

## Re: Compact flash programming and specs

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-09/5856.html>

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Bernie wrote:

> *Can someone help me out with finding specs/protocol for programming  
> compact flash. I am logging data with an A/D and need to save it to a  
> compact flash card which will be read by a card reader on a laptop. I  
> read another thread that talked about needing to use the FAT32  
> protocol for MS Windows. I don't know how to do that either, but also  
> need info on connections and reading/writing to Compact Flash cards.  
>  
> Thanks in advance,  
>  
> Bernie*

You've searched the web?

As far as I know any flash card will come to you as a mass of blank storage. I don't know if the standard is for NAND flash only or if it supports NOR flash --- but that should be on the web. Either way, if you want it to be readable as a disk you need to impose a file system on it.

Generally with DOS-derived machines this is done by treating the memory as if it were a disk and writing the usual sectorized data (with a FAT in the case of a Windows system). I've forgotten the details of FAT-16 and never learned the details of FAT-32 but again -- this should be on the web.

You'll find that writing the FAT 32 file system requires reading lots of picky, poorly documented details (remember this is Microsoft you're dealing with). You can, however, buy file system software from various vendors. I know that US Software sells this, but I don't know their current name. You can search the web for this, but you'd be better off to buy a copy of some magazine that addresses the embedded systems marketplace (Embedded Systems Programming, Nuts & Volts, etc.) and look at the ads in the back. Embedded Systems is hard to get subscriptions to, so you might want to see if you can find ads on their website.

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