

# AHP-1152

## P5 Test Report

Summary	<input checked="" type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/> <b>Pass with Deviation</b> Comment: _____			
	<b>Test Result Summary</b>			
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	Approval	Test Engineer
2010 / 11 / 15	Jansin Lee	Anderson Lin

Platform Information:

Item	Device Information	Test Item
System	AHP-1152	1,2,3,4,5,6,7,8
PCB Model /Version	GENE-LN05 (A0.2)	1,2,3,4,5,6,7,8
BIOS / Version	AHP-1152 Rev 1.0(010/12/2010)	1,2,3,4,5,6,7,8
CPU Type	Intel® Atom™ Processor D510 (1M Cache, 1.66 GHz)	1,2,3,4,5,6,7,8
Memory Type	Onboard DDR2-667 1GB	1,2,3,4,5,6,7,8
SATA HDD	Seagate ST9160412AS 2.5" 160GB SATA HDD	1,2,3,4,5,6,7,8
LVDS	Onboard AUO G150XG03 V3	1,2,3,4,5,6,7,8
LCD Monitor	Samsung SyncMaster 171s	1,2,3,4,5,6,7,8
Operating System	Fedora Core 13 Kernel 2.6.33.3-85	1,2,3,4,5,6,7,8
	Windows 7 Ultimate 32Bit	1,2,3,4,5,6,7,8
	Windows XP Professional English SP3 32 Bit	1,2,3,4,5,6,7,8
Power Supply	AC/DC Adapter:FSP084-DMAA1	1,2,3,4,5,6,7,8
	AC INPUT:100-240V / DC OUTPUT:12V	

## Summary Table of contents:

Platform Information .....	2
Summary Table of contents.....	3
1. I/O Peripheral Function Test.....	4
2. Timer Accuracy Test.....	7
3. Network HUB / LAN Connection Test .....	7
4. Hardware compatibility.....	8
5. O.S. Compatibility Test.....	12
6. BIOS Function Test.....	12
7. Performance Test.....	13

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 specifications or no test equipment

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

## Test Result for Certification

### 1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
Floppy Connector / Driver A:			X	
PATA Master			X	
PATA Slave			X	
SATA Port 0	X			
SATA Port 1			X	
SATA Port 2			X	
SATA Port 3			X	
SATA Port 4			X	
RAID 0 Function Test			X	
RAID 1 Function Test			X	
RAID 1+0 & RAID 5 Test			X	
SSD H.D 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	
SATA4 / Serial ATA Connector 5			X	
Compact Flash			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 3-232	X			
PS/2 Mouse & Keyboard			X	
Audio Connector			X	
LPT 1			X	
IrDA			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			
DIO Connector			X	
PC/104			X	
PC/104-Plus			X	
PCI-104			X	
CD-In Connector			X	
TFT TTL LCD			X	
TFT LVDS LCD	X			Onboard LCD
LVDS Backlight Power Connector			X	
TV-out / AV Terminal			X	ViewSonic VT2430 LCDTV
TV-out / S-Video			X	ViewSonic VT2430 LCDTV
Component Video : Y/ Pb /Pr			X	ViewSonic VT2430 LCDTV
DVI Function			X	LG / L1753T / 17"
HDMI Output (Embedded Audio)			X	ViewSonic VT2430 LCDTV
Touch Screen – 8 Wire			X	
Touch Screen – 4/5 Wire			X	
DIMM Slots	X			
Watchdog Software Control	X			
FAN Connector			X	
AC/DC in Connector	X			
Power Button	X			
Battery Connector			X	
Front Panel	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	
Jumpers Function	Result			Notes
	Pass	Fail	N/A	

CMOS Clear Selection		X			
Auto PWRBTN Selection				X	Default ATX
Power Connector & Function		Result			Notes
		Pass	Fail	N/A	
Standard AT Power Connector				X	
Standard ATX Power Connector				X	
ATX Power Connector (Short PS-ON and GND to simulate AT mode)				X	
5V Only Power Connector				X	
AC/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	
PCI Slot				X	
Mini PCI Slot				X	
PCI Express x1 & x4				X	
PCI Express x16				X	
Mini PCI Express card (Mini Card)				X	
Express card (PCMCIA)				X	

## 2. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
RTC Clock in Power On Mode	±2 second during 24 hours	X		
RTC Clock in Power Off Mode	±2 second during 24 hours	X		
Watchdog Timer Test		Result		
		Pass	Fail	N/A
Time-out Interval	10 sec	X		
	60 sec	X		

## 3. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 LED		Link / Speed LED				X		
		Active LED				X		
LAN2 LED		Link / Speed LED				X		
		Active LED				X		
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/100/1000 Mbps	D-Link DGS-1008T	100M	1GBps	1000	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		
Onboard LAN2	10/100/1000 Mbps	D-Link DGS-1008T	100M	1GBps	1000	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		

