

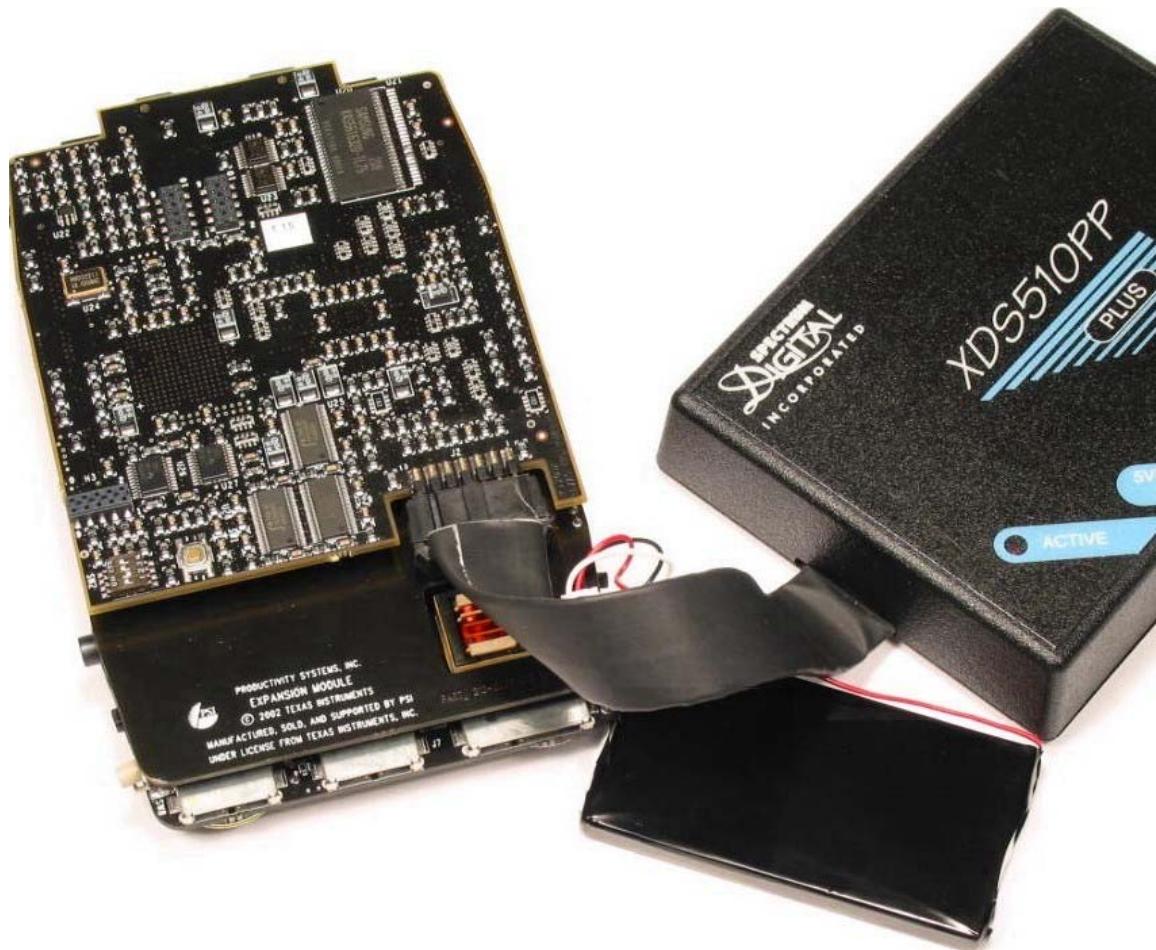
Loading IBoot Core Using Code Composer

Step 1: Start with the Innovator turned off.

Step 2: Load the Innovator CD in the CD ROM Drive of your PC. If the CD auto launches, minimize the window for the time being.

Step 3: Set the Innovator Memory Configuration switches:
SW1 – Off
SW2 – Off
SW3 – Off
SW4 – Off

Step 4: Connect JTAG to Innovator Processor Module.



Step 5: Start SDConfig.exe to reset JTAG.

Step 6: Turn Innovator Module power switch on.

Note: Example below uses the PCI JTAG. Your particular JTAG may indicate a different port address.

