

Report NO:11I010005

GCS-1500i

Intel Core i7/i5 Mobile processor Green Communication Server

P5 Verification Test Report

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

Issue date

2011/6/3

Approval

Jansin Lee

Test Engineer

Anderson Lin

Version Released Records

Date	Version	Change History	Note
2010/04/21	P3-1001	1. Re-composing test Items	
2010/06/01	P2P3-1001	1. New Test Report	
2010/06/21	P2P3-1002	1. Add BIOS -> SPI ROM Setting (South Bridge - GPIO)	
2010/12/02	P2P2-1003	1. New Test Report	
2011/02/23	P2P3-1101	1. Re-composing test Items	
2011/03/04	P2P3-1102	1. Add Specification Validation	

Note :

For all test items in this report, 3 results have been defined and described as following:

Pass: Functionality work perfectly
Fail: Functionality failed and must be resolved in the next version
N/A: Functionality Not Applicable or Not Available

This test report would be updated when re-test completed in product next change version.

Specification Validation

Main Specification of carrier board

Item	Specification	Result			Note
		Pass	Fail	N/A	
Product Name	GCS-1500i	<input checked="" type="checkbox"/>			
Form Factor	1.5U / 19" Rackmount Fan- less chassis design	<input checked="" type="checkbox"/>			
Processor	Intel Embedded Processor list (Longevity CPU list) Intel® Core i7-620M,Core i5-520M, Intel Celeron P4500	<input checked="" type="checkbox"/>			
Chipset	Intel QM57	<input checked="" type="checkbox"/>			
Display	Intel® Gen 6.0 integrated Graphics Engine CRT resolution up to 1600 x 1200 @ 75MHz DVI resolution up to 1920 x 1080p @ 60MHz	<input checked="" type="checkbox"/>			
Ethernet	4 x PCI-E GbE LAN Chipset LAN1: Intel 82577LM (Supports Intel® AMT 6.0) LAN2: Intel 82574L/82583V LAN3,4: 2 x RTL8111C on I/O board	<input checked="" type="checkbox"/>			
Serial Port	9 x COM port -- 1 x RS-232 COM from M/B -- 8 x RS-232/422/485 w/ isolation from I/O board	<input checked="" type="checkbox"/>			
USB	8 x USB 2.0 Port -- 4 x USB 2.0 on front panel -- 4 x USB 2.0 on rear panel	<input checked="" type="checkbox"/>			
Storage	1 x 2.5" HDD Bay, 1 x CFD socket (by Option)	<input checked="" type="checkbox"/>			
Digital I/O	8 bit (4-in /4-out) programmable	<input checked="" type="checkbox"/>			
Watchdog Timer	1~255 step by software program	<input checked="" type="checkbox"/>			
Front I/O	1 x PWR LED 1 x HDD LED 4 x USB port 4 set LAN LED w/ Active,Link 8 set RS-232/422/485 Tx/Rx status LED	<input checked="" type="checkbox"/>			
Rear I/O	1 x PWR Switch 1 x 3-Pin DC-in Jack 1 x PS/2 KB/MS 1 x VGA port 1 x DVI-I port 4 x GbE RJ-45 w/ Active/Link LED 9 x RS-232/422/485 DB9 port 2 x 4-pin Digital I/O connector	<input checked="" type="checkbox"/>			
Chassis Dimension	430 x 300 x 66 mm (W*D*H)	<input checked="" type="checkbox"/>			
Power Supply	10~30 VDC / 120W Switching PSU (Model No. MPD-810H)	<input checked="" type="checkbox"/>			
Certification	CE/FCC Class A	<input checked="" type="checkbox"/>			

Environmental Specification

Operating temperature	0 ~ 45° C (32 ~ 113° F)
Storage temperature -	-20 ~ 60° C (-4 ~ 140° F)
Storage humidity	10~ 90% @ 40° C, Non-Condensing
Vibration	1.0G , 5~500 Hz / operation
Shock	30G , 11 m/sec duration
Drop	7.5Kg / 76cm

O.S. Support

Item	Specification	Result	Note
Microsoft Windows	Windows 7(32 bit)	☒	
	Windows 7(64 bit)	☒	
	Windows XP(32 bit)	☒	
	Windows XP(64 bit)	☒	
Linux	Linux kernel 2.6.x or above / Fedora	☒	

