

# ACP-5215HTT-A1-1010

## Fanless Touch Panel with Intel Core

### 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

2012/03/26

Approval

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Test Engineer

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**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	P2P3-1003	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

Item	Specification	Result			Note
		Pass	Fail	N/A	
Processor	Support Intel i7-620M / i5-520M / P4500	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Display	21.5", 1920 x1080, 250 nit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Touch Screen	Projected Capacitive Touch Window	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CPU Board	EPIC-QM57	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
System Memory	DDR3 800/1066,SODIMM (204pin) x 1, 2GB, Max. 4GB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Storage	SATA 2.5" HDD bay x 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rear I/O	Smart card reader x 1(Optional) (USB2.0 interface) (Inside the system) Barcode scanner x 1(Optional) (1-D scanner)(USB interface) (bottom of the system) Skype Phone x1(Optional) (USB interface) (Option) (side of system) MSR x1(Optional) (USB interface) 2W Speaker x 2 WiFi x1 IEEE 802.11b/g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Side I/O	2x USB 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bottom I/O	USB 2.0 x 4 RS-232 x 1 LAN x 2 VGA x 1 Power input x 1 Line out x 1 ATX power button	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Expansion	PCIe Mini Card x 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mounting	VESA / Desktop mount	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power Supply	ATX Power function DC Input 12 V w/ lock connector Built-in AC/DC power adapter , input voltage range 100~240 V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Front Button	WebCam x 1 1.3M pixel, USB interafce Brightness up/down x2 Volume up/down x 2 Backlight on/off x 1 RF ID reader x 1(Optional) Support 13.56Hz frequency, USB interface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Touch Button	1.Backlight + 2.Backlight - 3.Volume + 4.Volume - 5.Backlight on/off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**O.S. Support**

Item	Specification	Result			Note
		Pass	Fail	N/A	
Microsoft Windows	Windows XP Pro (32-bit )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Windows 7 (32-bit & 64-bit)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Linux	Fedora Linux 2.6.30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Environmental Specifications**

Item	Specification
Operating temperature	32°F ~ 104°F (0°C ~ 40°C) ( HDD )
Storage temperature	-4 ~ 158° F (-20 ~ 70° C)
Storage humidity	5 ~ 90% @ 40C, non-condensing
Vibration	1G RMS / 5~ 500Hz / operation – With HDD
Shock	20G peak acceleration (11 msec. duration) – With HDD
Drop	1 Cycle, 61cm(High) (1 Corner, 3 Edge, 6 Surface)
EMC	CE /FCC class A

**Note:** Please refer to Environment Test Report for detail information

## Platform Information

Item	Device Information	Test Item
System Model/Version	ACP-5215HTT-A1-1010	1,2,3,4,5,6,7,8,9
PCB Model / Version	EPIC-QM57 A1.0	1,2,3,4,5,6,7,8,9
CPU Board	N/A	N/A
Carrier Board	N/A	N/A
BIOS / Version	ACP-5215 R1.0 (ACP5AM10) (01/16/2012)	1,2,3,4,5,6,7,8,9
CPU Type	Intel® Core™ i7 CPU 620M @ 2.67GHz Intel® Core™ i5 CPU 520M @ 2.40GHz	1,2,3,4,5,6,7,8,9
Memory Type	DSL DDR3 1066 4GB	1,2,3,4,5,6,7,8,9
SATA HDD	TOSHIBA 2.5" SATA2 160GB-MK1665GSX Seagate 2.5" SATA 80GB-ST980817SM	1,2,3,4,5,6,7,8,9
SATA DVD-ROM	N/A	N/A
USB DVD-ROM	AOpen USB2.0 DVD-ROM EDR8865U	1,2,3,4,5,6,7,8,9
LCD Monitor	HANNS.G LCD Monitor HK191H - HSG1049	1,2,3,4,5,6,7,8,9
LVDS	21.5", 1920 x1080, 250 nit	1,2,3,4,5,6,7,8,9
Compact Flash	N/A	N/A
Daughter Board	N/A	N/A
Expansion Board	N/A	N/A
Operating System	<input type="checkbox"/> Linux	
	<input checked="" type="checkbox"/> Fedora Core 14 – Kernel 2.6.35.6- 45.fc14.i686	7-1
	<input checked="" type="checkbox"/> Windows 7 Ultimate 32/64Bit	7-2
	<input checked="" type="checkbox"/> Windows XP Professional English SP3 32 Bit	7-3
Power Supply	AC/DC Adapter FSP084-DMAA1 DC Output: 12V 7A AC Input:100-240V 1.3A 50-60Hz	1,2,3,4,5,6,7,8,9
Battery Model	N/A	N/A
<b>Chipset Information with Windows 7 Ultimate English Version 32 Bit Driver Version</b>		
Chipset Software	Intel® Chipset Device Software 9.1.1.1020(08/26/2009)	
North Bridge	Intel Arrandale	
South Bridge	Ibex peak M PCH	
Super IO Chipset	ITE 8781F	
VGA Chipset	Intel® Graphics Media Accelerator HD 8.15.10.1986(10/30/2009)	
Audio Chipset	VIA High Definition Audio 6.0.1.7300(7/10/2009)	
Ethernet Chipset	Intel® Gigabit CT Desktop Adapter 11.0.103.0(7/14/2009)	
	Intel® 82577LM Gigabit Network Connection 11.2.19.0(9/23/2009)	

