

## Diagnostics report

Device model:	Hitachi HTS725050A9A364	Unit IP:	10.0.0.121
Device serial:	100529PCK404VLHY7RWJ	Unit serial:	lena
Device firmware:	PC4OC72E	Write protection:	On
Device size:	500 GB (500,107,862,016 bytes)	Computer:	OLYA
Case number:	Not assigned	User:	Atola
Case description:		OS:	64-bit Windows 10 Enterprise Version 6.2 (Build: 19042)

### Diagnostics results

**No major hardware or firmware issues have been found.**

**Estimated imaging time: 1 hour 37 minutes**

**99% of the disk is not associated with any partition.**

### Full Diagnostic Log

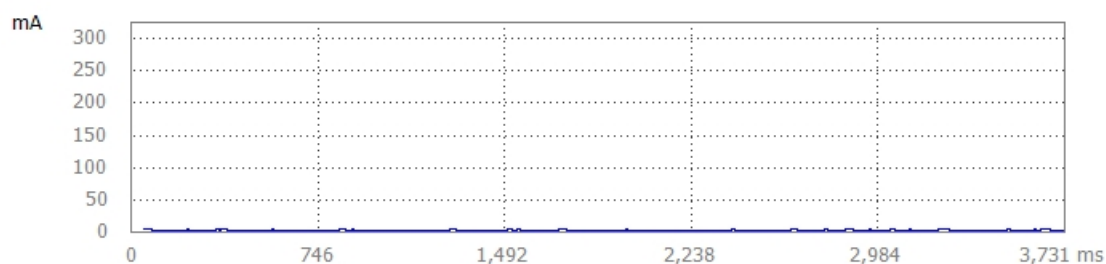
#### Circuit Board (PCB)

Device is powered on. A power cycle is needed...

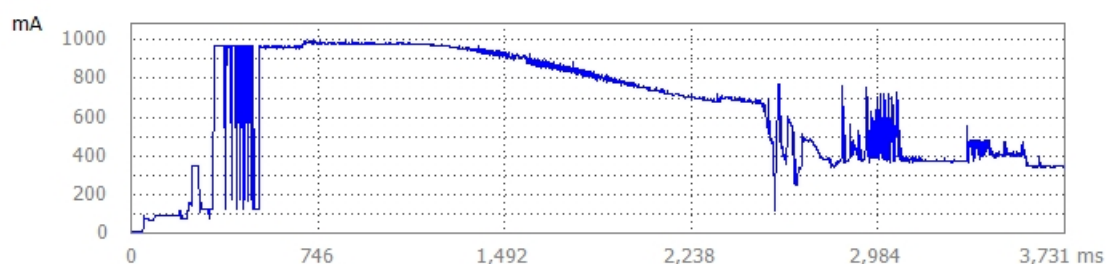
Applying power and watching spin-up currents...

Selected Interface: SATA

#### Current oscillogram (12V):



#### Current oscillogram (5V):



Device has become ready in 4 sec.

Registers: 0101 0000 0000 0000 0000 A0A0 5050 Alt: 5050

Peak power consumption during spin-up: 5V line = 975.31 mA; 12V line = 2.68 mA

Integrity word of device identification data is ok.

Device has been identified: Hitachi HTS725050A9A364 SN: 100529PCK404VLHY7RWJ

Logical sector size: 512 bytes, Physical sector size: 512 bytes

Elapsed: 21.4 sec.

**Circuit board check passed**

#### Heads

Detecting device family

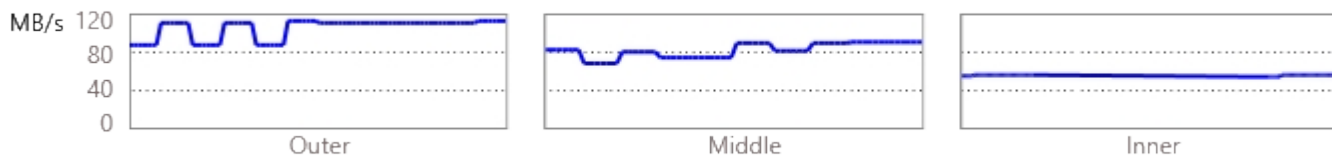
All device identification checks have passed.