Platform Information

Item	Device Information	Test Item
System Model	GCS-1500i	1,2,3,4,5,6,7,8,9
PCB Board	IMBI-QM57 A1.1	1,2,3,4,5,6,7,8,9
BIOS / Version	GCS-1500i 1.0(03/02/2011)	1,2,3,4,5,6,7,8,9
CPU Type	Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)	1,2,3,4,5,6,7,8,9
Memory Type	kingston DDR3-1066 4GB	1,2,3,4,5,6,7,8,9
SATA HDD	FUJITSU MHY2080BH 80GB 2.5" sata hd	1,2,3,4,5,6,7,8,9
USB DVD-ROM	LITE-ON USB2.0 DVD-R/W DX-20A4PU	1,2,3,4,5,6,7,8,9
LCD Monitor	Samsung SyncMaster 171S	1,2,3,4,5,6,7,8,9
Compact Flash	Transcend UDMA 4GB CF	1,2,3,4,5,6,7,8,9
Operating System	Windows XP Professional English SP3 32 Bit	1,2,3,4,5,6,7,8,9
	Windows 7Ultimate English 32 Bit / 64 Bit	1,2,3,4,5,6,7,8,9
	Fedora 12	1,2,3,4,5,6,7,8,9
Power Supply	DC Adapter : FSP Model:FSP120-AAB Input:100-240V / Output:19V~6.32A	1,2,3,4,5,6,7,8,9

Summary Table of contents:

GCS-1500i	1
Intel Core i7/i5 Mobile processor Green Communication Server	1
This test report would be updated when re-test completed in product next change version.	2
Specification Validation.....	3
Main Specification of carrier board	3
Environmental Specification	3
O.S. Support	4
Platform Information	4
1. Hardware Test	6
1.1. CPU Compatibility Test	6
1.2. Memory Compatibility Test	6
1.3. SATA Compatibility Test	6
1.4. IDE Compatibility Test	6
1.5. Compact Flash Compatibility Test	6
2. Basic Function Test	7
2.1. Video Function Test	7
2.2. Audio Function Test	9
2.3. LAN Function Test	9
3. Integration Test	15
3.1. USB Port Integration Test	15
3.2. Digital I/O Port Test	15
3.3. COM Port Integration Test	15
3.4. RS-422 / RS-485 Test	15
3.5. LPT Port Test	15
4. Application Test	16
5. Power Consumption Test	18
5-1 PC Health Status	18
6. Time Accuracy Test.....	18
6.1. System Clock & RTC Clock Test	18
6.2. Booting Timer Test	18
6.3. Watchdog Timer Test	18
7. O.S. Compatibility Test	19
7.1. English Fedora Core 12 – Kernel 2.6.31.5- 127.fc12	19
7.2. Windows 7 Ultimate English Version 32/64Bit	20
7.3. Windows XP Professional English Version 32/64Bit	22
8. BIOS Function Test	23
8.1. Boot Sequence Test	23
8.2. Power Management Test	23
8.3. Power On Function Test	23
8.4. Power On after Power Failure Test	25
8.5. CMOS Backup / Clear CMOS Test	25
8.6. AAEON Tag Check Utility	25
8.7. TPM Function Test	25
8.8. IAMT Function Test	25
8.9. Supervisor / User Password Test	25
9. Performance Test	26
9-2. Memory Test	26

1. Hardware Test

1.1. CPU Compatibility Test

CPU Information	Result			Note
	Pass	Fail	N/A	
Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Windows XP
Intel® i7™ Processor 620M (4M Cache, 2.66 GHz)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Windows XP

1.2. Memory Compatibility Test

Memory Information	MEM V4.0			Note
	Pass	Fail	N/A	
kingston DDR3-1066 4GB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transcend DDR3-1066 4GB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.3. SATA Compatibility Test

SATA Device Information	Result			Note
	Pass	Fail	N/A	
FUJITSU MHY2080BH 80GB 2.5" sata hd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.4. IDE Compatibility Test

IDE Device Information	Result			Note
	Pass	Fail	N/A	
WD800BB 3.5 IDE HDD	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Defect No. E101228QEE08

1.5. Compact Flash Compatibility Test

Compact Flash Information	Result			Note
	Pass	Fail	N/A	
Transcend 4GB UDMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Install XP
Transcend 2GB UDMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2. Basic Function Test

2.1. Video Function Test

2.1.1. Single Output Function Test

Hardware Information with XP Professional English SP3 32 Bit Driver Version							
CPU	Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)						
Memory	kingston DDR3-1066 4GB						
HDD/CFD	FUJITSU MHY2080BH 80GB 2.5" sata hd						
VGA	DELL U2410						
DVI	DELL U2410						
TV	N/A						
Color Quality	<input checked="" type="checkbox"/> 16bit <input type="checkbox"/> 24bit <input checked="" type="checkbox"/> 32bit						
Resolution	VGA			DVI			Note
	Pass	Fail	N/A	Pass	Fail	N/A	
640X480	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
800X600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1024X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1152X864	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X600	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X720	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X768	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X960	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X1024	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1400X1050	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X900	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X1200	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X1050	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1792X1344	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1856X1392	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1080	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1200	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1440	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2048X1536	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rotation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rotation (0 / 90 /180 /270)

Note: Pay attention with Full Screen under POST screen and Text Mode.

