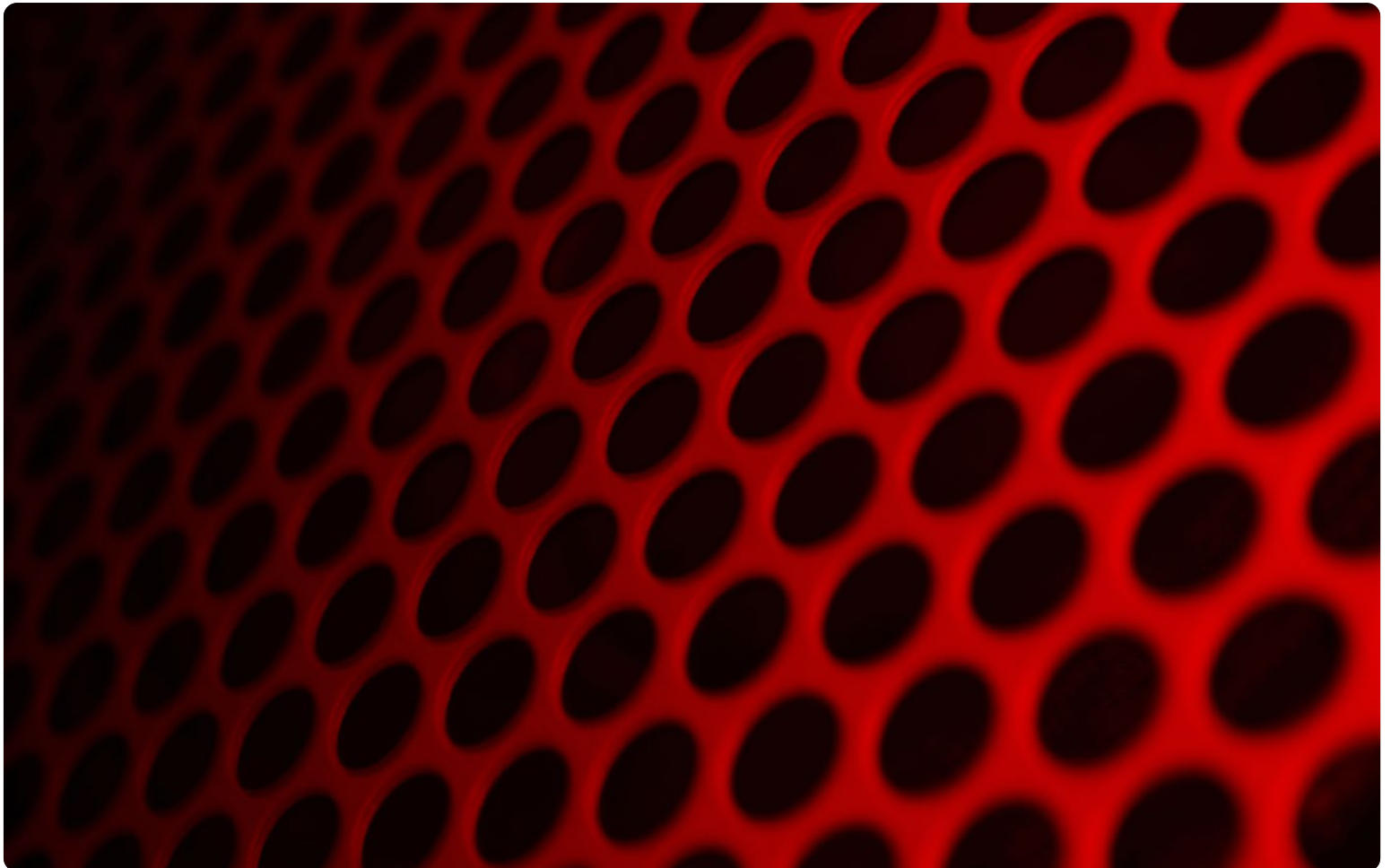


SMART Attribute Details



SMART Attribute Details

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

Kingston® DC450R, DC500R, DC500M, and DC600M SMART Attribute Details

ID	HEX	Attribute Name	Description
1	01h	Host UNC Error Count	Counts the number of uncorrectable errors that accumulate when host reads data from Flash and ECC events occur. (Same as BBh) Raw Value Byte [5~0]: Uncorrectable errors count
9	09h	Power on Hours	Counts the power-on hours that accumulate from initial drive deployment. Raw Value Byte [5~0]: Power on hours count
12	0Ch	Power On / Off Cycle	Counts the number of drive power on-off cycles since initial drive deployment. This value accumulates when system is powered-on. Raw Value Byte [5~0]: Power on / off cycle count
167	A7h	Protect mode	Indicates if the drive is in write-protect mode. When this occurs, data can only be read from the drive. Raw Value Byte [0]: Write Protect mode
168	A8h	SATA PHY Error Count	Counts the number of SATA PHY errors. This value includes all PHY error counts, e.g. data FIS CRC , command FIS crc, etc. Raw Value Byte [5~0]: SATA PHY Error Count
169	A9h	Bad Block Rate	Percentage of used reserve blocks divided by total reserve blocks. Raw Value Byte [0]: Bad Block Rate Formula $100 * \text{later bad block} / \text{reserve block}$
170	AAh	Bad Block Information	Counts the number of bad blocks. Raw Value Byte [3~0]: Early bad block count Raw Value Byte [5~4]: Later bad block count
172	ACh	Erase Failure Count	Counts the number of erase failure bad blocks. Raw Value Byte [5~0]: Erase failure count
173	ADh	Erase Count (Max / Avg)	Max and average erase count. Raw Value Byte [1~0]: Max erase count Raw Value Byte [3~2]: Average erase count
181	B5h	Program Fail Count	Counts the number of program failure bad blocks. Raw Value Byte [5~0]: Program Fail Count
182	B6h	Erase Failure Count	Counts the number of erase failure bad blocks. Raw Value Byte [5~0]: Erase Failure Count

ID	HEX	Attribute Name	Description
187	BBh	Host UNC Error Count	Counts the number of uncorrectable errors that accumulate when host reads data from Flash and ECC events occur. (Same as 01h) Raw Value Byte [5~0]: Uncorrectable errors count
