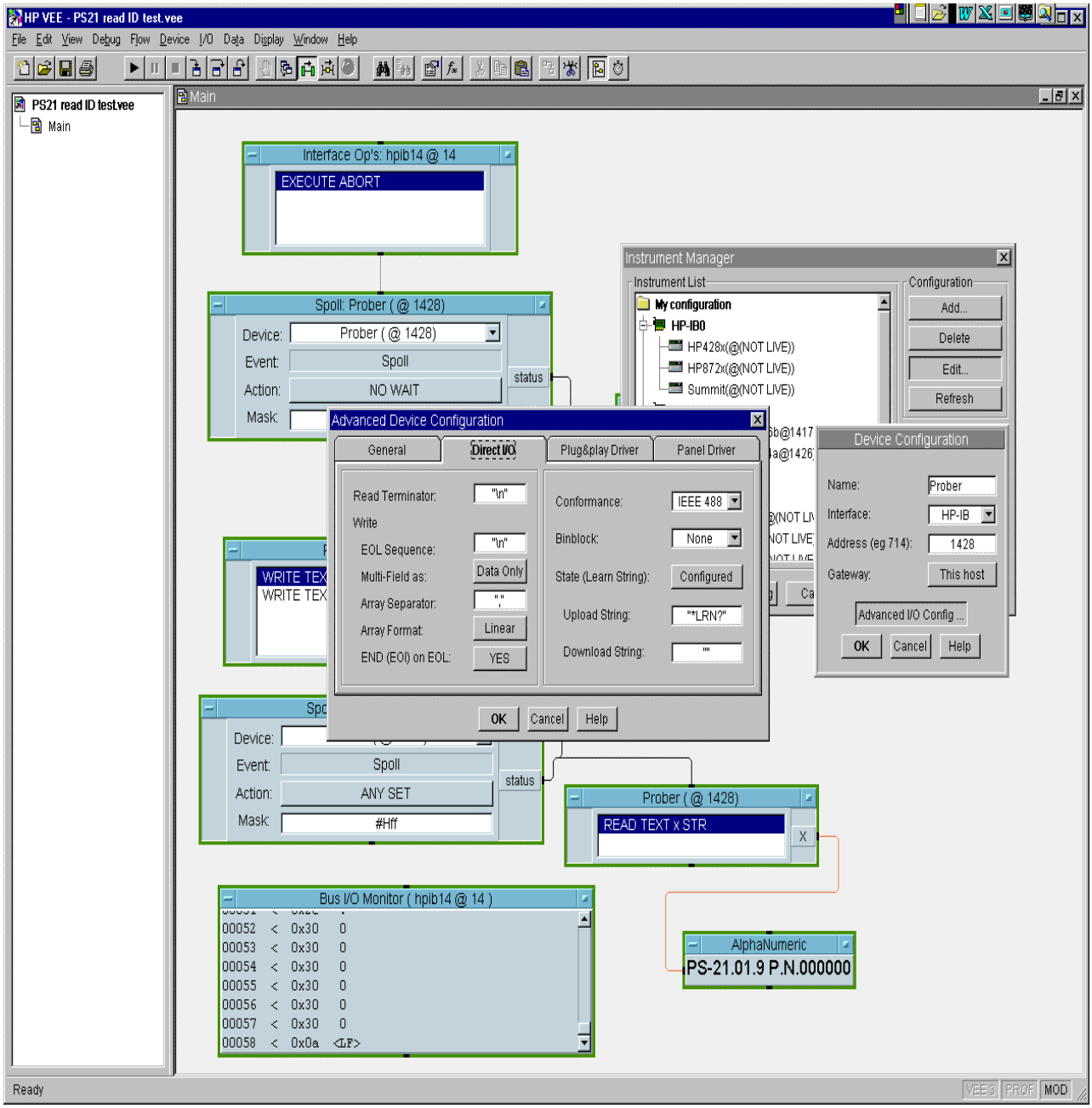
TECH NOTE

DATE: 4/27/99

SUBJECT: HP-VEE setup for PS21/Nucleus and WinCal with the GPIB switch box



Configuration and test program

Setting up the PS21/Nucleus prober device in VEE

- Select Instrument Manager from the menu
- Enter correct interface and GPIB address combination as documented in VEE
- Press "Advanced I/O" and select the "Direct I/O tab"
    - Read terminator is LineFeed ("\n")
    - EOL sequence is LineFeed ("\n")
    - END (EOI) on EOL must be YES
    - Conformance can be either 488 or 488.2

Starting communications with PS21/Nucleus

This applies both when starting from scratch and when reconnecting after WinCal GPIB switching.

The first thing that need to happen is an "EXECUTE ABORT" on the **interface**, not the device. Do **not** do "EXECUTE CLEAR" on the interface, since that can also reset the other instruments on the bus.

It is then a good idea to Serial Poll the prober to clear out any lingering SRQ. Ignore the result. The prober should now be ready to receive commands.

It is also a good idea to always send the meta command that selects the desired interpreter mode in the prober (EG, TEL or SUMMIT)

Sending commands

When adding commands to send use EOL, i.e. allow for LF to be added as last byte.

Remember the SRQ protocol for EG mode. For all queries you must first get an SRQ from the prober and then Serial Poll the prober to confirm and clear the SRQ. Then the Read of the answer can take place.

For non-query commands it is the SM15 command that rules what generates an SRQ and response of MC/MF. See the EG documentation.

Simple test program

Execute Abort - HPIB interface

Serial Poll - Prober device

Send "$:SET:MODE EG" with LF added - Prober device

Send "ID" with LF added to the prober - Prober device

Wait for SRQ (Serial Poll until bit 6 is set) - Prober device

Read the returned ID string and display it - Prober device