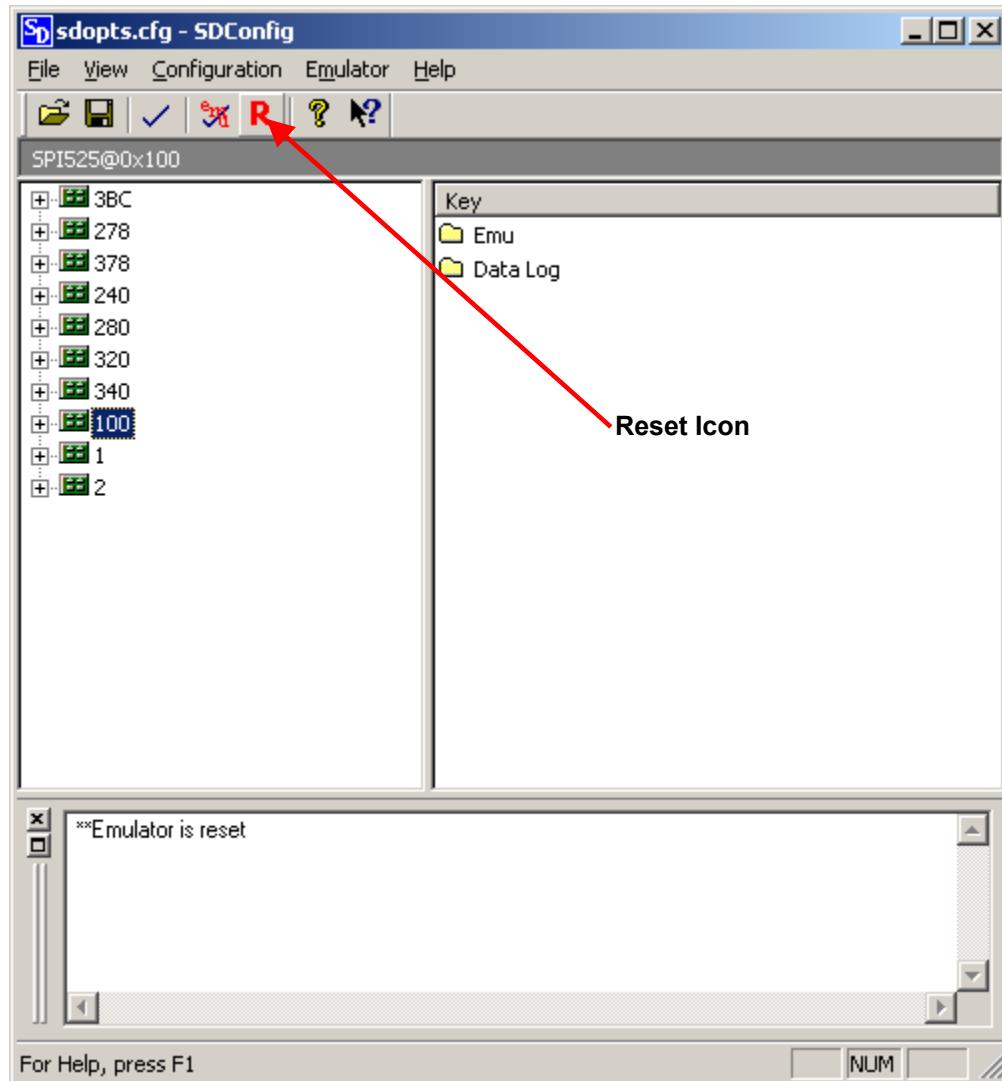


Figure 1. Emulator Reset

Step 7: Reset JTAG by clicking on the Reset Emulator,  , icon as shown above.

Step 8: Click on the Emulator Test,  , icon (see figure below) and verify bottom two lines of text read:

