

# P5 Verification Test Plan

Release No : 09E010032

Product Model	<b>EPIC-9457</b>
Description	<b>Intel Navy Pier EPIC Express Board</b>
Test Configuration	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> CPU Board : EPIC-9457 A1.0 <input checked="" type="checkbox"/> BIOS : EPIC-9457 BIOS Rev 1.0 For Dual LVDS(05/11/2009) <input checked="" type="checkbox"/> Carrier Board : N/A <input checked="" type="checkbox"/> Expansion Board : N/A <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> CPU : Onboard CPU Intel Atom N270 1.6GHz <input checked="" type="checkbox"/> North Bridge : Intel 945GSE <input checked="" type="checkbox"/> South Bridge : Intel ICH7-M <input checked="" type="checkbox"/> VGA Chipset : Intel 945GSE <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Intel 82574L <input checked="" type="checkbox"/> I/O Chipset : ITE8781 <input checked="" type="checkbox"/> TV Chipset : Intel 945GSE <input checked="" type="checkbox"/> SDVO : N/A  <input checked="" type="checkbox"/> Remark :P5 Report for EPIC-9457 A1.0
<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation  Comment: _____  _____	

*2009/07/29*

Issue date

*Wenyuan Yang*

Manager

*Jerry Tsai*

Test Engineer

## Summary Table of contents :

Summary Table of contents	2
Platform Information	3
1. I/O Peripheral Function Test	4
2. Power Connector Test	6
2.1. Power Consumption Test	7
3. Timer Accuracy Test	8
4. Network HUB / LAN Connection Test	8
5. Hardware compatibility	8
6. O.S. Compatibility Test	13
7. BIOS Function Test	14
8. Performance Test	15

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	EPIC-9457 A1.0	
Carrier Board	N/A	
/ Version	EPIC-9457 BIOS Rev 1.0 For Dual LVDS(05/11/2009)	
CPU Type	Onboard CPU Intel Atom N270 1.6GHz	
Memory Type	Kingston DDR2-667 2GB KVR667D2S5/2G (7KEI2 D9HNL)	
SATA	Western Digital WD1200BEVS-60RST0 120GB 2.5" SATA HDD	
Primary IDE Master	N/A	
Primary IDE Slave	ASUS DVD-E818A DVD-ROM	
CRT	ViewSonic E70	
LCD	AUO G065VN01 V.0 / 640x480x18bit / 6.5" / 3.3V LVDS Panel	
Compact Flash	N/A	
Backplane	N/A	
Riser Card	N/A	
Expansion Board	PER-V03B A0.1 (DVI Output via SDVO interface)	
	PER-V04B A0.1 (18/24bit LVDS output via SDVO interface)	
Operating System	[ ] Linux-RedHat 9.0 or [ X ] Fedora Core 8	6
	Windows Vista™ Ultimate English Version	6
	Windows Vista™ Ultimate x64 English Version	N/A
	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 3	1,2,3,4,5,6,7,8
	Windows XP Professional English Version /Standard x64 Edition	N/A
	Windows 2000 Professional English Version V5.00.2195 Service Pack4	N/A
	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	ATX Power Supply : PRT PRM400	
	AT Power Supply: EMACS SP2-4300F	
	DC Adapter : N/A	