2.1.2. Dual Output Function Test

Selection	Output	Result			Note
		Pass	Fail	N/A	
Dual Display Clone	VGA + DVI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dual Display Twin		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Extended Desktop		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.1.3. Video Resolution Test

Test points:

1. Power on without inserting any VGA connector until system reaches Windows desktop
2. Plug VGA connector into test machine while system reaches Windows then check VGA driver and display
3. Check VGA output Brightness is normal and it shows "Ghost Image" / "Flicker" or not

	Result			Note
	Pass	Fail	N/A	
In Windows Desktop	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.1.4. Video Resolution Test

LVDS Model		Result			Note
		Pass	Fail	N/A	
LVDS	1_AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LM-200604
	2_AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LM-200608
	3_Data Image 7" / 800*480 / 18bit (16:9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	4_AU G084SN05 V.3 / 8.4" / 800*600 / 18bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	5_AU B104SN02 V.0 / 10.4" / 800*600 / 18bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	6_AUO G084SN05 v7 / 8.4" / 800*600 / 24bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	7_AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LM-200904
	8_AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	9_Toshiba /12.1"/1280 x 768 x 18bit (16:9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LM-200801
	10_AU M170EG01 V.D/ 17" / 1280*1024 / 48bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	11_AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	12_AUO T260XW02 / 26" / 1366x768 / 24bit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	13_AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	14_AUO T370HW01 / 37" / 1920x1080 / 48bit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	15_AUO M190PW01 V0 / 19"/1440X900/48 bit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	













2.2. Audio Function Test

[X] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
L (Left) Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R (Right) Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CD_In	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Line In	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MICROPHONE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6-channel mode for 5.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8-channel mode for 7.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S/P DIF function Test	Input	<input type="checkbox"/>	<input type="checkbox"/>	
	Output	<input type="checkbox"/>	<input type="checkbox"/>	

2.3. LAN Function Test

[] No Support

Connect two computers via different speed LAN HUB by using "Ping" instruction (1000 times)										
1000MBps LAN HUB		D-Link DGS-1008D								
100MBps LAN HUB		HP J4095A 24 Ports								
10MBps LAN HUB		SVEC FD916H								
OnBoard LAN1	Intel® 82583V Gigabit Network Connection						MAC Address	00-07-32-00-00-02		
OnBoard LAN2	Intel® 82577LM Gigabit Network Connection						MAC Address	88-88-88-88-87-88		
OnBoard LAN3	Realtek RTL8111C on I/O board #1						MAC Address	00-07-32-10-44-A0		
OnBoard LAN4	Realtek RTL8111C on I/O board #2						MAC Address	00-07-32-10-44-A0		
LAN Speed	Link / Active LED	Speed LED	LAN 1			LAN 2			Note	
			Pass	Fail	N/A	Pass	Fail	N/A		
1000MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
100MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Wake On LAN			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Boot ROM to Novell 4.11 [RPL]			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
LAN Boot (PXE)			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Internet Browser (DHCP Server)			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
LAN Speed	Link / Active LED	Speed LED	LAN 3			LAN 4			Note	
			Pass	Fail	N/A	Pass	Fail	N/A		
1000MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
100MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Wake On LAN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot ROM to Novell 4.11 [RPL]	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LAN Boot (PXE)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internet Browser (DHCP Server)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.3.2. Throughput Test

DUT Platform Information:

<input type="checkbox"/>	Fedora Core 14 Kernel 2.6.35.6-45.fc14
<input type="checkbox"/>	Cent 5.5
<input checked="" type="checkbox"/>	Ubuntu 10.10 Kernel 2.6.35
<input type="checkbox"/>	Red Hat

Note : Connection-Level Performance (Interaction Constants Duration Time Set to 60 Sec.)

