



## Physical Disk Information - Disk: ST31000533CS

### Hard Disk Summary

Hard Disk Number	: 2	
Interface	: JMicron USB/ATA	
Vendor Information	: VID: 152D, PID: 2336	
	Standard Enhanced PCI to USB Host Controller	
Disk Controller	: (USB 2.0) [VEN: 10DE, DEV: 0AA6] Version: 10.0.10240.16384, 6-21-2006	
Hard Disk Model ID	: ST31000533CS	
Firmware Revision	: SC15	
Hard Disk Serial Number	: 9TE26FPK	
Total Size	: 953867 MB	
Power State	: Active	
Logical Drive(s)	: F: [HOPPY LABEL]	
Current Temperature	: 45 °C	
Maximum Temperature (Ever Measured)	: 45 °C, 10/25/2018 10:13:27 AM	
Minimum Temperature (Ever Measured)	: 45 °C, 10/25/2018 10:13:27 AM	
Maximum Temperature (During Entire Lifespan)	: 60 °C	
Power On Time	: 530 days, 8 hours	
Estimated Remaining Lifetime	: 435 days	
Health	:   58 % (Fair)	
Performance	:   100 % (Excellent)	

There are 15 bad sectors on the disk surface. The contents of these sectors were moved to the spare area.

The drive found 1 bad sector during its self test.

Problems occurred during the spin up of the disk 10 times. This can be caused by the disk itself or huge power load (weak power supply).

There is 1 weak sector found on the disk surface. It may be remapped any time in the later use of the disk.

At this point, warranty replacement of the disk is not yet possible, only if the health drops further.

Problems occurred between the communication of the disk and the host 2384 times.

In case of sudden system crash, reboot, blue-screen-of-death, inaccessible file(s)/folder(s), it is recommended to verify data and power cables, connections - and if possible try different cables to prevent further problems.

More information:  
[http://www.hdsentinel.com/hard\\_disk\\_case\\_communication\\_error.php](http://www.hdsentinel.com/hard_disk_case_communication_error.php)

It is recommended to examine the log of the disk regularly. All new problems found will be logged there.

**It is recommended to continuously monitor the hard disk status.**

### ATA Information

Hard Disk Cylinders	: 1938021
Hard Disk Heads	: 16

Hard Disk Sectors	: 63
ATA Revision	: ATA8-ACS version 4
Transport Version	: SATA Rev 2.6
Total Sectors	: 1953525168
Bytes Per Sector	: 512
Multiple Sectors	: 16
Error Correction Bytes	: 4
Unformatted Capacity	: 953870 MB
Maximum PIO Mode	: 4
Maximum Multiword DMA Mode	: 2
Maximum UDMA Mode	: 300 MB/s (6)
Active UDMA Mode	: 300 MB/s (6)
Minimum Multiword DMA Transfer Time	: 120 ns
Recommended Multiword DMA Transfer Time	: 120 ns
Minimum PIO Transfer Time Without IORDY	: 120 ns
Minimum PIO Transfer Time With IORDY	: 120 ns
ATA Control Byte	: Valid
ATA Checksum Value	: Valid

## Acoustic Management Configuration

Acoustic Management	: Not supported
Acoustic Management	: Disabled
Current Acoustic Level	: Default (00h)
Recommended Acoustic Level	: Min performance and volume (80h)

## ATA Features

Read Ahead Buffer	: Supported, Enabled
DMA	: Supported
Ultra DMA	: Supported
S.M.A.R.T.	: Supported
Power Management	: Supported
Write Cache	: Supported
Host Protected Area	: Supported
Advanced Power Management	: Not supported
Extended Power Management	: Not supported
Power Up In Standby	: Supported
48-Bit LBA Addressing	: Supported
Device Configuration Overlay	: Supported
IORDY Support	: Supported
Read/Write DMA Queue	: Not supported
NOP Command	: Not supported
Trusted Computing	: Not supported
64-Bit World Wide ID	: 005000C5A5159BF5
Streaming	: Supported
Media Card Pass Through	: Not supported
General Purpose Logging	: Supported
Error Logging	: Supported
CFA Feature Set	: Not supported
CFAST Device	: Not supported
Long Physical Sectors (1)	: Not supported
Long Logical Sectors	: Not supported
Write-Read-Verify	: Supported, Enabled
NV Cache Feature	: Not supported
NV Cache Power Mode	: Not supported

NV Cache Size	: Not supported
Free-fall Control	: Not supported
Free-fall Control Sensitivity	: Not supported
Nominal Media Rotation Rate	: 7200 RPM

## SSD Features

Data Set Management	: Not supported
TRIM Command	: Not supported
Deterministic Read After TRIM	: Not supported

## S.M.A.R.T. Details

Off-line Data Collection Status	: Successfully Completed
Self Test Execution Status	: Test Failed By Read Element
Total Time To Complete Off-line Data Collection	: 625 seconds
Execute Off-line Immediate	: Supported
Abort/restart Off-line By Host	: Not supported
Off-line Read Scanning	: Supported
Short Self-test	: Supported
Extended Self-test	: Supported
Conveyance Self-test	: Supported
Selective Self-Test	: Supported
Save Data Before/After Power Saving Mode	: Supported
Enable/Disable Attribute Autosave	: Supported
Error Logging Capability	: Supported
Short Self-test Estimated Time	: 1 minutes
Extended Self-test Estimated Time	: 213 minutes
Conveyance Self-test Estimated Time	: 2 minutes
Last Short Self-test Result	: Test Failed By Read Element
Last Short Self-test Date	: 10/25/2018 10:16:47 AM
Last Short Self-test Duration	: 1 minutes
Last Extended Self-test Result	: Never Started
Last Extended Self-test Date	: Never Started
Last Conveyance Self-test Result	: Never Started
Last Conveyance Self-test Date	: Never Started