## Test Result for Certification

### 1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
<b>Floppy Connector / Driver A:</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	X			
Compact Flash – Type II	X			
DOC (Disk On Chip)			X	
DOM (Disk On Module) – 40 Pin			X	Transcend / TS512MDOM40V / 512MB / IDE 40 Pin
DOM (Disk On Module) – 44 Pin	X			Transcend / TS512MDOM44V / 512MB / IDE 44 Pin
COM 1-232	X			
COM 2-232	X			
COM 3-232	X			
COM 4-232	X			
COM 2-422	X			
COM 2-485	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			
SIR / 115.2 Kbps			X	
FIR / 4M bps			X	
USB 1/2 Ports	X			
USB 3 /4 Ports	X			
USB 2.0 1/2 Ports	X			
USB 2.0 3 /4 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 – 4/5 Wire	X			
DIMM Slots	X			
Watchdog IRQ n			X	
Watchdog Software Control	X			
FAN1 Connector	X			
FAN2 Connector			X	
Express card			X	
Speaker Connector	X			
LCD Backlight Power Connector	X			
DC in Connector			X	
PCI Express Mini Card			X	
Power Button	X			
Battery Connector	X			
Front Panel (CN34)	Result			Notes
	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			Notes
	Pass	Fail	N/A	
BIOS write protection Selection and boot Selection			X	
Backlight enable level Selection and LVDS Power Selection			X	
COM1 +12V/+5V/RING Selection			X	
COM2 +12V/+5V/RING Selection	X			
Auto Power button Selection and power on selection			X	
Power source selection	X			
FAN Power Selection			X	
CMOS Clear Selection	X			
LCD Brightness and speaker level Selection			X	
Power Connector & Function	Result			Notes
	Pass	Fail	N/A	
Standard AT Power Connector	X			
Standard ATX Power Connector	X			
5V Only Power Connector			X	
DC Adapter			X	
LAN Connector & Function	Result			Notes
	Pass	Fail	N/A	
LAN Link / Speed LED	LAN1	X		
	LAN2	X		
LAN Active LED	LAN1	X		
	LAN2	X		

LAN 10/100 Ethernet	X			
LAN 1G Ethernet	X			
PCI Connector & Function	Result			Notes
	Pass	Fail	N/A	
Mini PCI Slot			X	
PCI Slot			X	
PCI Express x1			X	
Express card			X	

## 2. Power Consumption Test

### Platform Information:

CPU Board	EPIC-9457
Carrier Board	N/A
BIOS	EPIC-9457 BIOS Rev 0.A For DVI(03/12/2009)
Operating System	English Windows XP Professional Service Pack 3 V2002
CRT	VIEWSONIC E70 17"
LCD	N/A
Compact Flash	N/A
Expansion Board	N/A
	N/A
Chipset Software	Intel chipset 9.0.0.1008 (5/01/2008)
Graphics Media	Intel 945 express chipset family 6.14.10.4926 (2/15/2008)
LAN Driver	Intel 82574L gigabytebit network connection 10.3.49.0 (8/5/2008)
Audio Driver	Realtek AC97 Audio 5.10.0.6280 (1/23/2008)
Touchscreen Driver	N/A
Power Supply	Seventeam ST-300BLP 300W

### 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	7C21P566
Calibration Date	Jan. 14,2008
Next Calibration Date	Jan. 13, 2009
Test By	Mick

- Test Point:**
1. Power on machine and boot into Windows environment
  2. Run test software: Prime95 to make system heavy loading in order to measure its maximum current
  3. Use Prova EN61010(set as 40A) to measure each current of system different mode

Test Environment	ATX Power: Seventeam ST-300BLP		AT Power: ZECK ZKS-300W		Note
Model					
CPU	Onboard CPU Intel Atom N270 1.6GHz				
HDD	WD800BB / 80GB / 7200 / 8M / 3.5"IDE HDD				
RAM	Transcend DDR2 667 SODIMM 2GB TS256MSQ64V6U				
OS Environment	English Windows XP Professional Service Pack 3 V2002				
Normal Mode (+5V)	0.4	A	0.3	A	
Suspend Mode (+5V)	0	A	0	A	
5VSB in Power Off Mode (just for ATX)	0.1	A	-----	A	
5VSB in Power On Mode (just for ATX)	0	A	-----	A	
Normal Mode (+12V)	1.6	A	1.6	A	
Suspend Mode (+12V)	0.8	A	0.9	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	0	A	
Suspend Mode (-12V)	0	A	0	A	
Normal Mode (-5V)	0	A	0	A	
Suspend Mode (-5V)	0	A	0	A	

- Test Point:**
1. Power on machine and boot into Windows environment
  2. Run test software: Prime95 to make system heavy loading in order to measure its maximum current
  3. Use GW Instek Programmable Power Supply PSH-3630 to measure total current of system

### 3. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
RTC Clock in Power On Mode	±3 second during 24 hours	X		
RTC Clock in Power Off Mode	±3 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		

### 4. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1~3 LED		Active LED				X		
		Link LED				X		
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
		D-Link DGS-1008T	100M	1GBps	100	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		
Location	Speed	D-Link DGS-1008T	100M	1GBps	100	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		