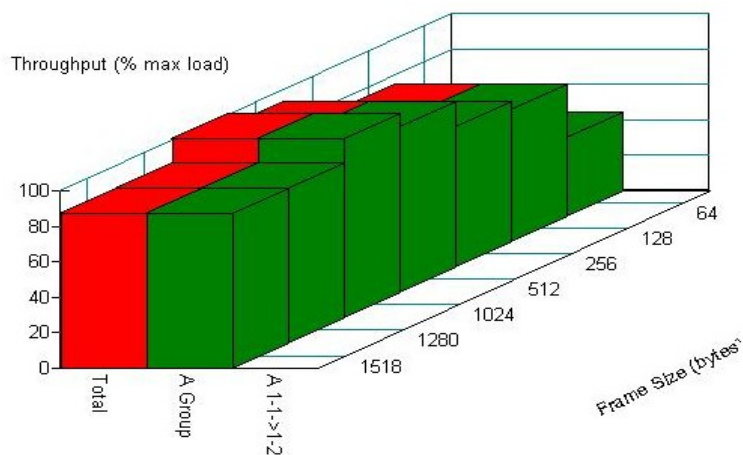
Graphics Media	Ubuntu Default setting
LAN	LAN1→ Intel® 82583V Gigabit Network Connection Ethernet: Intel® PRO/1000 Network Driver Rev. 1.0.2-k4
	LAN2→ Intel® 82577LM Gigabit Network Connection Ethernet: Intel® PRO/1000 Network Driver Rev. 1.0.2-k4
	LAN3→ Realtek RTL8111C on I/O board #1 Ethernet: Realtek RTL-8169 Gigabit Ethernet driver Rev. 2.3LK-NAPI
	LAN4→ Realtek RTL8111C on I/O board #2 Ethernet: Realtek RTL-8169 Gigabit Ethernet driver Rev. 2.3LK-NAPI
Audio Driver	Ubuntu Default setting

SMB Platform Information:

Chassis	SPIRENT Smartbits 600B
Chassis Version	2.80.003 (Cur) 2.50.000
Chassis Serial #	06014047
Library	6.00-29
API	5.50.42.01
File	0550042
Module	2 * LAN-3324A SmartMetrics XD 4-Port 10/100/1000Base-T Gigabit Ethernet
Test Software	SmartFlow5.50.42.1

Test Result:

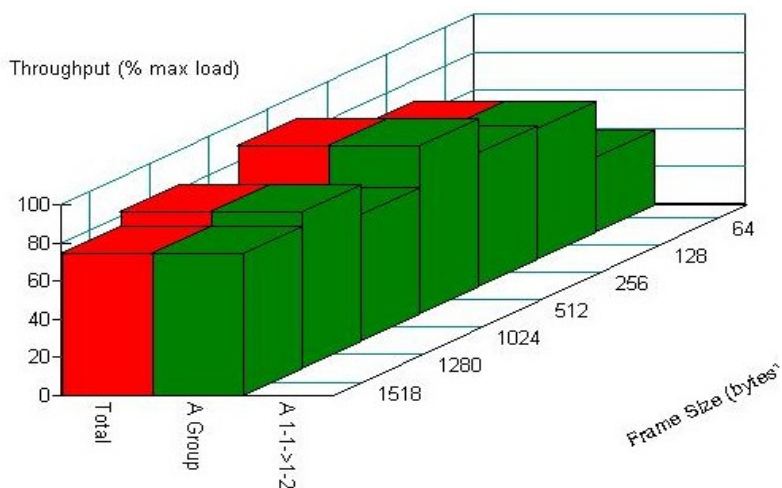
1. Half Direction (LAN1: Intel® 82583V 10/100/1G Ethernet → LAN2: Intel® 82577LM 10/100/1G Ethernet)



Throughput vs Frame Size

<u>Name/Framesize</u>	<u>64</u>	<u>128</u>	<u>256</u>	<u>512</u>	<u>1024</u>	<u>1280</u>	<u>1518</u>
Total	44.3125	73.703125	78.34375	93.0390625	100	86.8515625	86.8515625
A Group	44.3125	73.703125	78.34375	93.0390625	100	86.8515625	86.8515625
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A

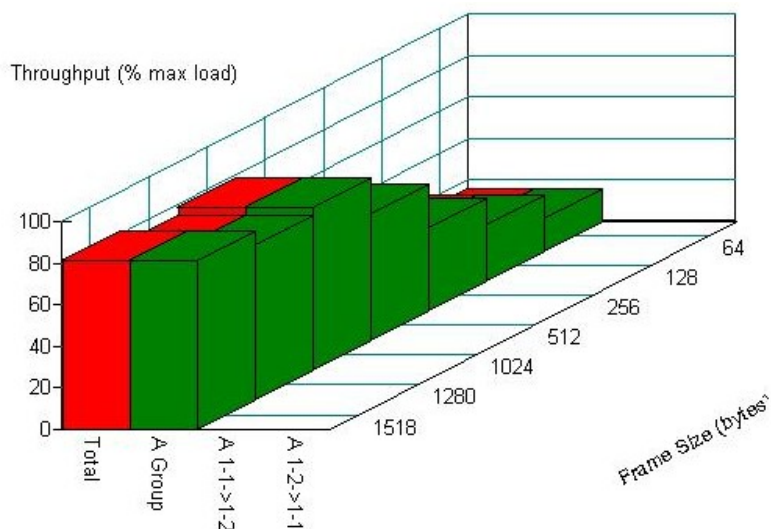
2. Half Direction (LAN1: Realtek RTL81111C 10/100/1G Ethernet → LAN2: Intel® 82577LM 10/100/1G Ethernet)



