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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	Test Item
PCB Model /Version	IMBM-935 Rev.A1.0	
BIOS / Version	IMBM-935 BIOS Rev 1.0 for VE (02/13/2008)	
	IMBM-935 BIOS Rev 1.0 for G2 (02/13/2008)	
CPU Type	Intel Core 2 Duo E4300 1.80GHz FSB:800MHz	1,4,5,6,7,8
	Intel Core 2 Duo E6400 2.13GHz FSB:1066MHz	1,2,3,4,5,6,7,8,9
	Intel Conroe-L Celeron 2.4GHz FSB:800MHz	1,4,5,6,7,8
Memory Type	Kingston DDRII 667MHz 512MB (HY818T512 800BF3S)	6
	Kingston DDRII 800MHz 512MB (NANYA NT5TU64M8BE-25C)	6
	Transcend DDRII 800MHz 512MB (7UB32 D9DCL)	1,2,3,4,5,6,7,8,9
	Kingston DDRII 800MHz 1GB (V59C1512804QCF25)	1,2,3,4,5,6,7,8
SATA	Western Digital WD1200JS 3.5" SATA HDD 120GB	1,5,6,7,8
	Western Digital WD800JD 3.5" SATA HDD 80GB	1,5,6,7,8
	Seagate ST380815AS 3.5" SATA HDD 80GB	1,5,6,7,8
	Western Digital WD1200BEVS 2.5" SATA HDD 120GB	1,2,3,4,5,6,7,8,9
	Seagate ST98823AS 2.5" SATA HDD 80GB	1,5,6,7,8
	FUJITSU MHW2060BH 2.5" SATA HDD 60GB	1,5,6,7,8
	HITACHI HDS721616PLA380 3.5" SATA HDD 160GB	1,5,6,7,8
Primary IDE Master	Pioneer DVD-121 / 5.25" DVD-ROM	1,6,7,8
	4KUS CCD-52X6D 52X / 5.25" CD-ROM	1,6,7,8
	SONY CDU4811 48X / 5.25" CD-ROM	1,6,7,8
	Seagate ST380215A 3.5" IDE HDD 80GB	1,6,7,8
	Seagate ST3160815A 3.5" IDE HDD 160GB	1,6,7,8
	Western Digital WD800BB 3.5" IDE HDD 80GB	1,6,7,8
Primary IDE Slave	N/A	
CRT	ViewSonic E653 15" CRT	1,2,3,4,5,6,7,8,9
	CTX PR-960F 19" CRT	1,4,5,7,8
LCD	N/A	N/A
Compact Flash	N/A	N/A
Operating System	Fedora Core 8	7
	Windows XP Professional English Version V2002 Service Pack 2	7
	Windows XP Professional English Version Standard x64 Edition	1,2,3,4,5,6,7,8,9
	Windows Vista Ultimate English Version	7
	Windows Vista Ultimate x64 Edition English Version	7
Power Supply	Seventeam ST350BKV 350W ATX Power	1,2,3,4,5,6,7,8,9

Test Result for Certification

1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
Floppy Connector / Driver A:	X			
Primary IDE Master	X			
RAID 0 Function Test	X			
RAID 1 Function Test	X			
RAID 5 Function Test	X			
RAID 10 Function Test	X			
SATA1 / Serial ATA Connector 1	X			(BIOS)IDE Channel 0 Master
SATA2 / Serial ATA Connector 2	X			(BIOS)IDE Channel 0 Master
SATA3 / Serial ATA Connector 3	X			(BIOS)IDE Channel 1 Master
SATA4 / Serial ATA Connector 4	X			(BIOS)IDE Channel 1 Master
SATA4 / Serial ATA Connector 5	X			(BIOS)IDE Channel 2 Master
IDE 1	X			(BIOS)IDE Channel 3 Master
DOM (Disk On Module) – 40 Pin	X			Transcend / TS512MDOM40V / 512MB / IDE 40 Pin
COM 1-232	X			
COM 2-232	X			
COM 2-422	X			
COM 2-485	X			
COM 2-Ring	X			
COM 3-232	X			
COM 4-232	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			
SIR / 115.2 Kbps	X			
FIR / 4M bps	X			
USB 1/2 Ports	X			
USB 3/4 Ports	X			
USB 5/6 Ports	X			
USB 7/8 Ports	X			
USB 2.0 1/2 Ports	X			
USB 2.0 3/4 Ports	X			
USB 2.0 5/6 Ports	X			
USB 2.0 7/8 Ports	X			
DIO Connector			X	
CD-In Connector	X			
DIMM Slots	X			
Watchdog IRQ n			X	
Watchdog Software Control	X			
CPU FAN Connector	X			
System FAN Connector	X			
Front Panel (CN34)	Result			Notes
	N/A			
	Pass	Fail	N/A	

