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There are 3 test results in this document; they are described as follows:

Pass: Function worked perfectly

Fail: Function failed and must be modified in the next version

N/A: Outside of specification or no test equipment

Platform Information:

Item	Device Information
System	AEC-6911
CPU Board	COM-945GSE
BIOS / Version	AEC-6911 BIOS Rev 1.0(03/20/2009)
CPU Type	Intel ATOM N270 1.6GHz
Memory Type	Onboard 512MB Memory
SATA	Fujitsu MHZ20808H G2 80GB
Primary IDE Master	N/A
Primary IDE Slave	N/A
CRT	Viewsonic E653
LCD	N/A
Compact Flash	N/A
Backplane	N/A
Riser Card	N/A
Operating System	Windows XP Professional English Version Service Pack 3
	Fedora 8
Power Supply	DC Input AC/DC Adapter:FSB120-AAB
	AC Input:100-240V~2A,50-60Hz
	DC Output:19V~6.32A

Test Result for Certification

1. OSD Control Function Test

OSD Control Function	Result			Note
	Pass	Fail	N/A	
Power Button			X	
Brightness			X	
Contrast			X	
Speaker Volume Up			X	
Speaker Volume Down			X	

2. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
Floppy Connector / Driver A:			X	
Primary IDE Master	X			
Primary IDE Slave	X			
Secondary IDE Master			X	
Secondary IDE Slave			X	
Third IDE Master			X	
Third IDE Slave			X	
RAID 0 Function Test			X	
RAID 1 Function Test			X	
SATA1 / Serial ATA Connector 1	X			
SATA2 / Serial ATA Connector 2			X	
SATA3 / Serial ATA Connector 3			X	
SATA4 / Serial ATA Connector 4			X	
Compact Flash – Type I	X			
Compact Flash – Type II			X	

DOC (Disk On Chip)			X	
DOM (Disk On Module) – 40 Pin			X	
DOM (Disk On Module) – 44 Pin			X	
COM 1-232	X			
COM 2-232	X			
COM 3-232	X			
COM 4-232	X			
COM 2-422	X			
COM 2-485	X			
PS/2 Mouse & Keyboard (Internal)	X			
PS/2 Mouse & Keyboard (External)	X			
Audio Connector	X			
Audio 5.1 Channel / S/P DIF			X	
LPT 1			X	
IR			X	
USB 1/2 Ports	X			
USB 3/4 Ports	X			
USB 2.0 1/2 Ports	X			
USB 2.0 3/4 Ports	X			
DVI Function			X	
DIO Connector			X	
Card Bus	X			
PC/104			X	
PC/104-Plus			X	
PCI-104			X	
CD-In Connector			X	
TFT TTL LCD			X	
TFT LVDS LCD			X	
TV-out / S Terminal	X			
TV-out / AV Terminal			X	
Touch Screen – 8 Wire			X	
Touch Screen – 4/5 Wire			X	
DIMM Slots	X			
Watchdog IRQ n			X	

Watchdog Software Control			X	
FAN1 Connector			X	
FAN2 Connector			X	
Express card			X	
Speaker Connector			X	
LCD Backlight Power Connector			X	
DC in Connector	X			
PCI Express Mini Card			X	
Power Button	X			
Battery Connector			X	
Front Panel	Result			
	Pass	Fail	N/A	
Power On Button			X	
IDE LED			X	
External Buzzer			X	
On Board Buzzer			X	
Power LED			X	
Battery LED			X	
Reset Switch			X	
Keyboard Lock			X	
Jumpers Function	Result			
	Pass	Fail	N/A	
BIOS write protection Selection and boot Selection			X	
Backlight enable level Selection and LVDS Power Selection			X	
COM1 +12V/+5V/RING Selection			X	
COM2 +12V/+5V/RING Selection			X	
Auto Power button Selection and power on selection			X	
Power source selection			X	
FAN Power Selection			X	
CMOS Clear Selection	X			
LCD Brightness and speaker level Selection			X	
Power Connector & Function	Result			

		Pass	Fail	N/A	
Standard AT Power Connector				X	
Standard ATX Power Connector				X	
5V Only Power Connector				X	
DC Adapter		X			
LAN Connector & Function		Result			
		Pass	Fail	N/A	
LAN Link / Speed LED	LAN1	X			
	LAN2	X			
LAN Active LED	LAN1	X			
	LAN2	X			
LAN 10/100 Ethernet		X			
LAN 1G Ethernet		X			
PCI Connector & Function		Result			
		Pass	Fail	N/A	
Mini PCI Slot				X	
PCI Slot		X			
PCI Express x1				X	
Mini PCI Express				X	
Express card				X	

3. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
System Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power On Mode	±1 second during 24 hours	X		
RTC Clock in Power Off Mode	±1 second during 24 hours	X		
Watchdog Timer Test		Result		
		Pass	Fail	N/A
Time-out Interval	10 sec	X		
	60 sec	X		
	255 sec	X		

4. Network HUB / LAN Connection Test

Location	LED Type	Result		
		Pass	Fail	N/A

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

5. Hardware Compatibility

CPU Compatible Test							
CPU Type		FSB			Result		
					Pass	Fail	N/A
Intel(R) Atom(TM) CPU N270 1.6GHz		533MHz			X		
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Onboard	Onboard	667	512MB	V2.01	X		
Transcend	TS256MSQ64V6U	667	2GB	V2.01	X		
Audio Basic Function Test					Result		
					Pass	Fail	N/A
System Sound					X		
CD_In							X
CD_In Sound Recorder							X
Play Sound Recorder					X		
Line Out					X		
Line In					X		
MIC Speaker				Dynamic			X
				Condenser	X		
MIC Sound Recorder				Dynamic			X
				Condenser	X		
Audio 5.1 Channel with S/P DIF Function Test					Result		
					Pass	Fail	N/A

2-channel mode for stereo speaker output		X		
4-channel mode for 4 speaker output				X
6-channel mode for 5.1 speaker output				X
S/P DIF function Test	Input			X
	Output			X
On Board TV Function Test		Result		
		Pass	Fail	N/A
NTSC	AV Terminal			X
PAL				X
NTSC	S Terminal	X		
PAL		X		

On Board LCD Function Test

TFT LCD	Type	Voltage	Result		
			Pass	Fail	N/A
LVDS	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	3.3V			X
	AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	3.3V			X
	AU B104SN05 / 10.4" / 800*600 / 18bit (4:3)	3.3V			X
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	3.3V			X
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	3.3V			X
	Toshiba LTD121EX1S / 12.1" / 1280x768 / 18bit (16:9)	3.3V			X
	AU M170EG01 / 17" / 1280*1024 / 48bit (4:3)	5V			X
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	5V			X
	AUO T260XW02 / 26" / 1366x768 / 24bit	5V			X
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V			X
	AUO T370HW01 / 37" / 1920x1080 / 48bit	5V			X
TTL	Toshiba LTM10C209A / 10.4" / 640*480 / 18bit (4:3)	5V			X
	NEC NL8060AC31-12 / 12.1" / 800*600 / 18bit (4:3)	3.3/5V			X
	Sharp LQ121SIDG11 / 12.1" / 800*600 / 18bit (4:3)	3.3V			X
	LG LM151X2-C2TH / 15.1" / 1024x768 / 18bit (4:3)	3.3V			X
	Fujitsu FLC38XGC6V-06 / 15" / 1024*768 / 36bit (4:3)	5V			X

PCI Slot Function (PCI Adapter Card) Test

Model	Type	Result		
		Pass	Fail	N/A
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA Card	X		
SB Sound Live ! 5.1 SB0100	Sound Card	X		
ADAPTEC Ultra160 SCSI ASC-29160	SCSI Card	X		
RTL 8139 10/100MB	LAN Card	X		
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	RAID Card	X		

PCI-Express Function Test

Model	Result		
	Pass	Fail	N/A
SUNIX SATA1414 VER 1.1 PCI-Express x1 SATA Card			X
SksKonnnect SK-9E21D 10/100/1000 Base-T Adapter PCI-Express x1 LAN Card			X
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card			X
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card			X

