
MP BBT with 12BitECC User Manual User Manual

General Description and Name

This BBM is for the system that has several partitions which might have different bad block handling style even store BB table (2 BBTs from Block 1).

Normally first partition bad block handling method is skip use next good one, while second partition uses reserved area for replacement (last 5% block).
On Skip bad block area, some particular range must keep 2 continues good block.

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 BBT with 12BitECC"

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

PartitionTable File : Point to a .mbn file which describes the partition information.

Check BB Marker In DataFile : Please refer to "Description of common NAND special features.pdf". *please normally set as "Disable" for this BBM.*

bad block detection : Please refer to "Description of common NAND special features.pdf". *please normally set as "BBM then BB marker" for this BBM.*

Special Notes

Format of PartitionTable.mbn:

- a. Binary file length is 16Bytes integral multiple. Max 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. **Attribute:** Don't care for this area

- ii. **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.
- iii. **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.
- iv. **Actual Data Length:** number of blocks of data to read from the input file and write to the flash in the current partition

Note:

- a) First partition must be added for this BBM, however context will be ignored.
- b) Leave un used partition with blank status (0xFFFFFFFF)
- c) Normally for this BBM, only 5 partitions is enough.

Please note to keep: Actual Data Length + max bad blocks allowed <= End Adr - Start Adr + 1

- v. Example PartitionTable.mbn file:



DSR47585.mbn

Attribute	NAND Flash Block		
	Start Adr	End Adr	Atual Data Length
0x554F5247	0x45442050	0x454E4946	0x32
0x1	0x0	0x0	0x1
0x1	0x32	0x5F	0x48
0x1	0x60	0x3CC	0x36D
0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF

Revision History

V1.0 September 5th, 2014
Create this spec.

Appendix

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