Power On Button	X			
IDE LED	X			
External Buzzer	X			
On Board Buzzer	X			
Power LED	X			
Reset Switch	X			
Keyboard Lock	X			
Jumpers Function	Result			Notes
	Pass	Fail	N/A	
ATX simulates AT			X	
CMOS Clear	X			
Power Connector & Function	Result			Notes
	Pass	Fail	N/A	
ATX Power Connector	X			
ATX Power 12V Connector	X			
AT Power Connector(P8&P9)			X	
LAN Connector & Function	Result			Notes
	Pass	Fail	N/A	
LAN Link / Speed LED	LAN1	X		
	LAN2	X		
LAN Active LED	LAN1	X		
	LAN2	X		
LAN 10/100 Ethernet	X			
LAN 1G Ethernet	X			
PCI Connector & Function	Result			Notes
	Pass	Fail	N/A	
Mini PCI Slot			X	
PCI Slot	X			
PCI Express	X			

2. Power Consumption Test (Run Prime95 Program)

Platform Information

PCB Model / Version	IMBM-935 Rev.A1.0
BIOS	IMBM-935 Rev 1.0 for G2 (02/13/2008)
	IMBM-935 Rev 1.0 for VE (02/13/2008)
Operating System	Windows XP Professional V2002 Service Pack 2
	DOS 6.22
CPU	Intel Core 2 Duo E6400 2.13GHz FSB:1066MHz
Memory	Kingston DDRII 800MHz 512MB (NANYA NT5TU64M8BE-25C)
SATA HDD	WD1200BEVS 2.5" SATA HDD 120GB
Primary IDE Master	4KUS CCD-52X6D 5.25" CD-ROM
Primary IDE Slave	N/A
CRT	ViewSonic E653
LCD	N/A
Chipset Software	8.3.0.1013
Graphics Media	6.14.10.4833
LAN Driver	9.8.20.0
Audio Driver	5.10.0.5497
Power Supply	As following

Test Equipment:

Equipment	AC/DC Clamp Meter
Manufacturer	PROVA
Model name	CM-01
Standard	Reference to CE EN 61010 Test Procedure
	Reference to UL Test Procedure

Equipment Certified Calibration:

Calibrated Company	IPE (儀寶)
S/N	00004072 (DM215)
Report No	7C21P566
Calibration Date	Jan. 14,2008
Next Calibration Date	Jan. 13, 2009
Test By	Mick

Test Environment	Windows XP Professional V2002 Service Pack 2 English Version			Note
	ATX Power: Seventeam ST-300BLP-300W	AT Power		
CPU Type	CPU: Intel Core 2 Duo E6400 2.13GHz FSB:1066MHz		CPU:N/A	
Normal Mode (+5V)	2.80	A	A	
Suspend Mode (+5V)	2.26	A	A	
5VSB in Power Off Mode (just for ATX)	0.34	A	A	
5VSB in Power On Mode (just for ATX)	0.04	A	A	
Normal Mode (+12V)	4.23	A	A	
Suspend Mode (+12V)	2.98	A	A	
Normal Mode (+3.3V) (just for ATX)	0.45	A	A	
Suspend Mode (+3.3V) (just for ATX)	0.44	A	A	
Normal Mode (-12V)		A	A	
Suspend Mode (-12V)		A	A	
Normal Mode (-5V)		A	A	
Suspend Mode (-5V)		A	A	

3. Power Connector Test (110V / 220V)

Test Method	Result		
	Pass	Fail	N/A
ATX Connector - Power On/Off for 10 times in DOS (Seventeam ST-352HLP 350W)	X		
AT Connector - Power On/Off for 10 times in DOS			X
5V Only - Power On/Off for 10 times in DOS			X

