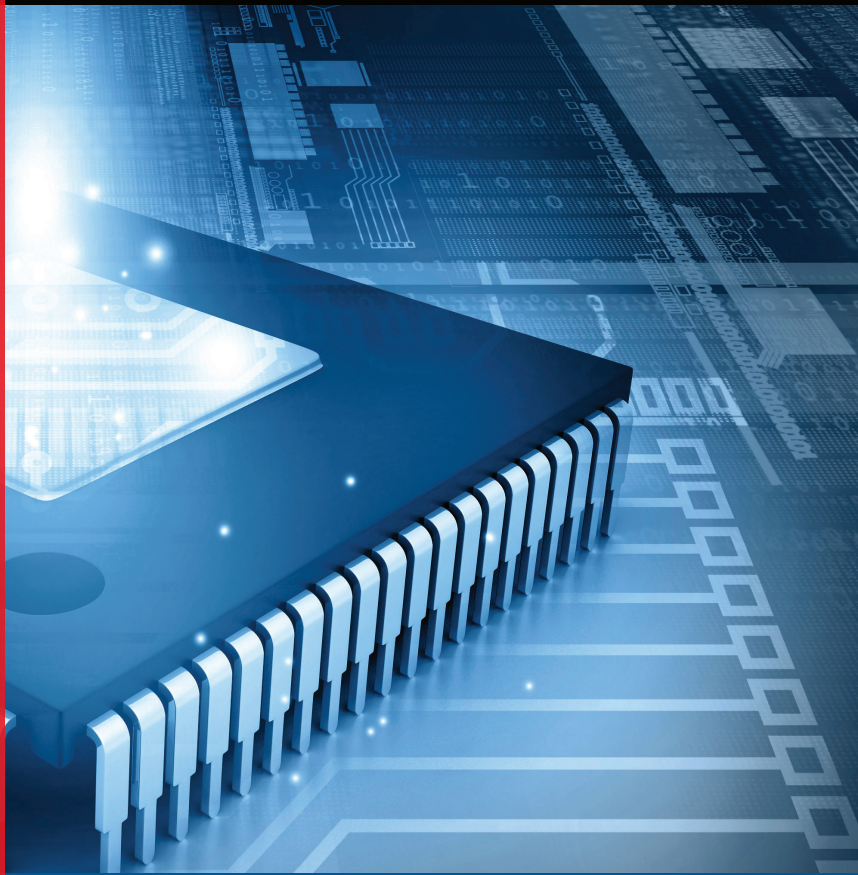


# CYPRESS FLASH FILE SYSTEM

## Smart Solutions for Design and Development

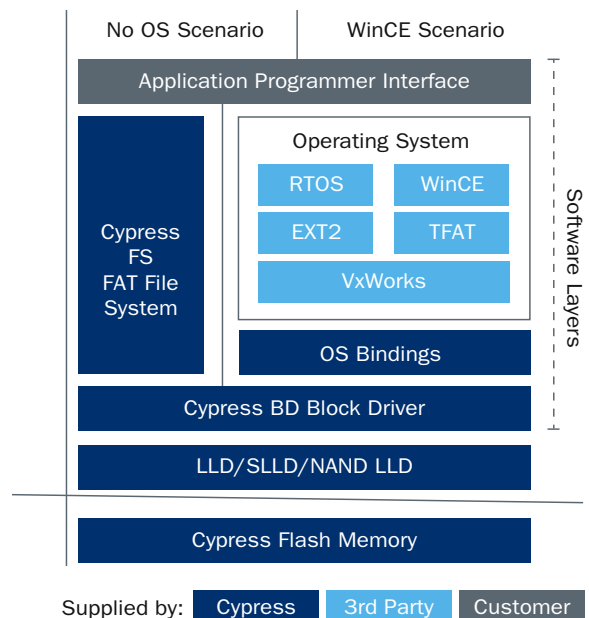
Today's designers are faced with the ongoing challenge of creating more complex designs in less time without sacrificing performance or increasing costs. Let us help you accelerate your designs with the Cypress Flash File System (FFS) software.