### 5. Hardware Compatibility

CPU Compatible Test							
CPU Type		FSB	Prime95 Version	Result			
				Pass	Fail	N/A	
Onboard CPU Intel Atom N270 1.6GHz		533MHz	V25.90	X			
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Transcend	hynix HY5PS12821A FP-C3	533	1G	V2.1	X		
Transcend	SEC 616 ZCD5 K4T51083QC	533	512mb	V2.1	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	Data Image 7" / 800*480 / 18bit (16:9)	3.3V	X		
	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 B104SN02 / 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		
	Toshiba LTD12EX1S / 1280*768 / 18bit	3.3V	X		
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	5V	X		
	AUO T260XW02 / 26" / 1366x768 / 24bit	5V	X		
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V	X		
	AUO T370HW01 / 37" / 1920x1080 / 48bit	26V	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
<b>PCI Slot Function (PCI Adapter Card) Test</b>					
Model	Type	Result			
		Pass	Fail	N/A	
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card			X	
SC3000 CMI8738/C3DX	Sound Card			X	
Takram DC-395U V1.02	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	
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	
<b>ISA Slot Function Test</b>		Result			
		Pass	Fail	N/A	
Creative CT4170 Sound Blaster Sound Card				X	
Adaptec AHA-1510/20/22B SCSI Card				X	
<b>PCI-Express Function Test</b>					
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		
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card			X		
WinFast PX6200 TC TDH PCI-Express x16 VGA Card			X		
<b>SATA HD Compatibility Test</b>					
Model	Result				
	Pass	Fail	N/A		
WD 1600AAJS-00PSA0 160GB 3.5" SATA HDD	X				
ST380815AS 80GB 3.5" SATA HDD	X				
WD800AAJS-00PSA0 80 GB 3.5" SATA HDD	X				
<b>CD/DVD-ROM Compatibility Test</b>					
Model	Result				
	Pass	Fail	N/A		
Pioneer DVD-ROM DVD-128A	X				
BENQ-DVD 1650V	X				
<b>IDE Cable Function test</b>					
IDE Model	Result				
	Pass	Fail	N/A		
40 Pin Cable ATA66			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	
LITEON DX-20A4PU USB-DVD ROM		X			
USB Device Full Loading Test		Result			
		Pass	Fail	N/A	
Model					
Mitsumi FLL3.5 D353GUE/FUE		X			
USB HDD 20GB		X			
USB Card Reader		X			
USB Mouse		X			
USB Thumb drive- Sandisk 4G		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
FUJITSU MCB3064SS		SCSI			X
IOMega ZIP 100 parallel port		Parallel			X
IOMega ZIP100MB Internal ATAPI Drive		IDE			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:		X			
Output Address:		X			
VCC: (5V)		X			
DIO-1 Function Test		X			

DIO-2 Function Test					X
<b>Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules</b>					
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
<b>On-Board RAID Function Test</b>					
Model		Interface	Result		
			Pass	Fail	N/A
Set SATA HDDs as RAID 0		SATA			X
Set SATA HDDs as RAID 1		SATA			X
Set SATA HDDs as RAID 10		SATA			X
Set SATA HDDs as RAID 5		SATA			X
COM Function Test			Result		
			Pass	Fail	N/A
COM Port Burn In Test overnight			X		
<b>Disk On Module [DOM] Compatibility Test</b>					
Model		Interface	Result		
			Pass	Fail	N/A
Transcend / TS512MDOM40V / 512MB		IDE 40 Pin			X
Transcend / TS512MDOM44V / 512MB		IDE 44 Pin	X		
<b>Mini PCI Card Compatibility Test</b>					
Model (Use PCI-104 transform board: MBC-1TM Rev.A1.0)		Interface	Result		
			Pass	Fail	N/A
PER-C10L Mini PCI LAN Card(Intel 82551QM)		LAN			X
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)		LAN			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		
LPT1			X		
LPT2					X

Card Bus(PCMCIA) Compatibility Function Test			
Model	Result		
	Pass	Fail	N/A
Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW)			X
PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting)			X
Kingston datapack DP-PCM2 / 2GB (PC Card TypeII HDD)			X
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X