-- Found JTAG IR length of 50
-- Found 3 JTAG device(s) in the scan chain

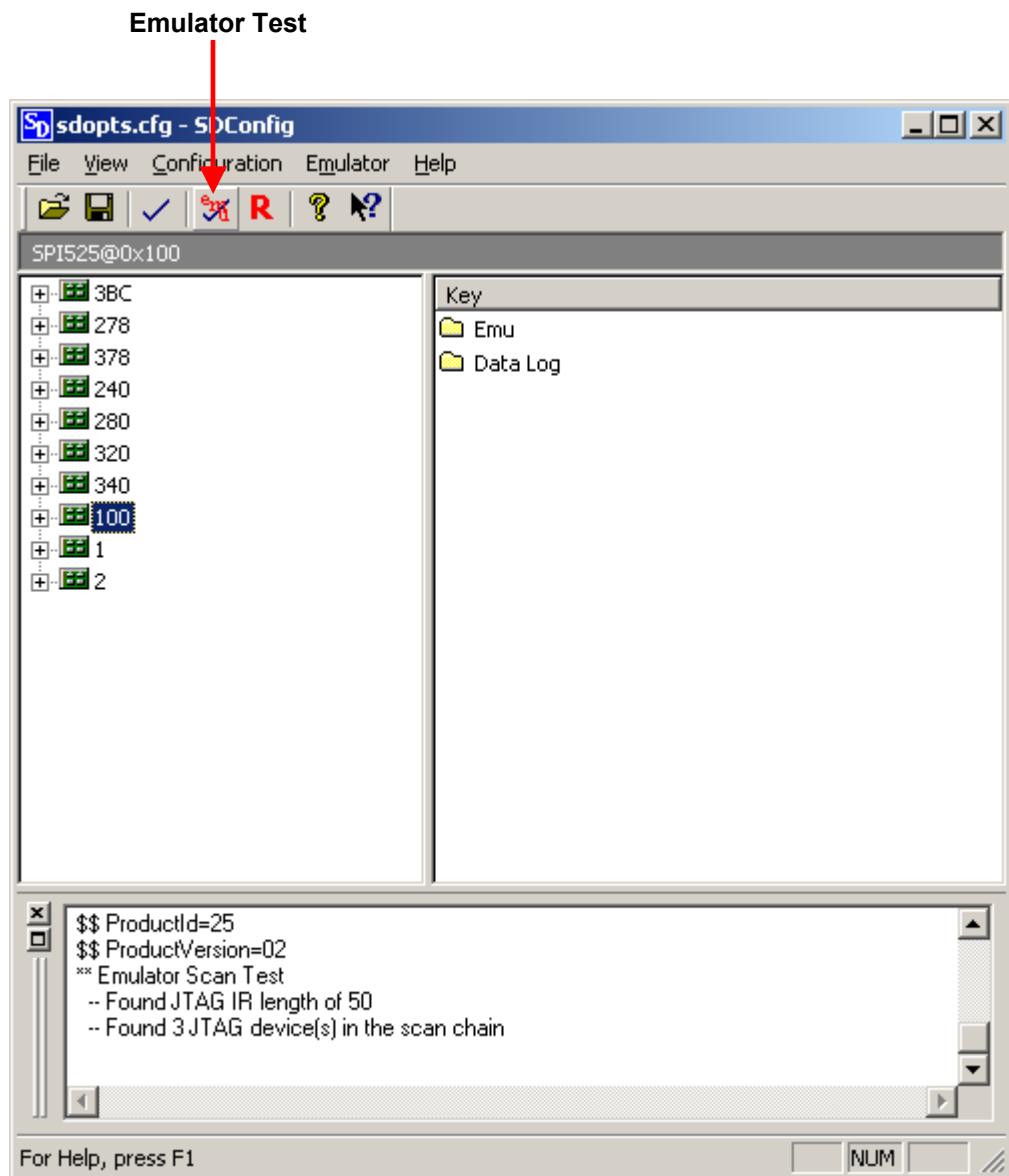


Figure 2. Emulator Test

Step 9: Reset JTAG again using the Emulator Reset, , icon.