## Summary Table of contents:

Fanless Touch Panel with Intel Core .....	1
Specification Validation .....	3
Main Specification .....	3
Environmental Specifications .....	4
Platform Information .....	5
1. OSD Control Function Test.....	7
1.1. OSD Control Test .....	7
1.2. OSD - On Screen Display Test.....	7
1.3. OSD Light Test.....	7
1.4. Modular System Industrial Workstation Function Test.....	7
1.5. Mechanism construction check .....	8
2. Basic Function Test.....	9
2.1. Video Function Test .....	9
2.2. Audio Function Test .....	11
2.3. LAN Function Test .....	11
2.4. Optional Function Test .....	13
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.....	16
3.6. Burn In Test .....	16
4. Application Test.....	17
4.1. PCI Slot Function (PCI Adapter Card) Test .....	17
4.2. PCI-Express Function Test.....	17
4.3. Mini PCI Card Compatibility Test .....	18
4.4. CardBus (PCMCIA) Compatibility Function Test .....	18
4.5. ISA Slot Function Test .....	18
4.6. Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104.....	18
4.7. SSD Modules Compatibility Test .....	19
4.8. Peripheral Compatibility- Storage Device Test .....	19
4.9. Riser Card Function Test .....	19
5. Power Consumption Test .....	20
5.1. PC Health Status .....	20
6. Time Accuracy Test.....	21
6.1. System Clock & RTC Clock Test.....	21
6.2. Booting Timer Test .....	21
6.3. Watchdog Timer Test .....	21
7. O.S. Compatibility Test .....	22
7.1. English Fedora Core 14 – Kernel 2.6.35.6- 45.fc14.i686 .....	22
7.2. Windows 7 Ultimate English Version 32/64Bit .....	23
7.3. Windows XP Professional English Version 32/64Bit .....	24
8. BIOS Function Test .....	25
8.1. Boot Sequence Test .....	25
8.2. Power Management Test.....	25
8.3. Power On after Power Failure Test.....	25
8.4. AAEON Tag Check Utility.....	25
8.5. TPM Function Test.....	26
8.6. IAMT Function Test.....	26
8.7. Supervisor / User Password Test .....	26
8.8. CAN port Function Test.....	26
9. Performance Test .....	27

# 1. OSD Control Function Test

## 1.1. OSD Control Test

OSD Control Function	Function			Note
	Pass	Fail	N/A	
Auto	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Backlight+	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Backlight-	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Volume+	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Volume-	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MENU	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
DOWN	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
POWER	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EXIT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

## 1.2. OSD - On Screen Display Test

OSD - On Screen Display	Function			Note
	Pass	Fail	N/A	
Input Source	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OSD Control by system
PIP Enable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Auto Tune	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Backlight	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Brightness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Contrast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Color	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Position	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Language	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Recall	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Save Exit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cancel Exit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

## 1.3. OSD Light Test

OSD Control Function	Function			Note
	Pass	Fail	N/A	
Power off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power on	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stand by	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Into S1 / S3 and see light function

