Skip bad blocks for MLC4 User Manual

General Description and Name

Skip Bad Blocks for MLC4. This scheme simply detects bad blocks in the device and skips past them to the next good block for all programming functions. For example, if block 3 of a device is bad, then block 3 of the image will be programmed in block 4 of the device. Several pages of block 0 are not written anything even 0xFF. This BBM calculate ECC for the customer data files and skip block 0, page 4-9 and page 126 & 127.

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 bad blocks for MLC4"

Spare area :

"ECC" for this BBM.[Default 'Disabled']

Only Cal ECC for User Data =

"YES" or "NO" depends on the customer.

Special Notes

The spare area in this scheme can either be programmed with the customer's image file, or it can be ignored. ECC is also an option with this particular scheme. However, the bad block marks are always located in the spare area.

The data file doesn't have to be arranged in any special way for this scheme. The binary that should be placed into the device is all that is needed

If the spare area is not to be programmed or want Data IO calculate ECC, then the image should not contain any data for the spare area.

Revision History

V1.0 2009-9-23 Create this spec.

Appendix

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