

QE 【Mainboard】

P5 Verification Test Plan

Release No : 08E010008

Product Model	PCM-9452
Description	Intel 945GM ICH7M Compact Board
Test Configuration	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : PCM-9452 A1.0 <input checked="" type="checkbox"/> BIOS : PCM-9452 BIOS Rev 1.0(01/24/2008) <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> North Bridge : Intel 945GM/GME <input checked="" type="checkbox"/> South Bridge : Intel ICH7 <input checked="" type="checkbox"/> VGA Chipset : Intel 945GM/GME <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82562EZ/82573L <input checked="" type="checkbox"/> I/O Chipset : IT-8712F-S <input checked="" type="checkbox"/> TV Chipset : Intel 945GM/GME <input checked="" type="checkbox"/> Remark : P5 Test Report for PCM-9452 Rev A1.0
Test Result Summary	
<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____ _____	

2008/03/04

Issue date

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Manager

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Test Engineer

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There are 3 test results in this document; they are described as follows:

Pass: Function worked perfectly

Fail: Function failed and must be modified in the next version

N/A: Outside of specification or no test equipment



Platform Information:

Item	Device Information	Test Item
PCB Model /Version	PCM-9452 A1.0	1,2,3
BIOS / Version	PCM-9452 BIOS Rev 1.0(01/24/2008)	1,2,3
CPU Type	Intel CPU Core 2 Duo 2.16 GHz.667MHz FSB Merom T7400 LF80537GF0484M Socket CPU	1,2,3
Memory Type	Kingston DDR2 667 SODIMM 2GB (7DE12 D9HNL)	1,2,3
Primary IDE Master	Seagate ST3160815A 160GB HDD	1,2,3
Primary IDE Slave	SONY DDU1632 48X CD-ROM/16X DVD-ROM	1,2,3
CRT	ViewSonic E70 17" Monitor	1,2,3
LCD	N/A	N/A
Compact Flash	N/A	N/A
Backplane	N/A	N/A
Carrier Board	N/A	N/A
Operating System	[] Linux-RedHat 9.0 or [X] Fedora Core 6	2
	Windows Vista™ Ultimate English Version	N/A
	Windows Vista™ Ultimate x64 Edition English Version	2
	Windows Server 2003 English Version / Standard Edition 5.2.3790	N/A
	Windows Server 2003 English Version /Standard x64 Edition	N/A
	Windows XP Professional English Version V2002 Service Pack 2	1,2,3
	Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	2
	Windows XP Professional Japanese Version V2002 Service Pack 2	2
	Windows XP Professional English Version /Standard x64 Edition	2
	Windows 2000 Professional English Version V5.00.2195 Service Pack4	2
	Windows Server 2000 English Version	N/A
	Windows 98SE English Version V4.10.2222A	N/A
	MS-DOS 6.22 English Version	N/A
Power Supply	SEVENTEAM ST-400EAG-05F ATX-400W	1,2,3

Test Result for Certification

1. I/O Peripheral Function Test

I/O Peripheral Function Test –I/O Function	Result		
	Pass	Fail	N/A
Floppy Connector / Driver A:			X
Floppy Connector / Driver B:			X
Primary IDE Master	X		
Primary IDE Slave	X		
Secondary IDE Master			X
Secondary IDE Slave			X
Third IDE Master			X
Third IDE Slave			X
RAID 0 Function Test			X
RAID 1 Function Test			X
SATA1 / Serial ATA Connector 1	X		
SATA2 / Serial ATA Connector 2	X		
SATA3 / Serial ATA Connector 3			X
SATA4 / Serial ATA Connector 4			X
Compact Flash – Type I(UDMA)	X		
Compact Flash – Type I(PIO)	X		
DOC (Disk On Chip)			X
DOM (Disk On Module) – 40 Pin	X		
DOM (Disk On Module) – 44 Pin			X
COM 1-232	X		
COM 2-232	X		
COM 2-422	X		
COM 2-485	X		
COM 2-Ring /+5V /+12V	X		
COM 3-232	X		
COM 4-232	X		
PS/2 Mouse & Keyboard (Internal)	X		
PS/2 Mouse & Keyboard (External)			X
Audio Connector	X		
Audio 5.1 Channel / S/P DIF			X
LPT 1	X		
LPT 2			X
SIR / 115.2 Kbps	X		
FIR / 4M bps			X
USB 1/2 Ports	X		
USB 3/4 Ports	X		
USB 5/6 Ports	X		
USB 7/8 Ports			X
USB 2.0 1/2 Ports	X		
USB 2.0 3/4 Ports	X		
USB 2.0 5/6 Ports	X		
USB 2.0 7/8 Ports			X