## 1.4. Modular System Industrial Workstation Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
AC power outlet / inlet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power On / Off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power LED	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
H.D.D LED	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CD-ROM drive included	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Floppy drive included	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Lockable front-panel door	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Finger mouse	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

59 Data-entry&amp;20/24 Function keys

## 1.5. Mechanism construction check

Test Item	Result			Note
	Pass	Fail	N/A	
Case construction check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCMCIA construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CF Card construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Please check both ( Type I and Type II )
Component check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Smart card reader construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ACP-5215 and ACP-5185 uses the same main board, the only difference is panel size, all other functions are the same. ACP-5185 has been tested with smart card reader, therefore it will not be tested in ACP-5215
Webcam construction check	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ACP-5215 and ACP-5185 uses the same main board, the only difference is panel size, all other functions are the same. ACP-5185 has been tested with webcam, therefore it will not be tested in ACP-5215



## 2. Basic Function Test

### 2.1. Video Function Test

#### 2.1.1. Single Output Function Test

Hardware Information with Windows 7 Ultimate English Version 32 Bit Driver Version										
CPU	Intel® Core™ i7 CPU 620M @ 2.67GHz									
Memory	DSL DDR3 1066 4GB									
SATA HDD	TOSHIBA 2.5" SATA2 160GB-MK1665GSX									
VGA	VE228									
DVI	N/A									
TV	N/A									
Color Quality	<input checked="" type="checkbox"/> 16bit <input type="checkbox"/> 24bit <input checked="" type="checkbox"/> 32bit									
Resolution	VGA			DVI			LVDS			Note
	Pass	Fail	N/A	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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
800X600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1024X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1152X864	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X720	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X960	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1280X1024	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1333X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1400X900	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1400X1050	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1600X900	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1600X1200	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X1050	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1792X1344	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1920X1080	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1920X1200	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rotation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rotation ( 0 / 90 /180 /270)

Note: Pay attention to 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dual Display Twin		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Extended Desktop		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dual Display Clone	VGA + LVDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dual Display Twin		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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	
1_AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2_AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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"/>	
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"/>	
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

[ ] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
L (Left) Channel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R (Right) Channel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CD_In	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line In	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Line Out	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MICROPHONE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6-channel mode for 5.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8-channel mode for 7.1 speaker output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S/P DIF function Test	Input	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Output	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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							
On Board LAN1		Intel® Gigabit CT Desktop Adapter				MAC Address		00-07-32-1C-6F-A6	
On Board LAN2		Intel® 82577LM Gigabit Network Connection				MAC Address		00-07-32-1C-6F-A5	
LAN Speed	Link / Speed LED	Active 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"/>	

### 2.3.2. Throughput Test

DUT Platform Information:

<input type="checkbox"/>	Fedora Core 13
<input checked="" type="checkbox"/>	Cent 5.5 kernel 2.6.18-194
<input type="checkbox"/>	Ubuntu 10.1
<input type="checkbox"/>	Red Hat

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

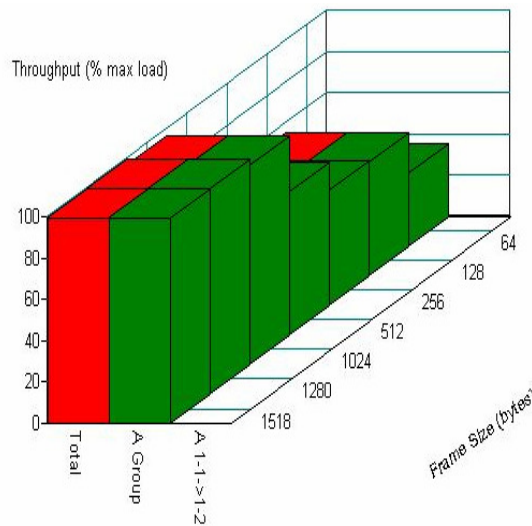
Graphics Media	System Default
LAN	LAN1 → Intel® Gigabit CT Desktop Adapter Ethernet: System Default
	LAN2 → Intel® 82577LM Gigabit Network Connection Ethernet: System Default
Audio Driver	System Default

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:

