
MBBS MPF with BCH 4bit User Manual

General Description and Name

This BBM is used for 2 bad block schemes and multiple partition. The partition file is specified string format.

The first BB-Scheme just skip any bad block and override the data. The 2th BB-Scheme is similar with other MPF BBM.

The ECC value is calculated by DIO. The algorithm is BCH m13, correction bits are 4-bit.

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 = "MBBS MPF with BCH 4bit"

Spare area : Please refer to "Description of common NAND special features.pdf". *Normally set as "Update ECC field" for this BBM.* [Default 'Update ECC field']

PartitionTable File: *Must set as the partition file for this BBM.* [Default 'C:\PartitionTable.mbn']

MBBS: BBS 1 partition: *The first BBS name for this BBM.* [Default 'u-boot']

BB-Table location: *Should set as the main BB-Table location(as block number) expecting.* [Default '1023']

BB-Table reserved block number: *How many blocks are reserved for BB-Tables.* [Default '4']

bad block detection: *Normally set as "BBM then BB marker" for this BBM.* [Default 'semi vendor BB marker']

Check BB Marker In DataFile: *Normally set as "Disabled" for this BBM.* [Default 'Enabled']

MBBS BCH4: Blocks Group for U-Boot: *How many blocks as one group in BB-Scheme 1 area.* [Default '3']

MBBS BCH4: BB-Table Init Version: *BB-Table initial version.* [Default '0']

MBBS BCH4: Reset BB-Table Version: *Reset the BB-Table version value.* [Default 'Disabled']

Fail device on specific bad blocks: *Fail device if specific block is bad.* [Default 'Off']

Good Blocks List File: *Good block(s) list file location.* [Default 'c:\GoodBlocksList.txt']

Special Notes

Partition file:

The partition file has the specified string format. Every line is one partition. The format is: "start addrss valid datasize partition length partition name"

For example, below is a partition table with ascii string:

```
0x00000000 0x000C6000 0x00738000 u-boot
0x00738000 0x00483000 0x01080000 kernel_0
0x017B8000 0x00483000 0x01080000 kernel_1
0x02838000 0x011EB000 0x05B02000 fs
0x0833A000 0x00021000 0x00042000 environment_parameter
```

Please notice the partition name cares sensitive. All address includes spare area (OOB).

Good block list file:

The file will be text file. One line indicate a block record.
i.e. Block 4,5,6,7,1020 must be good so the file should be:

```
4
5
6
7
1020
```

Revision History

V1.0 Dec 5, 2011
 Create this spec.

V1.1 Mar 8, 2013
 Add new special function.

Appendix

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

Data I/O