

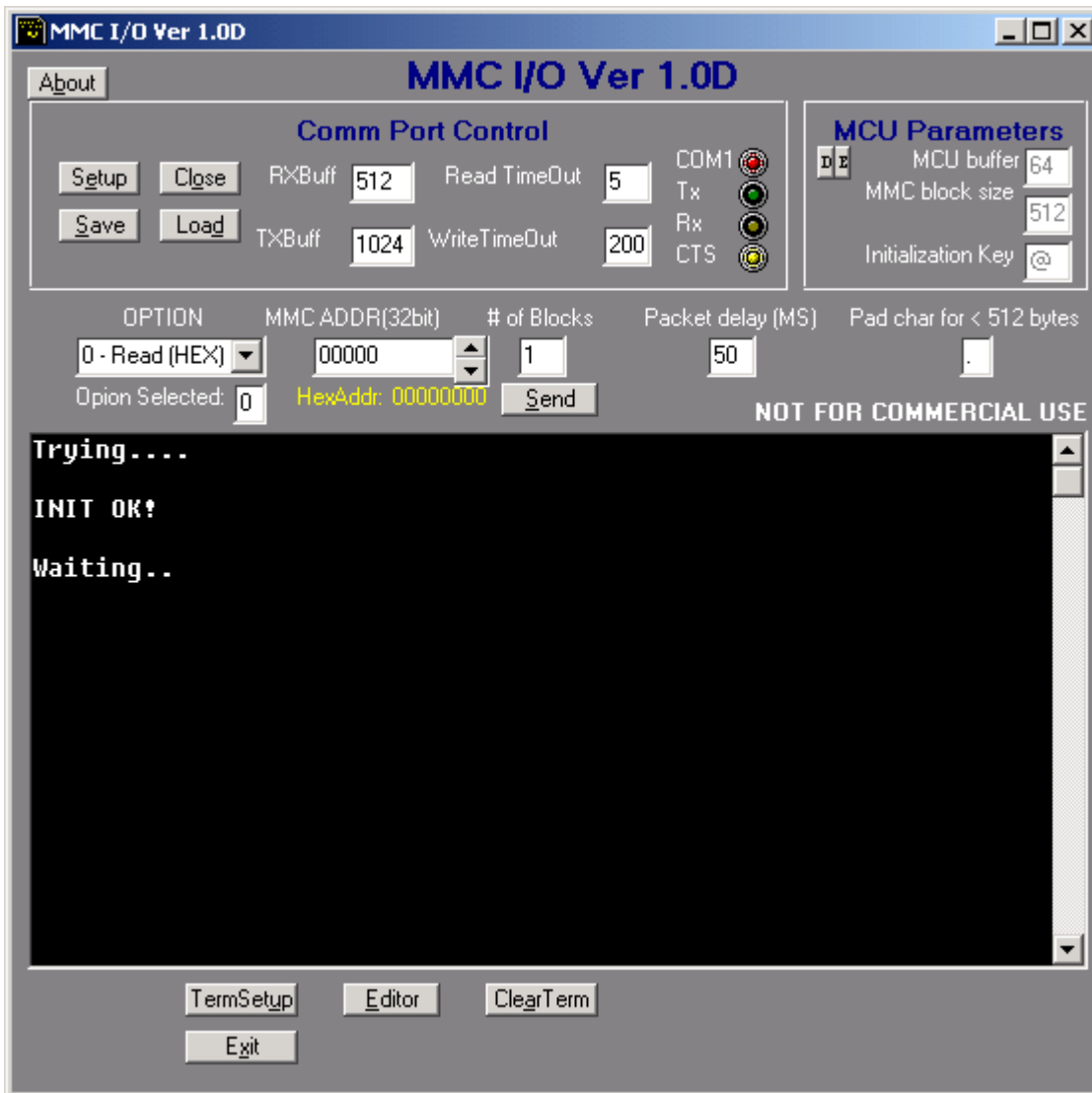
MMC I/O Test: Storing a text file to the card

This will test the SDMMC board by storing an 8kb text file at a given location and then reading it back. The test data has tags "Start.of.block" and "End of block" that indicate the beginning and end of each 512 byte block. The body of the text simply consists of characters.