DVI Function			X
DIO Connector	X		
Card Bus	X		
PC/104			X
PC/104-Plus			X
PCI-104			X
CD-In Connector	X		
TFT TTL LCD			X
TFT LVDS LCD	X		
TV-out / S Terminal	X		
TV-out / AV Terminal	X		
Touch Screen – 8 Wire			X
Touch Screen – 5 Wire			X
DIMM Slots	X		
Watchdog IRQ n			X
Watchdog Software Control	X		
CPU FAN Connector	X		
System FAN Connector	X		
Front Panel	Result		
	Pass	Fail	N/A
Power On Button	X		
IDE LED	X		
External Buzzer	X		
On Board Buzzer	X		
Power LED	X		
Reset Switch	X		
Keyboard Lock			X
Jumpers Function	Result		
	Pass	Fail	N/A
ATX simulates AT	X		
Audio Out Selection (W/O & W/ Amplifier)			X
LCD Voltage Selection	X		
COM2-Ring/5V/12V Selection	X		
COM2 RS-232/422/485 Selection			X
Clear CMOS	X		
Touch Screen Operating Mode Selection			X
Clock Shift of TFT LCD			X
Power Connector & Function	Result		
	Pass	Fail	N/A

ATX Power Connector		X		
ATX Power_12V Connector				X
AT Power Connector (P8 & P9)				X
Big 4P Power Connector				X
Mini 4P Power Connector				X
External Power Connector (Adapter)				X
Option ATX Power Connector (PS-ON / +5VSB)				X
LAN Connector & Function		Result		
		Pass	Fail	N/A
LAN Speed LED	LAN1	X		
	LAN2	X		
LAN Active LED	LAN1	X		
	LAN2	X		
LAN Link LED	LAN1	X		
	LAN2	X		
LAN 10/100 Ethernet		X		
LAN 1G Ethernet		X		
PCI Connector & Function		Result		
		Pass	Fail	N/A
Mini PCI Slot		X		
PCI Slots		X		
PCI Express		X		

2. Power Consumption Test (Run Prime95 Program) Platform Information

PCB Model / Version	PCM-9452 A0.2
BIOS	PCM-9452 BIOS Rev 0.6(08/29/2007)
Operating System	Windows XP Professional V2002 Service Pack 2
CPU	Intel CPU Core 2 Duo 2.16 GHz.667MHz FSB Merom T7400 LF80537GF0484M Socket CPU
Memory	Transcend DDR2 667 SODIMM 2GB (7DE12 D9HNL)
SATA HDD	N/A
Primary IDE Master	Seagate ST3160815A 160GB HDD
Primary IDE Slave	SONY DDU1632 48X CD-ROM/16X DVD-ROM
CRT	ViewSonic E70 17" Monitor
LCD	N/A
Compact Flash	N/A
Backplane	N/A
Riser Card	N/A
Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)
Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4820 (04/16/2007)
LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)
Audio Driver	Realtek AC'97 Audio 5.10.0.5820 (03/25/2005)
Touchscreen Driver	N/A
Power Supply	Seventeam ST-300BLP-300W ATX Power supply

Test Equipment:

Equipment	AC/DC Clamp Meter
Manufacturer	PROVA
Model name	CM-01
Standard	Reference to CE EN 61010 Test Procedure
	Reference to UL Test Procedure

Equipment Certified Calibration:

Calibrated Company	IPE (儀寶)
S/N	00004072 (DM215)
Report No	6118P016
Calibration Date	19, January, 2007
Next Calibration Date	18, January, 2008
Test By	Mick

Test Environment	Windows XP Professional V2002 Service Pack 2 English Version		Note
	ATX Power: Seventeam ST-300BLP-300W	AT Power	
CPU Type	CPU: Intel CPU Core 2 Duo 2.16 GHz.667MHz FSB Merom T7400 LF80537GF0484M Socket CPU		CPU:N/A
Normal Mode (+5V)	2.75	A	A
Suspend Mode (+5V)	1.99	A	A
5VSB in Power Off Mode (just for ATX)	0.21	A	A
5VSB in Power On Mode (just for ATX)	0	A	A
Normal Mode (+12V)	0.61	A	A
Suspend Mode (+12V)	0.53	A	A
Normal Mode (+3.3V) (just for ATX)	0	A	A
Suspend Mode (+3.3V) (just for ATX)	0	A	A
Normal Mode (-12V)	0	A	A
Suspend Mode (-12V)	0	A	A
Normal Mode (-5V)	0	A	A
Suspend Mode (-5V)	0	A	A