## 6. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
[ ] Linux-RedHat 9.0 or [ ] Fedora Core 4.0 [ X ] Fedora Core 8.0			X		
Windows Server 2003 English Version / Standard Edition 5.2.3790					X
Windows Server 2003 English Version /Standard x64 Edition					X
Windows Vista 32-bit			X		
Windows Vista 64-bit					X
Windows XP Professional English Version V2002 Service Pack 3			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
DOS 6.22 English Version					X
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Fedora Core 8.0	Chipset Software	Default driver	X		
	Graphics Media	Default driver	X		
	LAN Driver	Default driver	X		
	Audio Driver	Default driver	X		
Windows Server 2003 English Version Standard Edition 5.2.3790	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Server 2003 English Version Standard x64 Edition	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Vista 32-bit	Chipset Software	Intel chipset 9.0.0.1008 (5/01/2008)	X		
	Graphics Media	Intel 945 express chipset family 7.14.10.1504 (6/18/2008)	X		
	LAN Driver	Intel 82574L gigabytebit network connection 10.3.49.0 (8/5/2008)	X		

	Audio Driver	Realtek AC97 Audio 6.0.1.6285 (3/25/2008)	X		
Windows Vista 64-bit	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows XP Professional English Version V2002 Service Pack 3	Chipset Software	Intel chipset 9.0.0.1008 (5/01/2008)	X		
	Graphics Media	Intel 945 express chipset family 6.14.10.4926 (2/15/2008)	X		
	LAN Driver	Intel 82574L gigabytebit network connection 10.3.49.0 (8/5/2008)	X		
	Audio Driver	Realtek AC97 Audio 5.10.0.6280 (1/23/2008)	X		
Windows XP Professional English Version /Standard x64 Edition	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows 2000 Professional English Version V5.00.2195 Service Pack 4	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows Server 2000 English Version	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X
Windows 98SE English Version V4.10.2222A	Chipset Software	N/A			X
	Graphics Media	N/A			X
	LAN Driver	N/A			X
	Audio Driver	N/A			X

## 7. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test			X
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
<b>Power Management Test</b>			
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		
LCD / DVI Function Test	X		
TV Standard Function Test	X		
Init Display First Function Test	X		
On-Chip Serial ATA Function Test	X		X
SATA Mode-IDE/RAID Function Test			X
<b>PC Health Status</b>			
Voltage Monitor Test	X		
FAN Speed Monitor Test	X		
Temperature Monitor Test	X		
USB Onboard Device Function Test	X		
COM Address / IRQ Test	X		
LPT Address / IRQ Test	X		
BIOS AWDFLASH Program Test	X		

## 8. Performance Test

### Platform Information

CPU Board	EPIC-9457 A1.0
Carrier Board	N/A
BIOS	EPIC-9457 BIOS Rev 1.0 For Dual LVDS(05/11/2009)
Operating System	English Windows XP Professional Service Pack 3 V2002
CPU	Onboard CPU Intel Atom N270 1.6GHz
Memory	Kingston DDR2-667 2GB KVR667D2S5/2G (7KEI2 D9HNL)
SATA HDD	N/A
Primary IDE Master	WD800BB / 80GB / 7200 / 8M / 3.5" IDE HDD
Primary IDE Slave	LH-52C1P CD-RW/DVD-ROM
CRT	ViewSonic e70 17"
LCD	N/A
Compact Flash	N/A
Expansion Board	N/A
	N/A
Chipset Software	Intel chipset 9.0.0.1008 (5/01/2008)
Graphics Media	Intel 945 express chipset family 6.14.10.4926 (2/15/2008)
LAN Driver	Intel 82574L gigabytebit network connection 10.3.49.0 (8/5/2008)
Audio Driver	Realtek AC97 Audio 5.10.0.6280 (1/23/2008)
Touchscreen Driver	N/A
Power Supply	Seventeam ST-300BLP 300W

Test result:

Testing Software	Result	Unit
<b>PCMark2002</b>		
CPU	2648	
Memory	6298	
HDD	702	
<b>Final Reality V1.01—BenchMark Test</b>		
2D image	19.07	
3D	3.96	
Bus transfer	33.41	
Overall	12.91	Reality marks
<b>3Dmark2001</b>		
3DMark2001SE Build 330_Benchmark mode	3051	

**Test Result:**

Testing Software	Result	Unit
<b>PCMark05</b>		
PCMark	N/A	PCMarks
CPU	N/A	
Memory	N/A	
Graphics	N/A	
HDD	N/A	
<b>3Dmark2003 v360</b>		
3Dmark Score	793	
CPU Score	248	