This test was conducted on a Windows 2000 Professional workstation (1.8ghz w/256 ram) using a SDMM3 board and a eFilm 32mb SD card as well as a Lexar 64mb SD card.

- (1) Connect the MMSD board to a Windows PC using a serial cable
- (2) Connect a 5-9vdc supply to the MMSD board
- (3) Open the Windows' MMC I/O application and select/open the appropriate port (leave rest of the settings at the default values).
- (4) Place an SD or MMC card in the socket on the MMSD board
- (5) Press the reset button on the MMSD board

In the MMC I/O the following should appear:

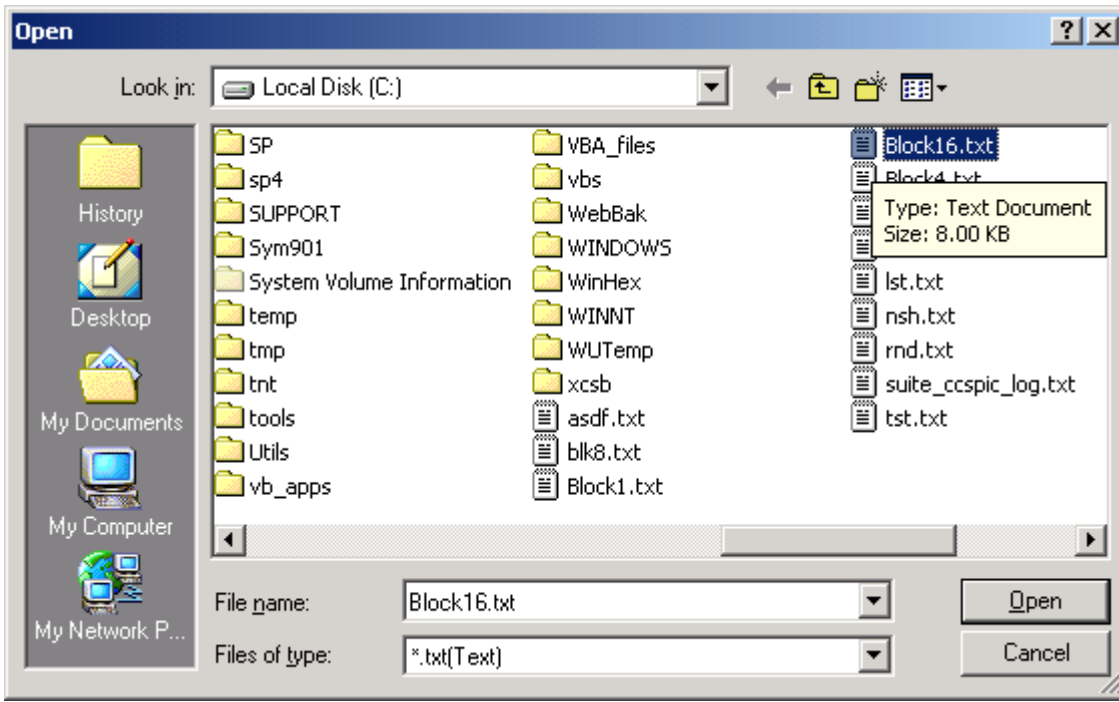


Note: If it hangs on the "Trying...." it means that it cannot initialize the card or that a card is not in the socket. Check for proper placement of the card and then try again by re-cycling the power on the board.

