FIELD	SIZE	VALUE	Descriptions	total size	header size
magic_number	4bytes	0xAA55DD44	magic number to indicates this header existed, little endian	512bytes	1M(0x100000)bytes
reserved		0xFF	reserved area		
extended CSD(after program)	512bytes		refer the fields to eMMC4.4 specification. Please fill the value as what you expected.		
mask of extended CSD	512bytes		mask the fields which don't need modification, '1' masks the bit.		
reserved		0xFF	reserved area	512bytes	
eMMC re-partition parameter	16bytes		Some eMMC(moviNAND, iNAND, etc..) re-partition parameter. Little endian	512bytes	
reserved		0xFF	reserved area for future partition function usage		
reserved		0xFF	reserved area	5632bytes	
magic_number	4bytes	0xAA55EC33	magic number to indicates this super partition header area existed, little endian	16400bytes	
magic_number	4bytes	0xA9A90033	magic number to indicates enable transfer partition start address to end-begin count, little endian		
reserved	8bytes	0xFF	reserved area		
super partition information area			every partition record takes 16 bytes, 1024 records at most. Please set the unused area as all 0xFF bytes. Little endian.		
reserved		0xFF	reserved area		
real_data		*data*	the customer's data which will be programmed to the device as super partition information specified.		

Notes

1st, For every byte in Extended CSD:
if the mask byte is 0xFF, then this byte will keep as it is;
Otherwise the programmed value will be ((CURRENT_VALUE & MASK) | (EXPECTED_VALUE & (~MASK)))
CURRENT_VALUE is the value in the chip, EXPECTED_VALUE is what specified in this header.

2nd, The structure of each partition record is:
{///1 block == 512 bytes
DWORD part_bgn_blk; ///this variable indicates the location of this partition within the physical partition(boot partition, general purpose partition or user data area).
DWORD data_bgn_blk; ///the location of this partition within data file.(please don't include the 1M header.)
DWORD data_length_blk; ///how many blocks of data file this partition occupies. Please NOTE these 2 variables should be TLwin sectors aligned.
*DWORD attr; see *** ////the lowest byte indicate which physical partition it belongs to. the higher 3 bytes are reserved. 0 is user data area; 1&2 is boot area partiton 1 and 2; 3 ~ 6 are related to the general purpose partitions.*
}
**** Partition record would terminate by 16BYTES 0xFF***
***** Please note any data what have not been covered by any partition will be discarded***
****** (attr & 0xF000) = 0x5000,Partition physical start offset means count from partition END to START.***

3rd, Re-partition parameter struct is:
{
DWORD magic_number; //Magic number to indetify which device(moviNAND, iNAND, etc..) re-partition routine runs
DWORD boot_area_param; //Boot area re-size parameter (the definition of value is dependent on the device Spec)
DWORD rpmb_area_param; //RPMB area re-size parameter if exist (the definition of value is dependent on the device Spec)
DWORD reserved; //Reserved for future usage
}
About magic_number:
0x53414D50 *indicate "SAMP", Samsung moviNAND partition function active.*
0x53414E50 *indicate "SANP", Sandisk iNAND partition function active.*

4th, The whole file structure should be totally the same as "MMC44 Data File Organization" if don't consider this new super partition features.
5th, "High Capacity Erase Group Size" should be used after configuring partitions.
5th, There will be related information generated within eventlog.txt once loaded.
7th, This document is for Data I/O customers only.

Date	History
2012/6/5	Add partition function support (moviNAND and iNAND)
2013/5/8	Add partition number to 1024 (what was 63 in the past)
2013/6/21	Add partition terminating condition
2014/10/14	Improve the document for clearness
2014/12/30	Add magic code & attribute for partition physical start address End - Begin convert