3. Power Connector Test (110V / 220V)

Test Method	Result		
	Pass	Fail	N/A
ATX Connector - Power On/Off for 10 times in DOS (Seventeam ST-352HLP 350W)	X		
AT Connector - Power On/Off for 10 times in DOS			X
5V Only - Power On/Off for 10 times in DOS			X

4. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
System Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power Off Mode	±1 second during 24 hours	X		
Watchdog Timer Test		Result		
		Pass	Fail	N/A
Time-out Interval	10 sec	X		
	60 sec	X		
	255 sec	X		

5. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 LED		Active LED				X		
		Link LED				X		
		Speed LED				X		
LAN2 LED		Active LED				X		
		Link LED				X		
		Speed LED				X		
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/100/1000 Mbps	HP J4095A 24 Ports	100 M	100 MBps	100M	X		
		D-Link DGS-1008T	100 M	1GBps	1G	X		
		D-Link DES-1316 PoE	100 M	100 MBps	100M	X		
		Intel InBusiness 8 Port	100 M	100 MBps	100M	X		
		Accton DeskTop-3005	100 M	100 MBps	100M	X		
		SVEC FD916H (10 Mbps HUB)	100 M	10 MBps	10M	X		
Onboard LAN2	10/100/1000 Mbps	HP J4095A 24 Ports	100 M	100 MBps	100M	X		
		D-Link DGS-1008T	100 M	1GBps	1G	X		
		D-Link DES-1316 PoE	100 M	100 MBps	100M	X		
		Intel InBusiness 8 Port	100 M	100 MBps	100M	X		
		Accton DeskTop-3005	100 M	100 MBps	100M	X		
		SVEC FD916H (10 Mbps HUB)	100 M	10 MBps	10M	X		

6. Hardware Compatibility

CPU Compatible Test					
CPU Type	FSB	Prime95 Version	Result		
			Pass	Fail	N/A
Intel Core Duo T2500 2.0GHz	667	V2414	X		

Intel CPU Core 2 Duo 2.16 GHz.667MHz FSB Merom T7400 LF80537GF0484M Socket CPU		667	V2414	X			
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Transcend	7DE12D9HNL	667	2GB	V1.65	X		
KIGNMAX	HY5PS12821 F-C4	533	1GB	V1.65	X		
Kingston	HY5PS12821B FP-Y5	667	512MB	V1.65	X		
Kingston	D3216TLSAKL37U	533	256MB	V1.65	X		
Audio Basic Function Test					Result		
					Pass	Fail	N/A
System Sound					X		
CD_In					X		
CD_In Sound Recorder					X		
Play Sound Recorder					X		
Line Out					X		
Line In					X		
Line In Sound Record					X		
MIC Speaker			Dynamic		X		
			Condenser		X		
MIC Sound Recorder			Dynamic		X		
			Condenser		X		
Audio 5.1 Channel with S/P DIF Function Test					Result		
					Pass	Fail	N/A
2-channel mode for stereo speaker output							X
4-channel mode for 4 speaker output							X
6-channel mode for 5.1 speaker output							X
S/P DIF function Test			Input				X
			Output				X
On Board TV Function Test					Result		
					Pass	Fail	N/A
NTSC		AV Terminal			X		
PAL					X		
NTSC		S Terminal			X		
PAL					X		
On Board LCD Function Test							
TFT LCD	Type	Voltage	Result				
			Pass	Fail	N/A		
LVDS	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	3.3V			X		
	AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	3.3V			X		
	AU B104SN05 / 10.4" / 800*600 / 18bit (4:3)	3.3V	X				
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	3.3V	X				
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	3.3V			X		
	AU M170EG01 / 17" / 1280*1024 / 48bit (4:3)	5V			X		
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	5V			X		
	AUO T260XW02 / 26" / 1366x768 / 24bit				X		

