

Tekram Technology Co., Ltd.

Test Report

Product Name : DC-390U2WE
Test Report Date : Mar-13-2002
Test Report Version : B
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Reviewed by : Antony Hou
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Report Version History

Version	Date	Description
A	Feb-18-2002	First Release
B	Mar-13-2002	Fix bug for DOS Install Program.

Test Environment

OS	Drivers Date	Driver Version	Bios Version	Remark
Win98se	11/18/2001	1.00.00	1.00	
WinNT	N/A	1.00	1.00	
Win2000	10/31/2001	1.0.0.00	1.00	
WinXP	10/31/2001	1.0.0.00	1.00	

A . Check BIOS Basic Function & Show Adapter Information

A1.Check BIOS Function Keys

Item	Result	Remark
Check F1 Function Keys	Pass	
Check F2 Function Keys	Pass	
Check F6 Function Keys	Pass	
Check F8 Function Keys	Pass	

A2.Check Show Adapter Information

Item	Information	Result	Remark
SCSI Chip	53C896	Pass	
Bus Type	PCI Bus	Pass	
Bus#	02H	Pass	
Device#	05H	Pass	
Function#	00H;01H	Pass	
Bios ROM mapped at	Cc00H	Pass	
IO Address	A000H	Pass	
PCI Interrupt Line	INTA#	Pass	
IRQ#	11	Pass	
IRQ Trigger Type	Level Trigered	Pass	
Data xfer Type	PCI Bus Master	Pass	

B . Check Set Adapter Options

B1 . Check Change Adapter SCSI ID

Adapter SCSI ID	Result	Remark
Adapter SCSI ID 0	Pass	
Adapter SCSI ID 1	Pass	
Adapter SCSI ID 2	Pass	
Adapter SCSI ID 3	Pass	
Adapter SCSI ID 4	Pass	
Adapter SCSI ID 5	Pass	
Adapter SCSI ID 6	Pass	
Adapter SCSI ID 7----- >>Default	Pass	
Adapter SCSI ID 8	Pass	
Adapter SCSI ID 9	Pass	
Adapter SCSI ID 10	Pass	
Adapter SCSI ID 11	Pass	
Adapter SCSI ID 12	Pass	
Adapter SCSI ID 13	Pass	
Adapter SCSI ID 14	Pass	
Adapter SCSI ID 15	Pass	

B2 . Check Boot Device ID(Two Devices)

BOOT DEVICE ID Setup	First Device ID	Secondly Device ID	Adaptec SCSI ID	Result	Remark
BOOT DEVICE ID0	0	1	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID1	1	0	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID2	0	2	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID3	0	3	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID4	0	4	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID5	0	5	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID6	0	6	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID7	0	7	Adaptec SCSI ID6	Pass	
BOOT DEVICE ID8	0	8	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID9	0	9	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID10	0	10	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID11	0	11	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID12	0	12	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID13	0	13	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID14	0	14	Adaptec SCSI ID7	Pass	
BOOT DEVICE ID15	0	15	Adaptec SCSI ID7	Pass	

B3 . Check Boot Device Lun

BOOT DEVICE LUN	BOOT DEVICE ID	Adaptec SCSI ID	Result	Remark
BOOT DEVICE LUN 0	BOOT DEVICE ID 0	Adaptec SCSI ID7	Pass	
BOOT DEVICE LUN 1	BOOT DEVICE ID 0	Adaptec SCSI ID7	Pass	

B4 . Check Boot From CD-ROM

Item	Status	Boot CD Type	Result	Remark
BOOT FROM CD-ROM	Enabled	No Emulation	Pass	
		Floppy Emulation 1.44MB	Pass	
		Floppy Emulation 2.88MB	Pass	
		Hard disk Emulation	Pass	
BOOT FROM CD-ROM	Disabled	No Emulation	Pass	

