

Report NO: 14CO010005

# COM-HM76-C10

## Intel Ivy Bridge+HM76 COM Express CPU Module

### 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	Approval	Test Engineer
2014/05/23	Tom Lin	Danny Chen

**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	
2012/05/29	P2P3-1201	1. Add Summary Table of DTS	

**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 will be updated when re-test completed in product next change version.**

## Specification Validation Main Specification

Item	Specification	Result			Note
		Pass	Fail	N/A	
Product Name	COM-HM76	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Form Factor	COM Express, Basic Module, Pin-out Type VI: 125mm x 95mm (4.92" x 3.75")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thickness of PCB	2.0mm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Processor	Socket type. Power design support up to 45W	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chipset	Intel HM76 PCH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
System Memory	Single-channel SODIMM DDR3L 1333/1600 Memory, Max. 8GB (per DIMM Max. 8GB)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VGA/LCD Controller	Intel Ivy Bridge processors integrated CRT: up to 2560 x 2048 LVDS: up to 1920 x 1200	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LCD Interface	Up to 24-bit dual-channel LVDS, VGA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Digital Display	Digital Display Interface x 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shared Memory	Shared system memory above 512MB/ DVMT 5.0 (TBC w/Intel)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TPM	Not Support	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Ethernet	Intel 82579LM, Gigabit Ethernet PHY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I/O Chipset	HM76 (Winbond SIO on the carrier board)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
K/B and Mouse	From LPC interface on carrier board	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Watchdog Timer Chipset	Embedded Controller iTE8518 ==> LPC interface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hardware Monitor Chipset	Embedded Controller iTE8518	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Expansion Interface	PCI-Express [x16] x 1 (Gen 3.0) PCI-Express [x1] x 7 LPC bus x 1 SMBus x 1 UART x 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
BIOS	SPI Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EEPROM	Atmel AT24C02 (Ref) Appendix 1 ==> SOP 8, 2Kb, Serial EEPROM ==> Save BIOS and configuration data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Wake on LAN	Yes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
BBS (BIOS Boot Spec.)	Yes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Audio	High definition audio interface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SATA interface	SATA port x 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Serial Port	from LPC to EC , then to Carrier board (ECx2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPIO	Up to 4 input and 4 output ==> Signals from iTE 8518	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Universal Serial Bus	USB 2.0 x 8 (include USB 3.0 x 4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Power Supply Request	Normal: +12V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**O.S. Support**

Item	Specification	Result			Note
		Pass	Fail	N/A	
Microsoft Windows	Windows 7 32 bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microsoft Windows	Windows 7 64 bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microsoft Windows	Windows 8 64 bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Linux Fedora	Linux Fedora 16 or later	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Environmental Specifications**

Item	Specification
Operating Temp.	32oF ~ 140oF (0oC ~ 60oC)
Storage Temperature	-40oF ~ 176oF (-40oC ~ 80oC)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE: EN 55022/55024( ITE EMI/EMS) Class A EN 55011(ISM EMI) Class A FCC: FCC Part 15 (DOC / ID)

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

### Platform Information

Item	Device Information	Test Item
Model Name	COM-HM76-C10	1,2,3,4,5,6,7,8,9
CPU Board	COM-HM76-C10	1,2,3,4,5,6,7,8,9
Carrier Board	ECB-920A Rev A0.3_0_0	1,2,3,4,5,6,7,8,9
BIOS / Version	COM-HM76 T0.7 (CM76CT07) (04/16/2014) Legacy	1,2,3,4,5,6,7,8,9
CPU Type	Intel ® Core ™ i7-3610QE CPU @ 2.30GHz	1,2,3,4,5,6,7,8,9
Memory	Transcend DDR3L 1600 SO-DIMM 8GB (1.35V)	1,2,3,4,5,6,7,8,9
SATA HDD	TOSHIBA SATA HDD 320GB - MK3276GSX	1,2,3,4,5,6,7,8,9
USB DVD-ROM	Pioneer DVR-XD10T USB DVD	1,2,3,4,5,6,7,8,9
VGA	ViewSonic VT2430-NT	1,2,3,4,5,6,7,8,9
Display Port	EIZO EV2335W 23.5"	1,2,3,4,5,6,7,8,9
LVDS	AUO M215HW03 V.1 / 21.5" / 1920x1080 / 48bit	1,2,3,4,5,6,7,8,9
	AUO T260XW02 / 26" / 1366x768 / 24bit	1,2,3,4,5,6,7,8,9
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	1,2,3,4,5,6,7,8,9
Operating System	<input checked="" type="checkbox"/> English Ubuntu 12.10 - Kernel 3.5.0-17- generic #28	7-1
	<input checked="" type="checkbox"/> Windows 7 Ultimate English Version 32/64Bit	7-2
	<input checked="" type="checkbox"/> Windows 8 Pro English Version 32/64Bit	7-3
Power Supply	DELTA DPS-460DB-2A 460W	1,2,3,4,5,6,7,8,9
<b>Chipset Information with 7 Ultimate English SP1 32 Bit Driver Version</b>		
Chipset Software	Intel ® Chipset Device Software 9.4.0.1027 (August/21/2013)	
South Bridge	Intel HM76PCH	
Super IO Chipset	ITE8518	
VGA Chipset	Intel ® HD Graphics 4000 9.17.10.3372 (12/06/2013)	
Audio Chipset	Realtek High Definition Audio 6.0.1.7083 (11/05/2013)	
	Intel ® Display Audio 6.14.0.3097 (06/19/2012)	
Ethernet Chipset	Intel ® 82579LM Gigabit Network Connection 12.10.28.0 (8/21/2013)	

