THE MSDOS SERIAL DOWNLOADER:

The MSDOS serial downloader is a software program that allows the user to serially download an assembled program (Intel Standard HEX format) to the on-chip program FLASH memory via the serial COM1 port on a standard PC.
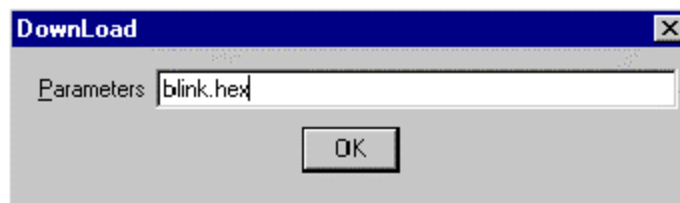
Once the part is configured for serial download mode (pulling PSEN low during Reset), a program can be easily downloaded by using the 'copy' command from a DOS shell or alternatively you can use a preconfigured icon provided as part of the developent tools

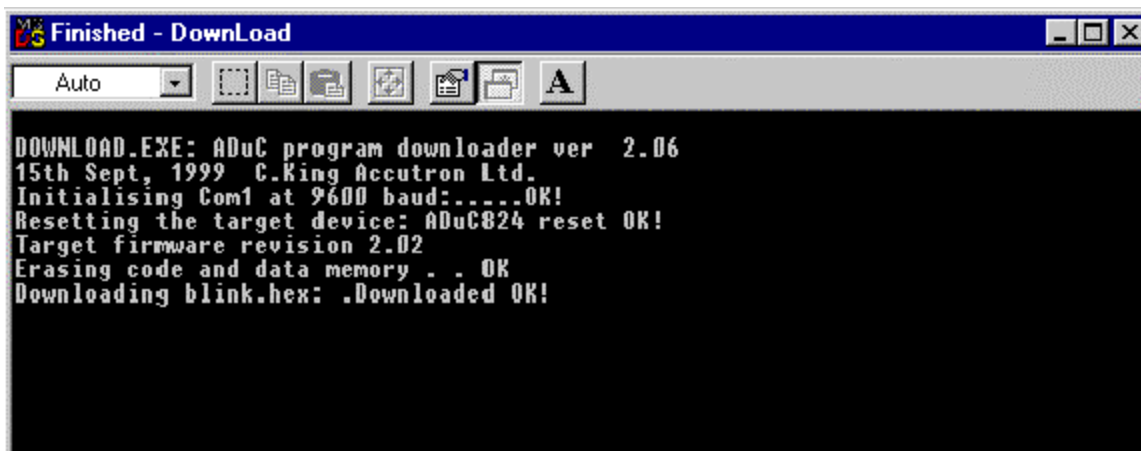1. Verify the following link connections on your ADuC824 QuickStart development board:

   LK3 - inserted

   For details on link connection options, refer to the eval board user's guide at
   C:\ADuC\Documentation\824\EvalDocs\824Eval_B.pdf.

2. Power up your eval board using the power supply provided or a 9V battery (not both).

3. Connect the eval board to your PC's COM1 serial port using the provided RS-232 cable.

4. Press the RESET button on your eval board.

5. On your PC, in the ADuC_Beta824\Download directory, double-click the *DownLoad* icon (DownLoad).

6. In the window that comes up, type the relative path of the hex file you wish to download.

DownLoad

Parameters: blink.hex

OK

The downloader will display the below information, indicating that the serial download was successful.

Finished - DownLoad

Auto

```
DOWNLOAD.EXE: ADuC program downloader ver  2.06
15th Sept, 1999  C.King Accutron Ltd.
Initialising Com1 at 9600 baud:.....OK!
Resetting the target device: ADuC824 reset OK!
Target firmware revision 2.02
Erasing code and data memory . . OK
Downloading blink.hex: .Downloaded OK!
```

7. Remove LK3 from your board and press RESET. The code will begin executing (as indicated by a blinking LED with the example code blink.hex).
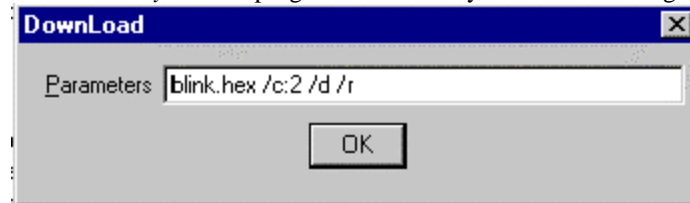
8.   To perform additional downloads, re-insert LK3 and repeat steps 4 thru 7 above.

ADDITIONAL DOWNLOADER OPTIONS:

To make use of the additional downloader options, type any of the following switches immediately following the file name (making sure to precede each with a *space*):

/C:n   - select the COM port (default is 1)
/D   - download to Flash/EE program memory without erasing Flash/EE data memory
/R   - run the program from the beginning i.e. 0000hex
/R:xxxx   - run the program from the specified hex start address

For example, the below text selects a download via *COM2* to an ADuC824 without erasing Flash/EE data memory and sets the downloader to *automatically run* the program immediately after downloading.

DownLoad   ✕
Parameters blink.hex /c:2 /d /r
[OK]

note: The serial downloader can also be launched directly from a DOS prompt. For example:

MS-DOS Prompt   _ ▢ ✕
C:\ADuC\DownLoad>download blink.hex /r