	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V		X
	AUO T370HW01 / 37" / 1920x1080 / 48bit			X
TTL	Toshiba LTM10C209A / 10.4" / 640*480 / 18bit (4:3)	5V		X
	NEC NL8060AC31-12 / 12.1" / 800*600 / 18bit (4:3)	3.3/5V		X
	Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit (4:3)	3.3V		X
	LG LM151X2-C2TH / 15.1" / 1024x768 / 18bit (4:3)	3.3V		X
	Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit (4:3)	5V		X

PCI Slot Function (PCI Adapter Card) Test

Model	Type	Result		
		Pass	Fail	N/A
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card	X		
SC3000 CMI8738/C3DX	Sound Card	X		
ADAPTEC Ultra160 SCSI ASC-29160	SCSI Card	X		
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	Capture Card	X		
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card	X		
3Com 3C905C-TXM ETHERLINK 10/100 PCI	LAN Card	X		
D-Link DWL-520+ Wireless LAN	LAN Card	X		
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	RAID Card	X		
LEMEL MD V1456VQH-P2 PCI MODEM Card	Modem Card	X		
D-Link DU-520 USB 2.0	USB Hub Card	X		
Tekram TR-822 Serial ATA 150 [SA-001] + SATA HDD Seagate ST3120026AS 120GB	SATA Card	X		

PCI-Express Function Test

Model	Result		
	Pass	Fail	N/A
SUNIX SATA1414 VER 1.1 PCI-Express x1 SATA Card	X		
SksKonnnect SK-9E21D 10/100/1000 Base-T Adapter PCI-Express x1 LAN Card	X		
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card			X
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card	X		
WinFast PX6200 TC TDH PCI-Express x16 VGA Card	X		

HDD Compatibility Test

Model	Result		
	Pass	Fail	N/A
Seagate ST3400620A 400GB 3.5" IDE HDD	X		
Maxtor VAM51JJ0 40GB ATA/133 3.5" IDE HDD	X		
Seagate ST315320A 15.3GB ATA33 3.5" IDE HDD	X		
FUJITSU MPE 3136AH 13.6GB ATA66 3.5" IDE HDD	X		
Seagate ST3160815A 160GB Barracuda 7200.7 3.5" IDE HDD	X		
Seagate ST3160812A 160GB 3.5" IDE HDD	X		
HITACHI HDS721616PLA380 160GB 3.5"SATA-I HDD	X		
Seagate ST3160811AS 160GB 3.5"SATA-I HDD	X		
Seagate ST98823AS 80GB 2.5" SATA-I HDD	X		

CD/DVD-ROM Compatibility Test

Model	Result
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	Pass	Fail	N/A
Pioneer DVD-ROM DVD-126D CD 40X / DVD 16X	X		
SONY DDU1632 16 x DVD ROM	X		
Acer DVP1640A / 16X / DVD-ROM / ATA33	X		
ASUS /CD S-500/A 50X CD-ROM	X		
IBM HL-DT-ST / GCR-8480B / 48X / CD-ROM/ ATA33	X		
Pioneer / DVD-121 / 16X / DVD-ROM / ATA66	X		
SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X / ATA33	X		
NEC / ND-2500A / DVD R/RW / +R8X-R8X / ATA33	X		
IDE Cable Function test			
IDE Model	Result		
	Pass	Fail	N/A
40 Pin Cable ATA100	X		
44 Pin Cable ATA33			X
80 Pin Cable ATA100			X
USB Function Test			
USB Basic Function Test	Result		
	Pass	Fail	N/A
USB Controller	X		
USB 2.0 Controller	X		
USB Keyboard Support	X		
USB Mouse Support			X
USB 1.1 Compatible Test	Result		
	Pass	Fail	N/A
USB 1.1 Compatible Test	X		
USB 2.0 Compatible Test	Result		
	Pass	Fail	N/A
USB 2.0 Compatible Test	X		
USB 2.0 Function Test	Result		
	Pass	Fail	N/A
Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS	X		
USB Device Full Loading Test			
Model	Result		
	Pass	Fail	N/A
ASUS DRW-1604P-D/WHT/G/DVD-RW	X		
IBM IC25N020ATCS04-0 / 20GB	X		
Transcend Flash Disk 2GB	X		
USB Card Reader+pq1 1GB CF Card	X		
Kingston Flash Disk 256MB	X		
SONY Flash Disk 256MB	X		
Floppy Disk Controller Function Test	Result		
	Pass	Fail	N/A
Copy and compare file between C: and A / B:			X
Change Floppy to None value			X
Swap FDD			X

