Testing

System Information:

DRAM Type & Capacity	LGX GM72V661641CT7J SDRAM 64M
VGA Card	On Board (C&T69000)
HDD TYPE	Fujitsu MPC3032AT
VGA Testing Mode	1024X768X256 colors (For WinStone98 & WinBench98)
O.S.	DOS V 6.22 & Windows 95 & Windows NT 4.0

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

				CPU	Configur	ation		
Testing Utility	Celeron	Celeron	Celeron	Celeron	Celeron	Celeron	Celeron	Unit
	300	366	400	433	466	500	533	
LandMark Speed <u>2.0</u>								
CPU	1897.75	2319.52	2530.39	2741.25	2952.18	3163.05	3373.92	Mhz
FPU	5377.48	6572.63	7170.18	7767.72	8365.34	8542.57	9112.11	Mhz
VIDEO	14894	14894	14894	14894	14894	16384	16384	Chs/sec
Norton <u>8.0</u> 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 <u>98</u>								
Business Winstone98	25.8	27.8	28.6	29.8	30.2	30.8	32.5	
High-End Winstone98	29	31.4	32.4	33.6	34.5	36	36.8	
WinBench <u>98</u>							-	
High-End/Business	160/127	185/144	196/153	207/160	217/167	228/174	240/179	MP/s
Graphics WinMark98								
CPUmark 32	602	672	693	726	757	775	788	
Coretest 3.02							-	
DTR (Buffered Read)	5042	5374	5318	5276	5444	7632	7632	 KB/sec
Performance ID	36.40	38.38	38.04	37.79	38.79	53.51	53.63	

Note : 1. CPU type of Celeron 500 / Celeron 533 HDD is IBM DPTA-372050

^{2.} CPU type of Celeron 500 / Celeron 533 O.S.& test AP is Windows 98 & Winstone 99 / Winbench 99

5. Power Consumption

System Information:

DRAM Type & Capacity	NEC D4564841G5 -A80 -9JF
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	Prompt \$P\$G	
Dos=High,Umb	C:\Dos\Smartdrv.Exe /X	
Files=35		
Buffers=40		

The Application of Software

Brand	Landmark System Speed Test Version 2.0

Test Result

Mode Type	CPU Type					Unit
	Celeron 300	Celeron 366	Celeron 400	Celeron 433	Celeron 466	
Normal Mode(+5V)	4.2	4.4	4.8	5.0	5.1	Amp/Max
Suspend Mode(+5V)	1.8	1.8	1.8	1.8	1.8	Amp/Max

Mode Type	CPU Type				Unit	
	Celeron 500	Celeron 533				
Normal Mode(+5V)	5.5	6				Amp/Max
Suspend Mode(+5V)	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 (Power On/Off)

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

B. IDE Drive Capability

Test Equipment

Primary IDE Port:

Master Device: HDD Fujitsu MPC3032AT Slave Device: CD-ROM TEAC CD-532E

Testing Condition	Result	Note
Primary IDE Port Flat-Cable Length Margin	65CM	
Secondary IDE Port Flat-Cable Length Margin	N/A	