## Security Mode

Security Mode	: Supported
Security Erase	: Supported
Security Erase Time	: 182 minutes
Security Enhanced Erase Feature	: Supported
Security Enhanced Erase Time	: 182 minutes
Security Enabled	: No
Security Locked	: No
Security Frozen	: No
Security Counter Expired	: No
Security Level	: High

## Serial ATA Features

S-ATA Compliance	: Yes
S-ATA I Signaling Speed (1.5 Gps)	: Supported
S-ATA II Signaling Speed (3 Gps)	: Supported
S-ATA Gen3 Signaling Speed (6 Gps)	: Not supported

Receipt Of Power Management Requests From Host: Not supported  
 PHY Event Counters : Supported  
 Non-Zero Buffer Offsets In DMA Setup FIS : Not supported  
 DMA Setup Auto-Activate Optimization : Not supported  
 Device Initiating Interface Power Management : Supported, Disabled  
 In-Order Data Delivery : Not supported  
 Asynchronous Notification : Not supported  
 Software Settings Preservation : Supported, Enabled  
 Native Command Queuing (NCQ) : Not supported  
 Queue Length : Not supported

## Disk Information

Disk Family : Pipeline HD Pro 1000533  
 Form Factor : 3.5"  
 Capacity : 1 TB (1 x 1,000,000,000,000 bytes)  
 Number Of Disks : 3  
 Number Of Heads : 6  
 Rotational Speed : 7200 RPM  
 Rotation Time : 8.33 ms  
 Average Rotational Latency : 4.17 ms  
 Disk Interface : Serial-ATA/300  
 Buffer-Host Max. Rate : 300 MB/seconds  
 Buffer Size : 32768 KB  
 Drive Ready Time (Typical) : 20 seconds  
 Average Seek Time : ? ms  
 Track To Track Seek Time : ? ms  
 Full Stroke Seek Time : ? ms  
 Width : 101.6 mm (4.0 inch)  
 Depth : 147.0 mm (5.8 inch)  
 Height : 26.1 mm (1.0 inch)  
 Weight : 630 grams (1.4 pounds)  
 Acoustic (Idle) : 2.7 Bel  
 Acoustic (Min Performance And Volume) : 2.9 Bel  
 Acoustic (Max Performance And Volume) : 2.9 Bel  
 Required Power For Spinup : 2,800 mA  
 Power Required (Seek) : 12.8 W  
 Power Required (Idle) : 7.2 W  
 Power Required (Standby) : 0.8 W  
 Manufacturer : Seagate Technology  
 Manufacturer Website : <http://www.seagate.com/www/en-us/products>

## S.M.A.R.T.

No.	Attribute	Threshold	Value	Worst	Data	Status	Flags
1	Raw Read Error Rate	6	107	99	000003D33FAE	OK	Error-Rate, Performance, Statistical, Critical
3	Spin Up Time	0	92	92	000000000000	OK (Always passing)	Statistical, Critical
4	Start/Stop Count	20	96	96	000000001209	OK	Self Preserving, Event Count, Statistical

	5	Reallocated Sectors Count	36	100	100	00000000000F	OK	Self Preserving, Event Count, Statistical, Critical
	7	Seek Error Rate	30	83	60	00000DE7E9E2	OK	Error-Rate, Performance, Statistical, Critical
	9	Power On Time Count	0	86	86	0000000031B8	OK (Always passing)	Self Preserving, Event Count, Statistical
	10	Spin Retry Count	97	100	100	00000000000A	OK	Event Count, Statistical, Critical
	12	Drive Power Cycle Count	20	96	96	000000001204	OK	Self Preserving, Event Count, Statistical
	184	End-to-End Error Count	99	100	100	000000000000	OK	Self Preserving, Event Count, Statistical
	187	Reported Uncorrectable Errors	0	90	90	00000000000A	OK (Always passing)	Self Preserving, Event Count, Statistical
	188	Command Timeout	0	100	74	006500740817	OK (Always passing)	Self Preserving, Event Count, Statistical
	189	High Fly Writes	0	1	1	00000000067B	OK (Always passing)	Self Preserving, Event Count, Error-Rate, Statistical
	190	Airflow Temperature	45	55	40	07E82D19002D	OK	Self Preserving, Statistical
	194	Disk Temperature	0	45	60	00110000002D	OK (Always passing)	Self Preserving, Statistical
	195	Hardware ECC Recovered	0	51	45	000003D33FAE	OK (Always passing)	Event Count, Error-Rate, Statistical
	197	Current Pending Sector Count	0	100	100	000000000001	OK (Always passing)	Event Count, Statistical
	198	Off-Line Uncorrectable Sector Count	0	100	100	000000000001	OK (Always passing)	Event Count
	199	Ultra ATA CRC Error Count	0	200	175	000000000950	OK (Always passing)	Self Preserving, Event Count, Error-Rate, Performance, Statistical