SCSI Function	Boot Order: SCSI,C,A		Boot Order :C,ONLY	Remark
	ENABLED	DISABLED	ENABLED	
1 SCSI HDD	Pass	Pass	Pass	
2 SCSI HDDs	Pass	Pass	Pass	
1 SCSI HDD+1 IDE HDD	Pass	Pass	Pass	
2 SCSI HDD+1 IDE HDD	Pass	Pass	Pass	
1 SCSI HDD+2 IDE HDD	Pass	Pass	Pass	
2 SCSI HDD+2 IDE HDD	Pass	Pass	Pass	

B5 . Check Greater Than 1G Support

Item	Status	Result	Remark
GREATER THAN 1G SUPPORT	Enabled	Pass	
GREATER THAN 1G SUPPORT	Disabled	Pass	

B6 . Check INT13 Extension

Item	Status	Result	Remark
INT13 EXTENSION	Enabled	Pass	
INT13 EXTENSION	Disabled	Pass	

B7 . Check More Than 2 Drives Support

Item	Status	Result	Remark
MORE THAN 2 DRIVES SUPPORT	Enabled	Pass	
MORE THAN 2 DRIVES SUPPORT	Disabled	Pass	

B8 . Check Removable Media as BIOS Device

Item	Status	Result	Remark
REMOVABLE MEDIA AS BIOS DEVICE	All Disk	Pass	
REMOVABLE MEDIA AS BIOS DEVICE	Boot Device Only	Pass	
REMOVABLE MEDIA AS BIOS DEVICE	Disabled	Pass	

B9 . Check Immedite Return On Seek Command

Item	Status	Result	Remark
IMMEDIATE RETURN ON SEEK COMMAND	Enabled	Pass	
IMMEDIATE RETURN ON SEEK COMMAND	Disabled	Pass	

B10 . Check Scan all Lun For Devices

Item	Status	Result	Remark
SCAN ALL LUN FOR DEVICES	Enabled	Pass	
SCAN ALL LUN FOR DEVICES	Disabled	Pass	

B11 . Check Active Negation

Item	Status	Result	Remark
ACTIVE NEGATION	Enabled	Pass	
ACTIVE NEGATION	Disabled	Pass	

B12 . Check Power On Reset SCSI Bus

Item	Status	Result	Remark
POWER ON RESET SCSI BUS	Enabled	Pass	
POWER ON RESET SCSI BUS	Disabled	Pass	

B13 . Check Delay Before BIOS Scans Device

Item	Status	Result	Remark
DELAY BEFORE BIOS SCANS DEVICE	3 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	5 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	10 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	20 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	30 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	60 Sec	Pass	
DELAY BEFORE BIOS SCANS DEVICE	120 Sec	Pass	

B14 . Check Max Number of Tagged Commands

Item	Status	Result	Remark
MAX NUMBER OF TAGGED COMMANDS	2	Pass	
MAX NUMBER OF TAGGED COMMANDS	4	Pass	
MAX NUMBER OF TAGGED COMMANDS	8	Pass	
MAX NUMBER OF TAGGED COMMANDS	16	Pass	
MAX NUMBER OF TAGGED COMMANDS	32	Pass	

B15 . Check SCAM Support

Item	Status	Result	Remark
SCAM SUPPORT	Enabled	Pass	
SCAM SUPPORT	Disabled	Pass	

B16 . Check F2 or F6 Function During Boot Up

Item	Status	Result	Remark
F2 or F6 FUNCTION DURING BOOTUP	Enabled	Pass	
F2 or F6 FUNCTION DURING BOOTUP	Disabled	Pass	

C . Check Set Device Options

Item	SCSI Device ID	Status	Result	Remark
Parity Checking	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Allow Disconnection	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Send START UNIT Command	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Tagged Command Queuing	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Wide Negotiation	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Synchronous Negotiation	SCSI Device ID 0	YES	Pass	
		NO	Pass	
Max Sync Xfer Rate	SCSI Device ID 0	Change Rate	Pass	
Included In BIOS Scan	SCSI Device ID 0	YES	Pass	
		NO	Pass	