4. 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		

5. 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		
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/100/1000 Mbps	HP J4095A 24 Ports	100 M	100 MBps	100M	X		
		D-Link DGS-1008T	100 M	1GBps	1G	X		
		D-Link DES-1316 PoE	100 M	100 MBps	100M	X		
		Intel InBusiness 8 Port	100 M	100 MBps	100M	X		
		Accton DeskTop-3005	100 M	100 MBps	100M	X		
		SVEC FD916H (10 Mbps HUB)	100 M	10 MBps	10M	X		
Onboard LAN2	10/100/1000 Mbps	HP J4095A 24 Ports	100 M	100 MBps	100M	X		
		D-Link DGS-1008T	100 M	1GBps	1G	X		
		D-Link DES-1316 PoE	100 M	100 MBps	100M	X		
		Intel InBusiness 8 Port	100 M	100 MBps	100M	X		
		Accton DeskTop-3005	100 M	100 MBps	100M	X		
		SVEC FD916H (10 Mbps HUB)	100 M	10 MBps	10M	X		

6. Hardware Compatibility

CPU Compatible Test				
CPU Type	FSB	Result		
		Pass	Fail	N/A

Intel Core 2 Duo E4300 1.8GHz	800MHz	X					
Intel Core 2 Duo E6400 2.13GHz	1066MHz	X					
Intel Conroe-L Celeron 2.4GHz	800MHz	X					
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Kingston	HY818T512 800BF3S	667	512MB	V1.65	X		
Kingston	NANYA T5TU64M8BE-25C	800	512MB	V1.65	X		
Transcend	7UB32 D9DCL	800	512MB	V1.65	X		
Kingston	V59C1512804QCF25	800	1GB	V1.65	X		
Audio Basic Function Test							
					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
Line In Sound Record							X
MIC Speaker				Dynamic	X		
				Condenser	X		
MIC Sound Recorder				Dynamic	X		
				Condenser	X		
Audio 5.1 Channel with S/P DIF Function Test							
					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							
					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		
	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			X
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V		X
	AUO T370HW01 / 37" / 1920x1080 / 48bit			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 LQ121S1DG11 / 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		
I-VIEW CP-1400AS (with Age STD-477FAI CCD)	Capture Card	X		
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card	X		
3Com 3C905C-TXM ETHERLINK 10/100 PCI	LAN Card	X		
D-Link DWL-520+ Wireless LAN	LAN Card	X		
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	RAID Card	X		
LEMEL MD V1456VQH-P2 PCI MODEM Card	Modem Card	X		
D-Link DU-520 USB 2.0	USB Hub Card	X		
Tekram TR-822 Serial ATA 150 [SA-001] + SATA HDD Seagate ST3120026AS 120GB	SATA 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
Seagate ST380215A 3.5" IDE HDD 80GB	X		
Seagate ST3160215A 3.5" IDE HDD160GB	X		
Western Digital WD800BB 3.5" IDE HDD 80GB	X		
Western Digital WD1200JS 3.5" SATA HDD 120GB	X		
Western Digital WD800JD 3.5" SATA HDD 80GB	X		
Seagate ST380815AS 3.5" SATA HDD 80GB	X		
Western Digital WD1200BEVS 2.5" SATA HDD 120GB	X		
Seagate ST98823AS 2.5" SATA HDD 80GB	X		

FUJITSU MHW2060BH 2.5" SATA HDD 60GB	X		
HITACHI HDS721616PLA380 3.5" SATA HDD 160GB	X		
CD/DVD-ROM Compatibility Test			
Model	Result		
	Pass	Fail	N/A
Pioneer DVD-121 / 5.25" DVD-ROM	X		
4KUS CCD-52X6D 52X / 5.25" CD-ROM	X		
SONY CDU4811 48X / 5.25" CD-ROM	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		
USB Device Full Loading Test	Result		
	Pass	Fail	N/A
USB Port	X		
USB1	X		
USB2	X		
USB3	X		
USB4	X		
USB5	X		
USB6	X		
Floppy Disk Controller Function Test	Result		
	Pass	Fail	N/A
Copy and compare file between C: and A / B:	X		
Change Floppy to None value	X		
Swap FDD			X
Peripheral Compatibility-Storage Device			
Model	Interface	Result	
		Pass	Fail
MO [SCSI]	SCSI		X

IOMega ZIP 100 parallel port	Parallel			X	
DOC				X	
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 Function Test