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# 1. Hardware Test

## 1.1. CPU Compatibility Test

CPU Information	Result			Note
	Pass	Fail	N/A	
Intel® Core™ i5-3610ME CPU @ 2.70GHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Prime95
Intel® Core™ i7-3610QE CPU @ 2.30GHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 1.2. Memory Compatibility Test \_Only Support DDR3L 1333/1600 Memory

Memory Information	MEM V4.20			Note
	Pass	Fail	N/A	
Transcend DDR3L 1600 SO-DIMM 8GB (1.35V)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
InnoDisk DDR3L 1600 SO-DIMM 8GB (1.35V)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transcend DDR3L 1333 SO-DIMM 2GB (1.35V)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Transcend DDR3L 1600 SO-DIMM 4GB (1.35V)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 1.3. SATA Compatibility Test

### 1.3.1 Onboard SATA (IDE Mode) Test

SATA Device Information	Result			Note
	Pass	Fail	N/A	
WD SATA HDD 320GB - WD3200BEVT - 00A23T0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Under Win 7
WD SATA HDD 320GB - WD3200BEVT - 75A23T0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TOSHIBA SATA HDD 320GB - MK3276GSX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TOSHIBA SATA HDD 320GB - MK3276GSX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 1.3.2 Onboard SATA (RAID) Test [ x ] No Support

SATA RAID Test	Result			Note
	Pass	Fail	N/A	
RAID-0 (HDDx2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Striping/Span Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RAID-1 (HDDx2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mirror Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RAID-5 (HDDx3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Striping/Span Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rotation Parity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RAID-10 (HDDx4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Striping/Span Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mirroring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 1.3.3 Onboard SATA (AHCI Mode ) Test

SATA AHCI Test	Result			Note
	Pass	Fail	N/A	
WD SATA HDD 320GB - WD3200BEVT - 00A23T0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Under Win 7
WD SATA HDD 320GB - WD3200BEVT - 75A23T0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TOSHIBA SATA HDD 320GB - MK3276GSX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TOSHIBA SATA HDD 320GB - MK3276GSX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.4. IDE Compatibility Test [ X ] No Support

IDE Device Information	Result			Note
	Pass	Fail	N/A	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1.5. Compact Flash Compatibility Test [ X ] No Support

Compact Flash Information	Result			Note
	Pass	Fail	N/A	
	<input 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 7 Ultimate English Version 32 Bit Driver Version										
CPU	Intel® Core™ i7-3610QE CPU @2.30GHz									
Memory	Transcend DDR3L1600 8GB									
SATA HDD	WD WD5000BPKX 2.5" STAT HDD 500GB									
VGA	ASUS VE228 "22"									
Display Port	EIZO EV2335W 23.5"									
LVDS	AUO M215HW03 V.1 / 21.5" / 1920x1080 / 48bit									
Color Quality	<input checked="" type="checkbox"/> 16bit <input type="checkbox"/> 24bit <input checked="" type="checkbox"/> 32bit									
Resolution	VGA			Display Port			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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1024X768	<input checked="" type="checkbox"/>	<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"/>	
1152X864	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X600	<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"/>	
1280X720	<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"/>	
1280X768	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1280X960	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1360X768	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1366X768	<input checked="" type="checkbox"/>	<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"/>	
1400X1050	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1440X900	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1600X900	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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"/>	
1680X1050	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rotation	<input checked="" type="checkbox"/>	<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"/>	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	DP1 + DP2 + CRT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Extended Desktop		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dual Display Clone	DP1 + DP2 + LVDS	<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.TFT LVDS / 1280*768 /18bit /12.1 /LM-200801	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microphone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mic Recorder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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							
OnBoard LAN1		Intel ® 82579LM Gigabit Network Controller					MAC Address		00-07-32-27-F7-AB	
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
100MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
10MBps			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Wake On LAN			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	S3/S4/S5	
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Internet Browser (DHCP Server)			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