D. Check Show SCSI Devices

Item	Result	Remark
Show SCSI Device information	Pass	

E. Check Low Level Format Utility

Item	Status	Result	Remark
Low Level Format HDD	Default Enter	Pass	
	Yes	Pass	
	No	Pass	

F. Check Verify Disk Utility

Item	Status	Result	Remark
Verify Disk Utility	Default Enter	Pass	
	Yes	Pass	
	No	Pass	

G. Operation System test

OS	Test Item	Result	Remark
MSDOS	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM , SCSI MO
	Shutdown & Restart	Pass	
Netware 3, 4, 5, 6	Install	Pass	
	Shutdown & Restart	Pass	
OS/2	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM、SCSI Tape、SCSI MO
	Reliability	Pass	
	Shutdown & Restart	Pass	
SCO Open Server 5	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM、SCSI Tape、
	Reliability	Pass	
	Shutdown & Restart	Pass	
Solaris 8	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM
	Reliability	Pass	
	Shutdown & Restart	Pass	
Unix Ware7.1	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM、SCSI Tape
	Reliability	Pass	
	Shutdown & Restart	Pass	
Red Hat 7.2	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM、SCSI Tape、SCSI MO
	Reliability	Pass	
	Shutdown & Restart	Pass	
Free BSD 4.4	Install	Pass	
	Compatibility	Pass	SCSI CD-ROM、SCSI Tape、SCSI MO
	Reliability	Pass	
	Shutdown & Restart	Pass	

OS	Test Item	Result	Remark
WIN98SE	Install	Pass	
	Boot (SCSI)	Pass	
	Task Test	Pass	
	Device Manager	Pass	
	Shutdown & Restart	Pass	
WIN NT	Install	Pass	
	Boot (SCSI)	Pass	
	Task Test	Pass	
	Device Manager	Pass	
	Shutdown & Restart	Pass	
WIN 2000	Install	Pass	
	Boot (SCSI)	Pass	
	Task Test	Pass	
	Device Manager	Pass	
	Shutdown & Restart	Pass	
WIN XP	Install	Pass	
	Boot (SCSI)	Pass	
	Task Test	Pass	
	Device Manager	Pass	
	Shutdown & Restart	Pass	

