

Product Certification Report

Release No : 03E010145

Product Model	HSB-460I
Product Description	NS GEODE HALF SIZE CPU CARD
Test Reason	<input type="checkbox"/> New product <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input checked="" type="checkbox"/> Renew product <input checked="" type="checkbox"/> PCB : HSB-460I Rev:A0.2 <input checked="" type="checkbox"/> BIOS: HSB BIOS Rev:0.4 (06/05/2003) <input type="checkbox"/> Revision change <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Component: <input checked="" type="checkbox"/> General Function <input checked="" type="checkbox"/> Chipset: Geode GX1(300MHz) +CS5530A <input checked="" type="checkbox"/> Audio Chipset: AC97 2.1 Compatible <input checked="" type="checkbox"/> Ethernet Chipset: RTL 8139DL / 2c008S1 <input checked="" type="checkbox"/> I/O Chipset: Winbond W83977EF-AW

2003-06-11

Wayne Chen

Andrew ku

Issue date

A.V.P

Test Engineer

Test result for certification

Stability Test - Dynamic / Boot_UP Burn_In Test	Result
Dynamic Burn-In test. (Qaplusfe 5.5 Operating at 0 ~60 for 48hours)	✓
Dynamic Burn-In test. (Power On/Off Operating at 0 ~60 for 24hours)	✓
Audio Play For Sound Codec Chipset Burn-In Test .(Operating at 0 & 60 for 2hours)	✓
LAN Chipset Burn_In Test. (Operating at 0 & 60 for 2hours)	✓
Boot_Up Burn_In Test .(Operating at Room Temp.)	✓
Timer Accuracy Test	Result
System clock accuracy of +/-5 sec per day.	✓
Watchdog timer accuracy of +/-20 % per sec/ min.	✓
Margin Test – Power Consumption – PIII 1G , SDRAM 128MB	Result
Electrical characteristics – Normal Mode(+5V)	1.98 A
Electrical characteristics – Standby Mode(+5V)	1.28 A
Electrical characteristics – Normal Mode(+12V)	0 A
Electrical characteristics – Standby Mode(+12V)	0 A
Power Connector Test – AT Power Motherboard	✓
Power Support Test (5V only operation)	✓
Network HUB / LAN Connects Test	Result
LAN1 HP J4095A 24Ports [100 /10 Mbps]	✓
LAN1 D-Link DES-1008 [100 / 10 Mbps]	✓
LAN1 Intel InBusiness 8 Ports [100 / 10 Mbps]	✓
LAN1 LEMEL LM-S5 5 Ports [100 / 10 Mbps]	✓
LAN1 Accton DeskTop-3005 [100 / 10 Mbps]	✓
LAN1 SVEC FD916H [10 Mbps]	✓
Touch Screen for serial Ports Test	Result
COM 1 Serial Port	✓
COM 2 Serial Port	✓
COM 3 Serial Port	✓
COM 4 Serial Port	✓
CPU Compatible Test	Result
Cyrix Media Gx with MMX.S CPU-300MHz	✓
Memory Test – SDRAM PC-133/100	Result
Hyndai / HY57V658020 TC-10/PC-100/128MB	✓
NEC / D4564841G5-A80-9JF/PC-100 / 64MB	✓
NEC / D4564841G5-A80-9JF/PC100 / 128MB	✓
HITACHI / 5264805DTTA60 /PC100 / 64MB	✓
NEC / D45128841G5-A75-9JF/PC-133 / 128MB	✓
WINBOND / Winbond107DDW981208BH-75/PC-133 / 256MB	✓
On Board Audio Function Test	Result
System Sound	✓
Play CD_IN	✓
Play Sound Recorder	✓

Line Out	✓
Line In	✓
Line In Sound Recorder	✓
MIC Speaker Recorder – Dynamic / Condenser	✓
Game port	✓
Multi Media Card Compatible Test	Result
LEMEL CT4170 (ISA bus)	✓
LEMEL ESS ES1868F 3D/16 PnP (ISA bus)	✓
SCSI Card Compatible Test	Result
AHA-1520B (ISA bus)	✓
LAN Card Compatible Test	Result
3COM 3C509B (10Mbps) (ISA bus)	✓
Intel PILA8560 (10/100MB) (ISA bus)	✓
HDD Compatible Test	Result
IBM DTLA-307075 / ATA-100 / 76.8GB	✓
IBM IC35L180AVV207-1 / ATA-133 / 185.2GB	✓
Maxtor 4G160J8 / ATA-100 / 46.1GB	✓
Maxtor 54610H6 / ATA-133 / 160GB	✓
Maxtor 54098U8 / ATA-66 / 40.9GB	✓
Seagate ST340016A / ATA-100 / 40GB	✓
Seagate ST380021A / ATA-100 / 80GB	✓
W/D WD200EB-OOCPFO / ATA- / 20GB	✓
W/D WD400EB / ATA- / 40GB	✓
CDROM / DVDROM Test	Result
NEC C&C-BCD F561B / 52X	✓
TEAC CD-540E-082-U / 40X	✓
SONY CDU5231 / 52X	✓
IBM GCR-8480B / 48X	✓
MITSUMI FX5400W /54X	✓
PIONEER ATAPI DVD-A03S / 6X / DVD-ROM	✓
Acer DVP1640A / 16X / DVD-ROM	✓
USB Compatible Test	Result
CMOS Setting Test	✓
CyberLink Power DVD XP4.0 Remote control	✓
Acer 6406EU-122 CD-ROM	✓
HP SJ4200C Scanner	✓
HP Photo Smart P1000 Print	✓
IOMEGA ZIP 100MB	✓
D-Link DSB-H4/ DU-H4 HUB	✓
MITSUMI FLL3.5 D353GUE/FUE	✓
Floppy Disk Controller Test	Result
Copy and Compare file between C : and A/B	✓
Format A/B with system transfer and boot PC from floppy	✓
Change CMOS Floppy is NONE value	✓