#### 2.3.2. Throughput Test [ X ] No Support

DUT Platform Information:

<input type="checkbox"/>	Fedora Core 13
<input type="checkbox"/>	Cent 5.5
<input type="checkbox"/>	Ubuntu 10.10 Kernel 2.6.35-22-generic #33
<input type="checkbox"/>	Red Hat

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

Graphics Media	N/A
LAN	LAN1→N/A
	LAN2→N/A
Audio Driver	N/A

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: Only one LAN , can't test

### 2.4. Optional Function Test

[ X ] No Support

Function Test	Result			Note
	Pass	Fail	N/A	
3G Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Wireless LAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bluetooth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3. Integration Test

Hardware Information with 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel ® Core ™ i7-3610QE CPU @2.30GHz
Memory	Transcend DDR3L1600 8GB
SATA HDD	WD WD5000BPKX 2.5" STAT HDD 500GB

#### 3.1. USB Port Integration Test ( USB 3.0 x 4 / USB 2.0 x 4 )

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 2.0 ( CN42 & CN46 ) next version to verification
USB FDD Mitsumi D353GUE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SONY USB2.0 DVD-R/W DRX-830UL		<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)								
USB 2.0 HUB PowerSync / USB 2.0 4 Port HU-155					<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB Benchmark Test								
USB3.0 Read Speed					68.2 MB/sec			HD Tune Pro 3.50
USB2.0 Read Speed					17.4 MB/sec			

#### 3.2. Digital I/O Port Test :

DIO Address	Result			Note
	Pass	Fail	N/A	
DIO VCC +3.3V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Input:3.3V / Output (H):3.3V / Output (L):0V DIO test complete during BIOS mode Wait for Hi-Safe release for HM76

#### 3.3. COM Port Integration Test [ x ] No Support

Test Item	Result			Note
	Pass	Fail	N/A	
Serial Modem Ring In	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Modem (COM1~ COM2)
Serial Modem +12V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Multimeter
Serial Modem +5V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test by Multimeter

#### 3.4. RS-232 Test

Test Item	Result			Note
	Pass	Fail	N/A	
RS-232 for "COM1" "COM2"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test speed 300 / 9600 / 115200 bit/sec
RS-422 for "COM1" "COM2"	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The communication between the RS-422 port of two boards is linked by one 1200m cable on Windows Terminal
RS-485 for "COM1" "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 1200m cable on Windows Terminal

### 3.5. LPT Port Test

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

### 3.6. Burn In Test

Under Room Temperature: 26 °C

OS: Windows 7 Ultimate English SP1

Test Item	Result			Note	
	Pass	Fail	N/A		
Burn In Test V7.1(1001) Duty: 100 Time: over 12 hours	CPU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	RAM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Currently only support the DIMM 1
	COM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Device Manager COM Port speed set to 115200
	Video	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2D	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3D	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Disk	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Sound	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Network	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Parallel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	USB	2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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	SATA 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	
PETRP02A PARALLEL Extend Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.RS232 & LPT 201302 From ECB-920A Carrier Board
Intel ® GIGABIT CT Desktop Adapter PCI-Express x1 LAN Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.NW-201102 From ECB-920A Carrier Board
Uptech UTB230 USB 3.0 Extend Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.USB-201201 From ECB-920 Carrier Board
Intel ® GIGABIT CT Desktop Adapter PCI-Express x1 LAN Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.NW-201001 From ECB-920A Carrier Board
PETRP02A PARALLEL Extend Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.RS232 & LPT 201302 From PCIe4 to PCIe1 *4 Riser Card
Intel ® GIGABIT CT Desktop Adapter PCI-Express x1 LAN Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.NW-201102 From PCIe4 to PCIe1 *4 Riser Card
Uptech UTB230 USB 3.0 Extend Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.USB-201201 From PCIe4 to PCIe1 *4 Riser Card