H. Benchmark Test

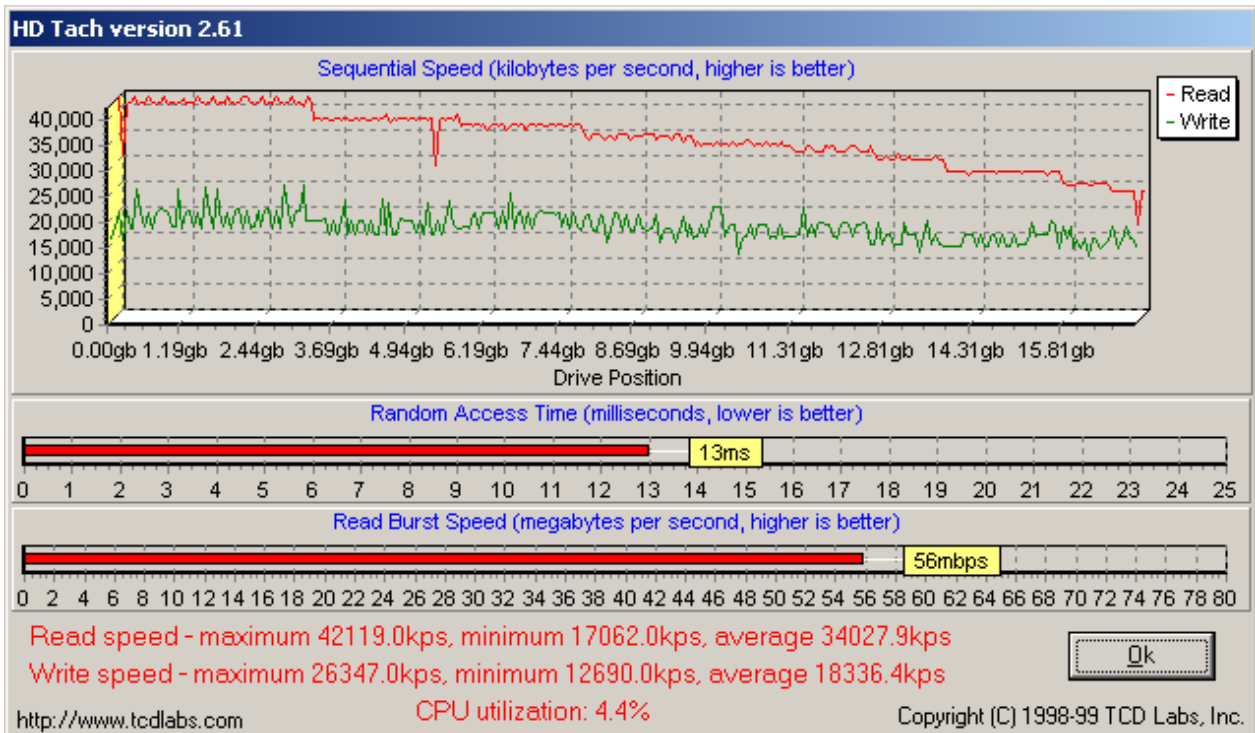
H1.Run IO-metre

Adapter	Access Specification Name	Workers	IOps	MBps	Average Response Time	Maximum Response Time	% CPU Utilization
DC390U2WE	64K Sequential Write	20	233.1	14.6	85.7	194.3	0.0
	64K Sequential Read	20	373.6	23.3	53.5	128.8	2.2
	64K Random Write	20	156.2	9.8	127.6	454.5	1.2
	64K Random Read	20	135.1	8.4	147.4	421.7	2.7
	128K Sequential Write	20	152.1	19.0	131.2	301.3	2.5
	128K Sequential Read	20	191.1	23.9	104.4	261.1	1.8
	128K Random Write	20	94.9	11.9	209.4	679.3	0.9
	128K Random Read	20	100.8	12.6	197.5	676.2	0.8

