SD/CF/HARD DRIVE FAT32 FRAMEWORK FOR DSP

Applied Signal Processing, Inc.

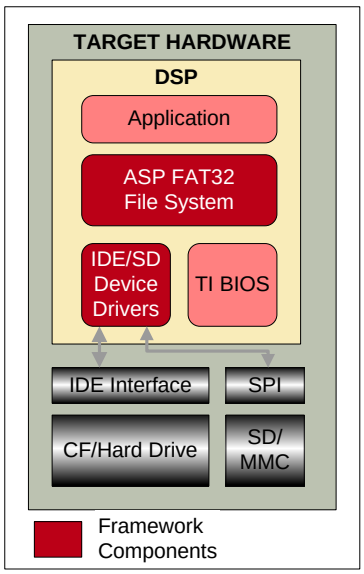
1981 N. Kollath Rd. Verona , WI 53593 / 608.441.9921 / Fax: 608.646.0311 / www.appliedsignalprocessing.com

EASILY INTEGRATE A MASS STORAGE DEVICE INTO YOUR NEXT DSP DESIGN

Applied Signal Processing's Secure Digital, Compact Flash and Hard Drive Interface (SD/CF/HD) Framework for Texas Instruments DSPs allows developers to quickly and easily add mass storage media to TI DSP based hardware. The SD/CF/HD Framework includes a Hardware Reference Design, IDE or SD Device Drivers and a FAT32 compatible File System all of which can be quickly integrated into your DSP application, saving several engineering-months of internal development effort.

START DEVELOPING YOUR APPLICATION TODAY

A companion product to the SD/CF/HD framework is our Mass Storage Daughter Card. The Mass Storage Daughter Card compliments the Texas Instruments DSKs and Code Composer Studio™ environment to provide a rapid prototyping tool for your DSP applications. Using the Daughter Card and SD/CF/HD Framework, developers can add a robust file system to an application in a matter of hours. This combination allows application software development to continue before your custom hardware is fabricated, compressing your project's timelines and greatly reducing project risk.



FEATURES

- Hardware Reference Design.
- IDE & SD Device Drivers.
- FAT32 compatible File System for the DSP.
- File System and Device Drivers delivered as linkable library.
- Data rates up to 4Mbytes/sec for CF, 9Mbytes/sec for HD, and 1Mbyte/sec for SD. (Suitable for 24Bit, 96KHz Stereo).
- WAVE File read/write support.
- Includes an example test application which measures SD/CF/HD device speed.
- Includes a Reference Framework 3 example for streaming audio to wave files.

SPECIFICATIONS

- Parallel IDE Interface. (CF/HD)
- SPI Interface (SD/MMC)
- TI BIOS™ Compatible.
- 10 levels of subdirectories.
- File Open: All fopen( ) modes supported.
- File Open: multiple files open for read or write
- Filenames: 8 characters plus 3 character extension. (8.3)
- Platforms:C28x, C55x, C64x, C67x. DM64x, C645x
- Devices: SD/MMC, CF, HDD.
- For other platforms and devices, please contact us.

FILE SYSTEM API

```
FILE_type *HD_fopen(..)     int HD_fseek(..)          void FATInit(..)
int HD_fclose(..)           int HD_ftruncate(..)      Bool HD_mkdir(..)
Uint32 HD_fwrite(..)        int HD_fflush(..)         Bool HD_cd(..)
Uint32 HD_fread (..)        Bool HD_remove(..)        Bool HD_rmdir(..)
                            int HD_rename(..)         void enumerateDirectory(..)
```

PROVEN FLEXIBLE DESIGN

Customers have used our SD/CF/HD Framework in several products including one application which we developed that records weeks of audio data to directly to Hard Disk. The SD/CF/HD Framework is a useful component for applications that need features such as audio streaming, data acquisition, or a flexible system reconfiguration options. Applied Signal Processing can provide application development, device driver support, and customization options to exactly match your needs, making sure your product is a success!

ABOUT APPLIED SIGNAL PROCESSING, INC.

Applied Signal Processing, located near Madison WI, provides custom engineered solutions, reference designs, and contract engineering services for Digital Signal Processing and Embedded Systems.

MathWorks Partner

DSP TEXAS INSTRUMENTS