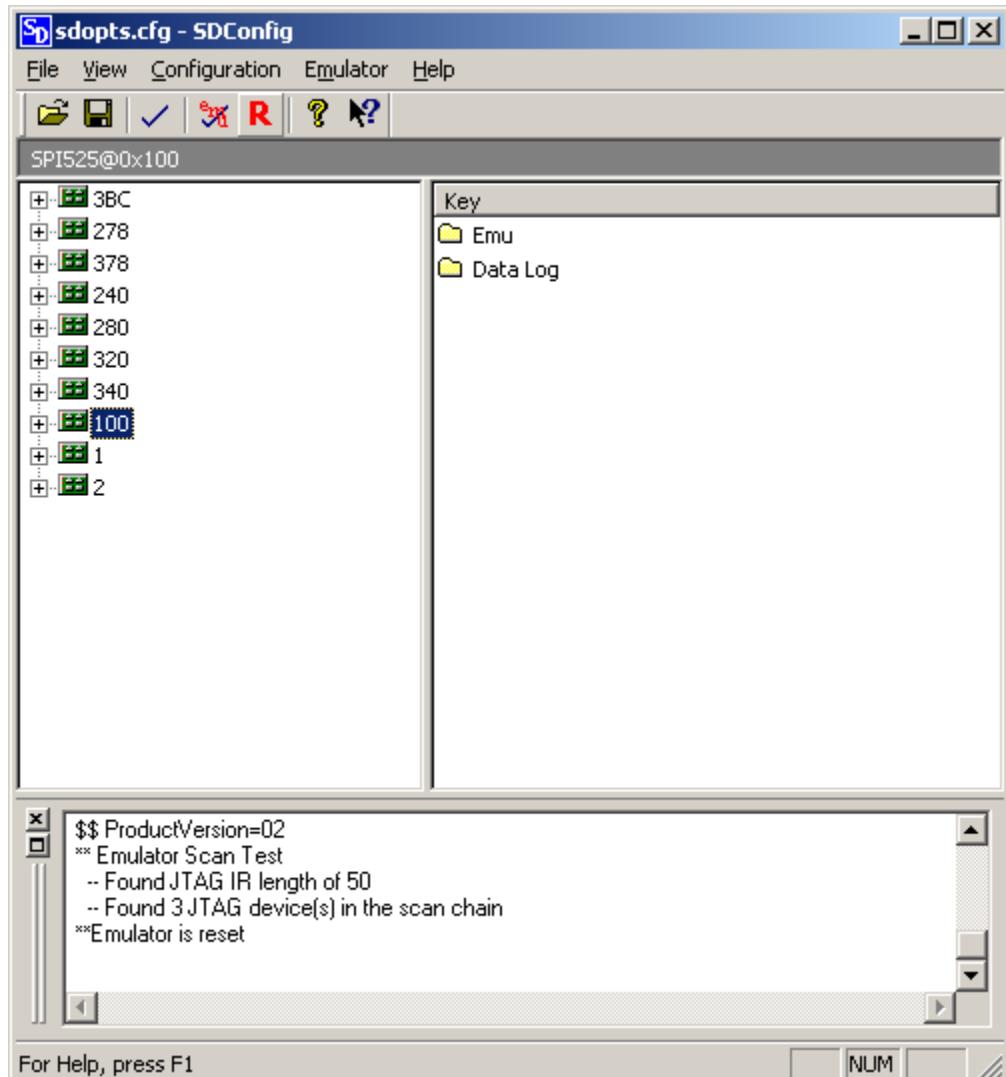


Figure 3. Emulator Reset, Second Time

Step 10: Open Code Composer Studio using the ARM-side.

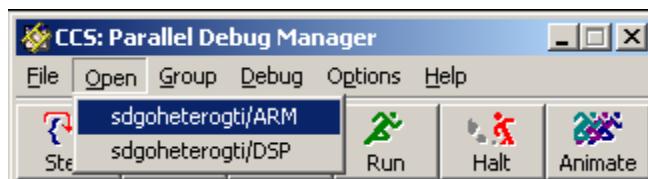


Figure 4. CCS Parallel Debug Manager

Step 11: From the File Menu, select “Load Program”. When the Load Program window appears, locate the “**LoadCore.out**” file on the Innovator CD. The file can be found in the CORE subfolder in the Software folder on the CD.