Throughput vs Frame Size

<u>Name/Framesize</u>	<u>64</u>	<u>128</u>	<u>256</u>	<u>512</u>	<u>1024</u>	<u>1280</u>	<u>1518</u>
Total	38.8984375	68.2890625	69.8359375	87.625	65.96875	81.4375	73.703125
A Group	38.8984375	68.2890625	69.8359375	87.625	65.96875	81.4375	73.703125
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A

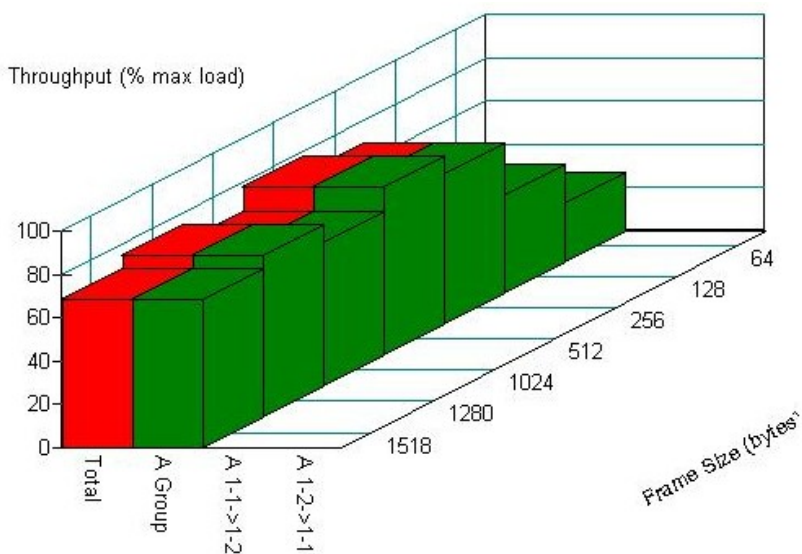
3. Half Direction (LAN1: Realtek RTL81111C 10/100/1G Ethernet → LAN2: Realtek RTL81111C 10/100/1G Ethernet)



Throughput vs Frame Size

<u>Name/Frame Size</u>	<u>64</u>	<u>128</u>	<u>256</u>	<u>512</u>	<u>1024</u>	<u>1280</u>	<u>1518</u>
Total	15.6953125	26.5234375	39.671875	60.5546875	77.5703125	73.703125	80.6640625
A Group	15.6953125	26.5234375	39.671875	60.5546875	77.5703125	73.703125	80.6640625
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A 1-2->1-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

4. Binary Direction (LAN1: Intel® 82583V 10/100/1G Ethernet → LAN2: Intel® 82577LM 10/100/1G Ethernet)

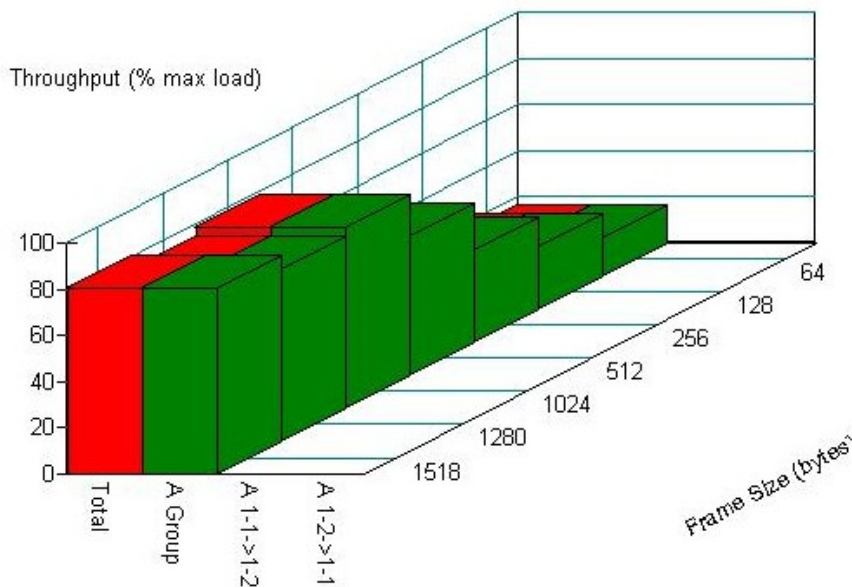


Throughput vs Frame Size

<u>Name/Frame Size</u>	<u>64</u>	<u>128</u>	<u>256</u>	<u>512</u>	<u>1024</u>	<u>1280</u>	<u>1518</u>
Total	26.5234375	45.0859375	69.0625	76.796875	65.96875	73.703125	68.2890625
A Group	26.5234375	45.0859375	69.0625	76.796875	65.96875	73.703125	68.2890625
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A 1-2->1-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