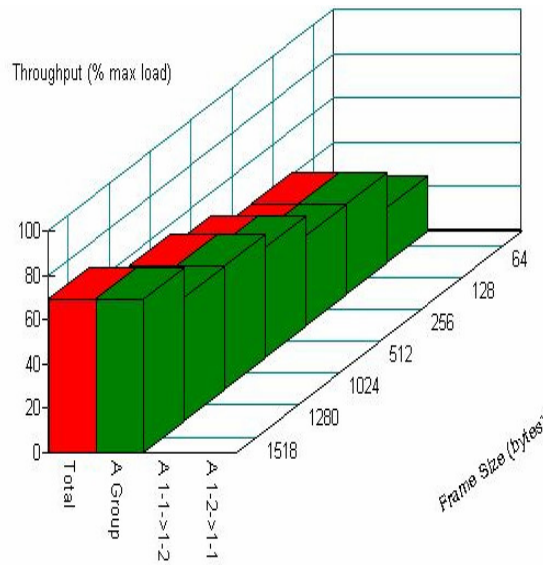
1.Half Direction (LAN1: Intel® Gigabit CT Desktop Adapter 10/100/1G Ethernet → LAN2: Intel® 82577LM Gigabit Network Connection 10/100/1G Ethernet)



Throughput vs Frame Size

Name/Frame size	64	128	256	512	1024	1280	1518
Total	35.03125	54.3671875	55.140625	69.0625	96.1328125	99.2265625	99.2265625
A Group	35.03125	54.3671875	55.140625	69.0625	96.1328125	99.2265625	99.2265625
A 1-1->1-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Binary Direction (LAN1: Intel® Gigabit CT Desktop Adapter 10/100/1G Ethernet → LAN2: Intel® 82577LM Gigabit Network Connection 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	24.203125	40.4453125	40.4453125	48.953125	55.140625	55.140625	69.0625
A Group	24.203125	40.4453125	40.4453125	48.953125	55.140625	55.140625	69.0625
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. Optional Function Test

[ ] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
3G Module	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
GPS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wireless LAN (AWM-S0021M)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bluetooth	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Webcam	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ACP-5215 and ACP-5185 uses the same main board, the only difference is panel size, all other functions are the same. ACP-5185 has been tested with webcam, therefore it will not be tested in ACP-5215

Smart card reader (USB2.0 interface) (Inside the system)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ACP-5215 and ACP-5185 uses the same main board, the only difference is panel size, all other functions are the same. ACP-5185 has been tested with smart card reader, therefore it will not be tested in ACP-5215
Barcode scanner (1-D scanner)(USB interface) (bottom of the system)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Skype Phone (USB interface) (Option) (side of system)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MSR (USB interface)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3. Integration Test

Hardware Information with Windows 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel® Core™ i7 CPU 620M @ 2.67GHz
Memory	DSL DDR3 1066 4GB
SATA HDD	TOSHIBA 2.5" SATA2 160GB-MK1665GSX
Chipset Information with Windows 7 Ultimate English Version 32 Bit Driver Version	
Chipset Software	Intel® Chipset Device Software 9.1.1.1020(08/26/2009)
North Bridge	Intel Arrandale
South Bridge	Ibex peak M PCH
Super IO Chipset	ITE 8781F
VGA Chipset	Intel® Graphics Media Accelerator HD 8.15.10.1986(10/30/2009)
Audio Chipset	VIA High Definition Audio 6.0.1.7300(7/10/2009)
Ethernet Chipset	Intel® Gigabit CT Desktop Adapter 11.0.103.0(7/14/2009) Intel® 82577LM Gigabit Network Connection 11.2.19.0(9/23/2009)

#### 3.1. USB Port Integration Test

Item	USB Port	Boot			Function(Win 7)			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"/>	
AOpen USB2.0 DVD-ROM EDR8865U		<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			Note
	Pass	Fail	N/A	
DIO VCC +5V	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

#### 3.3. COM Port Integration Test

Test Item	Result			Note
	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			Note
	Pass	Fail	N/A	
RS-422 for COM2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Use loopback and WINSSD.exe to test RS-422 in Windows
RS-485 for COM2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Use ICP CON I-7044D D/IO Module in Windows(Support Auto flow control)
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The communication between the RS-485 port of two boards is linked by one 1.2km cable on Windows Terminal

### 3.5. LPT Port Test

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

### 3.6. Burn In Test

Under Room Temperature: 26 °C

Test Item	Result			Note
	Pass	Fail	N/A	
BurnIn Test V6.0 Pro	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows 7 Ultimate SP1 English Version 32 Bit

Note: COM PORT Speed Set to 115200.



