

	Application Note
	Product: 80C52 Based Products
Using HyperTerminal	Date: 3/12/99
<p>Introduction: To communicate with any of Micromint's 80C52 based products, such as the Domino or RTC52 board, a terminal or PC emulating a terminal is needed. Included with Windows 95 is a terminal emulator program called HyperTerminal. When run, this program allows your PC to act as a terminal.</p>	
<p>Setup:</p> <ol style="list-style-type: none"> 1) Click on the Start icon and then select Programs - Accessories - (Communications for Windows 98) - HyperTerminal - HyperTerminal. This will start the program. 2) A New Connection window will appear and allow you to enter a name for the connection to your board or module. Once you have entered a name and configured the session, you'll be allowed to save the connection information when you exit the program. This will allow you to use the same configuration the next time you need a terminal without entering all the configuration information again. 3) The Connect To window will appear and you can select the Com port you have the board or module connected to. 4) Next, the COMx Properties window will appear. Set the selections as follows: <ul style="list-style-type: none"> Bits per second - 9600 (this is a good starting point) Data bits - 8 Parity - none Stop bits - 1 Flow control - Xon/Xoff 5) Because the 80C52 uses an interpreted BASIC, each line is deciphered and stored as it is read. To accommodate this you need to set some delays when transferring a program from the PC to the 80C52. To do this, select File - Properties - Settings 6) Select ASCII Setup and set the following: <ul style="list-style-type: none"> Line delay - 400 ms Character delay - 20 ms 	
<p>Entering a program: Programs can be entered into an 80C52 product two different ways as long as the 80C52 device is in RAM mode. A program can be directly typed into the 80C52's RAM or, a plain text file can be transferred into it. To transfer a plain text file just select Transfer located at the top of the window and then choose Send Text File. Find the desired text file that needs to be transferred and click open. The text should begin to stream down the screen. After the text is done streaming the program is in RAM. Always remember to have line numbers in an 80C52 basic program.</p>	
<p>Capturing a program: HyperTerminal allows us to capture a program and save it to a plain text file for editing. Before capturing a program be sure to stop the program by pressing CTRL C if you are running a program or are in the auto-run mode. To capture a program stored on the 80C52 memory, select Transfer located at the top of the window and then choose Capture Text. Next issue the LIST command to the 80C52. The program in memory will start listing on the screen. As the program is listing it is being saved into a text file. To stop the PC from capturing text select Transfer then Capture Text then stop.</p>	