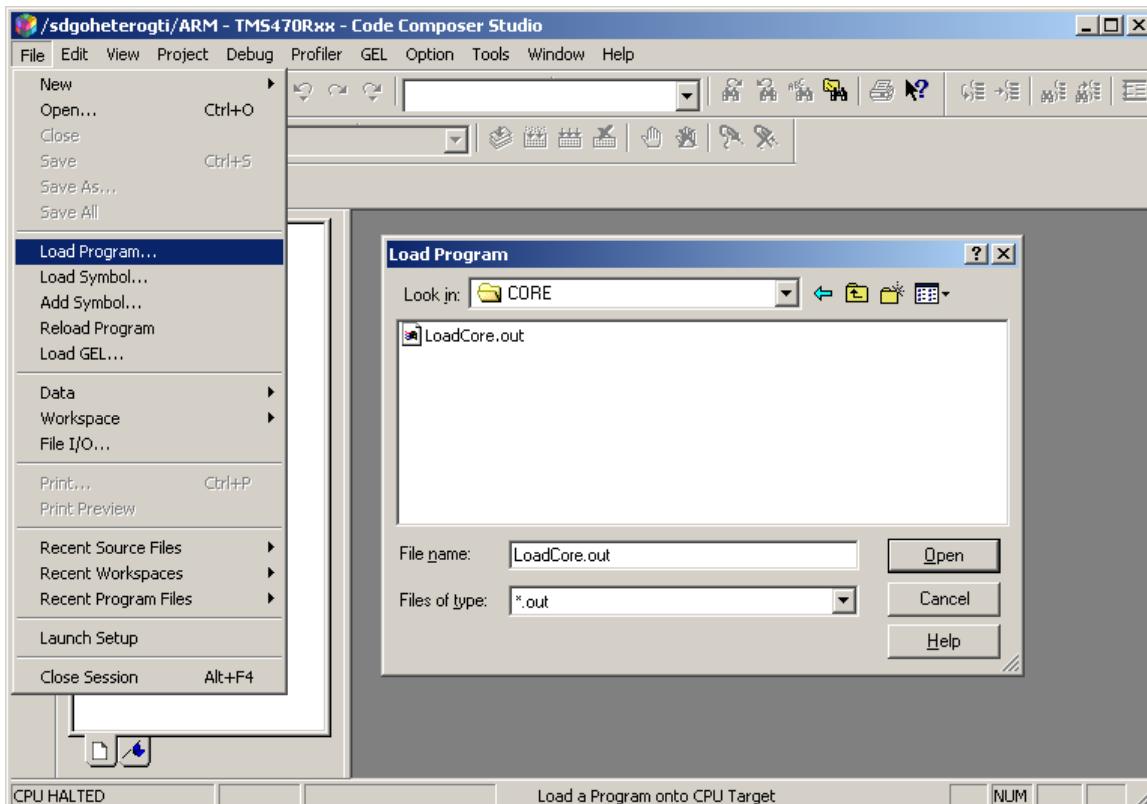


Figure 5. Loading Program in Code Composer Studio

A progress bar will appear to show the status of the program loading.

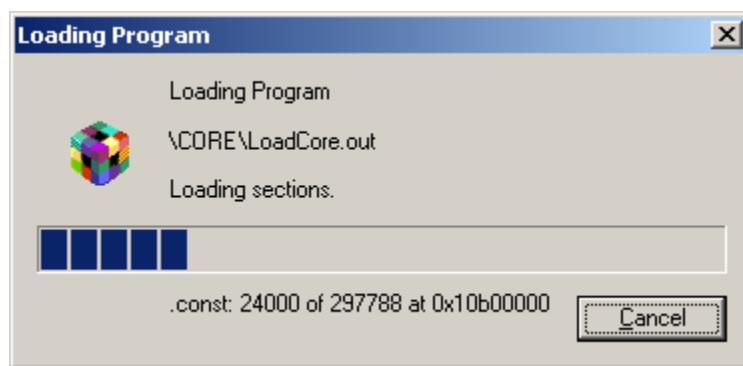


Figure 6. Loading Program Progress

Step 12: After program file loads, select Run from the Debug menu (or press F5) to run the LoadCore program. This program burns IBoot Core software into Boot Flash.