5. Binary Direction (LAN1: Realtek RTL8111C 10/100/1G Ethernet → LAN2: Realtek RTL8111C 10/100/1G Ethernet)

Ethernet)



Throughput vs Frame Size

<u>Name/Framesize</u>	<u>64</u>	<u>128</u>	<u>256</u>	<u>512</u>	<u>1024</u>	<u>1280</u>	<u>1518</u>
Total	16.46875	26.5234375	39.671875	59.78125	77.5703125	73.703125	79.890625
A Group	16.46875	26.5234375	39.671875	59.78125	77.5703125	73.703125	79.890625
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A 1-2->1-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2.4. Others Function Test

[X] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
3G Module				
GPRS				
Wireless LAN				
Bluetooth				

3. Integration Test

	Hardware Information with XP Professional English SP3 32 Bit Driver Version
CPU	Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)
Memory	kingston DDR3-1066 4GB
HDD/CFD	FUJITSU MHY2080BH 80GB 2.5" sata hd

3.1. USB Port Integration Test

Item	USB Port	Boot			Function(XP)			Note
		Pass	Fail	N/A	Pass	Fail	N/A	
USB HDD		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB FDD Mitsumi D353GUE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LITEON DX-20A4PU USB-DVD RW		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Hub Test (Connect USB Device) HUB Port1: USB Keyboard / HUB Port2: USB Mouse / HUB Port3: USB HDD								
USB 2.0 HUB PowerSync / USB 2.0 4 Port HU-155					<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.2. Digital I/O Port Test

DIO Address	Result			Notes
	Pass	Fail	N/A	
DIO VCC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.3. COM Port Integration Test

Test Item	Result			Notes
	Pass	Fail	N/A	
Serial Modem Dial Out	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Serial Modem Ring In	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Modem
Serial Modem +12V	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test by Multimeter
Serial Modem +5V	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test by Multimeter

3.4. RS-422 / RS-485 Test

Test Item	Result			Notes
	Pass	Fail	N/A	
RS-422 for COM2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Use loopback and WINSSD.exe to test RS-422 in Windows
RS-485 for COM2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The communication between the RS-485 pots of two boards is linked by one 300m cable on Windows Terminal

3.5. LPT Port Test

Test Item	Result			Notes
	Pass	Fail	N/A	
XEROX Phaser 3124 Laser Printer	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

4. Application Test

4-1. PCI Slot Function (PCI Adapter Card) Test No Support

PCI Card	Function			Note
	Pass	Fail	N/A	

4-2. PCI-Express Function Test No Support

PCI-Express x1	Function			Note
	Pass	Fail	N/A	

4-3. Mini PCI Card Compatibility Test No Support

Mini PCI Card	Function			Note
	Pass	Fail	N/A	

4-4. CardBus (PCMCIA) Compatibility Function Test No Support

CardBus (PCMCIA)	Function			Note
	Pass	Fail	N/A	

4-5. Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules

4-5.1. Device List: PC/104 Module No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3660				

4-5.2. Device List: PC/104+ Module No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3430				

4-5.3. Device List: PCI-104 Module No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PCM-3730				

4-5.4. Device List: PCI/104 Express Module No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
AAEON PER-123				

4-6. SSD Modules Compatibility Test

SSD HDD Compatibility Test:

Cable Type: IDE SATA2 MLC SLC No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
Transcend SSD 16G - TS16GSSD25S				

4-7. Peripheral Compatibility- Storage Device Test

4-7.1. Disk on Chip (DOC) Test No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
DOC 2000 Model	16MB			M-System / MD2200-D16
DOC 2000 Onboard Address	CC00			
	D000			
	D400			
	D800			
	DC00			
	Disable			

4-7.2. Disk on module (DOM) Test No Support

Test Item	Result			Notes
	Pass	Fail	N/A	
Transcend / TS512MDOM40V / 512MB / IDE 40 Pin				
Transcend / TS512MDOM44V / 512MB / IDE 44 Pin				

5. Power Consumption Test

	Hardware Information with XP Professional English SP3 32 Bit Driver Version
CPU	Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)
Memory	kingston DDR3-1066 4GB
HDD/CFD	FUJITSU MHY2080BH 80GB 2.5" sata hd