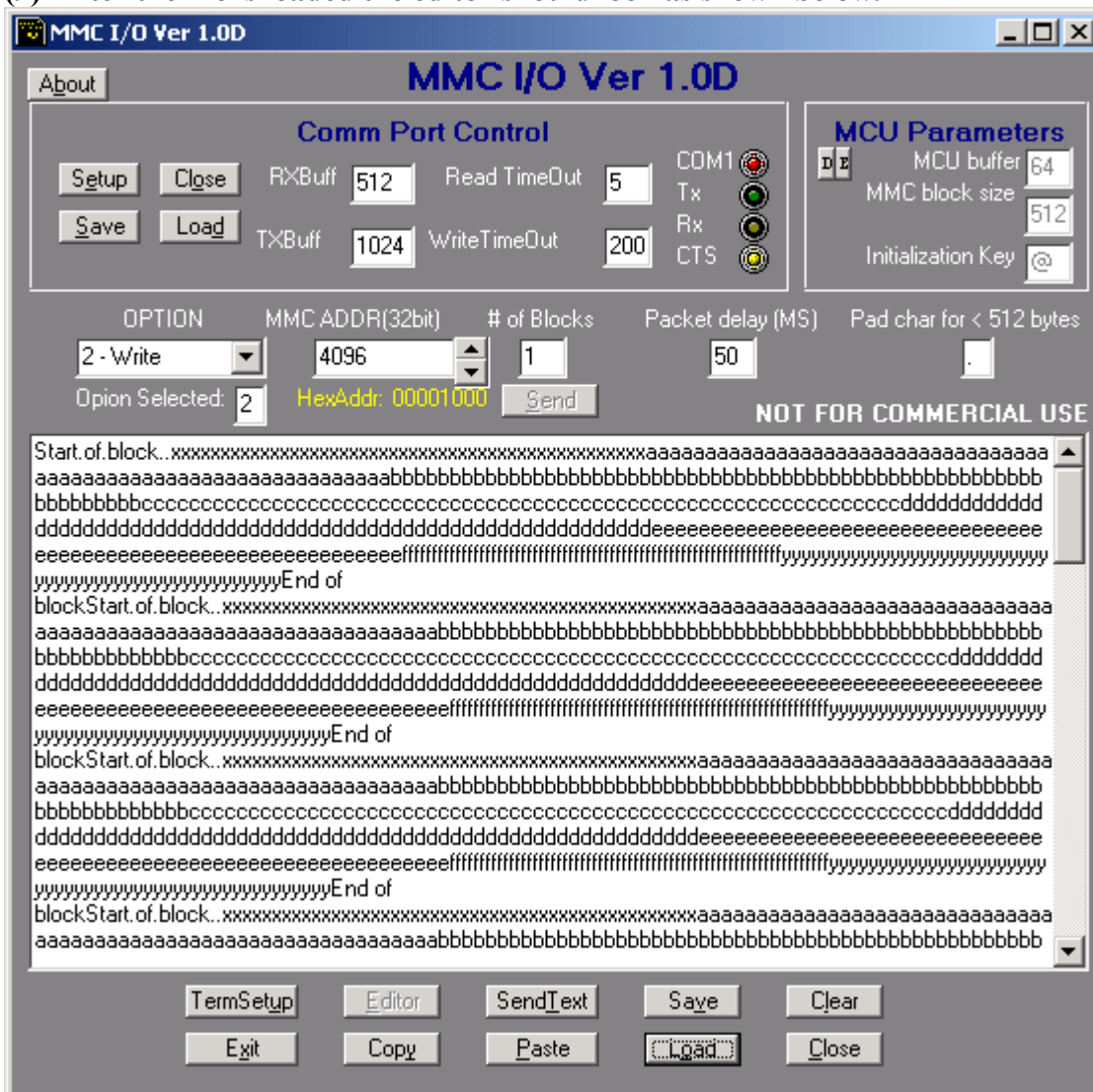
- (6) Press the “Clear Term” button and drag the right hand scroll bar to the top.
- (7) Select the address that the data is to be written to. For this example select 4096
In the MMC ADDR box by using the up/down arrows. Then select WRITE in the “Option” box (option number 2). The editor window will appear as shown below. If there is any text in the window clear it using the “Clear” button.



