

SEGGER's open BigFAT specification breaks FAT's 4GB per file barrier

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SEGGER's BigFAT specification, which enables any third party to store files larger than 4GB on standard FAT media, is now publicly available. This specification is not encumbered by any patents and can be used freely, along with the supporting tools.

Supported by all operating systems, FAT is the industry standard for formatting removable storage such as SD cards and USB memory sticks.

Technical simplicity and universal support make it attractive even for applications running on resource-constrained devices such as mid-size microcontrollers.

It is also a great choice for transferring files between systems.

FAT's main shortcoming is limited file size, which becomes apparent when storing or transferring video files or using databases.

SEGGER addresses this shortcoming with [BigFAT](#), extending the FAT file system with support for files well beyond 1TB. BigFAT breaks large files into small pieces, each piece comfortably fitting on a FAT volume as an individual file, and presents these files as a single massive file to the user, while maintaining full compatibility with standard FAT.

SEGGER provides a free tool called [BigFAT Converter](#), which runs on Linux, macOS, and Windows. It allows users to create, read, or copy BigFAT files to and from the host file system.

"FAT plays an important role in the Embedded Space," says Rolf Segger, founder of SEGGER. "Whether used for removable storage media, such as SD cards and USB sticks, or as an internal file system, many embedded systems use FAT. exFAT, presented as successor to FAT for SD-cards, is unfortunately not compatible with FAT and is also patent encumbered."

"Any company using or implementing exFAT requires a license from Microsoft, which can be difficult or costly to obtain, especially for small businesses and the Open Source Community," says Ivo Geilenbruegge, Managing Director of SEGGER. "That's why we at SEGGER decided to introduce BigFAT as open, non-patent encumbered specification. By allowing all interested parties to use BigFAT without charge or hassles, we aim to establish it as a new standard. Anyone is welcome to implement it based on the specification."

SEGGER [emFile PRO](#) comes with an implementation of BigFAT.



For more information on BigFAT, please visit:

<https://www.segger.com/products/file-system/emfile/bigfat/>

Learn more about emFile at:

<https://www.segger.com/products/file-system/emfile/>

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About SEGGER

SEGGER Microcontroller GmbH has three decades of experience in Embedded Systems, producing cutting-edge [RTOS and Software Libraries](#), J-Link and J-Trace [debug and trace probes](#), a line of [Flasher In-System Programmers](#) and [software development tools](#).

SEGGER's all-in-one solution [emPower OS](#) provides an RTOS plus a complete spectrum of software libraries including communication, security, data compression and storage, user interface software and more. Using emPower OS gives developers a head start, benefiting from decades of experience in the industry.

SEGGER's professional embedded development software and tools are simple in design, optimized for embedded systems, and support the entire embedded system development process through affordable, high-quality, flexible and easy-to-use tools.

The company was founded by Rolf Segger in 1992, is privately held, and is growing steadily. SEGGER also has a U.S. office in the Boston area and branch operations in Silicon Valley, Shanghai and the UK, plus distributors on most continents, making SEGGER's full product range available worldwide.

For more information on SEGGER, please visit www.segger.com.

Why SEGGER?

In short, SEGGER has a full set of tools for embedded systems, offers support through the entire development process, and has decades of experience as the Embedded Experts.

In addition, SEGGER software is not covered by an open-source or required-attribution license and can be integrated in any commercial or proprietary product, without the obligation to disclose the combined source.

Finally, SEGGER offers stability in an often volatile industry, making SEGGER a very reliable partner for long-term relationships.

For additional information please visit: www.segger.com

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