5-1 PC Health Status

Test Point: The value between Actual Voltage and Voltage Monitor must be + /- 5%

Voltage Monitoring Test	Result			In Bios(V)	Note
	Pass	Fail	N/A		
VCORE	<input checked="" type="checkbox"/>			0.944	
Vcc 3.3V	<input checked="" type="checkbox"/>			3.328	
Vcc 1.5V	<input checked="" type="checkbox"/>			1.520	
Vcc 5V	<input checked="" type="checkbox"/>			5.049	
Vsb 5V	<input checked="" type="checkbox"/>			5.076	
Vcc12V	<input checked="" type="checkbox"/>			11.904	
VBAT	<input checked="" type="checkbox"/>			3.216	
System Temperature 1	<input checked="" type="checkbox"/>			59°C	
System Temperature 2	<input checked="" type="checkbox"/>			51°C	
CPU Temperature	<input checked="" type="checkbox"/>			54°C	

6. Time Accuracy Test

6.1. System Clock & RTC Clock Test

Under Room Temperature: 26 °C

Item Function	Time Interval	Criteria	Actual	Result			Note
				Pass	Fail	N/A	
RTC Clock in Power On Mode	24 hrs	+/-2 sec	-1 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RTC Clock in Power Off Mode	24 hrs	+/-2 sec	-1 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.2. Booting Timer Test

Installation	Actual	Note
System Booting Time	6.48 Sec	Press the Power Button till "Beep" Sound appears

6.3. Watchdog Timer Test

Use Function as below: ADU313

[] No Support.

Time-Out Interval	Criteria	Actual	Result			Note
			Pass	Fail	N/A	
10 sec	+/-10 %	10.8 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60 sec	+/-10 %	65.6 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
255 sec	+/-10 %	262.7 Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Note : Under Room Temperature: 26°C / DOS Mode

7. O.S. Compatibility Test

7.1. English Fedora Core 12 – Kernel 2.6.31.5- 127.fc12

[] No Support

Driver Information:

Chipset Software	Fedora 12 Default driver
Graphics Media	Fedora 12 Default driver
Audio Driver	Fedora 12 Default driver
LAN Driver	Fedora 12 Default driver

Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
Kernel 2.6.31.5- 127.fc12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Type uname -a

Test Result:

Test Item	Result			Note
	Pass	Fail	N/A	
Display Function Test				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Network Function Test				
Connect to Internet – LAN 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connect to Internet – LAN 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connect to Internet – LAN 3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Connect to Internet – LAN 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audio Function Test				
Play Audio Function Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Play Audio Test
Base Function Test				
Mouse Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Keyboard Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CD-ROM Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X Windows Application				
Start Button Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Office function
X-Window	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Startx – Desktop in Linux
Command Test On Text Mode: Attention Delay Phenomenon				
uname -a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Show information
Shutdown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Init 0 or shutdown -h now
Restart the Computer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Init 6 or shutdown -r now
Halt	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Power Off Mode
ls / clear; cd /dev /ls -l	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Command instruction

7.2. Windows 7 Ultimate English Version 32/64Bit

[] No Support

[X] x32 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(11/02/2009)
Graphics Media	Intel Graphics Media Accelerator HD 8.15.10.1995(11/06/2009)
LAN Driver	Intel(R)82577LM Gigabit Network Connection 11.2.19.0(2009/09/23)
	Intel(R) Gigabit CT Desktop network Connection 11.0.103.0(2009/07/14)
	Realtek RTL8111C PCI-E Gigabit 7.34.1130.2010 (11/30/2010)
	Realtek RTL8111C PCI-E Gigabit 7.34.1130.2010 (11/30/2010)
Audio Driver	N/A

[] No Support

[X] x64 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(11/02/2009)
Graphics Media	Intel Graphics Media Accelerator HD 8.15.10.1995(11/06/2009)
LAN Driver	Intel(R)82577LM Gigabit Network Connection 11.2.19.0(2009/09/23)
	Intel(R) Gigabit CT Desktop network Connection 11.0.103.0(2009/07/14)
	Realtek RTL8111C PCI-E Gigabit 7.34.1130.2010 (11/30/2010)
	Realtek RTL8111C PCI-E Gigabit 7.34.1130.2010 (11/30/2010)
Audio Driver	N/A

Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Windows 7 Ultimate ACPI Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Test Results:

Test Item	Result			Note
	Pass	Fail	N/A	
Single Display				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot - Windows 7 Ultimate Advanced Options Menu				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Basic Function Test				
PS/2 Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COM Port Mouse detect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LPT1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN Function Test				
LAN1 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN2 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN3 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN4 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audio Function Test				
Line Out Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Microphone Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S/P DIF Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Start Menu				

Log off User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shut down (S5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hibernate (S4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

7.3. Windows XP Professional English Version 32/64Bit

[] No Support

[X] x32 Driver Information:

Chipset Software	Intel(R) Chipset Device Software: 9.1.1.1023(11/02/2009)
Graphics Media	Intel Graphics Media Accelerator 6.14.10.5179 (11/9/2009)
LAN Driver	Intel(R)82577LM Gigabit Network Connection 11.2.19.0(2009/09/23)
	Intel(R Gigabit CT Desktop network Connection 11.1.6.0(2009/07/13)
	Realtek RTL8111C PCI-E Gigabit 5.776.1111.2010 (11/11/2010)
	Realtek RTL8111C PCI-E Gigabit 5.776.1111.2010 (11/11/2010)
Audio Driver	N/A