## 4. Application Test

### 4.1. PCI Slot Function (PCI Adapter Card) Test [ X ] No Support

Adapter VGA Card	Set Simultaneous Display and Reboot			Note
	Pass	Fail	N/A	
CHAINTECH NVIDIA GeForce4 MX440-8X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter Sound Card	Play Sound			Note
	Pass	Fail	N/A	
Creative Sound BLASTER Live5.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter SCSI Card	Copy files to SCSI HDD			Note
	Pass	Fail	N/A	
ADAPTEC Ultra160 SCSI ASC-29160	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter Image Capture Card	Connect to CCD			Note
	Pass	Fail	N/A	
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter LAN Card	Connect to Internet			Note
	Pass	Fail	N/A	
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
INTEL PWLA8391GTBLK Pro/1000 Giga LAN Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adapter RAID Card	RAID 0 , 1 , 10 Function Test			Note
	Pass	Fail	N/A	
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 4.2. PCI-Express Function Test

PCI-Express x1	Function Test			Note
	Pass	Fail	N/A	
SUNIX SATA1414 eSATA & SATAII x1Express card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sysconnect SK-9E21D 10 /100/1000 Base-T Adapter PCI-Express x1 LAN Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
PCI-Express x4	Function Test			Note
	Pass	Fail	N/A	
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
PCI-Express x16	Function Test			Note
	Pass	Fail	N/A	
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
WINFAST PX6200 TC TDH PCI-Express x16 VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Express card	Function Test			Note
	Pass	Fail	N/A	
SUNIX SATA II Express card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
SunBox 34mm Giga LAN Express Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Mini PCI Express Card	Function Test			Note
	Pass	Fail	N/A	
Wireless LAN (AWM-S0021M)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 4.3. Mini PCI Card Compatibility Test [ X ] No Support

Device Item	Function Test			Note
	Pass	Fail	N/A	
Mini PCI.10/100 Base-Tx LAN (W/Intel.82551QM .A1.0) (Model:PER-C10L)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ADLINK mPCI-8750 ATI Rage XL Mini PCI VGA Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 4.4. CardBus (PCMCIA) Compatibility Function Test [ X ] No Support

Device Item	Bit	Function Test			Note
		Pass	Fail	N/A	
Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW)	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200200]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Kingston datapack DP-PCM2 / 2GB (PC Card Typell HDD)	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200201]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II	Slot 1 (Up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200502]
	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCi GW-NS54SG Cardbus Adapter Wireless LAN Type-II	Slot 2 (Down)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[PC-200502]

## 4.5. ISA Slot Function Test [ X ] No Support

Test Item	Result	Note
SCSI Card Adaptec AHA-1520B SCSI Card	<input type="checkbox"/>	[SS-002]
LAN Card NE2000 Compatible LAN Card (RTL8019AS)	<input type="checkbox"/>	[NW-014]
VGA Card CIRRUS LOGIC 5429 FCC ID:ICUVGA-GWV27A	<input type="checkbox"/>	[VC-008]

## 4.6. Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104

## 4.6.1. Device List: PC/104 Module [ X ] No Support

Test Item	Result			Note
	Pass	Fail	N/A	
AAEON PCM-3660	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 4.6.2. Device List: PC/104+ Module [ X ] No Support

Test Item	Result			Note
	Pass	Fail	N/A	
AAEON PCM-3430	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 4.6.3. Device List: PCI-104 Module [ X ] No Support

Test Item	Result			Note
	Pass	Fail	N/A	
AAEON PCM-3730	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.6.4. Device List: PCI/104 Express Module [ X ] No Support**

Test Item	Result			Note
	Pass	Fail	N/A	
AAEON PER-123	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.7. SSD Modules Compatibility Test**

SSD HDD Compatibility Test:

Cable Type: [ ] IDE [ ] SATA2 [ ] MLC [ ] SLC [ X ] No Support

Test Item	Result			Note
	Pass	Fail	N/A	
Transcend SSD 16G - TS16GSSD25S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.8. Peripheral Compatibility- Storage Device Test****4.8.1. Disk on Chip (DOC) Test [ X ] No Support**

