Performance Tests JesFs V1.5 -- https://joembedded.de					
Platform:	CC1310 with 48MHz (TI) SPI: 12 MHz MX25R8035F - **1MByte** Maximum Transfer (Bursts): **1.5MByte/se** Build: Release, SF_BUFFER_SIZE_B=128		nRF52840 with 64MHz (Nordic) SPI: 32 MHz (SPIM) MX648035F - **8MByte** Maximum Transfer (Bursts): **4MByte/sec** Build: Release, , SF_BUFFER_SIZE_B=128		
Cmd	Runtime (msec)	Speed (kB/Sec)	Runtime (msec)	Speed (kB/Sec)	Remark
F 1	14873		82402		Format HARD ("Chip Erase")
F 2	1858		6113		Format SOFT, Flash empty
F2	13659		112550		Format SOFT, Flash 90% full
i	11		37		Start/Wake Filesystem FS_START_FAST (*)
I	18		42		Start/Wake Filesystem FS_START_NORMAL (*)
W 943718	16669	56,6	17548	53,8	Write 921kB File WITH CRC on empty Flash (all Sectors empty)
W 943718	29045	32,5	32058	29,4	Write 921kB File WITH CRC on empty Flash (all Sectors marked USED)
W 943718	15047	62,7	15961	59,1	Write 921kB File CRC DISABLED on empty Flash
R 943718	2379	396,7	1842	512,3	Read 921kB File WITH CRC
R 943718	886	1065,1	253	3730,1	Read 921kB File CRC DISABLED
R 943718	10	94371,8	9	104857,6	Find to EOF, SILENT READ
d	278	3394,7	250	3774,9	Delete 921kB File

Conclusion:

1.) It makes sense to use „F 2“ (Soft Erase) if the flash is more the ca. 70%-80% full or used

2.) The writing speed depends on the availibility of erased sectors and is in the range of the technical specs of serial NOR Flash. Using CRC for writing or larger SF_BUFFER_SIZE has not to much effect.

3.) Reading the Flash is dependant of using CRC or not. If not using CRC for reading, the maximum reading speed is in the range of the technical limits of the SPI Interface. So using a (small) SF_BUFFER_SIZE of 128 is OK.

(*): Remark: With the flag FS_START_RESTART simple WAKEUP from DeepSleep is < 0.1 msec