Intel ® GIGABIT CT Desktop Adapter PCI-Express x1 LAN Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	QE No.NW-201001 From PCIe4 to PCIe1 *4 Riser Card
<b>PCI-Express x4</b>	<b>Function Test</b>			<b>Note</b>
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>PCI-Express x16</b>	<b>Function Test</b>			<b>Note</b>
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
ASUS NVIDIS GeForce GTX680 PCI-Express x16 VGA Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From ECB-920A Carrier Board
GIGABYTE GV-R5670C-1G PCI-Express x16 VGA Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From ECB-920A Carrier Board
<b>Express card</b>	<b>Function Test</b>			<b>Note</b>
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
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"/>	
<b>Mini PCI Express Card</b>	<b>Function Test</b>			<b>Note</b>
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
AzureWave AW-037 802.11b/g/n + Blue Tooth	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Half Size
cFeon RAID Card	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Full Size
M-SATA Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Full Size

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 TypeII 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  
[ X ] No Support

4.6.1. Device List: PC/104 Module

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

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

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

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 [ X ] No Support

SSD HDD Compatibility Test:

Cable Type: [ ] IDE [ ] SATA2 [ ] MLC [ ] SLC

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 [ X ] No Support

4.8.1. Disk on Chip (DOC) Test

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

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

Test Item	Result			Note
	Pass	Fail	N/A	
PER-T254 Rev A0.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PCIe4 to PCIe1 *4 Riser Card

#### 4.10. Super IO Card Function Test

Test Item	Result			Note	
	Pass	Fail	N/A		
PER-T254 Rev A2.0	PS2 KB/MS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	COM Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	LPT Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	FDD Port	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

## 5. Power Consumption Test

Hardware Information with 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel® Core™ i7-3610QE CPU @2.3GHz
Memory	Transcend DDR3L 1600 SO-DIMM 8G
SATA HDD	WD WD5000BPKX 2.5 SATA HDD 500GB

### 5.1. AT/ATX Power Consumption

Test Equipment						
Equipment	AC/DC Digital Clamp meter					
Manufacturer	KYORITSU					
Model name	2010					
Test Environment						
ATX Power Model	Seasonic G-Series 450W(SSR-450RM)					
Power Supply	ATX Power					Note
(Full Loading Mode)	(+12V)	2.73	A	32.76	W	Prime95 Version 279
Windows 7 with Prime 95 Full Loading Test	(+5V)	1.18	A	5.9	W	
	(+3.3V)	0.31	A	1.023	W	
Full Loading Total Watt	39.683 (W)					
Win. Idle mode: Measure the current value when system in windows mode and without running any program	(+12V)	1.78	A	21.36	W	
	(+5V)	0.86	A	4.3	W	
	(+3.3V)	0.25	A	0.825	W	
Idle Total Watt	26.485 (W)					
Power on - Boot sequency: Measure the maximum current value of between system power on and boot-up to O.S.	(+12V)	2.15	A	25.8	W	
	(+5V)	1.22	A	6.1	W	
	(+3.3V)	0.23	A	0.759	W	
Power On Total Watt	32.659 (W)					

### 5.2. PC Health Status

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

Voltage Monitoring Test	Result			BIOS (V)	Actual (V)	Note
	Pass	Fail	N/A			
CPU Temp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	48C	38°C	
System Temp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33C	33°C	
System FAN Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2610 RPM	2659 RPM	
VAC_IN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+11.830V	11.98V	
V5A2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+5.118V	5.09V	
V3.3S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+3.296V	3.29V	
V1.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+1.540V	1.52V	
V5A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+4.920V	4.98V	
VCORE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+0.796V	0.75V	

## 6. Time Accuracy Test

### 6.1. System Clock & RTC Clock Test

Under Room Temperature: 26 °C

Function	Item	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	4.3	Sec	Press the Power Button till "Beep" Sound appears

### 6.3. Watchdog Timer Test

Use Function as below:

[ ] 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"/>	Hi - Safe
60 sec	+/-10%	61	Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
255 sec	+/-10%	255	Sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Note : Under Room Temperature: 26°C /

## 7. O.S. Compatibility Test

### 7.1. English Ubuntu 13.04 - Kernel 3.8.0-19- generic #29

[ ] 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 Ubuntu 13.04 - Kernel 3..8.0 -19 - generic #29	<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"/>	
<b>Network Function Test</b>				
Connect to Internet – LAN 1	<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>				
USB Mouse Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
USB 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
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

