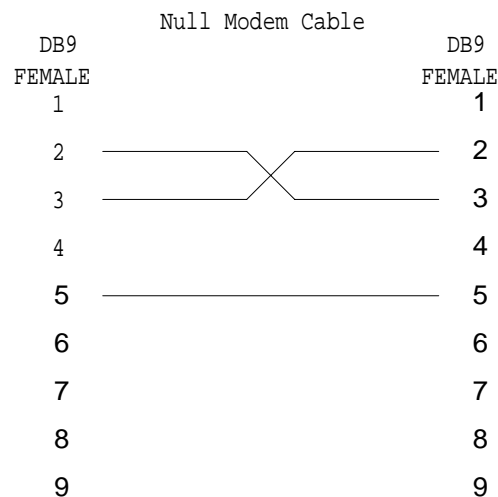


Updating the 8210A Flash Memory

To update the flash memory of the 8210A, you will need the following:

- 1). PC with RS-232 serial port
- 2). Terminal emulation software capable of binary data transfer using XMODEM or YMODEM Protocols. (ie Windows Terminal or HyperTerminal)
- 3). Null-modem cable
- 4). Binary data file containing the program code.

The RS232 Serial port on the 8210A is a 9-pin connector (DB9 male) that is compatible with the pin-out of the serial port on a PC. A Null-Modem cable (sometimes called a Direct Connect cable) is required to connect the 8210A to a PC. For reference, the required connections are shown in the figure below. The cable may also swap other signal lines. This shouldn't be a problem.



There is a 4-position Dip Switch located on the 8210A (P/N 193-8023) card that controls operation of the internal bootloader program. Note that the card assembly contains TWO 4-position switches. There is a switch located near the rear of the card, by the RS232/GPIB interface connectors. This is NOT the switch you want! The desired switch is located approximately in the center of the card, and may be obscured by the ribbon cable for the rear-panel Dip Switch. Place switch 4 in the ON position to activate the bootloader.

Connect the PC serial port to the 8210A serial port using the null-modem cable. Assuming the use of HyperTerminal, set the Connection Type to the following...

Connection Using : Direct to COMx

Configure the **Port Settings** properties to :

Bits per second (Baud rate) : 19200
Data bits : 8
Parity : None
Stop Bits : 1
Flow Control : None

Apply power to the 8210A. You should see the following menu appear...

8210A Flash Utility 1938031A V1.00

Initializing hardware.....Done

Locating flash memory...Found 29F400T on UCS

Main Menu

[A] Application Code (flash)
[B] Bootloader Code (flash)
[C] Config Data (eeprom)
[P] Protocols
[S] SelfTest

Enter Selection :

Enter **A** . The menu will change to the following...

Application Code Menu

[S] Status
[E] Erase
[D] Download
[U] Upload
[X] Exit to Main

Enter Selection:

Prior to downloading and programming the new code, the current contents of the Flash memory must be erased. Enter **E** to erase the current program. You will get the following message...

****WARNING****

You have selected to ERASE the App area!!!

Are you sure? (y/N) :

Answer **Y** to this question to proceed. You should see the following...

Erasing App code...

Erasing sector : 80000...ok

Erasing sector : 90000...ok

Erasing sector : A0000...ok

Erasing sector : B0000...ok

Erasing sector : C0000...ok

Erasing sector : D0000...ok

Erasing sector : E0000...ok

Application Code Menu

[S] Status
[E] Erase
[D] Download
[U] Upload
[X] Exit to Main

Enter Selection :

Select **D** for Download. You will see the following...

Checking flash app area...Ok

Begin Xmodem transfer..

At which point you will start the transfer. In HyperTerminal, select **Transfer | Send File...** from the menu. This should open a **Send File** dialog box. In the **Protocol** drop-down list, select **1K Xmodem**. In the **Filename** box, enter (or browse to) the file name of the supplied data file. Select the **Send** button. The download should proceed.

Note : If you do not perform the preceding steps in a timely fashion (approx 3 mins), the 8210A will assume that there is a problem with the transfer, and will abort the download. You will get a message similar to

ERROR! : No response from sender

Download failed.

After which you would have to repeat the steps for beginning the download.

If all goes well, after approx 2–3 mins, the download should complete, and the dialog box will close. You should get the following message...

Download complete. 262144 bytes received.

Application Code Menu

[S] Status
[E] Erase
[D] Download
[U] Upload
[X] Exit to Main

Enter Selection :

Enter **S** to check the status. You should get a response similar to the following...

App Code Status : OK
PartID : 1938032T
Version : V2.65
Size : 256k
Crc : 0x99D5

Remember to place Dip Switch 4 in the OFF position to set normal operating mode.