8 & Single Channel Serial Port Driver

The code originally stemmed from a driver written by Olivetti. This code should retain copyrights of all sources, and must acknowledge the sources in all original and derived works.

The features of this driver are that 2200ch/s have been reported, and flow control, 19200 and 38400 work properly. In addition, up to four instances, with each instance holding from 1 to 8 multiplexed serial ports, allows up to 26 (the letters of the alphabet limit us ...) serial ports

to be added to the NeXTSTEP computer. The driver dynamically handles 8250, 16450, 16550(Broken FIFO), NS16550AFN and 82510 (four byte FIFO) ports and has the capability of assigning the ports devices in sequence for each instance of the port driver.

The Configuration app has not be written to handle all the possible configurations, and the Default configuration application is not entirely appropriate, so it is recommened to edit the /NextLibrary/Devices/Mux.config/Instance?.table (at your own risk, your service contracts could be voided) to tailor the devices and their names if it is desired to mix the NeXTSTEP SerialPorts Driver, and this driver. Some basic configuration tips follow.

For Single ports (one IRQ for each port address) that replace the

SerialPorts driver supplied with NeXTSTEP,   take a copy of the Default.table from Configurations/COM1,COM2 (The default table shipped with the source) and place it into the /NextLibrary/Devices/Mux.config/Default.table file. The default configuration application then can be used to set up single ports and IRQs by using a new instance for each port. (ie, create two instances of the driver, one with 0x3F8 IRQ4, and the other with 0x2F8 IRQ3) once the Default.table file has been edited first. An example view of a setup is shown as follows:

paste.tiff ¬21843_paste.tiff ¬739902_paste.tiff ¬

For DigiBoard 8 Based Multiplexed serial card it is recommended to use the default (Default.table) port values of 0x110,0x118,0x120,0x128,0x130,0x138,0x140,0x148 with the Multiplex port set to 0x150 as found in the Configurations/DigiBoard8 directory. If

you wish to use different addresses for the ports, then after configuring an instance without touching the port addresses, edit the Instance?.table file directly since the Default Inspector is not up to the task. If you are replacing the SerialPorts driver, just edit out the `Path' configuration lines in the Default.table file as above for the single port cases, and you can mix multiplexed and single port instances freely (Only manually editing to override the `Path' configuration lines in each Instance?.table). You might be pleasantly surprised at the default port naming if the SerialPorts driver is not present ...

This Driver currently is not ttested for the AST Multiplexed serial port board but can be added conveniently by setting the Mux port to a single address (0x150-0x150 for example) . This code is *not* tested as I do not have access to one of these multiplexed boards. If anyone gets this

going, or requires advice to set these up, please send the code changes to Mark Salyzyn <mark@ve6mgs.ampr.ab.ca> to add into porting base.