

MPF DaVinci User Manual

This scheme is a Multiple Partition format. It ignores bad blocks prior to Kernel Blocks. After kernel Start #, bad blocks are skipped within each partition.

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 = "MPF DaVinci"

Spare Area = "ECC, Default = Disabled"

ECC Extended Type = "ECC DaVinci (Large page), Default = ECC"

Kernel Block # = "Starting Block # for the Kernel Default = 50"

Image Preparation

The image data file should be created such that:

Includes as many copies of UBL needed including (Little Endian) header
signature | 00 ed ac a1 00 01 00 00 0a 00 00 00 01 00 00 00
 | 01 00 00 00 00 00 00 00 ff ff ff ff ff ff ff ff

Includes as many copies of UBoot needed including (Little Endian) header
signature | 66 ed ac a1 00 00 08 81 4b 00 00 00 19 00 00 00
 | 01 00 00 00 00 00 08 81 ff ff ff ff ff ff ff ff

The rest of the partition files (like Kernel) inserted at their proper position

Partition Table Format Partition.mbn

- A binary file of YourFile.MBN with fixed length of 256 bytes.
- Organization: 16 rows x 4 columns. Each table item is 32-bits, little endian byte ordering.
- Each row of the table describes configuration for one partition. Up to 16 partitions can be used.
- If a BB-table is to be added for this BBM, then last partition should be used for the purpose of the BB-table.
- 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.

Revision History

V1.0 Date 12/07/2012

Appendix

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