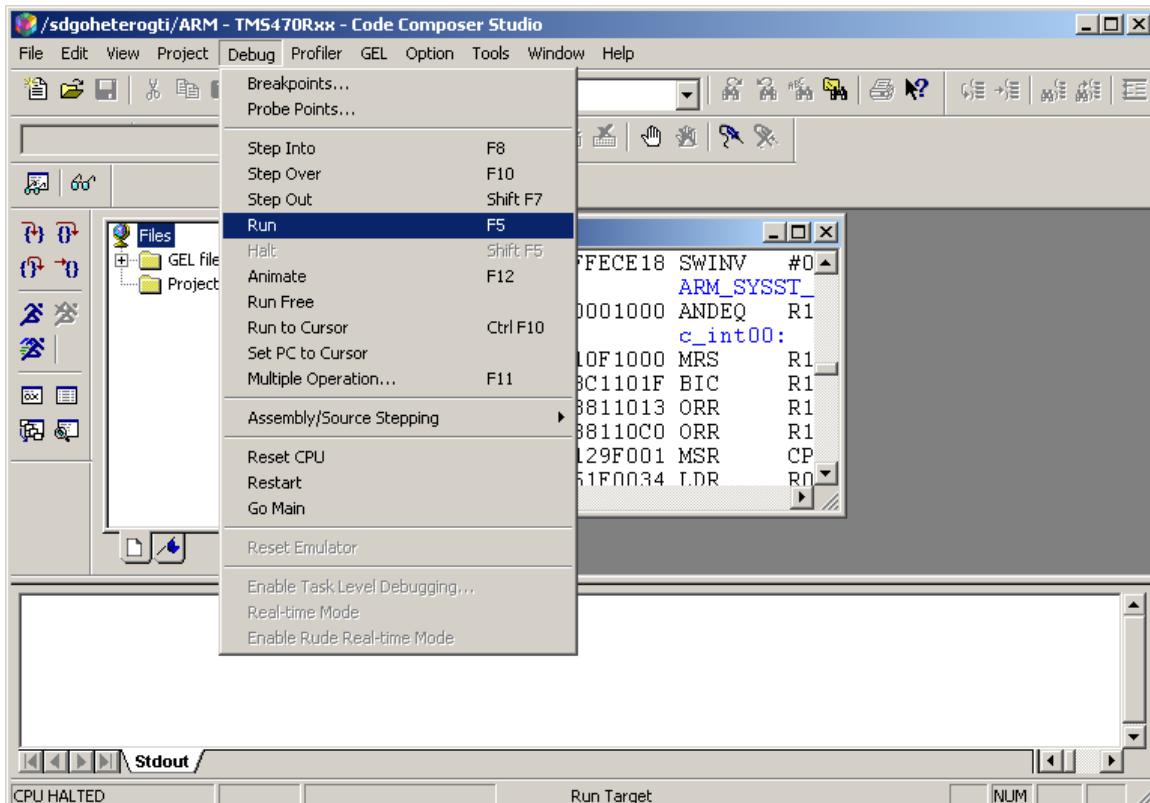


Figure 7. Running Program from CCS

Step 13: When LoadCore begins, a splash screen will appear on the Innovator. The LED on the Innovator module will blink green while the Innovator erasing Boot Flash. The LED changes to orange when the software is being burned into Boot Flash and then to red when the process has completed.

Step 14: When LoadCore has finished loading IBoot Core, close CCS and SD Config and turn off the Innovator module.

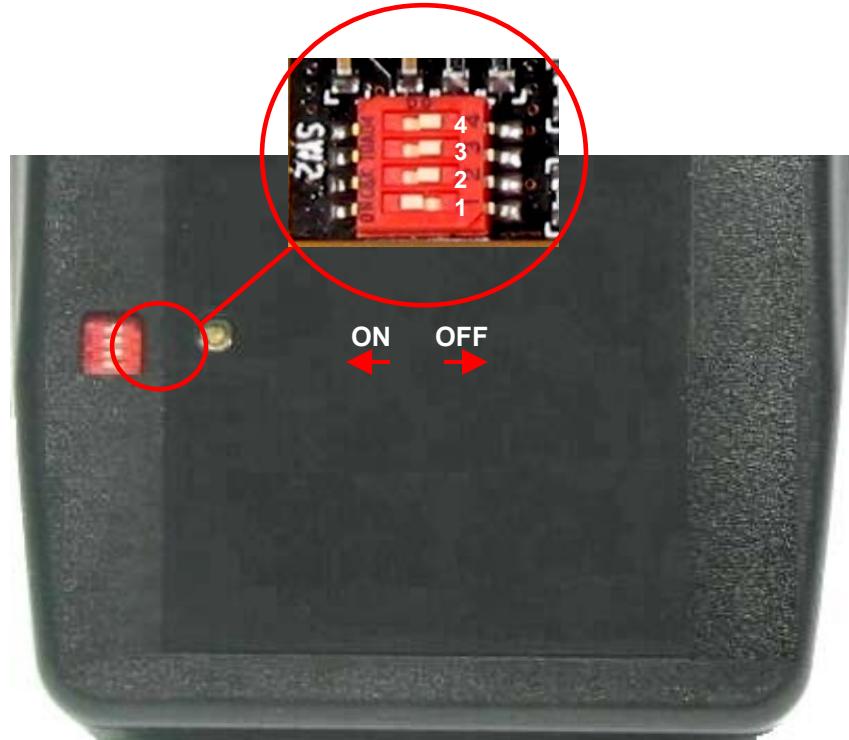
Step 15: To run IBoot, set SW1 to On and turn on the Innovator power switch to see IBoot.