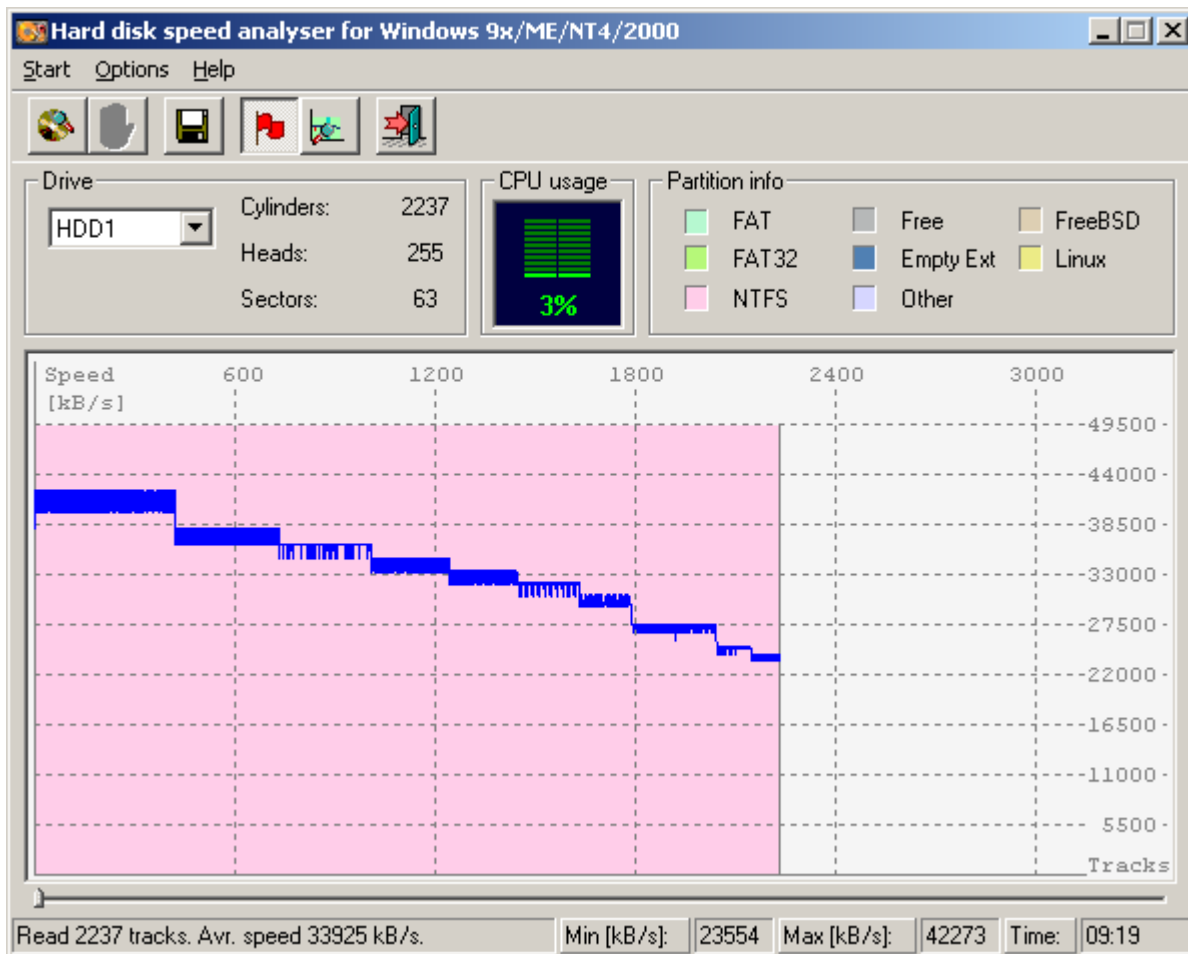
H2.Run Winbench 99

Adapter	Test Item	Result	Remark
DC390U2WE	Bussiness Disk WinMark99	6220	
	High-End Disk WinMark99	16300	
	Disk Transfer Rate Beginning	34900	
	Disk Transfer Rate End	30000	
	Disk Access Time	8.1	
	Disk CPU Utilization	1.27	
	Disk playback/Bus overall	6220	
	Disk playback/HE overall	16300	
	AVS/Express 3.4	16200	
	Frontpage 98	98200	
	Microstation SE	24200	
	Photoshop 4.0	12100	
	Premiere 4.2	8980	
	Sound Forge 4.0	15700	
Visual c++ 5.0	17000		