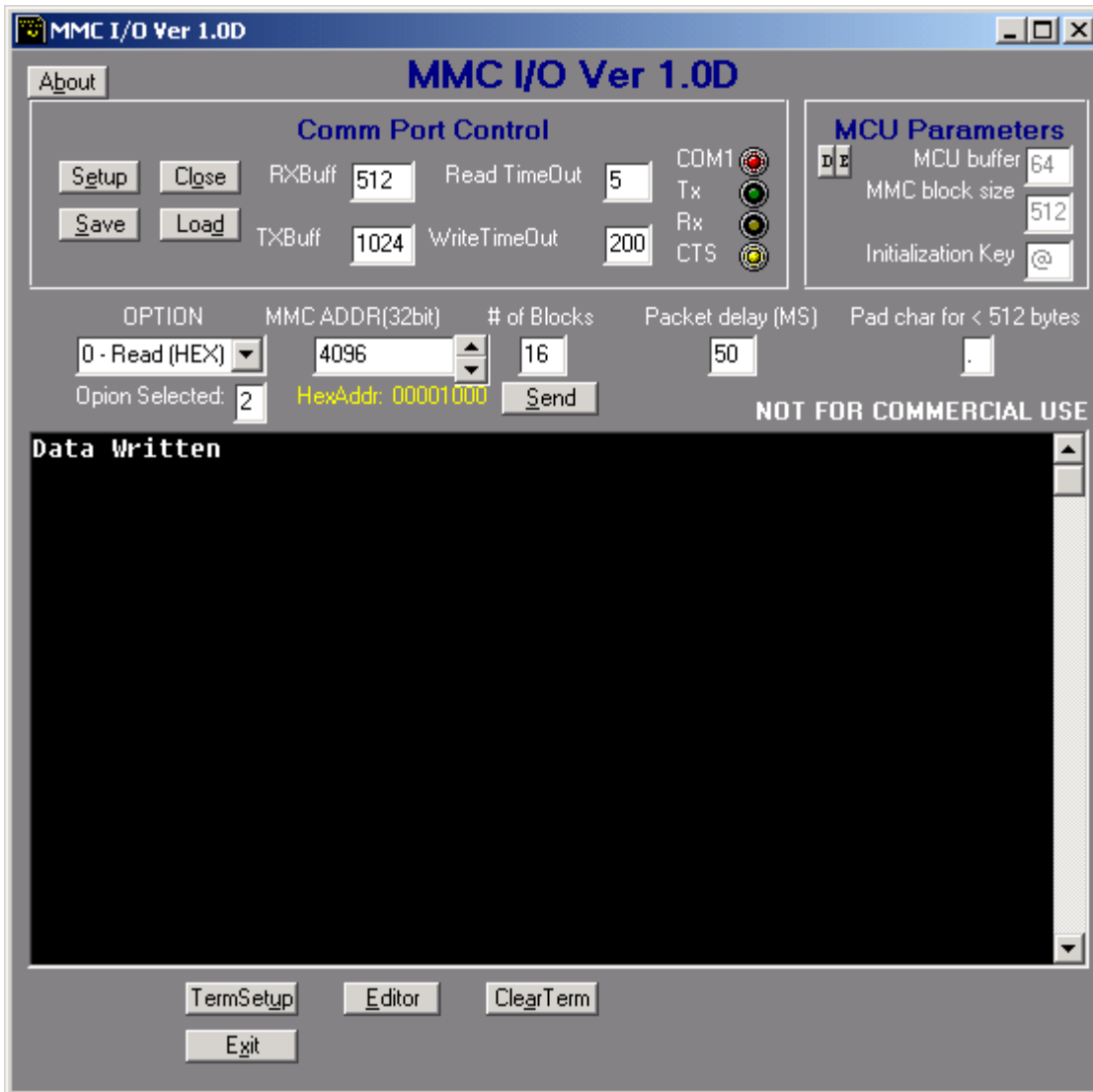
- (8) Now open the text file to be written. For testing purposes use the “Block16.txt” file which is exactly 8kb in size and sector markers which indicate the start and end of each 512 byte block. Click the “Load” button and navigate to the file.