SW1 – ON

SW2 – OFF

SW3 – OFF

SW4 – OFF



Loading Applets Using IBoot Host

This procedure assumes that IBoot Core software has already been loaded on the Innovator Module, and IBoot Host and the USB driver have been loaded on the PC. SW2 on Processor module should have 1 on, 2-4 off.

Step 16: Launch IBoot Host by double-clicking on the IBoot Host icon on the PC desktop. This will display the IBoot Host GUI.



Step 17: Plug the USB cable into the USB Client connector on the Innovator Module.



Figure 8. USB Client Cable Connection

Step 18: Turn the Innovator Module on.



Figure 9. Setting the ON/OFF Switch to ON

Step 19: On the IBoot Host GUI, click once on the **Connect** button to establish a connection between the Innovator Module and the PC.

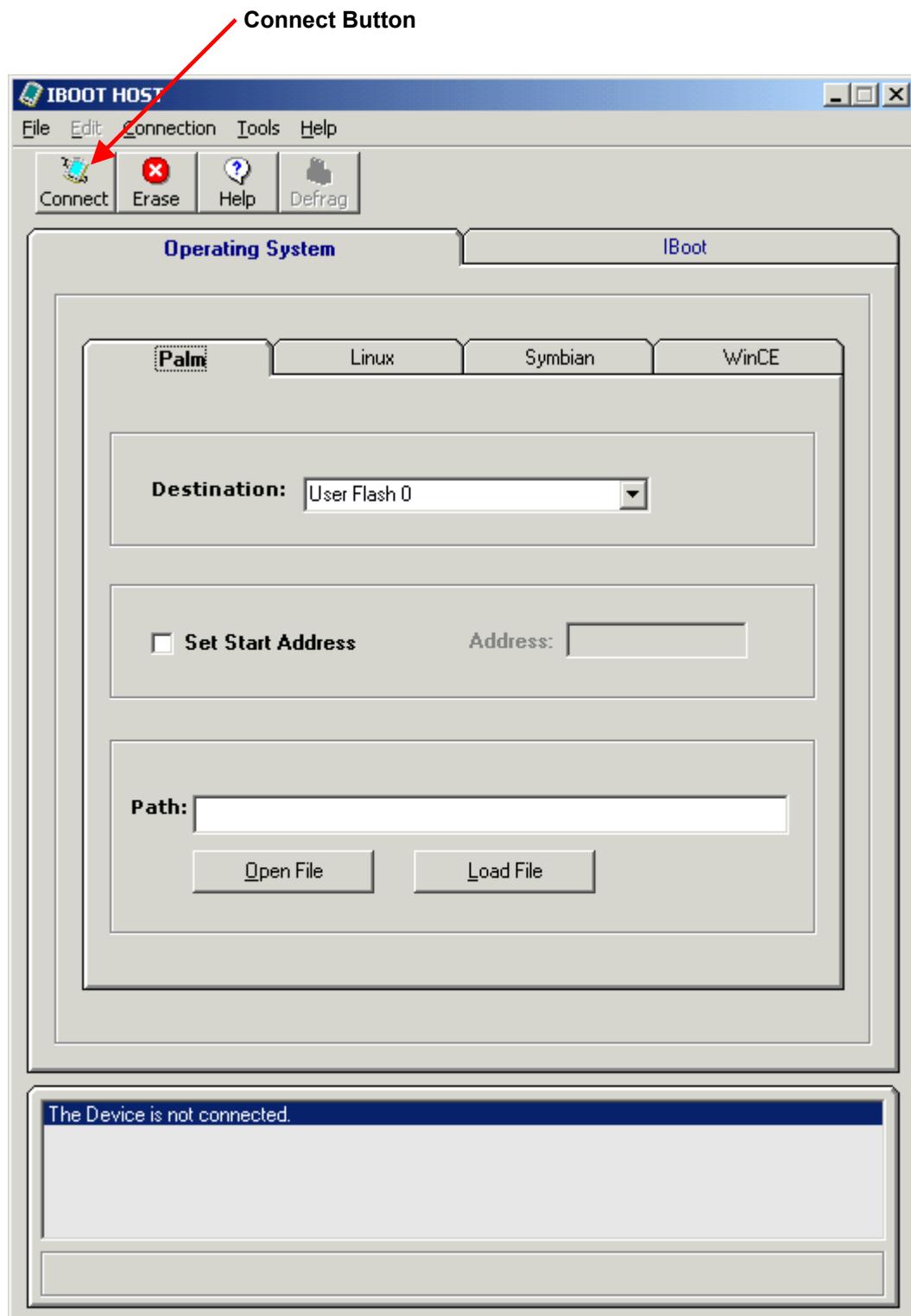


Figure 10. IBoot Host GUI

Step 20: In the IBoot Host status window, the words “**Connection successful**” will appear when the connection is established. If you get a “**Failed to Connect**” message, check that the USB cable is plugged in and the Innovator Module is on. Cycle power to the Innovator Module and click the **Connect** button again.

