QMP v21 En with BB Limitation User Manual

General Description and Name

This BBM is based on QMP v2.1 Enhance, and allows the user to create BB(Bad Blocks) Limitation PartitionTable File .The start block, end block and maximum number of BB allowed can be set in the BB Limitation PartitionTable File. From start block to end block , actual numbers of BB shouldn't be over maximum numbers of BB allowed.

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 =   "**QMP v21 En with BB Limitation**"

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

BB Limitation PartitionTable File =   The path of the Bad Blocks Limitation Partition Table file on your PC. *[Always required, if all partitions in this files are filled with 0xFFFFFFFF,this BBM is be fullly compatible with QMP v2.1 Enhance .]*

Special Notes

Format of BB Limitation PartitionTable File.mbn:
   a. Binary file length is fixed 256 bytes.
   b. Organization:16 rows x 4 columns. Each table item is 32-bits, little endian.
   c. Please fill all the unused fields with 0xFFFFFFFF.
   d. If one of the partitions are all filled with 0xFFFFFFFF, all the fields'values of the following partitions are ignored.
   e. fields configuration are described as below.
        i.   **Start Blk**: start block of the partition.
        ii. **End Blk**: last block of the partition.
        iii. **Maximum Num of BB Allowed**: the maximum numbers of bad blocks can be allowed in the partition . No default value.
        iv. **Attribute**: the field is reserved. please fill the field with "0xFFFFFFFF"

Example BB limitation Partition Table.mbn file:

NAND Flash Block				
Partition Number	Start Blk	End Blk	Maximum Num of BB Allowed	Attribute
1	0x0	0x1F	0x2	0xFFFFFFFF
2	0x20	0x4F	0x0	0xFFFFFFFF
3	0x50	0x7F	0x0	0xFFFFFFFF
4	0x80	0xAF	0x0	0xFFFFFFFF
5	0xB0	0xFF	0x1	0xFFFFFFFF
6	0x100	0x2FF	0x4	0xFFFFFFFF
7	0x300	0x32F	0x0	0xFFFFFFFF
8	0x330	0x33F	0x0	0xFFFFFFFF
9	0x340	0x34F	0x0	0xFFFFFFFF
10	0x350	0x3FF	0x2	0xFFFFFFFF
11	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
12	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
13	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
14	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
15	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF
16	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF	0xFFFFFFFF

Revision History

V2.0   July 28, 2014
Add the Function that this BBM is full compatible with the BBM QMP v2.1 Enhance.

V1.0   July 14, 2014
Create this spec.

Appendix

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