

Product Certification Report

Release No : 05E010036

Product Model	GENE-5312
Product Description	SubCompact Board
Test Reason	<input checked="" type="checkbox"/> New product <input checked="" type="checkbox"/> PCB : GENE-5312 Rev.A0.2 <input checked="" type="checkbox"/> BIOS : GENE-5312 BIOS Rev.A1.0 (10/14/2005) <input checked="" type="checkbox"/> Chipset : <input checked="" type="checkbox"/> CPU Type : AMD Geode™GX 400MHz <input checked="" type="checkbox"/> North Bridge : AMD Geode™GX series <input checked="" type="checkbox"/> South Bridge : CS5535 <input checked="" type="checkbox"/> VGA Chipset : AMD Geode™GX1 533/500/466 integrated graphic <input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 <input checked="" type="checkbox"/> Ethernet Chipset : Realtek RTL8100BL <input checked="" type="checkbox"/> I/O Chipset : ITE / IT8712F-A <input type="checkbox"/> Remark :

2005/10/24

Wenyuan Yang

Andrew Ku

Issue date

Manager

Test Engineer

Test Result for Certification

Dynamic / Boot_UP Burn_In Test	Test Condition	Result
Diagnostics Software Burn-In Test.	0°C~60°C, 48 hrs	Pass
Power On/Off Test.	0°C~60°C, 24hrs	Pass
I/O Peripheral Function Test – I/O Function		Result
Floppy Connector / Driver A:		Pass
Primary IDE Master		Pass
Primary IDE Slave		Pass
Compact Flash - Type I		Pass
Compact Flash - Type II		Pass
DOM (Disk On Module) - 44 Pin		Pass
COM 1		Pass
COM 2-232		Pass
COM 2-422		Pass
COM 2-485		Pass
COM 2-Ring /+5V /+12V		Pass
Clear CMOS		Pass
PS/2 Mouse & Keyboard (Internal)		Pass
LPT 1		Pass
SIR / 115.2 Kbps		Pass
USB 1&2 Ports		Pass
USB 3& 4Portts		Pass
VGA Display		Pass
DIO Connector		Pass
PC/104		Pass
Audio Function Test		Pass
LCD / TFT		Pass
Internal KB & Mouse		Pass
Watchdog Software Control		Pass
I/O Peripheral Function Test –Front Panel and Other connector		Result
IDE LED		Pass
On Board Buzzer		Pass
Power LED		Pass
Internal K/B Connector		Pass
I/O Peripheral Function Test – Power Connector & Function		Result
4P Power Connector		Pass
I/O Peripheral Function Test – LAN Connector & Function		Result
LAN Speed LED		Pass
LAN Active LED		Pass
LAN Link LED		Pass
LAN 10/100 Ethernet		Pass
Power Consumption Test (Run Speed 200 in DOS Mode)		
	AT Power: LEMACS/ SP2-4300F /250W	
	CPU: AMD Geode™ GX 400MHz	
Normal Mode (+5V)	1.29	A
Suspend Mode (+5V)		A
Normal Mode (+12V)	0.00	A
Suspend Mode (+12V)		A

Power Connector Test (110V/220V)		Voltage Range		Result
AT Connector Power On/Off for 10 times in DOS				Pass
5V Only Power On/Off for 10 times in DOS				Pass
Timer Accuracy Test				
System Clock & RTC Clock Test				
Test Method		Margin for error		Result
System Clock in Power On Mode		+-1 second during 24 hours		Pass
RTC Clock in Power On Mode		+-1 second during 24 hours		Pass
RTC Clock in Power Off Mode		+-1 second during 24 hours		Pass
Watchdog Timer Test				Result
Time-out Interval		10 sec		Pass
		60 sec		Pass
		255 sec		Pass
Network HUB / LAN Connection Test				Result
LAN Location	LAN Speed	HUB Type	HUB Speed	Result
LAN	10/100 Mbps	HP J4095A 24 Ports	100 Mbps	Pass
		D-Link DGS-1008T	1Gbps	Pass
		Intel InBusiness 8 Ports	100 Mbps	Pass
		LEMEL LM-S5 5 Ports	100 Mbps	Pass
		Accton Desktop-3005	100 Mbps	Pass
		SVEC FD916H	10 Mbps	Pass
Hardware Compatibility				
CPU Compatible Test				
Type	Speed	FSB	Run HCT Version	Result
AMD Geode™GX 400MHz			9.5	Pass
Memory Compatibility Test				
Brand	Chipset	Frequency	Size	Result
ELPIDA	DD2516AKTA-6B	333	256	Pass
INFINEON	HYB25D256800CC-6	333	512	Pass
HYNIX	HY5DU121622AT-J	333	256	Pass
HYNIX	HY5DU121622A	333	512	Pass
On Board Audio Function Test				
Audio Basic Function Test				Result
System Sound				Pass
Play CD_IN				Pass
Play Sound Recorder				Pass
Line Out				Pass
Line In				Pass
Line In Sound Record				Pass
MIC Speaker		Dynamic		Pass
		Condenser		Pass
MIC Sound Recorder		Dynamic		Pass
		Condenser		Pass
On Board LCD Function Test				
TFT LCD	Type	Voltage	Result	
TFT	Toshiba LTM10C209A / 10.4" / 640*480 / 18bit	5V	Pass	
	Sharp LQ121S1DG11 / 12.1" / 800*600 / 18bit	3.3V	Pass	
HDD Compatible Test				Result
Model				Result
Hitachi / HDS722525VLAT80 / 250GB / ATA-100				Pass
IBM / DTLA-307045 / 46.1GB / ATA-100				Pass