[ X ] x32 Driver Information:

Chipset Software	Intel ® Chipset Device Software 9.3.0.1027 (August / 21 / 2013)
Graphics Media	Intel ® HD Graphics 9.17.10.3372 (12/6/2013)
Audio Driver	Intel ® Display Audio 6.14.0.3097 (6/19/2012) Realtek High Definition Audio 6.0.1.7083 (11/5/2013)
LAN Driver	Intel ® 82579LM Gigabit Network Connection 12.10.28.0 (8/21/2013)

[ X ] x64 Driver Information:

Chipset Software	Intel ® Chipset Device Software 9.3.0.1027 (August / 21 / 2013)
Graphics Media	Intel ® HD Graphics 9.17.10.3372 (12/6/2013)
Audio Driver	Intel ® Display Audio 6.14.0.3097 (6/19/2012) Realtek High Definition Audio 6.0.1.7083 (11/5/2013)
LAN Driver	Intel ® 82579LM Gigabit Network Connection 12.10.28.0 (8/21/2013)

Install OS to SATA HDD :

Installation	Result			Note
	Pass	Fail	N/A	
English Windows 7 Ultimate 32bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SATA set to IDE mode
English Windows 7 Ultimate 64bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SATA set to AHCI mode

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"/>	
Display Port -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From SIO Card
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"/>	1.From SIO Card COM Port Mouse Test 2.ECB-920A0.3 (CN49 & CN54) design no support
LPT Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From SIO Card
USB 2.0 / 3.0 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"/>	
<b>Audio Function Test</b>				
Line Out Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Line In Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microphone Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 (S3)	<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 8 Pro English Version 32/64Bit

[ X ] x32 Driver Information:

Chipset Software	Intel ® Chipset Device Software 9.4.0.1027 (August / 21 / 2013)
Graphics Media	Intel ® HD Graphics 9.17.10.3372 (12/6/2013)
Audio Driver	Intel ® Display Audio 6.14.0.3097 (6/19/2012) Realtek High Definition Audio 6.0.1.7083 (11/5/2013)
LAN Driver	Intel ® 82579LM Gigabit Network Connection 12.10.28.0 (8/21/2013)

[ X ] x64 Driver Information:

Chipset Software	Intel ® Chipset Device Software 9.4.0.1027 (August / 21 / 2013)
Graphics Media	Intel ® HD Graphics 9.17.10.3372 (12/6/2013)
Audio Driver	Intel ® Display Audio 6.14.0.3097 (6/19/2012) Realtek High Definition Audio 6.0.1.7083 (11/5/2013)
LAN Driver	Intel ® 82579LM Gigabit Network Connection 12.10.28.0 (8/21/2013)

### Install OS to SATA HDD:

Installation	Result			Note
	Pass	Fail	N/A	
English Windows 8 Enterprise 32bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IDE Mode
English Windows 8 Enterprise 64bit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IDE Mode

### 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"/>	
Display Port -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LVDS -- Full Screen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Boot - Windows 8 Ultimate Advanced Options Menu</b>				
Safe Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Basic Function Test</b>				
PS/2 Keyboard / Mouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	From SIO Card
USB Keyboard / Mouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COM Port Mouse detect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.From SIO Card COM Port Mouse Test 2.ECB-920A0.3 (CN49 & CN54) design no support
USB 2.0 / 3.0 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"/>	
<b>Audio Function Test</b>				
Line Out Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Line In Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Microphone Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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(S3)	<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 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel® Core™ i5-3610ME CPU @2.70GHz
Memory	Panram DDR3 -1333MHz - CL9 8GB
SATA HDD	TOSHIBA SATA HDD 320GB - MK3276GSX

### 8.1. Advanced Test

Test Item		Result			Note	
		Pass	Fail	N/A		
ACPI settings	Suspend Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Enable/Disable	
	Sleeps state (S1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	Sleeps state (S3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Dynamic Digital IO	DIO0~7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test under BIOS	
S5 RTC Wake up	Wake system with Dynamic time	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	Wake system with fixed time	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Trusted Computing	TPM Support	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	Clear TPM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
SATA configuration	SATA controller	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enable/Disable	
	AHCI mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	IDE mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	RAID mode	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
AMT Configuration	Intel AMT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Enable/disable	
	Un-configure ME	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
USB configuration	Legacy USB Support	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	USB 3.0 Support	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
W83627DHG Super IO configuration	Serial port 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enable/Disable	
	Serial port 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Parallel Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
ITE8518 super IO configuration	Serial port1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Serial port2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
ITE8518 Smart FAN	CPU_FAN1	Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Full Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4500rpm
		Manual Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0~100 100: 4500rpm / 50:2560rpm / 0:1145rpm
		Auto Mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	CHA_FAN1	Disable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Manual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Thermal Cruise mode	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Smart FAN IV mode	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### 8.2 Chipset Test

