FAT File System Module - FatFs for
Microchip PIC24FJ128GA010 16-bit general purpose microcontroller

FatFs is a generic file system module to implement the FAT file system on small embedded systems. The original source code can be obtained from elm-chan's web site at the following address. http://elm-chan.org/fsw/ff/00index_e.html
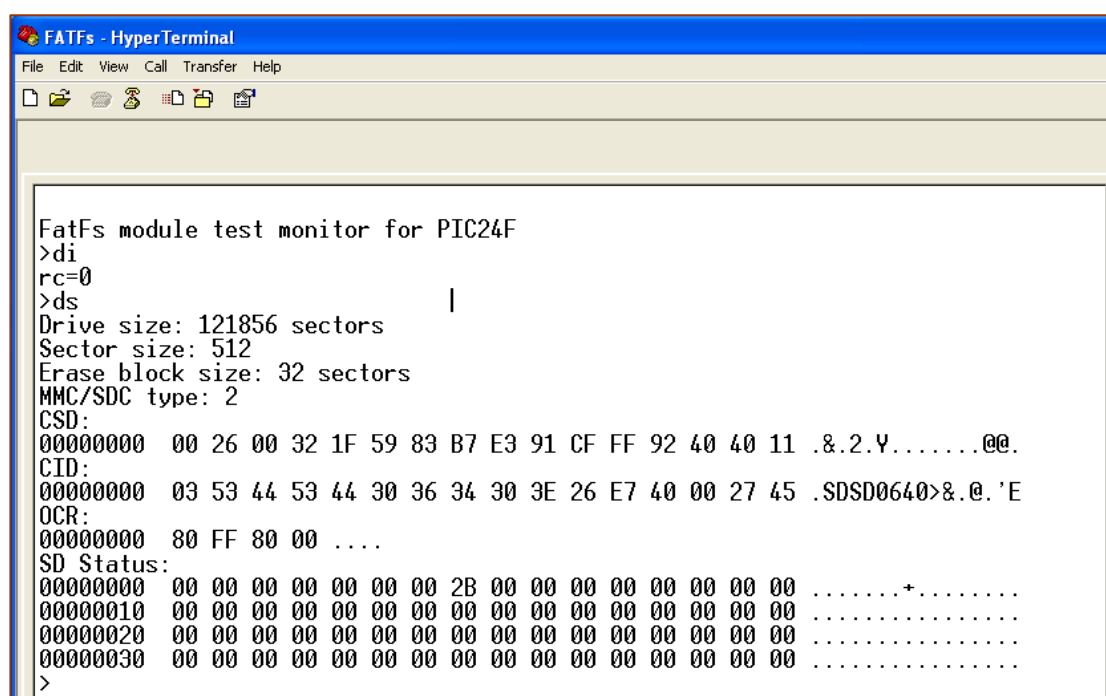
This program has been modified from FatFs (FAT File System Module) to run on the hardware platform PIC24-Eval-Board C for 16-bit microcontroller Microchip PIC24FJ128GA010. One may use either a Plug-in-Module for the said mcu or PIC24-Eval-Board C with option PIC24FJ128GA010 onboard.

To use this program, one must use **HyperTerminal** at **19200bps, no parity, 1-stop bit, no handshake**. Connect a straight cable from PC's COM PORT to RS232 connector (J2B) onboard for serial communication.

