

SHFR200 SMART Attribute Details



SMART Attribute Details

Provides a detailed description of SMART Attribute support and how each may be used.

SHFR200

ID	HEX	Attribute Name	Description
1	01h	Read Error Rate	This attribute counts the total amount of (correctable, uncorrectable) ECC error events over the life of the drive.
5	05h	Reallocated Sector Count	This attribute is the total count of any sector reallocation event (page or block level) caused by Program/Read operations. Normalized Equation: $100 - (100 * \text{reallocated sector count} / \text{total amount of spare sectors})$
9	09h	Power On Hours	This attribute is used for the hourly count of "power on" including idle and low power states.
12	0Ch	Power Cycle Count	This attribute counts power cycles, including unsafe power shutdowns.
170	AAh	Used Reserved Block Count	This attribute counts the number of reserved blocks used to replace bad blocks.
171	ABh	Program Fail Count	This attribute is used to count the number of NAND program failure events over the life of the drive.
172	ACH	Erase Fail Count	This attribute counts the number of NAND erase fails over the life of the drive.
174	A Eh	Unexpected Power Off Count	This attribute counts power off events (unsafe system shutdowns) without Cache Flush or Meta Data Flush.
175	AFh	Program Fail Count Worst Die	This attribute counts the program failures for the die which has exhibited the most errors.
176	B0h	Erase Fail Count Worst Die	This attribute counts the erase failures for the die which has exhibited the most errors.
178	B2h	Used Reserved Block Count worst Die	This attribute counts the number of reserved blocks used to replace bad blocks for the worst die.
180	B4h	Unused Reserved Block Count (SSD Total)	This attribute counts the reserved blocks remaining for the entire drive.
187	BBh	Reported Uncorrectable Errors	This attribute counts the number of uncorrectable ECC errors reported by the drive.
194	C2h	Temperature	This attribute reports drive temperature. Raw Value Bytes [1-0]: Current [3-2]: Min [5-4]: Max
195	C3h	On-the-Fly ECC Uncorrectable Error Count	This attribute counts the total amount of (correctable, uncorrectable) ECC error events over the life of the drive.
196	C4h	Reallocation Event Count	This attribute counts the number of reallocation events that have taken place on this SSD.

ID	HEX	Attribute Name	Description
197	C5h	Pending Sector Count	This attribute counts unrecoverable units (page/blocks) based on the recovery scheme.
199	C7h	UDMA CRC Error Count	This attribute counts CRC errors that have occurred on the SATA interface.
201	C9h	Uncorrectable Read Error Rate	This attribute provides the Uncorrectable ECC rate for the current power/reset period.
204	CCh	Soft ECC Correction Rate	This attribute provides the Soft ECC rate for the current power/reset period.
231	E7h	SSD Life Left	This attribute provides an indication of the remaining life of the SSD based on the number of program/erase cycles. Normalized Equation: $100 - ((100 * (\text{Average Erase Count} / \text{NAND Rated Program/Erase Cycle}))$
241	F1h	GB Written from Interface	This attribute counts data written by the host (in GB)
242	F2h	GB Read from Interface	This attribute counts data read by the host (in GB)
250	FAh	Total Number of NAND Read Retries	This attribute counts the number of read retries performed.