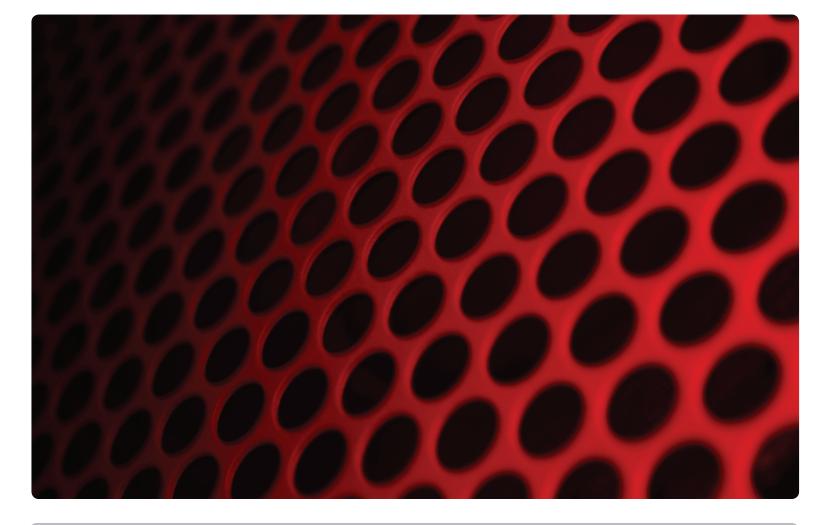
SMART Attribute Details





SMART Attribute Details

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

Kingston® DC500 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) |
| 9 | 09h | Power on Hours | Raw Value Byte [5~0]: Uncorrectable errors count Counts the power-on hours that accumulate from initial drive deployment. |
| 9 | 0911 | Power on Hours | 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 * later bad block / 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. |
| 218 | DAh | CRC Error Count | Raw Value Byte [1~0]: Thermal throttling count Counts the number of times the drive encounters data transaction CRC errors (continuous count). (Same as C7h) |
| 231 | E7h | SSD Life Remaining | Raw Value Byte [5~0]: CRC Error Count 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 [A1:D295~0]: Total erase count |

**Indicates that value will reset after power-cycle