FUJITSU / MPE 3136AH / 13.6GB / ATA-66	Pass		
Maxtor / 4G160J8 / 160GB / ATA-133	Pass		
Quantum / Fireball Plug AS / 30GB / ATA-100	Pass		
Seagate / ST310210A / 10.2GB / ATA-66	Pass		
Western / WD400BB-75DEA0 / 40GB / ATA-100	Pass		
CD/DVD-ROM Compatibility Test			
Model	Result		
Acer DVP1640A / 16X / DVD-ROM	Pass		
Creative DVD1240E / 12X / DVD-ROM	Pass		
IBM HL-DT-ST / GCR-8480B / 48X / CD-ROM	Pass		
Pioneer / DVD-121 / 16X / DVD-ROM	Pass		
PHILIPS CDD5301 / PBC03210G / 32X10X40 / 12X DVD / CD-RW / DVD-ROM	Pass		
SAMSUNG / SH-W08 / DVD+R 8X / DVD-R 8X / CD-R 32X	Pass		
NEC / ND-2500A / DVD R/RW / +R8X-R8X	Pass		
TEAC / CD-540E / 40X / CD-ROM	Pass		
IDE Cable Function test			
IDE Model	Result		
44 Pin Cable ATA33	Pass		
USB Function Test			
USB Basic Function Test	Result		
USB Controller	Pass		
USB 2.0 Controller	Pass		
USB Keyboard Support	Pass		
USB Mouse Support	Pass		
USB 1.1 Compatible Test	Result		
USB 1.1 Compatible Test	Pass		
Floppy Disk Controller Function Test			
Result	Result		
Copy and compare file between C: and A / B:	Pass		
Peripheral Compatibility-Storage Device			
Model	Interface	Result	
IOmega zip 100 parallel port	Parallel	Pass	
IOmega zip 100MB Internal ATAPI Drive	IDE	Pass	
PQI FC512 512MB	Type-I CF Card	Pass	
HITACHI / HMS360402D5CF00	Type- II CF Card	Pass	
Digital I/O Connector Test		Result	
Input Address: (801)		Pass	
Output Address: (801)		Pass	
VCC: ()		Pass	
DIO Function Test		Pass	
Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules			
Interface	Model	Result	
PC/104	AAEON PCM-5600	Modem Module	Pass
	AAEON PCM-3115B	PCMCIA Module	Pass
PC1-04	AAEON PCM-3430	SCSI Module	Pass
COM Port Send / Receive Test		Result	
Use software program: COMTEST.exe		Pass	
Use software program: LL5.exe		Pass	
Disk On Module [DOM] Compatibility Test			
Model	Interface	Result	
DOM-064-426P Rev: A2A11	IDE 44 Pin	Pass	
COM/LPT Ports & RS-232/422/485 Function Test		Result	
RS-422 for COM2		Pass	
RS-485 for COM2		Pass	
COM1		Pass	

COM2			Pass
LPT1			Pass
O.S. Compatibility Test			
Installation Operation System Compatible Test			Result
Linux-RedHat 9.0 / Kernel 2.4.20-8			Pass
Windows XP Professional V2002 Service Pack 2			Pass
DOS 6.22			Pass
Utility and Driver Test			
OS	Drivers Version		Result
Linux-RedHat 9.0 / Kernel 2.4.20-8	VGA	Default	Pass
	LAN	Default	Pass
	Audio	Default	Pass
Windows XP	VGA	Advanced Micro Devices Windows Graphic Ver.2.0.1.0	Pass
	LAN	Realtek RTL8139 Ver. 5.396.530.2001	Pass
	Audio	Geode -GX2 WDM Audio Driver Ver.1.4.1.0	Pass
DOS 6.22			Pass
BIOS Function Test			Result
Standard CMOS Setup Test			Pass
Boot Sequence Test			Pass
CMOS Backup / Clear CMOS Test			Pass
Boot ROM Test (PXE)			Pass
Supervisor / User Password Test			Pass
CRT / LCD / TV Function Test			Pass
Swap Floppy Drive & Boot up Floppy Seek Function Test			Pass
PC Health Status			Pass
COM Address / IRQ Test			Pass
USB Onboard Device Function Test			Pass
LPT Address / IRQ Test			Pass
BIOS AWDFLASH Program Test			Pass
Touch Screen LCD for Serial Ports Test		Address	IRQ
COM1		3F8	IRQ4
COM2		2F8	IRQ3
Performance Test			
English Windows 2000 Professional with SP4 5.00.2195 + 1280x1024x32bit / 60Hz + Direct 9.0			
ZD WinBench 99 V2.0			Unit
Business Disk WinMark99		4770	Thousand bytes/sec
High-End Disk WinMark99		18600	Thousand bytes/sec
Business Graphics WinMark99		594	
High-End Graphics WinMark99		131	
Final Reality V1.01—BenchMark Test (Reality Marks)			
2D image		3.59	
3D		0.38	
Bus transfer		4.69	
Overall		1.99	Reality marks
System Integrated Application Test			Result
A. System Integrated Application Test (Burn-In 8 Hrs):			Pass