[X] No Support

[] x64 Driver Information:

Chipset Software	
Graphics Media	
LAN Driver	
Audio Driver	

Install OS to IDE HDD/SATA HDD/ CF Card:

Installation	Result			Note
	Pass	Fail	N/A	
English Windows XP Professional ACPI Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Test Results:

Test Item	Result			Note
	Pass	Fail	N/A	
Single Display				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot - Windows XP Professional Advanced Options Menu				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Basic Function Test				
PS/2 Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Mouse and Keyboard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COM Port Mouse detect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LPT1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB 2.0 Removable Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN Function Test				
LAN1 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN2 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN3 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN4 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audio Function Test				
Line Out Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Microphone Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S/P DIF Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Start Menu				
Log off User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Shut down (S5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Standby	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hibernate (S4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8. BIOS Function Test

	Hardware Information with Win 7 Ultimate English 32 Bit Driver Version
CPU	Intel® i5™ Processor 520M (3M Cache, 2.60 GHz)
Memory	kingston DDR3-1066 4GB
HDD	FUJITSU MHY2080BH 80GB 2.5" sata hd

8.1. Boot Sequence Test

Test Item	Result			Note
	Pass	Fail	N/A	
Floppy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hard Disk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Removable (All Device Priority)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CDROM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USB HDD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Floppy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB CD-ROM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN [Boot From LAN First]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Check "Halt on" item – All error but K/B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

8.2. Power Management Test

8.2.1. APM Power Management Test

Test Item	Setting Test	Result			Note
		Pass	Fail	N/A	
Suspend Mode	Function Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Power Button	Delay 4 Sec	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soft-Off By PWRBTN
Power Button	Instant-Off	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Soft-Off By PWRBTN

8.2.2. ACPI Power Management Test

Test Item	Result			Note
	Pass	Fail	N/A	
Enable ACPI Auto Configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Enable Hibernation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ACPI - S1 (POS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Resume from PS/2 keyboard or mouse.
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Resume from USB keyboard or mouse.
ACPI - S3 (STR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Suspend Disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8.3. Power On Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
Password	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hot KEY	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

MOUSE Move & Click	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOUSE Click	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Any KEY	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
BUTTON ONLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8.4. Power On after Power Failure Test

Test Item	Result			Note
	Pass	Fail	N/A	
Off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
On	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Former-Sts (Auto)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8.5. CMOS Backup / Clear CMOS Test

Test Item	Result			Note
	Pass	Fail	N/A	
CMOS Backup	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clear CMOS Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Only Changed date and time

8.5.1 After Clear CMOS , Display will show " CMOS Checksum Error"

Test Item	Result			Note
	Pass	Fail	N/A	
CMOS Checksum Error	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

8.6. AAEON Tag Check Utility

Test Item	Result			Note
	Pass	Fail	N/A	
Check AAEON BIOS OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AONCHECK.EXE

8.7. TPM Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
Enable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Detect TPM device under Windows.

8.8. IAMT Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
IAMT Function	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

8.9. Supervisor / User Password Test

Test Item	Result			Note
	Pass	Fail	N/A	
Supervisor Password	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
User Password	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

9. Performance Test

9-1. Performance Test

Test Result: (Display set 1366*768 test)

Testing Software	Scope		Note
	AAEON	Ref.	
PCMark2002			Windows XP Professional
CPU	9541	-	
Memory	32109	-	
HDD	1079	-	
Benchmark (A)	-		
PCMark2005			Windows XP Professional
PCMark	4015	-	PCMarks
CPU	6499	-	
Memory	5411	-	
Graphics	2246	-	
HDD	3969	-	
Benchmark (B)	-		
Average Efficiency	-		

Testing Software	Scope		Note
	AAEON	Ref.	
3Dmark2003 v360			Windows XP Professional
3Dmark Score	3304	-	
CPU Score	629	-	
Benchmark (A)	-		
3Dmark2005 v130			Windows XP Professional
3Dmark Score	2229	-	
CPU Score	3758	-	
Benchmark (B)	-		
Average Efficiency	-		

Testing Software	Scope		Note
	AAEON	Ref.	
Final Reality V1.01—BenchMark Test			Windows XP Professional
2D image	54.08	-	
3D	4.34	-	
Bus transfer	72.60	-	
Overall	29.50	-	Reality marks
Benchmark (A)	-		

9-2. Memory Test

Test Item	Result			Note
	Pass	Fail	N/A	
MEM v4.10 Overnight Test	<input checked="" type="checkbox"/>			