SWAP FDD	✓
Peripheral Storage Device Compatible test	Result
IOMEGA ZIP100M (Parallel Type)	✓
IOMEGA ZIP100M (IDE Type)	✓
LS-120 / LKM-F930-1 (IDE Type)	✓
DOC 2000 Model	✓
DOC Onboard Address	✓
Compact Flash	✓
Digital I/O Connector Test	Result
DIO Function Test	✓
Industry Control Adapter Card Compatible Test-PC104/PC104Plus	Result
AAEON PCM-5600 / Fax/Modem Module	✓
AAEON PCM-3115B / PCMICA Module	✓
AAEON PCM-3640 / RS-232 Module	✓
On Board I / O Function Test	Result
COM Port Send-Receive Test	✓
CheckIt 7.0 Portable Edition Test	✓
Disk On Module [DOM] Compatibility Test	Result
DOM-256-026P / Rev.A1k20 / IDE 40 Pin	✓
BIOS Function Test	Result
Standard CMOS Setup Test	✓
Boot Sequence Test	✓
APM Power manager test	✓
Power On Function test	✓
Wake Up Event Test	✓
CMOS backup Test	✓
Boot ROM Test	✓
COM Address/IRQ Test	✓
LPT Address /IRQ Test	✓
Hardware Monitor Test	✓
Supervisor / User Password Test	✓
BIOS Awdflash Program Test	✓
Performance Test – CPU Pentium III 850 , DRAM 128MB	Result
LandMark Speed 2.0 – CPU	1288.28
LandMark Speed 2.0 – FPU	3458.09
LandMark Speed 2.0 – VIDEO	33.00
WinBench 99 V1.1- CPU mark99	5.64
WinBench 99 V1.1- FPU winmark	382
WinBench 99 V1.1- Business Graphic winmark99	21.8
WinBench 99 V1.1- High_end Graphic winmark99	58.3
Final Reality V1.01 BenchMark Test – 2D image	0.97
Final Reality V1.01 BenchMark Test – 3D	0.28
Final Reality V1.01 BenchMark Test – Bus transfer	1.09
Final Reality V1.01 BenchMark Test – Overall	0.61

3D WinBenech 2000 v1.0 with DirectX7 and 1024x768x16Bits-Processor Test	0..0905
Content Creation Winstone 2000 V1.0 – C.C.Winstone 2000	1.2
WinStone 99 V1.1 – Business winstone99	7.22
Operation System Compatible Test	Result
Windows 98SE English / Chinese version.4.10.2222	✓
Windows ME English / Chinese version. 4.90.3000	✓
Windows NT workstation 4.0 English version with service pack 6	✓
DOS and DOS Utility Compatibility Testing	✓
Utility and Driver Test	Result
VGA for Windows 98SE(NationalSemiconductorXpressGRAPHICS™Ver.4.10.01.1320)	✓
VGA for Windows ME(NationalSemiconductorXpressGRAPHICS™Ver.4.10.01.1315)	✓
VGA for Windows NT 4.0	✓
LAN for Windows 98SE (Realtek RTL8139 Ver.4.10.2222)	✓
LAN for Windows ME (Realtek RTL8139 Ver.4.90.3000)	✓
LAN for Windows NT 4.0	✓
Sound for Windows98SE (National Xpress AUDIO[™]16bit Sound Ver.5.05.00.1006)	✓
Sound for Windows ME(National Xpress AUDIO[™]16bit Sound Ver.5.05.00.1006)	✓
Sound for Windows NT 4.0	✓
LCD Monitor Function Test	Result
CRT+LCD – Dual Display Function Test	✓
NEC / NL8060BC31-09 / TFT / 10.4"	✓
Miscellaneous Test	Result
H/W Reset	✓
Ext. Speaker	✓
On board buzzer	✓
Keyboard Lock	✓
HDD LED	✓
Power LED	✓
Ext. KB connector	✓
Watchdog – Software Programming	✓
Disable watchdog	✓
CPU FAN connector	✓
COM1	✓
COM2	✓
COM2-RS-422	✓
COM2-RS-485	✓
COM3	✓
COM4	✓
LPT1	✓
PS2 Keyboard / Mouse	✓
SIR / 115K bps	✓
FIR / 4M bps	✓
LCD Display Function Test	✓