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
magic_number	4bytes	0x4D544B50	If use the MTK option,set this magic code indicate partition		
reserved		0xFF	reserved area		
extended CSD(after program)	512bytes		refer the fields to eMMC4.4 specification. Please fill the value as what you expected.	1024bytes	
mask of extended CSD	512bytes		mask the fields which don't need modification, '1' masks the bit.		
reserved		0xFF	reserved area	6656bytes	
magic_number	4bytes	0xAA55EC33	magic number to indicates this super partition header area existed, little endian	16400bytes	
reserved	12bytes	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 size of super partition information area is 1k - 16bytes, which can holds 63 pieces of partition records at most. The structure of each record is:
{///every block is 512 bytes currently,
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 **
}
** (attr & 0xF000) = 0x5000, Download offset from partition END. (Only valid MTK option enable. Only support user partition at very last partition!!!!)*
Otherwise process normally.
*** Partition record would terminate by 16BYTES 0xFF.*

3rd, The whole file structure should be totally the same as "MMC44 Data File Organization" if don't consider this new super partition features.
4th, "High Capacity Erase Group Size" should be used after configuring partitions.
5th, This document is for Data I/O customers only.
6th, "RPMB Partition Size(block)" and "Boot Partition Size(block)" is required for this feature(512B Unit).Fill these two special feature depend on data file.
7th, "RPMB Partition Size(block)" exist in special feature indicate support MTK partition.

Date	Author	History
2014/3/20	Caspar Chen	Add support MTK parition