

Virtual Small Block File Manager (VSB/VFM)

- Intel-developed code translates sector calls to the linear flash
- Makes virtual small blocks (sectors) in larger flash erase blocks
- VFM is based on the VSB flash media manager
- VFM can work as the file manager or with an existing one
- Primarily for embedded flash components (i.e. resident flash array)
- Component based architecture (e.g. uses a spare block per component)
- Small code size ($\approx 16K$ of code and $\approx 2-8K$ RAM)
- Has high-performance edit capability
- Robust power-off recovery and media clean-up

The VFM file manager and the underlying VSB flash media manager are both Intel-developed code. They are provided to those who need a file manager capability, or who need to add flash media management to an existing sector-based embedded file manager. The full VFM (VFM and VSB) can be used as the system file manager to flash or can be adapted to operate under an existing file system/operating system through the high level API. If only a sector-to-flash capability is

required, the VSB can be used to provide the sector capability and flash media management.

VFM handles general file manager functions including but not limited to: File Open, File Close, File Write, File Edit, File Delete, File Seek, Tell, Reclaim, robust Power-off Recovery and robust Cleanup. The high-performance Edit feature supports append, insert, replace and delete on any byte boundary. VFM allows the user to define the sector size for their application. Multiple partitions are supported and several files may be opened concurrently per partition. Open files are supported in Read, Write and Edit modes. The architecture supports a flat directory structure (no sub-directories). The Type and ID fields are used to identify files. These may be used to support a pseudo sub-directory capability. ASCII file names and other file information are extensible via an Extended Header field.

Source code is primarily in highly portable 'C' code with some assembly required. The software license for the code gives you royalty-free and derivative rights to the code when used with Intel Flash memory.

INTEL FLASH MEMORY SUPPORTED:

28F008SA, 28F008SC, 28F016SA, 28F016SC, 28F016SV, 28F016XD, 28F016XS, 28F032SA, Series 2 Cards, Series 2+ Cards, Value Series 100 Cards, Series 100 Miniature Cards

AVAILABILITY:

Now

CONTACT:

See Appendix C