#### 4. Hardware Compatibility

CPU Compatible Test							
CPU Type	FSB	Prime95 Version	Result				
			Pass	Fail	N/A		
Intel® Atom™ Processor D510 (1M Cache, 1.66 GHz)	667	V25.9	X				
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Onboard	Onboard	DDR2-667	1GB	V 4.10	X		
Audio Basic Function Test					Result		
					Pass	Fail	N/A
System Sound							X
CD_In							X
Play Sound Recorder							X
Line Out							X
Line In							X
Line In Sound Record							X
MIC Speaker			Condenser				X
MIC Sound Recorder			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
8-channel mode for 7.1 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	Result		
		Pass	Fail	N/A
LVDS	Onboard AUO G150XG03 V3	X		
	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)			X
	AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)			X
	Data Image 7" / 800*480 / 18bit (16:9)			X
	AU G084SN05 V.3 / 8.4" / 800*600 / 18bit (4:3)			X
	AUO G084SN05 v7 / 8.4" / 800*600 / 24bit (4:3)			X
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)			X
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)			X
	Toshiba /12.1"/1280 x 768 x 18bit (16:9)			X
	AU M170EG01 V.D/ 17" / 1280*1024 / 48bit (4:3)			X
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)			X
	AUO T260XW02 / 26" / 1366x768 / 24bit			X
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit			X
	AUO T370HW01 / 37" / 1920x1080 / 48bit			X
	AUO M190PW01 V0 / 19"/1440X900/48 bit			X

PCI Slot Function (PCI Adapter Card) Test

Model	Type	Result		
		Pass	Fail	N/A
CHANTECH NVIDIA GeForce4 MX440-8X	VGA Card			X
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card			X

ISA Slot Function Test

	Result		
	Pass	Fail	N/A
NE2000 Compatible LAN Card (RTL8019AS)			X
Adaptec AHA-1510/20/22B SCSI Card			X

PCI-Express Function Test(From PCI-104 Express Card)

Model	Result		
	Pass	Fail	N/A
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 NVIDIA PCI-E x16 VGA Card (ENGT220/D1/1GD2(LP))			X

HDD Compatibility Test

Model	Result		
	Pass	Fail	N/A
Seagate ST9160412AS 2.5" 160GB SATA HDD	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	
<b>USB Function Test</b>					
USB Basic Function Test				<b>Result</b>	
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Mitsumi FLL3.5 D353GUE/FUE		X			
USB HDD 20GB		X			
USB Card Reader		X			
USB Mouse		X			
USB Flash drive Transcend 2GB		X			
USB 2.0 Function Test				<b>Result</b>	
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS		X			
<b>Peripheral Compatibility-Storage Device</b>					
Model	Interface	<b>Result</b>			
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Type-I CF	Fix / PIO Mode			X	
Type-I CF	Fix / UDMA Mode			X	
Digital I/O Connector Test				<b>Result</b>	
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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	<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
PC/104	AAEON PCM-3600	Lan Module			X
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-3730	Intel 82559 LAN Module			X
PCI/104 Express	AAEON PER-123				X
<b>On-Board RAID Function Test</b>					
Model	Interface	<b>Result</b>			
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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		
Disk On Module [DOM] Compatibility Test				
Model	Interface	Result		
		Pass	Fail	N/A
Transcend / TS512MDOM40V / 512MB	IDE 40 Pin			X
Transcend / TS512MDOM44V / 512MB	IDE 44 Pin			X
Mini PCI Card Compatibility Test				
Model	Interface	Result		
		Pass	Fail	N/A
Mini PCI.10/100 Base-Tx LAN (W/Intel.82551QM .A1.0) (Model:PER-C10L)	LAN			X
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	WLAN			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		
LPT1				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 Typell HDD)			X	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X	

## 5. O.S. Compatibility Test

Installation Operation System Compatibility Test	Result		
	Pass	Fail	N/A
Fedora Core 13 Kernel 2.6.33.3-85	X		
Windows 7 Ultimate 32Bit	X		
Windows XP Professional English SP3 32 Bit	X		

## 6. 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>			
ATX Power Management Test	X		
AT 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 (RPL/PXE)	X		
Supervisor / User Password Test	X		
CRT / LCD / TV / DVI 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		
USB Onboard Device Function Test	X		
COM Address / IRQ Test	X		
LPT Address / IRQ Test			X
BIOS AWDFLASH Program Test	X		
PC Health	X		
AAEON Tag Check Utility	X		

## 7. Performance Test

### Platform Information

System	AHP-1152
PCB Board	GENE-LN05 (A0.2)
BIOS	AHP-1152 Rev 1.0(010/12/2010)
Operating System	Windows XP Professional English SP3 32 Bit
CPU	Intel® Atom™ Processor D510 (1M Cache, 1.66 GHz)
Memory	Onboard DDR2-667 1GB
SATA HDD	Seagate ST9160412AS 2.5" 160GB SATA HDD
LVDS	Onboard AUO G150XG03 V3
LCD Monitor	Samsung SyncMaster 171s
Chipset Software	Intel(R) Chipset Device Software 9.1.1.1009 3/9/2009
Graphics Media	Intel(R) Graphics Media Accelerator 3150: 6.14.10.5244(2010/03/25)
LAN Driver	Intel(R) 82567V-3 Gigabit Network Connection: 10.1.9.0(2010/4/7) Intel(R) 82583V Gigabit Network Connection: 11.7.32.0(2010/7/8)
Audio Driver	N/A
Power Supply	AC/DC Adapter:FSP084-DMAA1 AC INPUT:100-240V / DC OUTPUT:12V

### Test Result:

Testing Software	Result	Unit
PCMark2002		
CPU	2777	
Memory	7193	
HDD	1499	
Final Reality V1.01—BenchMark Test		
2D image	21.20	
3D	4.03	
Bus transfer	34.62	
Overall	13.77	Reality marks
3Dmark2001		
3DMark2001SE Build 330_Benchmark mode	3012	

Testing Software	Result	Unit
PCMark05		
PCMark	2115	PCMarks
CPU	2007	
Memory	2536	
Graphics	745	
HDD	5573	
3Dmark2003 v360		
3Dmark Score	951	