Detected 4 heads: 0 1 2 3

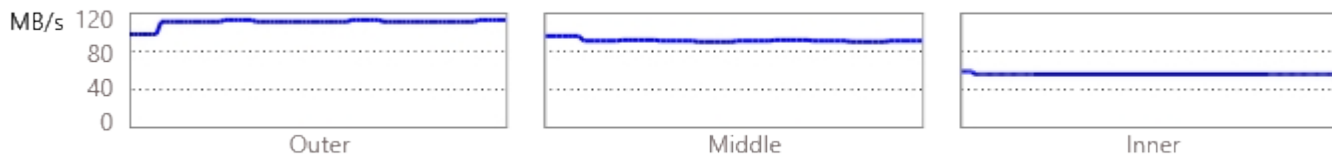
Performing media access timing verification separately for each head.

Using the following LBA ranges for this test: Outer: 0 - 725,004, Middle: 488,024,081 - 488,749,085, Inner: 976,048,163 - 976,773,167.

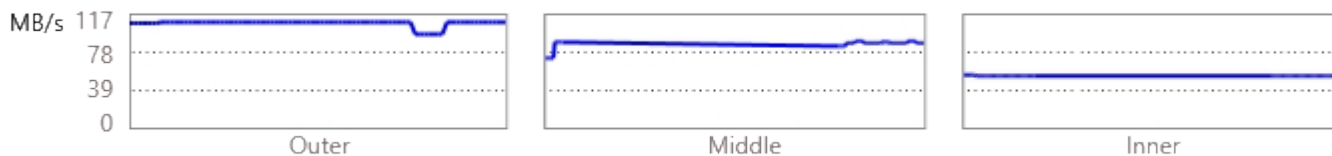
**Head #0 speed graph:**



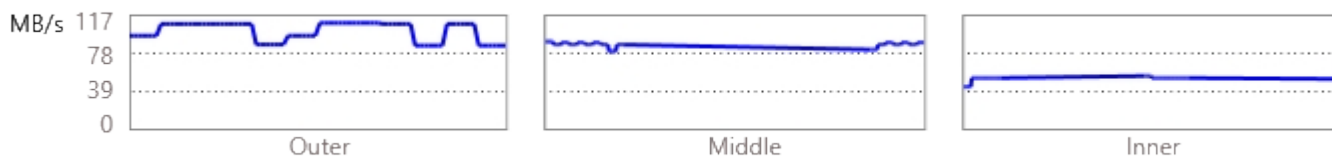
**Head #1 speed graph:**



**Head #2 speed graph:**



**Head #3 speed graph:**



Head #	Speed	Sectors processed	Freeze count	Read Errors	Head status
0	77 MB/s	513,420	0	0	OK
1	81 MB/s	518,064	0	0	OK
2	76 MB/s	521,480	0	0	OK
3	76 MB/s	622,050	0	0	OK

Media access timing verification shows no damage to the head stack.

Elapsed: 16.4 sec.

Head stack check passed

**Media Surface**

Media scan is running...

Verifying starting sectors (LBA: 0-600,064)

0 error(s) found

Speed: 110 MB/s

Verifying middle sectors (LBA: 488,386,583-488,986,647)

0 error(s) found

Speed: 90 MB/s

Verifying ending sectors (LBA: 976,173,103-976,773,167)

0 error(s) found

Speed: 56 MB/s

Average speed: 85 MB/s

Elapsed: 11.9 sec.

Media surface check passed

**Firmware**

Device is not locked.

Device identification data is valid.