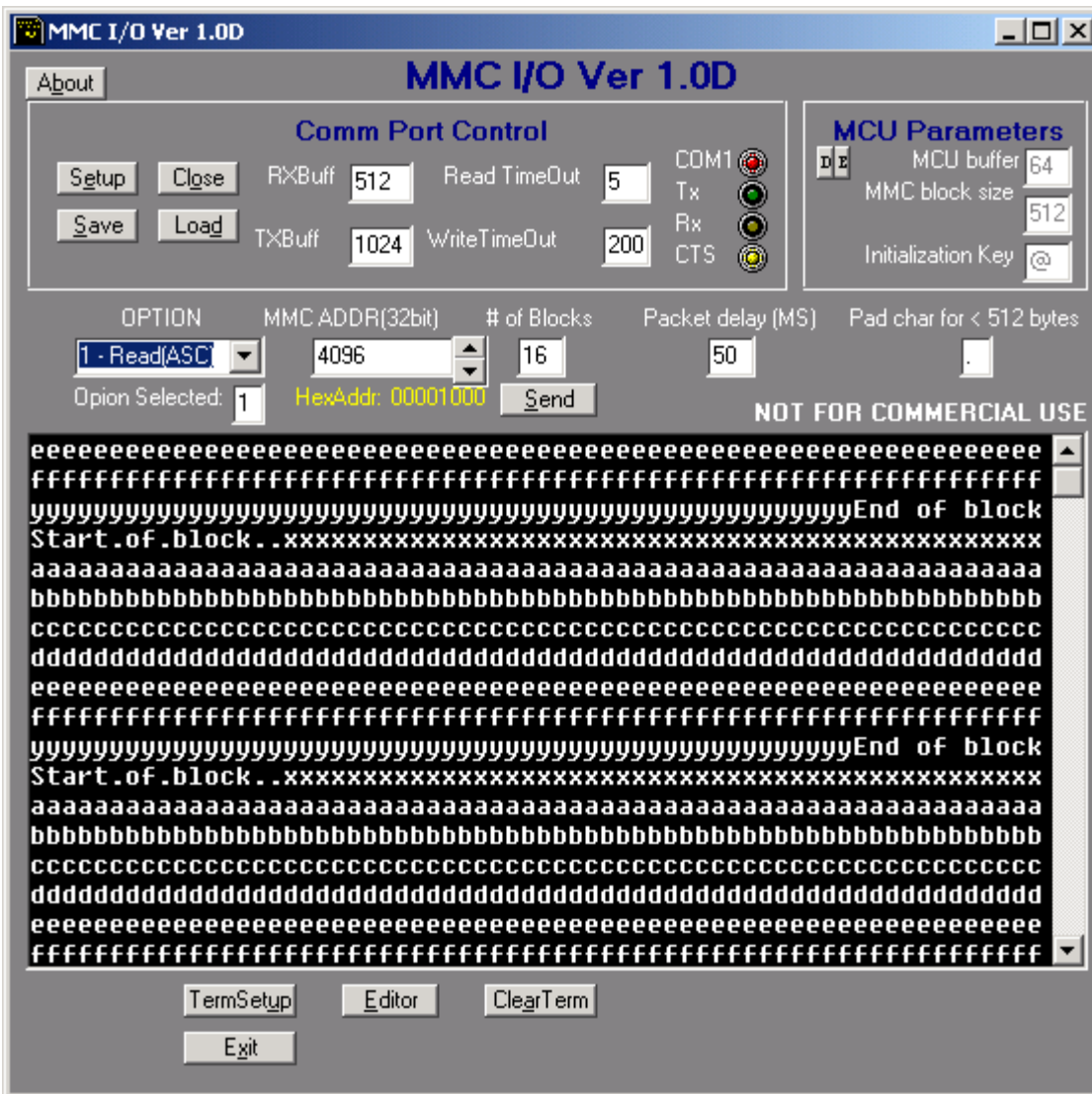
(9) After the file is loaded the editor should look as shown below.



- (10) To write the text to the card press “Send Text” and wait until all the file has been saved (watch the blinking lights in the MMC I/O window and wait until the blinking stops)
- (11) Make sure to clear the editor window by pressing the “Clear” button (do not save, if prompted)
- (12) Press the “Close” button. This will return to the terminal and if the data was saved properly a “Data Written” message will be shown. If not, it means that there was a data transmission problem. Usually this can be fixed by increasing packet delay and decreasing the TX buffer values



- (13) Next, to read back the data, press the “Clear Term” button and drag the scroll bar to the top. Also, press the “Editor” button and clear the editor window and then return back to the terminal by pressing the “close” button. In the terminal, The MMC ADDR should still be at the 4096 value and the “# of Blocks” should be at 16. From “Option” select “Read (ASC)”, option number 1 and then press the “Send” button. The data will be read and displayed in the terminal as shown below. Wait until the MMC I/O lights quit flashing.



- (14) Clear the terminal and press the “Editor” key. The following screen should be displayed. The data can be edited as necessary and then save using the “Save” button. The test data has tags “Start.of.block” and “End of block” that indicate the beginning and end of each 512 byte block.



(15) Finally, the data can be edited and saved as a file. It should also be compared with the original to make sure that it was all saved correctly.