Using the SuperTrace Probe to Collect Real-time Trace Data from a V850 Target

The following addendum describes connecting the SuperTrace Probe to a Midas RTE Cube, connecting to the NEC IECUBE, configuring the SuperTrace Probe, and collecting trace data. For more information about the SuperTrace Probe, see the *Green Hills Debug Probes User's Guide.* For more information about connecting your debug server see *Configuring Connections for …* your target architecture.

Before connecting a SuperTrace Probe, you must first be able to debug a program from MULTI by using either a Midas RTE Cube (for example, RTE-2000-TP) or an NEC IECUBE ICE.

Connecting the SuperTrace Probe to a Midas RTE Cube

The target board must have a trace breakout board on it, or you must acquire a board separately. This trace breakout board passes through the debug signals the ICE needs while providing an additional Mictor connector to plug the SuperTrace Probe in. The trace collection pod can be plugged directly into this breakout board, except for the very earliest version of the breakout board, which is labeled ADP-NECM-STP without any numbers following. When using this version of the breakout board, Green Hills adapter PATV8-01A must be used. Plug the trace pod into the adapter, and the adapter into the breakout board.

Connecting the SuperTrace Probe to a NEC IECUBE

The version of the NEC IECUBE that can talk to the SuperTrace Probe is easily identified by the Mictor connector located on the front of the device. To connect to the NEC IECUBE:

1. Plug the tracepod into the trace adapter (PATV8-01A).
2. Plug the trace adapter into the IECUBE.

   If this puts too much strain on the Mictor connector on the IECUBE, a Mictor extension cable is available from Green Hills Software (part number GH-ME-V85-mic), which can be inserted in between the trace adapter and the IECUBE ICE.

Configuring the SuperTrace Probe

Use telnet console, serial console, or **gpadmin** to set the following settings:

- Adapter must be set to **v850e-trace**.
- Target must be set to **v850e_trace**.

Note: There is a hyphen in the adapter name, and there is an underscore in the target name.

For more information about the configuring the SuperTrace Probe, see Chapter 2, "Installing and Configuring Your SuperTrace Probe" in the *Green Hills Debug Probes User's Manual.*

Collecting trace data

To collect trace data from the target, you must add **-stp probe_ip** or **-stp -usb** to the debug server command line depending on whether the probe is hooked up using Ethernet or USB. Once the connection is made, you must check that the target-specific trace options dialog is configured correctly for your target. All the standard trace controls are available now.

The following examples are command lines that you can enter as a custom connection method which. For more information about these connection methods, see Chapter 4, "Using Custom Connection Methods" in the *Green Hills Probes User's Manual.*

Example: NEC IECUBE:

On the server command line, enter the following to collect trace data from the target:

```
850eserv2 -df=df3419.800 -iecube -stp probe_ip
```

Example: Midas RTE Cube

On the server command line, enter the following to collect trace data from the target:

```
rteserv2 -stp probe_ip
```