Test Item		Result			Note
		Pass	Fail	N/A	
DOC 2000 Model	16MB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M-System / MD2200-D16
DOC 2000 Onboard Address	CC00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	D800	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DC00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.8.2. Disk on module (DOM) Test [ X ] No Support**

Test Item	Result			Note
	Pass	Fail	N/A	
Transcend / TS512MDOM40V / 512MB / IDE 40 Pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transcend / TS512MDOM44V / 512MB / IDE 44 Pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**4.9. Riser Card Function Test [ X ] No Support**

Test Item	Result			Note
	Pass	Fail	N/A	
LAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI Slot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCI-e Slot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 5. Power Consumption Test

Hardware Information with Windows 7 Ultimate English Version 32 Bit Driver Version	
<b>CPU</b>	Intel® Core™ i7 CPU 620M @ 2.67GHz
<b>Memory</b>	DSL DDR3 1066 4GB
<b>SATA HDD</b>	TOSHIBA 2.5" SATA2 160GB-MK1665GSX

### 5.1. PC Health Status

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

Voltage Monitoring Test	Result			BIOS (V)	Note
	Pass	Fail	N/A		
CPU Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+66 °C	
System Temperature 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+62 °C	
System Temperature 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+61 °C	
Vcore	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+1.072 V	
Vcc 1.5V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+1.488 V	
Vcc 3.3V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+3.344 V	
Vcc 5V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+4.862 V	
Vcc 12V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+12.032 V	
Vsb 5V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+4.995 V	
VBAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+3.312 V	

## 6. Time Accuracy Test

### 6.1. System Clock & RTC Clock Test

Under Room Temperature: 26 °C

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

### 6.2. Booting Timer Test

Installation	Actual		Note
System Booting Time	4.5	Sec	Press the Power Button till "Beep" Sound appears

### 6.3. Watchdog Timer Test

Use Function as below: ITE

[ ] No Support.

Time-Out Interval	Margin for error	Actual		Result			Note
				Pass	Fail	N/A	
10 sec	+/-10%	10.2	Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60 sec	+/-10%	61.9	Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
255 sec	+/-10%	252	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 14 – Kernel 2.6.35.6- 45.fc14.i686

[ ] No Support

Driver Information:

Chipset Software	System Default
Graphics Media	System Default
Audio Driver	System Default
LAN Driver	System Default

Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Fedora Core 14 – Kernel 2.6.35.6- 45.fc14.i686	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Type uname -a

Test Result:

Test Item	Result			Note
	Pass	Fail	N/A	
<b>Display Function Test</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LVDS -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VGA + DVI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VGA + LVDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI + LVDS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Network Function Test</b>				
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"/>	
<b>Audio Function Test</b>				
Play Audio Function Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Play Audio Test
<b>Base Function Test</b>				
Mouse Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Keyboard 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"/>	
<b>X Windows Application</b>				
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
<b>Command Test On Text Mode: Attention Delay Phenomenon</b>				
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® Chipset Device Software 9.1.1.1020(08/26/2009)
Graphics Media	Intel® Graphics Media Accelerator HD 8.15.10.1986(10/30/2009)
Audio Driver	VIA High Definition Audio 6.0.1.7300(7/10/2009)
LAN Driver	Intel® Gigabit CT Desktop Adapter 11.0.103.0(7/14/2009)
	Intel® 82577LM Gigabit Network Connection 11.2.19.0(9/23/2009)

[ X ] x64 Driver Information:

Chipset Software	Intel® Chipset Device Software 9.1.1.1020(08/26/2009)
Graphics Media	Intel® HD Graphics 8.15.10.2104(03/31/2010)
Audio Driver	VIA High Definition Audio 6.0.1.7300(7/10/2009)
LAN Driver	Intel® Gigabit CT Desktop Adapter 11.0.103.0(7/14/2009)
	Intel® 82577LM Gigabit Network Connection 11.2.19.0(9/23/2009)

