

SKIP MPF OMAP V3 User Manual

General Description and Name

This scheme Implements the skip block method.
Multiple Partition Table is supported.
Each Partition support different ECC method.

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 = "SKIP MPF OMAP V3"

Spare area = "ECC"

PartitionTable File = "C:\ PartitionTable.mbn"

Hardware ECC = "Disabled"

Error bits allowed in one page = How many error bits allowed within one page while verify. [Default "0", if you are not sure the value, could set it to '1']. This setting only affects how many error bits allowed during preprogramming.

Option settings:

Required good block area: Start block = "0" Please refer to "Description of common NAND special features.pdf" [Default "0"]

Required good block area: Number of blocks = "16" Please refer to "Description of common NAND special features.pdf" [Default "0"]

Special Notes

- Customer image file should not contain the OOB (spare areas). Only contain the main areas.

Partition Table Format Partition.mbn:

- A binary file of YourFile.MBN with fixed length of 4096 bytes.
- Organization: 256 rows x 16 bytes. Each table item is 32-bits, little endian byte ordering.
- Each row of the table describes configuration for one partition. Up to 256 partitions can be used.
- 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. The other blocks in the partition are reserved for bad blocks. If this length is set to End-Start+1, which means no bad blocks are allowed within this partition.
 - iv. **Attribute:**

The attribute is used to name the ECC method for each partition.

EccType		Value
nandecc hw 2	-	0x00
none ecc	-	0x01
nandecc hw	-	0x02
Jffs2 ecc	-	0x03
4bit on-die	-	0x04

Note – TaskLink will request the name and location of this file during job load operations.



PartitionTableV3.mbn

Revision History

V1.0 Date: 2017-05-26

Create this spec.

Appendix

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