Max Address according to device ID: 976,773,167

Max Address from DCO: 976,773,167

Reported capacity appears logically correct.

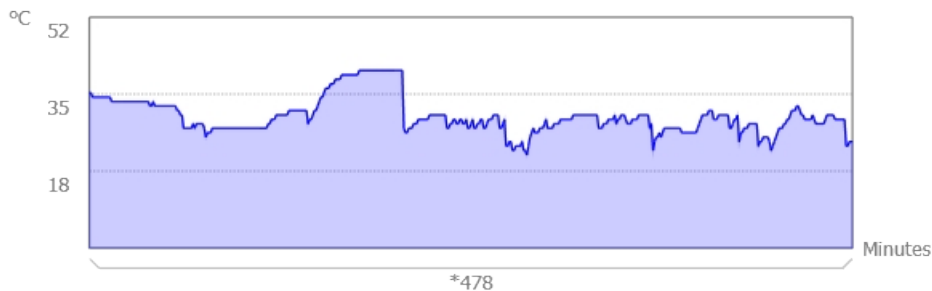
Performing SMART checks...

Power cycles: 2821 Power on time: 169 days 22 hours SMART Status: Good

#	Attribute Name	Value	Worst	Threshold	RAW
1	Read error rate	100	100	62	0
2	Throughput performance	100	100	40	0
3	Spin up time	151	100	33	115,964,116,994
4	Number of spin-up times	99	99	0	2,824
5	Reallocated sectors count	100	100	5	0
7	Seek error rate	100	100	67	0
8	Seek performance	100	100	40	0
9	Power-on time	91	91	0	4,078
10	Spin-up retries	100	100	60	0
12	Power Cycles	99	99	0	2,821
183	Vendor specific	100	100	0	0
184	End to End Error	100	100	97	0
187	Reported Uncorrectable	99	100	0	4,294,901,761
188	Command Time Out	100	97	0	5
190	Airflow Temperature	76	43	45	404,226,072
191	G-Sensor trigger rate	100	100	0	31
192	Power-off retract count	100	100	0	6,619,237
193	Load/unload cycle count	98	98	0	28,842
196	Reallocate event count	100	100	0	0
197	Current pending sectors	100	100	0	0
198	Offline scan UNC sectors	100	100	0	0
199	Ultra ATA CRC Error Rate	100	100	0	48
223	Load retry count	100	100	0	0

### Temperature and power cycle history

The diagram shows the device temperature history with the recent work time intervals between power cycles.



\* Earliest available record. The exact time and duration is unspecified in SMART history.

Last significant work time interval before power off or standby (in minutes): 478

Elapsed: 0.3 sec.

**Firmware check passed**

### File System Structures

Found partition at sector 40 (type FAT32). Label: EFI. Size: 210 MB.

Found APFS container at sector 409,640. Container size: 334 MB.

Found APFS container at sector 1,061,416. Container size: 667 MB.

Found APFS container at sector 2,364,984. Container size: 250 MB.

Found APFS container at sector 2,852,304. Container size: 300 MB.

Found APFS container at sector 3,437,824. Container size: 2 GB.

Found APFS container at sector 7,419,800. Container size: 244 MB.

**99% of the disk is not associated with any partition.**

Checking FAT partition at sector 40. Partition size: 210 MB

Checking FAT boot sector...

Checking main FAT structures...

**Invalid APFS container at sector 409,640. Partition size: 334 MB**  
**Invalid APFS container at sector 1,061,416. Partition size: 667 MB**  
**Invalid APFS container at sector 2,364,984. Partition size: 250 MB**  
**Invalid APFS container at sector 2,852,304. Partition size: 300 MB**  
**Invalid APFS container at sector 3,437,824. Partition size: 2 GB**  
**Invalid APFS container at sector 7,419,800. Partition size: 244 MB**  
Elapsed: 0.6 sec.  
**File System Structures check complete.**