### 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	
<b>Single Display</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LVDS -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Boot - Windows 7 Ultimate Advanced Options Menu</b>				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Basic Function Test</b>				
PS/2 Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	
<b>LAN Function Test</b>				
LAN1 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN2 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Audio Function Test</b>				
Line Out Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	
<b>Start Menu</b>				
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® Chipset Device Software 9.1.1.1020(08/26/2009)
Graphics Media	Intel® Graphics Media Accelerator HD 6.14.10.5179(11/09/2009)
Audio Driver	VIA High Definition Audio 6.0.1.7300(7/10/2009)
LAN Driver	Intel® Gigabit CT Desktop Adapter 11.1.6.0(7/13/2009) Intel® 82577LM Gigabit Network Connection 11.2.19.0(9/23/2009)

[ X ] No Support

[ ] x64 Driver Information:

Chipset Software	
Graphics Media	
Audio Driver	
LAN Driver	

#### Install OS to SATA HDD:

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

#### Test Results:

Test Item	Result			Note
	Pass	Fail	N/A	
<b>Single Display</b>				
VGA -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DVI -- Full Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
LVDS -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Boot - Windows XP Professional Advanced Options Menu</b>				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Basic Function Test</b>				
PS/2 Mouse and Keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	
<b>LAN Function Test</b>				
LAN1 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LAN2 --- Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Audio Function Test</b>				
Line Out Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	
<b>Start Menu</b>				
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 Windows 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel® Core™ i7 CPU 620M @ 2.67GHz
Memory	DSL DDR3 1066 4GB
SATA HDD	TOSHIBA 2.5" SATA2 160GB-MK1665GSX

### 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"/>	From Windows 7
ACPI - S1 (POS)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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"/>	

### 8.4. 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

## 8.5. TPM Function Test

Test Item	Result			Note
	Pass	Fail	N/A	
No Change	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Clear	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Enable & Active	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Disable & Disactive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Detect TPM device under Windows.

## 8.6. IAMT Function Test

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

## 8.7. 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"/>	

## 8.8. CAN port Function Test

Basic Function Test					Note
Test Item	Interrupt: Polling or IRQ	Result			
		Pass	Fail	NA	
CAN1 transmits CAN2	CAN1:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	CAN2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CAN2 transmits CAN1	CAN2:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	CAN1:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Note: Sets the interrupt for each port. Be sure that this setting matches the IRQ

## 9. Performance Test

Hardware Information with Windows 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel® Core™ i7 CPU 620M @ 2.67GHz
Memory	DSL DDR3 1066 4GB
SATA HDD	TOSHIBA 2.5" SATA2 160GB-MK1665GSX

### 9-1. Performance Test

Test Result: (Display set 1920\*1080 test)

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark2002</b>			Only for Windows 7
CPU	N/A	-	
Memory	41438	-	
HDD	2265	-	
Benchmark (A)	-	-	
<b>PCMark2005</b>			Windows 7
PCMark	6346	-	PCMarks
CPU	8228	-	
Memory	4887	-	
Graphics	2691	-	
HDD	4919	-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>3Dmark2003 v360</b>			Only for Windows 7
3Dmark Score	2104	-	
CPU Score	1308	-	
Benchmark (A)	-	-	
<b>3Dmark2006 v110</b>			Windows 7
3Dmark Score	1063	-	
CPU Score	2999	-	
SM2.0 Score	327	-	
HDR/SM3.0 Score	412	-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Final Reality V1.01—BenchMark Test</b>			Windows 7
2D image	45.51	-	Reality marks
3D	5.38	-	
Bus transfer	18.47	-	
Overall	19.38	-	
Benchmark (A)	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark7</b>			
PCMark	1559	-	
CPU	-	-	
Memory	-	-	
HDD	-	-	
Benchmark (A)	-		
<b>PCMark Vantage</b>			
PCMarks	5308	-	PCMarks
TV and Movies	3269	-	
Memories	2934	-	
Gaming	2761	-	
Music	5434	-	
Communications	8196	-	
Productivity	4503	-	
HDD	2596	-	
Benchmark (B)	-		
Average Efficiency	-		

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Performance Test 7.0</b>			
PassMark Rating	730.4	-	
CPU Mark	1127.3	-	
2D Graphics Mark	273.7	-	
Memory Mark	874.5	-	
Disk Mark	587	-	
Benchmark (A)	-		

## 9.2. Memory Test

Test Item	Result			Note
	Pass	Fail	N/A	
MEM v4.20 Overnight Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	