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## **BBM ICERA User Manual**

### **General Description and Name**

This BBM is for ICERA system. 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"

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.

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<u>ICERA: Filesystem 1st Partition Blocks:</u> partition occupies.. [Default '65535']	How many blocks 1 <sup>st</sup> File system
<u>ICERA: Filesystem 2nd Partition Start Block:</u> from. [Default '65535']	Where 2 <sup>nd</sup> File system partition starts
<u>ICERA: Filesystem 2nd Partition Blocks:</u> partition occupies.. [Default '65535']	How many blocks 2 <sup>nd</sup> File system
<u>ICERA: Filesystem 3rd Partition Start Block:</u> from. [Default '65535']	Where 3 <sup>rd</sup> File system partition starts
<u>ICERA: Filesystem 3rd Partition Blocks:</u> partition occupies.. [Default '65535']	How many blocks 3 <sup>rd</sup> File system
<u>ICERA: Filesystem 4th Partition Start Block:</u> from. [Default '65535']	Where 4 <sup>th</sup> File system partition starts
<u>ICERA: Filesystem 4th Partition Blocks:</u> partition occupies.. [Default '65535']	How many blocks 4 <sup>th</sup> File system
<u>ICERA: Filesystem 5th Partition Start Block:</u> from. [Default '65535']	Where 5 <sup>th</sup> File system partition starts
<u>ICERA: Filesystem 5th Partition Blocks:</u> partition occupies.. [Default '65535']	How many blocks 5 <sup>th</sup> File system

### 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

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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

Block 0x0C~0x0F with dummy data, all 0xFF.

Block 0x10 Filesystem memory start

## **Revision History**

V1.0 June 11, 2009

Create this spec.

V1.1 June 26, 2009

Add the multiple partition function of file system part.

V1.2 Dec 03, 2009

Add the comments for disable partial download function.

## **Appendix**

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