
MP SG BCH4 32B Spare User Manual

General Description and Name

This BBM is very similar with BBM ‘Skip SG BCH4 32B Spare’, Only differ is bad block handling is multiple partition style.

Relevant User Options

The following special features on the special features tab apply to this scheme. The default values might work in some cases but please make sure to set the right value according to your system.

Please note only the below special feature items are related to this scheme and ignore any others. If any of below items doesn’t exist, please check whether the right version has been installed or contact Data I/O for support by submitting Device Support Request through this address:

<http://www.dataio.com/support/dsr.asp>

Bad Block Handling Type = “MP SG BCH4 32B Spare”

Spare area : Please refer to “Description of common NAND special features.pdf”. *Normally set as “ECC ” for this BBM.* [Default ‘Disabled’]

PartitionTable File = “The path of the partition table file on your PC.”

Skip SG BCH4 sub page spare size = “32”

Normally the valid range is from 16 to 32 bytes. For this case, value could be 16, 25, 27 or 32. Default “32”

Skip SG BCH4: do second swap32? = “Yes” or “No”

Default “No”.

Normally set ‘No’ for this BBM. If “yes”, swap shown as below:

0x01 0x02 0x03 0x04 => 0x04 0x03 0x02 0x01

BB: max allowed = The Max permitted number of bad blocks. Please note, if the actual bad block number of the chip is bigger than this value, the algorithm error will be reported. [Default “FFFFFFFF”, not change; or equal 2% of total blocks]

Special Notes

- Format of PartitionTable.mbn:
 - a. Binary file fixed length 256 bytes.
 - b. Organization:16 rows x 4 columns. Each table item is 32-bits, little endian byte ordering.
 - c. Each row of the table describes configuration for one partition. Up to 16 partitions can be used.
 - d. Partition configuration:

- i. **Start Adr**: address of start of partition in flash blocks. The programmer will set the file read pointer and the programmer write pointer to Start Adr. If Start Adr=0xFFFFFFFF, skip to the next partition.
- ii. **End Adr**: last valid block in the current partition. The last data block programmed must be equal to or less than End Adr, otherwise the programmer will reject the flash device.
- iii. **Actual Data Length**: number of blocks of data to read from the input file and write to the flash in the current partition
- iv. **Attribute**: ignore

Please note to keep: Actual Data Length <= End Adr - Start Adr + 1 for this BBM

v. Example PartitionTable.mbn file:

NAND Flash Block			Attribute
Start Adr	End Adr	Actual Data Length	
0x0	0x7FF	0x360	0xFFFFFFFF
0x800	0xFFF	0x30	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF

Revision History

V1.0 24th April, 2017
Create this spec.

Appendix

You can get the file "Description of common NAND special features.pdf" from <http://ftp.dataio.com/FCNotes/BBM/>