

## [2.6.15] New ATA error messages on upgrade to 2.6.15

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*Source:* <http://linux.derkeiler.com/Mailing-Lists/Kernel/2006-03/msg09651.html>

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  - *Date:* Tue, 28 Mar 2006 12:57:29 -0500
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I'm getting the following errors in my syslog on a fairly regular basis (1 or 2 per hour). They seem to have started when I upgraded from Debian 2.6.12-1-powerpc (with internal IDE patch) to Debian 2.6.15-1-powerpc. My best guess is for some reason the kernel started issuing the command MULTWRITE\_EXT that it didn't before, and one of my drives doesn't like it. Two of the drives are attached to a Promise PDC20268 (Rebranded a couple times by different manufacturers and with mac-bootable firmware), the third is attached to the internal ATA66 bus in the 400MHz powermac G4. My apologies if this problem is known and fixed in 2.6.16; if necessary I'll wait until Debian testing gets a 2.6.16 kernel and test that too.

Thanks for the help!

Cheers,  
Kyle Moffett

Begin forwarded message:

### Security Events

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Mar 28 03:15:13 penelope kernel: ide: failed opcode was: unknown

Mar 28 03:30:13 penelope kernel: ide: failed opcode was: unknown

### System Events

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Mar 28 03:15:13 penelope kernel: hdi: status timeout: status=0xd0 { Busy }

Mar 28 03:15:13 penelope kernel: PDC202XX: Secondary channel reset.

Mar 28 03:15:13 penelope kernel: hdi: no DRQ after issuing MULTWRITE\_EXT

Mar 28 03:15:13 penelope kernel: ide4: reset: success

Mar 28 03:30:13 penelope kernel: hdi: status timeout: status=0xd0 { Busy }

Mar 28 03:30:13 penelope kernel: PDC202XX: Secondary channel reset.

Mar 28 03:30:13 penelope kernel: hdi: no DRQ after issuing MULTWRITE\_EXT

Mar 28 03:30:13 penelope kernel: ide4: reset: success

smartctl -a:

smartctl version 5.34 [powerpc-unknown-linux-gnu] Copyright (C) 2002-5 Bruce Allen  
Home page is <http://smartmontools.sourceforge.net/>

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==== START OF INFORMATION SECTION ====

Device Model: SAMSUNG SP0822N  
Serial Number: S06QJ10Y946116  
Firmware Version: WA100-32  
User Capacity: 80,060,424,192 bytes  
Device is: In smartctl database [for details use: -P show]  
ATA Version is: 6  
ATA Standard is: ATA/ATAPI-6 T13 1410D revision 1  
Local Time is: Tue Mar 28 12:54:35 2006 EST  
SMART support is: Available - device has SMART capability.  
SMART support is: Enabled

==== START OF READ SMART DATA SECTION ====

SMART overall-health self-assessment test result: PASSED

General SMART Values:

Offline data collection status: (0x84) Offline data collection activity was suspended by an interrupting command from host.  
Auto Offline Data Collection: Enabled.  
Self-test execution status: ( 0) The previous self-test routine completed without error or no self-test has ever been run.  
Total time to complete Offline data collection: (1980) seconds.  
Offline data collection capabilities: (0x5b) SMART execute Offline immediate.  
Auto Offline data collection on/off support.  
Suspend Offline collection upon new command.  
Offline surface scan supported.  
Self-test supported.  
No Conveyance Self-test supported.  
Selective Self-test supported.  
SMART capabilities: (0x0003) Saves SMART data before entering power-saving mode.  
Supports SMART auto save timer.  
Error logging capability: (0x01) Error logging supported.  
No General Purpose Logging support.  
Short self-test routine recommended polling time: ( 2) minutes.  
Extended self-test routine recommended polling time: ( 33) minutes.