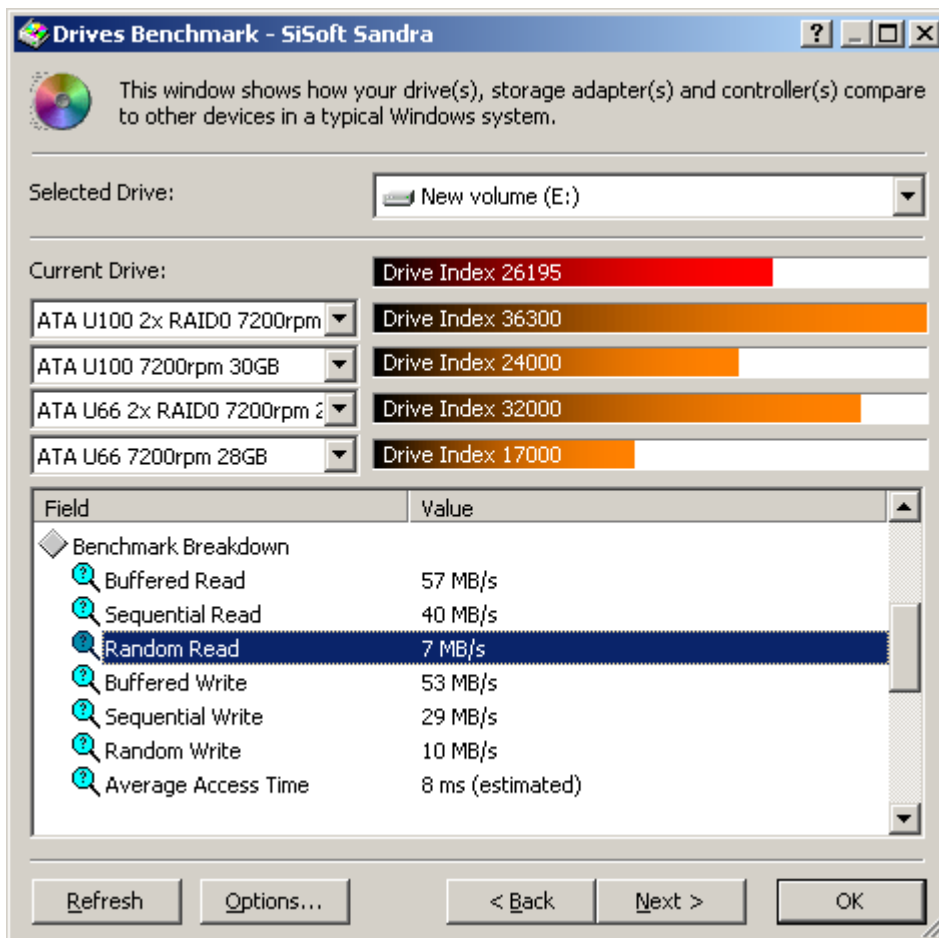
H3.Run HD Tach



H4.Run Disk Speed 32



H5.Run Drives Benchmark–SiSoft



Drives Benchmark - SiSoft Sandra

This window shows how your drive(s), storage adapter(s) and controller(s) compare to other devices in a typical Windows system.

Selected Drive:

