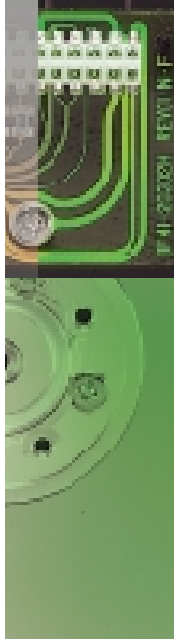


# W2100 - Samsung Hard Disk Drive

## SW0212A/SW0323A/SW0434A



### Contact

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### Drive Architecture

Formatted Capacities	
Gigabytes per Drive	2.1/3.2/4.3
Physical Organization	
Disks	1/2/2
Heads	2/3/4

### Functional Specifications

Actuator Type	Rotary Voice Coil
Interface	Ultra ATA/E-IDE
Servo	Embedded Sector Servo
Recording Method	16/17 EPR4
S.M.A.R.T.-2 Support	

### Performance Specifications

Seek Time (typical)	
Track to Track	2 ms
Average	11 ms
Full Stroke	20 ms
Average Latency	5.6 ms
Spindle Speed	5,400 rpm
Data Transfer Rate	
Buffer to Media(max.)	151.1 Mbits/s
Buffer to Host(max.)	33.3 Mbytes/s
Buffer Size	512 Kbytes

### Reliability Specifications

Recoverable Read Error	1 in 10 <sup>10</sup> bits
Non-recoverable Read Error	1 in 10 <sup>14</sup> bits
MTBF (POH)	500,000 hours
MTRR (Typical)	5 min
Start/Stop Cycles	50,000
Component Design Life	5 years

### Environmental Specifications

Temperature	
Operating	5 ~ 55°C
Non-operating	-40 ~ 70°C
Thermal Gradient (max.)	20°C/15%/hr
Humidity (non-condensing)	
Operating	8 ~ 80%
Non-operating	8 ~ 95%
Maximum Wet Bulb (OP/NOP)	29°C/40°C
Altitude (relative to sea level)	
Operating	-200 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

### Shock and Vibration

Shock (1/2 sine pulse, 2 ms duration)	
Operating	63 G
Non-operating	140 G
Shock (1/2 sine pulse, 11 ms duration)	
Operating	10 G
Non-operating	75 G
Vibration (swept sine, 1 octave per minute)	
Operating	
5 ~ 21 Hz	0.034" (double amplitude)
22 ~ 400 Hz	1.5 Gp-p
Non-operating	
5 ~ 21 Hz	0.195" (double amplitude)
22 ~ 500 Hz	8 Gp-p

### Power Consumption (typical)

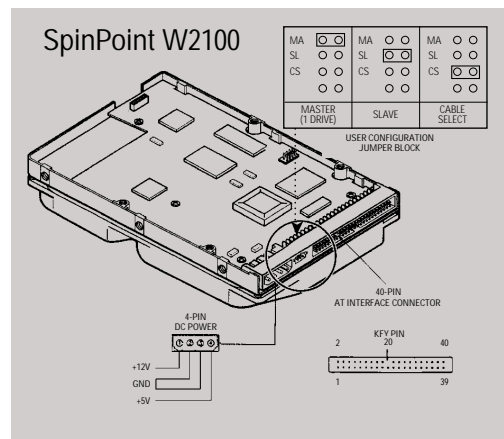
Voltage	5V±5%	12V±10%
Read/Write		4.4 W
Seek (1/3 seek, 33% Duty)		5.6 W
Idle		3.1 W
Standby		1.3 W
Sleep		1.2 W

### Acoustic Noise

Sound pressure at 1 meter (typical)	
Idle	32.5 dBA
Random Read/Write	36 dBA

### Physical Dimension

Height	1 inch
Width	4 inches
Depth	5.75 inches
Weight	1.2 pounds

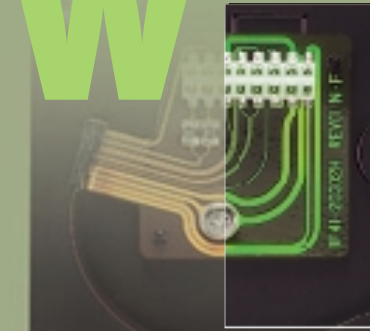


Distributed by: \_\_\_\_\_

SpinPoint™  
W2100

**W** series

2.1/3.2/4.3GB



### SAMSUNG HARD DISK DRIVE

- 5400 RPM Spindle Speed
- 11 ms Average Seek
- 33.3 MB/sec Ultra DMA
- 512KB Cache Buffer
- Rugged, 63G Operating Shock Resistance
- Low Power Consumption
- Quiet Operation with Silent Servo
- S.M.A.R.T. -2 Support



**SAMSUNG**

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