The Cypress FFS software is customized to support parallel and serial NOR, and NAND Flash memories. This flexible software solution is designed to help you rapidly create a full-featured data storage subsystem where the universal interface of the block driver isolates the command interface of the Flash memory from your software application. Coupled with memory from your board design, you have a complete Flash solution to manage your changing design needs that can leverage the complete Cypress roadmap, now and into the future.

### THE CYPRESS FFS SOFTWARE OFFERS MANY BENEFITS, INCLUDING:

- Easy to license and procure
  - The click-thru license enables easy evaluation and acceptance
  - The package is available at no cost to Cypress customers
  - Receive full source code, user guide and porting guide
- Flexible system integration options
  - Cypress File System (FS) - a standalone FAT File System,
  - OS Bindings - pre-integrated for Windows CE, and
  - Cypress Block Driver (BD) - a block driver for serial and parallel interface Flash memories
- Pre-tested under continuous and discontinuous power scenarios to minimize your risk
- Tunable for your system requirements
- Free support from our worldwide network of Application Engineering Specialists!



## CYPRESS BD AND LOW LEVEL DRIVER: CORE COMPONENTS FOR DATA STORAGE

At the heart of the Cypress FFS package is the Cypress BD and Low Level Driver. The Cypress BD contains all of the specialized core logic that maps a Flash device to a logical disk device:

- The BD maps logical blocks to physical blocks for you, automatically managing dirty space cleanup, wear leveling, and power failure recovery. The Low Level Driver contains all of the device specific logic that manages Flash command presentation and Flash status:
- The Serial Low Level Driver (SLLD) supports the full range of Cypress serial peripheral interface Flash, providing the industry's first FFS for Serial Interface devices!
- The Low Level Driver (LLD) supports Cypress parallel interface Flash, through the older polling interface, or the newer status register interface; and the LLD enables multiple board layouts, supporting both cascaded and interleaved layouts for various data bus widths.
- The NAND Low Level Driver (NAND LLD) supports all the Cypress NAND products. Not only does it provide a simple development interface, but it also enables advanced device features for more complex and high-performance applications.

## MODULAR DESIGN LOWERS YOUR DEVELOPMENT COSTS AND GETS YOU TO MARKET FASTER

The Cypress BD is easily integrated into multiple application and OS environments when combined with one of the three integration interfaces:

1. Cypress FS delivers standalone FAT16 and FAT32 support
2. Pre-integrated OS Binding for Windows CE

## WHERE

- Cypress FS is useful if your system has no disk file system, or if you want to integrate your application directly with Cypress FS.
- The OS Bindings enable rapid integration of Cypress BD into your OS – preserving the OS-supplied data storage abstraction that requires no changes to your application layer.

## HIGH QUALITY MINIMIZES RISK TO YOUR PRODUCT

Whether you're dealing with high-reliability automotive requirements, or a pressured time-to-market consumer device platform, you want only the best solutions that deliver high quality with minimal risk for you and your customers. Our rigorous and repeatable quality assurance program addresses:

- Continuous Power Testing: Our automated test processes exercise a broad range of valid and invalid inputs, as well as long-term random operation tests – all repeated for multiple build configurations – so you can be assured of correct operation under normal conditions.
- Discontinuous Power Testing: Our best-in-class automated and focused power failure stress test enables bug discovery rates that are orders of magnitude faster than normal unfocused methods – so you can be assured that when the power turns on, your Flash disk will mount and your committed data will be preserved.



**GET STARTED NOW**

### EASY AND FREE!

Cypress FFS is available free to Cypress customers.

Register now by logging onto [www.cypress.com](http://www.cypress.com) and selecting "Design Support/Software and Drivers" from the menu. Click the "Cypress Flash File System (FFS)" link under the Flash Memory list, then click on the "Request Cypress FFS" button. Our worldwide customer response team will provide you with a secure portal to download the full source code. They can also provide technical support. After accepting the easy click-thru license, you will be on your way to enjoying the benefits Cypress FFS has to offer.

### Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134  
phone +1 408.943.2600 fax +1 408.943.6848  
toll free +1 800.858.1810 (U.S. only) Press "1" to reach your local sales representative

© 2017 Cypress Semiconductor Corporation. All rights reserved. All other trademarks are the property of their respective owners.  
002-21746 Rev.\*\*