Format a SD card and insert it to J1B (the SD Card socket) onboard. A reset action will send an ASCII message to HyperTerminal as <FatFs module test monitor for PIC24F> on PC

Experiment a bit with the following command from HyperTerminal:

di *<Enter>* :This command initializes the SD Card.
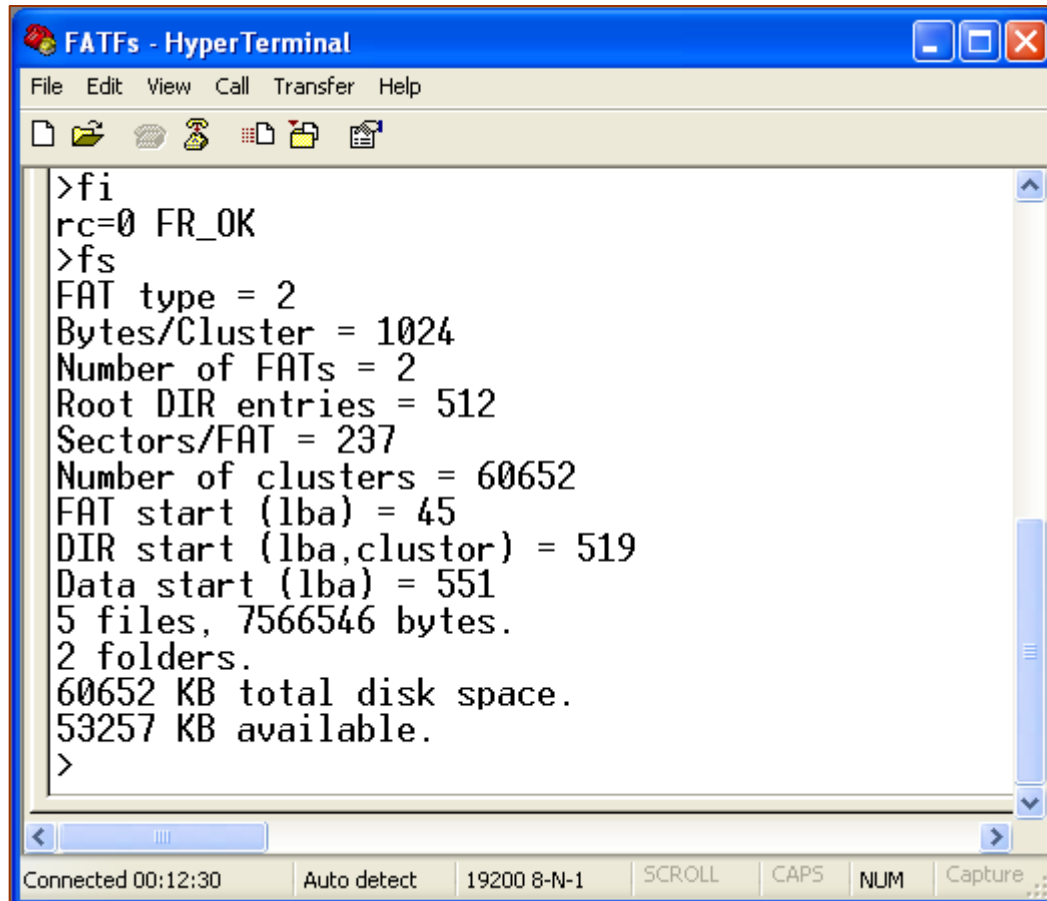ds *<Enter>* :This command shows sector information of your SD card

```
FatFs module test monitor for PIC24F
>di
rc=0
>ds                         |
Drive size: 121856 sectors
Sector size: 512
Erase block size: 32 sectors
MMC/SDC type: 2
CSD:
00000000  00 26 00 32 1F 59 83 B7 E3 91 CF FF 92 40 40 11 .&.2.Y.......@@.
CID:
00000000  03 53 44 53 44 30 36 34 30 3E 26 E7 40 00 27 45 .SDSD0640>&.@.'E
OCR:
00000000  80 FF 80 00 ....
SD Status:
00000000  00 00 00 00 00 00 00 2B 00 00 00 00 00 00 00 00 .......+........
00000010  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00000020  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00000030  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
>
```

fi <Enter> : Initialize the logical drive
fl <Enter> : It is the directory listing command

Learn more about this FatFs from elm-chan web page. Look at the main() to see what else function is supported.

Making use of this FatFs is the first step to display a bmp picture on the TFT color LCD from SD Card or nandFlash.