COM Port Burn In Test overnight	Result		
	Pass	Fail	N/A
	X		

Disk On Module [DOM] Compatibility Test

Model	Interface	Result		
		Pass	Fail	N/A
Transcend / TS512MDOM40V / 512MB	IDE 40 Pin	X		
Transcend / TS512MDOM44V / 512MB	IDE 44 Pin			X

PCI Card Compatibility Test

Model	Interface	Result		
		Pass	Fail	N/A
CHAINTECH NVIDIA GeForce4 MX440-8X	VGA	X		
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN	X		
ADAPTEC 1420SA RoHS 4-Port SATA II RAID	SATA	X		

PCI-Express Card Compatibility Test

Model	Interface	Result		
		Pass	Fail	N/A
SUNIX SATA1414 VER 1.1 PCI-Express x1 SATA Card	PCI-Express x1	X		
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card	PCI-Express x4	X		
ASUS EAX1600PRO/TD/256M/A (ATI Chipset) PCI-Express x16 VGA Card	PCI-Express x16	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		
COM5				X
COM6				X
LPT1		X		
LPT2				X

7. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
English Fedora Core 8 2.6.23.1-42.fc8			X		
Windows Vista™ Ultimate English Version			X		
Windows Vista™ Ultimate x64 Edition English Version			X		
Windows XP Professional English Version V2002 Service Pack 2			X		
Windows XP Professional English Version /Standard x64 Edition			X		
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Fedora Core 8 2.6.23.1-42.fc8	Chipset Software	Default Driver	X		
	Graphics Media	Default Driver	X		
	LAN Driver	Default Driver	X		
	Audio Driver	Default Driver	X		
Windows Vista™ Ultimate x64 Edition English Version	Chipset Software	8.3.0.1013	X		
	Graphics Media	15.4.3.64.1283	X		
	LAN Driver	9.8.20.0	X		
	Audio Driver	6.0.1.5464	X		
Windows XP Professional English Version V2002 Service Pack 2	Chipset Software	8.3.0.1013	X		
	Graphics Media	6.14.10.4833	X		

	LAN Driver	9.8.20.0	X		
	Audio Driver	5.10.0.5497	X		
Windows XP Professional English Standard Version x64 Edition	Chipset Software	8.3.0.1013	X		
	Graphics Media	6.14.10.4833	X		
	LAN Driver	9.8.20.0	X		
	Audio Driver	5.10.0.5497	X		

8. 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		
PC Health Status			
CPUVcore	X		
(+) Vcore	X		
(+) 1.5V	X		
(+) 1.8V	X		
(+) 5V	X		
(+) 12V	X		
(+) Vcc	X		
(+)VBAT	X		
(+) 3VSB	X		
System Temp.	X		
Current CPU Temp.	X		
CPU Fan Speed	X		
System Fan Speed	X		

9. Performance Test Platform Information

PCB Model / Version	IMBM-935 Rev.A1.0
BIOS	IMBM-935 BIOS Rev 1.0 for G2 (02/13/2008)
	IMBM-935 BIOS Rev 1.0 for VE (02/13/2008)

Operating System	Windows XP Professional V2002 Service Pack 2
CPU	Intel Core 2 Duo E6400 2.13GHz FSB:1066MHz
Memory	Transcend DDRII 800MHz 512MB x 2 (7UB32 D9DCL)
SATA HDD	Western Digital WD1200BEVS 2.5" SATA HDD 120GB
CRT	ViewSonic E653 15" CRT
Chipset Software	8.3.0.1013
Graphics Media	15.4.3.64.1283
LAN Driver	9.8.20.0
Audio Driver	6.0.1.5464
Power Supply	Seventeam ST350BKV 350W ATX Power

Test result:

Testing Software	Result	Unit
Final Reality V1.01—BenchMark Test (Reality Marks)		
2D Image	48.03	
3D	7.33	
Bus transfer	121.91	
Overall	36.73	Reality marks
3Dmark2001SE Pro (Demo version)		
3DMark2001SE Build 330_Benchmark mode	8582	
PCMark2002		
CPU	8428	
Memory	17215	
HDD	1035	

Test Result:

Testing Software	Result	Unit
PCMark05		
PCMark	N/A	PCMarks
CPU	5463	
Memory	4732	
Graphics	N/A	
HDD	3959	
3Dmark2003 v360		
3Dmark Score	2205	
CPU Score	862	

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