Peripheral Compatibility-Storage Device					
Model	Interface	Result			
		Pass	Fail	N/A	
MO [SCSI]	SCSI	X			
IOMega ZIP 100 parallel port	Parallel	X			
DOC				X	
Type-I CF	Fix / PIO Mode	X			
Type-I CF	Fix / UDMA Mode	X			
Digital I/O Connector Test		Result			
		Pass	Fail	N/A	
Input Address: 801H		X			
Output Address: 801H		X			
VCC: (5V)		X			
DIO-1 Function Test		X			
DIO-2 Function Test				X	
Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules					
Interface	Model	Type	Result		
			Pass	Fail	N/A
PC/104	AAEON PCM-5600	Modem Module			X
	AAEON PCM-3115B	PCMCIA Module			X
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-FA00	Mini-PCI Converter			X
	AAEON PCM-3794	SCSI Module			X
	AAEON PCM-3730	Intel 82559 LAN Module			X
On-Board RAID Function Test					
Model	Interface	Result			
		Pass	Fail	N/A	
Set SATA HDDs as RAID 0		X			
Set SATA HDDs as RAID 1		X			
Set SATA HDDs as RAID 10				X	
Set SATA HDDs as RAID 5				X	
COM Function Test		Result			
		Pass	Fail	N/A	
COM Port Burn In Test overnight		X			
Disk On Module [DOM] Compatibility Test					
Model	Interface	Result			
		Pass	Fail	N/A	
Transcend / TS512MDOM40V / 512MB		X			
Transcend / TS512MDOM44V / 512MB				X	
Mini PCI Card Compatibility Test					
Model	Interface	Result			
		Pass	Fail	N/A	

GM-100 WLAN 11g Mini PCI Card (Model: Sky Thru GC-100)	LAN	X		
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	LAN	X		
PER-C20S SATA RAID MiniPCI Card (Silicon Image Sil3512ECTU128 QF7227.1-1)	SATA	X		
COM/LPT Ports & RS-232/422/485 Function Test		Result		
		Pass	Fail	N/A
RS-422 for COM2		X		
RS-485 for COM2		X		
COM1		X		
COM2		X		
COM3		X		
COM4		X		
COM5				X
COM6				X
LPT1		X		
LPT2				X
Card Bus(PCMCIA) Compatibility Function Test				
Model		Result		
		Pass	Fail	N/A
Compact Flash Adapter (1GB PQI CF Card inserting)		X		
Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD)		X		
D-Link DWL-650 802.11g/2.4GHz Wireless Cardbus Adapter		X		
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II		X		

7. O.S. Compatibility Test

Installation Operation System Compatibility Test	Result		
	Pass	Fail	N/A
English Linux Fedora Core 6 (2.6.18-1.2798.fc6)	X		
Windows Vista™ Ultimate English Version			X
Windows Vista™ Ultimate x64 Edition English Version	X		
Windows Server 2003 English Version / Standard Edition 5.2.3790			X
Windows Server 2003 English Version /Standard x64 Edition			X
Windows XP Professional English Version V2002 Service Pack 2	X		
Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	X		
Windows XP Professional Japanese Version V2002 Service Pack 2	X		
Windows XP Professional English Version /Standard x64 Edition	X		
Windows 2000 Professional English Version V5.00.2195 Service Pack4	X		
Windows Server 2000 English Version			X

Windows 98SE English Version V4.10.2222A				X
MS-DOS 6.22 English Version				X
Utility and Driver Test				
OS	Drivers Version	Result		
		Pass	Fail	N/A
Fedora 6 (2.6.18-1.2798.fc6)	Chipset Software	Default Driver	X	
	Graphics Media	Default Driver	X	
	LAN Driver	Default Driver	X	
	Audio Driver	Default Driver	X	
Windows Vista™ Ultimate x64 Edition English Version	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X	
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 7.14.10.1329 (09/13/2007)	X	
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.9.13.0(06/19/2007)	X	
	Audio Driver	Realtek AC'97 Audio 6.0.1.6251 (08/14/2007)	X	
Windows XP Professional English Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X	
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4864 (08/24/2007)	X	
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)	X	
	Audio Driver	Realtek AC'97 Audio 5.10.0.6250 (08/07/2007)	X	
Windows XP Professional Simplified-Chinese Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X	
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4864 (08/24/2007)	X	
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)	X	
	Audio Driver	Realtek AC'97 Audio 5.10.0.6250 (08/07/2007)	X	

