BBM ICERA 4BIT ECC User Manual

General Description and Name

This BBM is for ICERA system with 4bit ECC. This system includes header copy area, boot code copy area and filesystem area.

There are dynamic values within the first 2 pages of every header copy.

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 = "BBM ICERA 4BIT ECC"

ICERA: Boot Code Blocks : How many blocks per boot code. [Default '1']

ICERA: Boot Code Copies : How many copies of the boot code. [Default '4']

ICERA: Filesystem Start Block : The filesystem start block(0 based). [Default '16']

ICERA: Header Copies : How many copies of the header. [Default '4']

ICERA: Max BB in Header Area : How many bad blocks allowed within header area. [Default '1']

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

Check BB Marker In DataFile : Please refer to "Description of common NAND special features.pdf". ***Normally set as "Disabled" for this BBM***.[Default 'Enabled']

bad block detection : Please refer to "Description of common NAND special features.pdf". ***Normally set as "BBM then BB marker" for this BBM while do re-program***.

Below items supports multiple partition of file system part which might not needed and can be ignored if keep the default value.

ICERA: Filesystem 1st Partition Blocks: How many blocks 1st File system partition occupies.. [Default '65535']

ICERA: Filesystem 2nd Partition Start Block: Where 2nd File system partition starts from. [Default '65535']

ICERA: Filesystem 2nd Partition Blocks: How many blocks 2nd File system partition occupies.. [Default '65535']

ICERA: Filesystem 3rd Partition Start Block: Where 3rd File system partition starts from. [Default '65535']

ICERA: Filesystem 3rd Partition Blocks: How many blocks 3rd File system partition occupies.. [Default '65535']

ICERA: Filesystem 4th Partition Start Block: Where 4th File system partition starts from. [Default '65535']

ICERA: Filesystem 4th Partition Blocks: How many blocks 4th File system partition occupies.. [Default '65535']

ICERA: Filesystem 5th Partition Start Block: Where 5th File system partition starts from. [Default '65535']

ICERA: Filesystem 5th Partition Blocks: How many blocks 5th File system partition occupies.. [Default '65535']

Special Notes

Please disable the partial download function in TaskLink for this BBM by unchecking "Transfer data only …" checkbox and ensure the program flag before file system area have been checked.
Customer needs to provide all the data within a single data file ***page by page*** as below structure:
If boot code has only 1 block:
Block 0 header copy 0
Block 1 header copy 1
Block 2 header copy 2
Block 3 header copy 3

Block 4 boot code copy 0 block 0
Block 5 boot code copy 1 block 0
Block 6 boot code copy 2 block 0
Block 7 boot code copy 3 block 0

Block 8~0x0F with dummy data, all 0xFF.

Block 0x10 Filesystem memory start

If boot code has only 2 blocks:
Block 0 header copy 0
Block 1 header copy 1
Block 2 header copy 2
Block 3 header copy 3

Block 4 boot code copy 0 block 0
Block 5 boot code copy 0 block 1
Block 6 boot code copy 1 block 0
Block 7 boot code copy 1 block 1
Block 8 boot code copy 2 block 0
Block 9 boot code copy 2 block 1
Block 10 boot code copy 3 block 0
Block 11 boot code copy 3 block 1

Block0x0C~0x0F with dummy data, all 0xFF.

Block 0x10 Filesystem memory start

Revision History

V1.0 Aug 10, 2011
Create this spec.

Appendix

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