Current Drive: **Drive Index 26195**

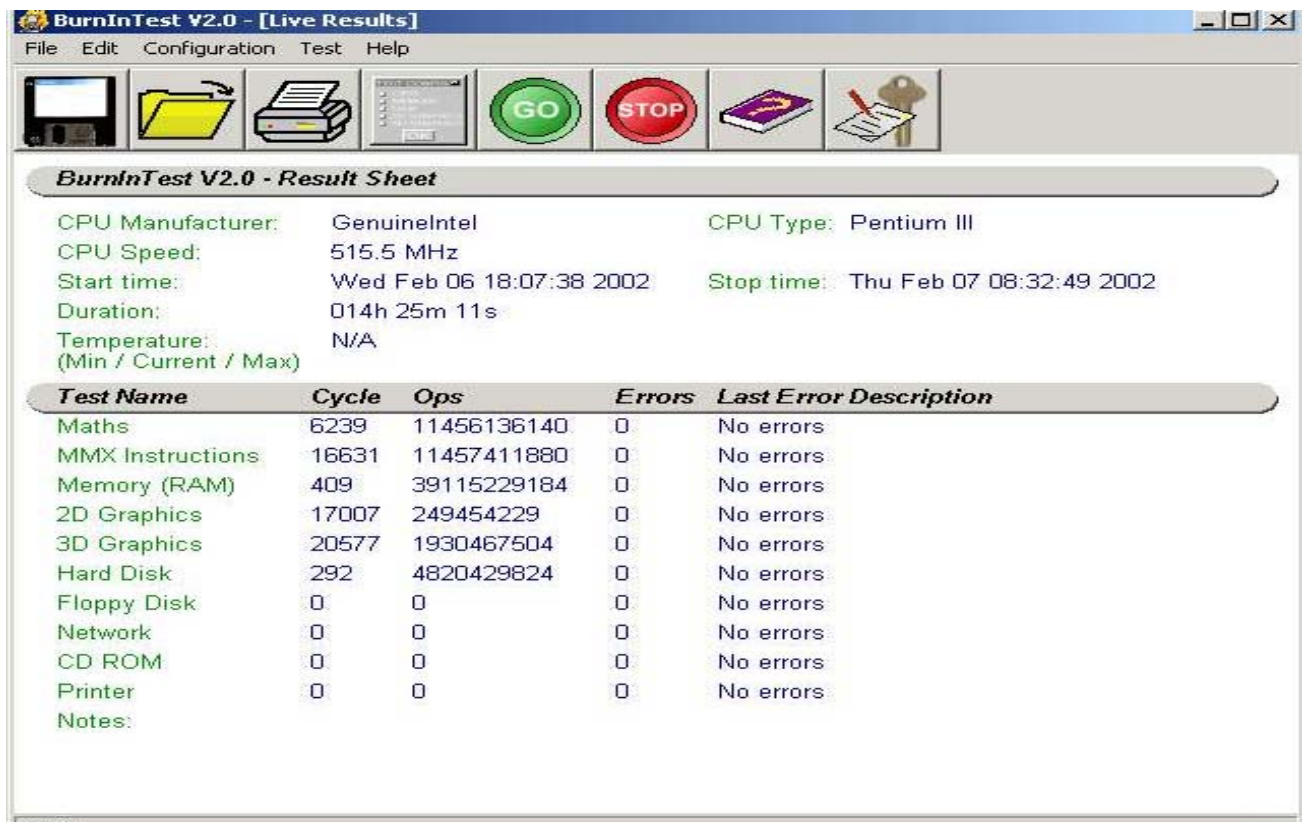
Configuration	Drive Index
ATA U100 2x RAID0 7200rpm	36300
ATA U100 7200rpm 30GB	24000
ATA U66 2x RAID0 7200rpm 2	32000
ATA U66 7200rpm 28GB	17000

Field	Value
Benchmark Breakdown	
Buffered Read	57 MB/s
Sequential Read	40 MB/s
Random Read	7 MB/s
Buffered Write	53 MB/s
Sequential Write	29 MB/s
Random Write	10 MB/s
Average Access Time	8 ms (estimated)

Buttons: Refresh, Options..., < Back, Next >, OK

I. Reliability Test

I1. Burn In Test



BurnInTest V2.0 - [Live Results]