SMART Attributes Data Structure revision number: 17

Vendor Specific SMART Attributes with Thresholds:

ID#	ATTRIBUTE_NAME	FLAG	VALUE	WORST	THRESH	TYPE	UPDATED	WHEN_FAILED	RAW_VALUE
1	Raw_Read_Error_Rate	0x000f	100	099	051	Pre-fail	Always	-	0
3	Spin_Up_Time	0x0007	252	252	011	Pre-fail	Always	-	0
4	Start_Stop_Count	0x0032	252	252	000	Old_age	Always	-	0
5	Reallocated_Sector_Ct	0x0033	252	252	011	Pre-fail	Always	-	0

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7 Seek\_Error\_Rate 0x000f 252 252 051 Pre-fail Always - 0  
8 Seek\_Time\_Performance 0x0025 092 092 015 Pre-fail Offline - 3665  
9 Power\_On\_Half\_Minutes 0x0032 099 099 000 Old\_age Always - 32h+43m  
10 Spin\_Retry\_Count 0x0033 252 252 051 Pre-fail Always - 0  
11 Calibration\_Retry\_Count 0x0012 252 252 000 Old\_age Always - 0  
12 Power\_Cycle\_Count 0x0032 252 252 000 Old\_age Always - 0  
190 Unknown\_Attribute 0x0022 154 133 000 Old\_age Always - 33  
194 Temperature\_Celsius 0x0022 151 133 000 Old\_age Always - 34  
195 Hardware\_ECC\_Recovered 0x001a 100 100 000 Old\_age Always - 0  
196 Reallocated\_Event\_Count 0x0032 252 252 000 Old\_age Always - 0  
197 Current\_Pending\_Sector 0x0012 252 252 000 Old\_age Always - 0  
198 Offline\_Uncorrectable 0x0030 252 252 000 Old\_age Offline - 0  
199 UDMA\_CRC\_Error\_Count 0x003e 199 199 000 Old\_age Always - 173  
200 Multi\_Zone\_Error\_Rate 0x000a 100 100 000 Old\_age Always - 0  
201 Soft\_Read\_Error\_Rate 0x000a 100 100 000 Old\_age Always - 0

Warning! SMART ATA Error Log Structure error: invalid SMART checksum.

SMART Error Log Version: 1

No Errors Logged

SMART Self-test log structure revision number 0

Warning: ATA Specification requires self-test log structure revision number = 1

Num Test\_Description Status Remaining LifeTime (hours) LBA\_of\_first\_error

# 1 Short offline Completed without error 00% 3918 -  
# 2 Short offline Completed without error 00% 3894 -  
# 3 Extended offline Interrupted (host reset) 30% 3870 -  
# 4 Short offline Completed without error 00% 3846 -  
# 5 Short offline Completed without error 00% 3822 -  
# 6 Short offline Completed without error 00% 3798 -  
# 7 Short offline Completed without error 00% 3774 -  
# 8 Short offline Completed without error 00% 3750 -  
# 9 Short offline Completed without error 00% 3726 -  
#10 Extended offline Completed without error 00% 3703 -  
#11 Short offline Completed without error 00% 3678 -  
#12 Short offline Completed without error 00% 3654 -  
#13 Short offline Completed without error 00% 3630 -  
#14 Short offline Completed without error 00% 3606 -  
#15 Short offline Completed without error 00% 3582 -  
#16 Short offline Completed without error 00% 3558 -  
#17 Extended offline Completed without error 00% 3535 -  
#18 Short offline Completed without error 00% 3511 -  
#19 Short offline Completed without error 00% 3487 -  
#20 Short offline Completed without error 00% 3463 -  
#21 Short offline Completed without error 00% 3439 -

SMART Selective Self-Test Log Data Structure Revision Number (0) should be 1

SMART Selective self-test log data structure revision number 0

Warning: ATA Specification requires selective self-test log data structure revision number =

1

SPAN MIN\_LBA MAX\_LBA CURRENT\_TEST\_STATUS

1 0 0 Not\_testing

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2 0 0 Not\_testing

3 281479271677952 0 Not\_testing

4 0 281479271767952 Not\_testing

5 604800 4 Not\_testing

Selective self-test flags (0x0):

After scanning selected spans, do NOT read-scan remainder of disk.

If Selective self-test is pending on power-up, resume after 0 minute delay.

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