WinFast PX6200 TC TDH PCI-Express x16 VGA Card				X
HDD Compatibility Test				
Model		Result		
		Pass	Fail	N/A
Fujitsu MHW2040AT IDE 2.5" HDD		X		
CD/DVD-ROM Compatibility Test				
Model		Result		
		Pass	Fail	N/A
SONY DVD-RW DRU-840A IDE 40 pin		X		
USB Function Test				
USB Basic Function Test		Result		
		Pass	Fail	N/A
USB Controller		X		
USB 2.0 Controller		X		
USB Keyboard Support		X		
USB Mouse Support		X		
USB 1.1 Compatible Test		Result		
		Pass	Fail	N/A
USB 1.1 Compatible Test		X		
USB 2.0 Compatible Test		Result		
		Pass	Fail	N/A
USB 2.0 Compatible Test		X		
USB 2.0 Function Test		Result		
		Pass	Fail	N/A
Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS		X		
Peripheral Compatibility-Storage Device				
Model		Interface		Result
				Pass
				Fail
				N/A
Type-I CF		Fix / PIO Mode		X
Type-I CF		Fix / UDMA Mode		X
Digital I/O Connector Test		Result		
		Pass	Fail	N/A
Input Address: 801H				X
Output Address:801H				X
VCC: (5V)				X
DIO-1 Function Test				X
DIO-2 Function Test				X
Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules				
Interface	Model	Type		Result
				Pass
				Fail
				N/A

PC/104	AAEON PCM-5600	Modem Module			X
	AAEON PCM-3115B	PCMCIA Module			X
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-FA00	Mini-PCI Converter			X
	AAEON PCM-3794	SCSI Module			X
	AAEON PCM-3730	Intel 82559 LAN Module			X

On-Board RAID Function Test

Model	Interface	Result		
		Pass	Fail	N/A
Set SATA HDDs as RAID 0	SATA			X
Set SATA HDDs as RAID 1	SATA			X
Set SATA HDDs as RAID 10	SATA			X
Set SATA HDDs as RAID 5	SATA			X

COM/LPT Ports & RS-232/422/485 Function Test

	Result		
	Pass	Fail	N/A
RS-422 for COM2	X		
RS-485 for COM2	X		
COM1	X		
COM2	X		
COM3	X		
COM4	X		
LPT1			X
LPT2			X

6. O.S. Compatibility Test

Installation Operation System Compatibility Test	Result		
	Pass	Fail	N/A
Windows XP Professional English Version Service Pack 3	X		
Fedora 8	X		

7. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test	X		
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
Power Management Test			
APM Power Management Test			X
ACPI Power Management Test	X		
Power On Function Test	X		
Wake Up Event Test			X
Power On after Power Failure Test	X		
CMOS Backup / Clear CMOS Test	X		
Boot ROM Test (PXE)	X		

Supervisor / User Password Test	X		
Init Display First Function Test			X
On-Chip Serial ATA Function Test			X
SATA Mode-IDE/RAID Function Test			X
LPT Address / IRQ Test			X
BIOS AWDFLASH Program Test	X		

8. Performance Test Platform Information

PCB Board	AEC-6911
Carrier Board	N/A
BIOS	AEC-6911 BIOS Rev 1.0(03/20/2009)
Operating System	English Windows XP Professional Service Pack 3
CPU	Intel(R) Atom(TM) CPU N270 1.6GHz
Memory	Onboard 512MB DDR2-667Memory
SATA HDD	2.5" SATA Fujitsu MHZ20808H G2 80GB
Primary IDE Master	N/A
Primary IDE Slave	N/A
CRT	Viewsonic E653
LCD	N/A
Compact Flash	N/A
Expansion Board	2 PCI Slot
Chipset Software	Intel Chipset Device software-9.0.0.1008-2008/05/01
Graphics Media	Mobile Intel(R) 945 ExpressChipset Family -- 6.14.10.4926 -- 2/15/2008
LAN Driver	Intel 82574L Gigabit Network Connection-10.3.49.0-2008/8/5 Intel PRO/1000 PL Network Connection-9.12.18.0-2008/2/6
Audio Driver	Realtek AC'97 Audio- 5.10.0.6300-2008/09/24
Touchscreen Driver	N/A
Power Supply	AC/DC Adapter:FSB120-AAB AC Input:100-240V~2A,50-60Hz DC Output:19V~6.32A

Test result:

Testing Software	Result	Unit
PCMark2002		
CPU	2648	

Memory	5889	
HDD	580	
Final Reality V1.01—BenchMark Test		
2D image	15.52	
3D	3.76	
Bus transfer	22.10	
Overall	10.04	Reality marks
3Dmark2001		
3DMark2001SE Build 330_Benchmark mode	2711	

Test Result:

Testing Software	Result	Unit
PCMark05		
PCMark	1303	PCMarks
CPU	1482	
Memory	2350	
Graphics	435	
HDD	2307	
3Dmark2003 v360		
3Dmark Score	681	
CPU Score	242	

Remark: Please uses below two performance software to test mainboard if the chipset is new enough.
(ex. Intel Core 2 Duo CPU)