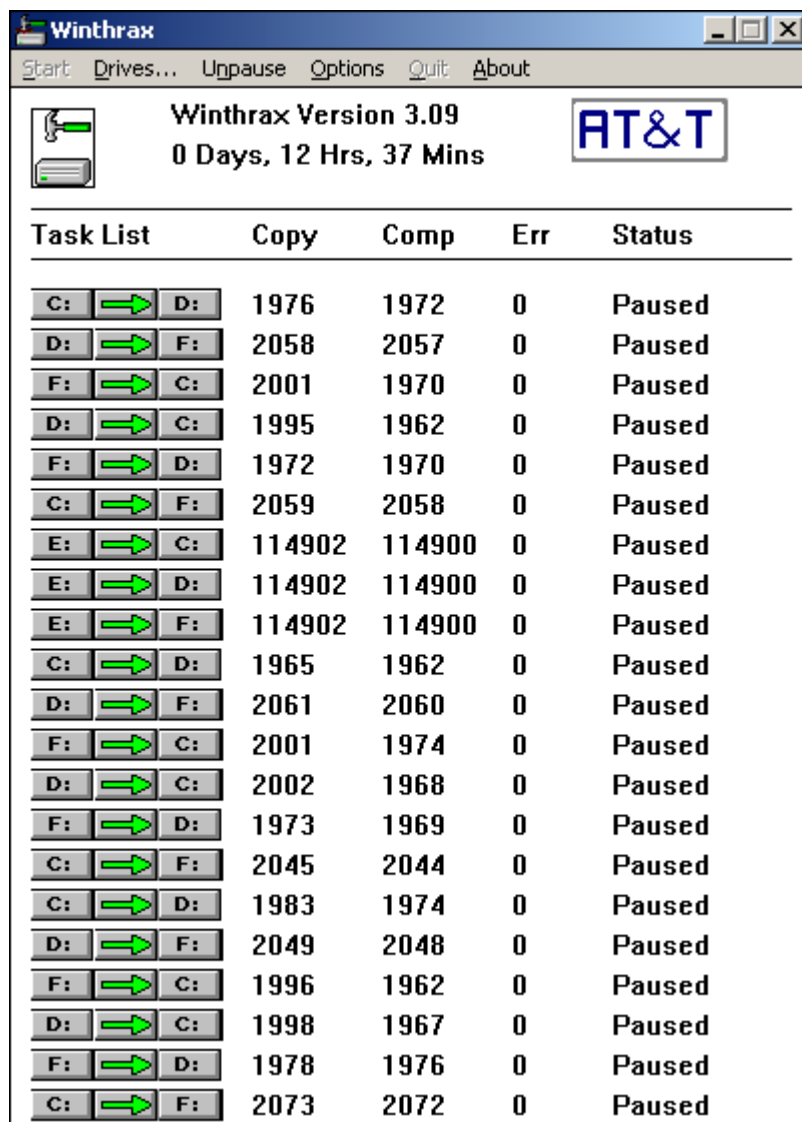
File Edit Configuration Test Help

BurnInTest V2.0 - Result Sheet

CPU Manufacturer: GenuineIntel CPU Type: Pentium III
 CPU Speed: 515.5 MHz
 Start time: Wed Feb 06 18:07:38 2002 Stop time: Thu Feb 07 08:32:49 2002
 Duration: 014h 25m 11s
 Temperature: N/A
 (Min / Current / Max)

Test Name	Cycle	Ops	Errors	Last Error Description
Maths	6239	11456136140	0	No errors
MMX Instructions	16631	11457411880	0	No errors
Memory (RAM)	409	39115229184	0	No errors
2D Graphics	17007	249454229	0	No errors
3D Graphics	20577	1930467504	0	No errors
Hard Disk	292	4820429824	0	No errors
Floppy Disk	0	0	0	No errors
Network	0	0	0	No errors
CD ROM	0	0	0	No errors
Printer	0	0	0	No errors
Notes:				

I2.Run Winthrax.exe



Winthrax Version 3.09
0 Days, 12 Hrs, 37 Mins

Task List	Copy	Comp	Err	Status
C: → D:	1976	1972	0	Paused
D: → F:	2058	2057	0	Paused
F: → C:	2001	1970	0	Paused
D: → C:	1995	1962	0	Paused
F: → D:	1972	1970	0	Paused
C: → F:	2059	2058	0	Paused
E: → C:	114902	114900	0	Paused
E: → D:	114902	114900	0	Paused
E: → F:	114902	114900	0	Paused
C: → D:	1965	1962	0	Paused
D: → F:	2061	2060	0	Paused
F: → C:	2001	1974	0	Paused
D: → C:	2002	1968	0	Paused
F: → D:	1973	1969	0	Paused
C: → F:	2045	2044	0	Paused
C: → D:	1983	1974	0	Paused
D: → F:	2049	2048	0	Paused
F: → C:	1996	1962	0	Paused
D: → C:	1998	1967	0	Paused
F: → D:	1978	1976	0	Paused
C: → F:	2073	2072	0	Paused

Test Environment:

OS	Test Environment	Model	PCBA	BIOS
WIN 2000	M/B	GA-60XET	1.0	F2
	CPU	Intel Pentium III 1B GHZ		
	DRAM	HY PC133 256M		
	SCSI HDD	Seagate ST39204LW 18G		
	SCSI Card	DC390U2WE	1.01	1.00