

# Using the HW-130 Programmer

If you have had difficulty installing your HW-130 Programmer, Xilinx Technical Support recommends this troubleshooting process.

First, before first connecting the HW-130 to the COM port of your PC (or after disconnecting it from the port), check to ensure that it powers up properly. The power-on LED indicator light located above the FAIL light should blink following power-on while the programmer performs a self-test, and then stop blinking and remain lit. If the power-on LED does not blink initially, or the FAIL light goes on and stays on, the programmer is probably defective; contact Xilinx Customer Service to obtain a replacement unit.

A typical installation and start-up of the programmer involves the following steps:

- 1** Insert the floppy disk and change to the "a:\>" (or "b:\>") prompt.
- 2** Type "install" and follow the instructions on the screen.
- 3** After installation of the software, "cd" to the target directory.
- 4** Hook up the programmer to the serial port of your PC and power it up. Make sure the FAIL LED is **not** flashing three or four seconds after power-on.
- 5** Type "hw130" to launch the application. The software will search all COM ports for the programmer and negotiate the highest baud rate after doing a reset of the programmer. The power LED of the programmer will flash for about four seconds during the reset.
- 6** Once communication has been established, you can select a device and use the programmer.

Assuming that this installation process has been followed completely, but the HW-130 is still not working properly, one of the following procedures may solve the problem:

- If you are using the DOS version, make sure you are **not** running out of a DOS window in Windows 3.1, 95 or NT. The hw130 program only works in a DOS-only environment.
- Make sure there is **not** a "hw130.ini" file in the working directory. Delete it if there is one.
- Check that you are using a standard serial cable and/or 9-25 or 25-9 pin cable adapters. Null modem cables will not work.
- Make sure the minimum 470K of conventional memory needed to launch the program is available. Type "mem" from the DOS prompt, look for the line, "Largest executable program size ...Kbyte." If it is less than 470K, unload some device drivers in the config.sys or autoexec.bat files and restart the PC (or run a memory optimization routine, such as "memmaker" provided with later DOS versions).
- Run "msd" (Microsoft diagnostics) from the DOS prompt, type in "C" for COM ports. Check that two COM ports are available

(two 16550 UART chips). The additional port is required to support your mouse. The other settings of the COM ports (like the baud rate, data bits, and so on) do **not** matter because the HW130 software initializes these settings. Make sure the address used is correct for the COM ports. Type in "Q" from the main menu of msd for the IRQ settings on the PC. Make sure IRQ3 points to COM2 and 4, and IRQ4 to COM1 and 3. The software assumes the following default addresses and IRQ settings on the COM ports:

|                | COM1 | COM2 | COM3 | COM4 |
|----------------|------|------|------|------|
| <b>Address</b> | 03F8 | 02F8 | 03E8 | 02E8 |
| <b>IRQ</b>     | 4    | 3    | 4    | 3    |

- If all else fails, reboot the PC and enter the CMOS setup. Search around for the COM ports and try swapping the COM ports (i.e. use a different UART for the programmer). Point COM1 to COM2 and COM2 to COM1. If there is only one COM port, point it to COM1 instead of 2 (or vice versa). Exit and save the CMOS setup and try again. ♦