192	C0h	Unexpected Power Loss Count	Counts the number of unexpected power loss events. This attribute returns the total unexpected power loss events numbers since initial drive deployment. Raw Value Byte [5~0]: Unexpected power loss count
194	C2h	Temperature (Current / Lowest / Highest)	Temperature Raw Value Byte [1~0]: Current temperature** Raw Value Byte [3~2]: Lowest temperature Raw Value Byte [5~4]: Highest temperature
196	C4h	Total Later Bad Block Count	Counts the number of bad blocks. Raw Value Byte [5~0]: Later Bad Block Count
199	C7h	CRC Error Count	Counts the number of times the drive encounters data transaction CRC errors (continuous count). (Same as DAh) Raw Value Byte [5~0]: CRC error count"
207	CFh	Thermal Throttling Count	Counts the number of times thermal throttling has been triggered. Drive throttling will trigger when temperature reaches 70°C and will stop when the drive falls below 66°C. Raw Value Byte [1~0]: Thermal throttling count
218	DAh	CRC Error Count	Counts the number of times the drive encounters data transaction CRC errors (continuous count). (Same as C7h) Raw Value Byte [5~0]: CRC Error Count
231	E7h	SSD Life Remaining	SSD Life Remaining Raw Value Byte [0]: SSD Life Remaining Formula $100 * [(Spec P/E - Average P/E) / Spec P/E]$ "
232	E8h	Read Fail Count	Counts the number of read failure bad blocks. Raw Value Byte [5~0]: Read fail count
233	E9h	NAND Write (GB)	Data written to NAND Flash in gigabytes. Raw Value Byte [5~0]: NAND write
241	F1h	Host Write (GB)	Lifetime writes from host (each GB). Raw Value Byte [5~0]: Host write increments in 1GB values
242	F2h	Host Read (GB)	Lifetime reads from host (each GB). Raw Value Byte [5~0]: Host read increments in 1GB values

ID	HEX	Attribute Name	Description
244	F4h	Avg Erase Count	Average Erase Count. Raw Value Byte [5~0]: Average erase count
245	F5h	Max Erase Count	Max erase count. Raw Value Byte [5~0]: Maximum erase count
246	F6h	Total Erase Count	Total erase count. Raw Value Byte [5~0]: Total erase count

***Indicates that value will reset after power-cycle*