Test Item			Result			Note
			Pass	Fail	N/A	
System Agent (SA) Configuration	Primary Display	Auto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		IGFX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		PEG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Boot display	CRT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



		LVDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Display Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Memory Configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
		PCIE 16x GEN speed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test with bear card	
PCH-IO Configuration		PCH Azalia Configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
		Azalia Internal HDMI codec	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
		Power Mode	ATX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			AT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FP_PWR LED is not support.
		Restore AC Power Loss	Power on	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Power off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			Last State	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			PCH LAN Controller	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enable /disable
		Wake on LAN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enable /disable	
		DDR3L Voltage Selection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

### 8.3. Boot Sequence Test

Test Item	Result			Note
	Pass	Fail	N/A	
Quiet Boot	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Launch 82579LM PXE OpROM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot From Hard Disk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot From USB HDD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot From USB Floppy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot From USB CD-ROM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boot from LAN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 8.4. 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"/>	CN59 Jumper

### 8.5. AAEON Tag Check Utility

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

### 8.6. 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"/>	

### 8.7. Hi-safe Test

Test Item	Result			Note	
	Pass	Fail	N/A		
Version 1.2014.02.21	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
System Information	CPU Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Model Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Display Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	RAM Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H/W Monitor	Info	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Fan Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Voltage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DIO	DIO1~4 High	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIO1~4 Low	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIO5~8 High	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIO5~8 Low	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
WatchDog	10sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1min	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	255sec	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Auto Reload	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SMBus	SMBus IO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Read Byte	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Read Word	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Result / Read	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Smart FAN	Chipset	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Fan Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Speed control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Off Speed TMP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Full Speed TMP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Backlight Controller	Dark (0%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Light (100%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 9. Performance Test

Hardware Information with 7 Ultimate English Version 32 Bit Driver Version	
CPU	Intel ® Core ™ i7-3610QE CPU @2.30GHz
Memory	Transcend DDR3L1600 8GB
SATA HDD	WD WD5000BPKX 2.5" STAT HDD 500GB

### 9.1. Performance Test

Test Result: Display set 1920\*1080

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark2002</b>			Only for Windows 7
CPU		-	
Memory	20428	-	
HDD	2752	-	
Benchmark (A)		-	
<b>PCMark2005</b>			Windows 7
PCMark		-	PCMarks
CPU	4486	-	
Memory	4848	-	
Graphics	2278	-	
HDD		-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>3Dmark2003 v360</b>			Only for Windows 7
3Dmark Score	2699	-	
CPU Score	956	-	
Benchmark (A)	-	-	
<b>3Dmark2006 v120</b>			Windows 7
3Dmark Score	1831	-	
CPU Score	2408	-	
SM 2.0	597	-	
HDR/SM 3.0	708	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Final Reality V1.01—BenchMark Test</b>			Windows 7
2D image	35.08	-	Reality marks
3D	5.26	-	
Bus transfer	25.36	-	
Overall	17.22	-	
Benchmark (A)	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>PCMark Vantage</b>			
PCMarks	4794	-	PCMarks
TV and Movies	3797	-	
Memories	3021	-	
Gaming	3388	-	
Music	4208	-	
Communications	5491	-	
Productivity	4043	-	
HDD	4291	-	
Benchmark (B)	-	-	
Average Efficiency	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Performance Test 7.0</b>			
PassMark Rating	822.5	-	
CPU Mark	2785.4	-	
2D Graphics Mark	274.3	-	
3D Graphics Mark	182.3	-	
Memory Mark	477.1	-	
Disk Mark	661.3	-	
Benchmark (A)	-	-	

Testing Software	Scope		Note
	AAEON	Ref.	
<b>Windows Experience Index</b>			
Processor	6.3	-	
Memory	7.2	-	
Graphics	5.0	-	
Gaming Graphics	5.6	-	
Primary HDD	5.9-		