

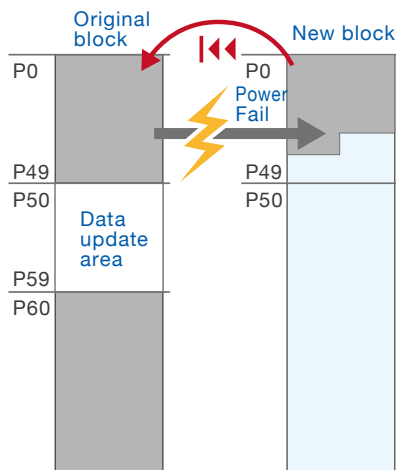
# Power fault tolerance

If power fail occurs in writing a new data, SSDs will lose not only the new data itself but also other data when coping preceding and succeeding data .

TDK SSDs have 2 countermeasures.

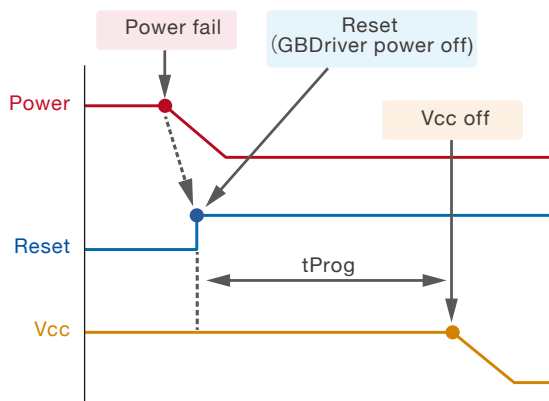
## Countermeasures No.1

First by GBDriver algorithm. GBDriver keeps the original data until coping is completed and will not employ any data of incomplete copy.

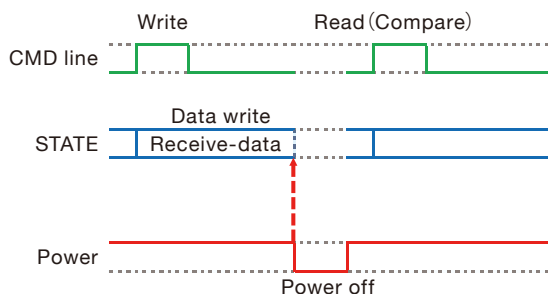


## Countermeasures No.2

Second, TDK SSDs (except for SD memory cards/microSD memory cards/eSSDs) employ power back up circuit inside, they are free from ECC errors.



## Power shutdown test



### ① SD Memory Cards, Power shutdown test result

|                      | TDK         | A          | B         |
|----------------------|-------------|------------|-----------|
| Writing data sectors | 166,049,542 | 27,296,954 | 5,791,942 |
| Power off cycles     | 15,989      | 7,155      | 753       |
| Data errors          | 0 (0.00%)   | 2 (0.03%)  | 1 (0.13%) |

### ② SSDs, Power shutdown test result

|                      | TDK        | A          | B          |
|----------------------|------------|------------|------------|
| Writing data sectors | 2837558584 | 3966531026 | 2015419396 |
| Power off cycles     | 677        | 946        | 481        |
| Data errors          | 0 (0.00%)  | 859 (91%)  | 68 (14%)   |



**TDK SSDs secure data reliability in sudden power fail.**