Windows XP Professional Japanese Version V2002 Service Pack 2	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X		
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4864 (08/24/2007)	X		
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)	X		
	Audio Driver	Realtek AC'97 Audio 5.10.0.6250 (08/07/2007)	X		
Windows XP Professional English Standard Version x64 Edition	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X		
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4864 (08/24/2007)	X		
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.9.13.0(06/19/2007)	X		
	Audio Driver	Realtek AC'97 Audio 5.10.0.6250 (08/07/2007)	X		
Windows 2000 Professional English Version	Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)	X		
	Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4864 (08/24/2007)	X		
	LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)	X		
	Audio Driver	Realtek AC'97 Audio 5.10.0.6250	X		

8. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test	X		
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
Power Management Test			
APM Power Management Test	X		
ACPI Power Management Test	X		
Power On Function Test			X
Wake Up Event Test	X		

Power On after Power Failure Test	X		
CMOS Backup / Clear CMOS Test	X		
Boot ROM Test (PXE)	X		
Supervisor / User Password Test	X		
CRT / LCD / TV Function Test	X		
TV Standard Function Test	X		
Init Display First Function Test	X		
On-Chip Serial ATA Function Test	X		
SATA Mode-IDE/RAID Function Test	X		
PC Health Status			
CPUVcore	X		
DDR2	X		
(+) 3.3V	X		
(+) 5V	X		
(+) 12V	X		
(-) 12V	X		
(-) 5V	X		
(+) 5VSB	X		
Voltage Battery (Above 3V)	X		
NB Temp.	X		
System Temp.	X		
Current CPU Temp.	X		
CPU Fan Speed	X		
System Fan Speed	X		

9. Performance Test Platform Information

PCB Model / Version	PCM-9452 A0.2
BIOS	PCM-9452 BIOS Rev 0.6(08/29/2007)
Operating System	Windows XP Professional V2002 Service Pack 2
CPU	Intel CPU Core 2 Duo 2.16 GHz.667MHz FSB Merom T7400 LF80537GF0484M Socket CPU
Memory	Transcend DDR2 667 SODIMM 2GB (7DE12 D9HNL)
SATA HDD	N/A
Primary IDE Master	Seagate ST3160815A 160GB HDD
Primary IDE Slave	SONY DDU1632 48X CD-ROM/16X DVD-ROM
CRT	ViewSonic E70 17" Monitor
LCD	N/A
Compact Flash	N/A
Backplane	N/A
Riser Card	N/A
Chipset Software	Intel(R) Chipset Software Installation Utility 8.2.0.1014(03/05/2007)
Graphics Media	Mobile Intel(R)945GM Express Chipset Family 6.14.10.4820 (04/16/2007)
LAN Driver	Intel PRO /100VE Network Connection Ver:8.0.43.0(10/31/2006) Intel PRO /1000PL Network Connection Ver:9.8.20.0(04/13/2007)
Audio Driver	Realtek AC'97 Audio 5.10.0.5820 (03/25/2005)
Touchscreen Driver	N/A
Power Supply	Seventeam ST-400EAG-05F 400W ATX Power supply

Test result:

ZD WinBench 99 V2.0	Result	Unit
Business Disk WinMark99	8690	Thousand bytes/sec
High-End Disk WinMark99	24700	Thousand bytes/sec
Business Graphics WinMark99	388	
High-End Graphics WinMark99	1050	
Final Reality V1.01—BenchMark Test (Reality Marks)		
2D Image	25.86	
3D	5.43	
Bus transfer	80.25	
Overall	22.78	Reality marks
ZD 3D Winbench 2000 V1.1		
3D WinMark 2000	127	Frames / sec
3Dmark2001SE Pro (Demo version)		
3DMark2001SE Build 330_Benchmark mode	5475	
Business Winstone 2004 v1.0.1		
Business Winstone2004	23.3	

Test Result:

Testing Software	Result	Unit
PCMark05		
PCMark	2845	PCMarks
CPU	5538	
Memory	4188	
Graphics	660	
HDD	3388	
3Dmark2003 v360		
3Dmark Score	1140	
CPU Score	639	

Remark: Please uses below two performance software to test mainboard if the chipset is new enough.
(ex. Intel Core 2 Duo CPU)