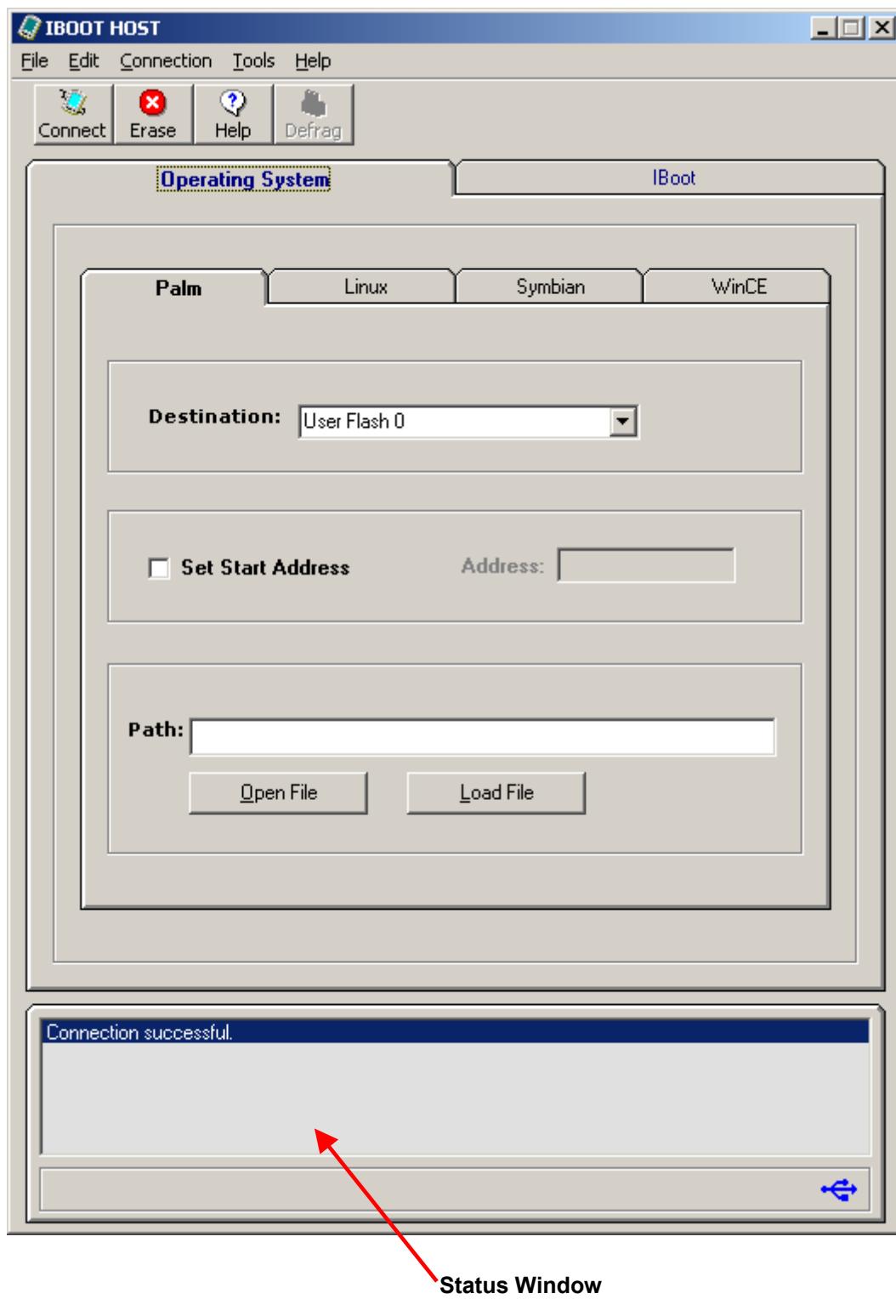


Figure 11. Connection Successful

Step 21: Click on the **IBoot** tab to display the screen shown below.

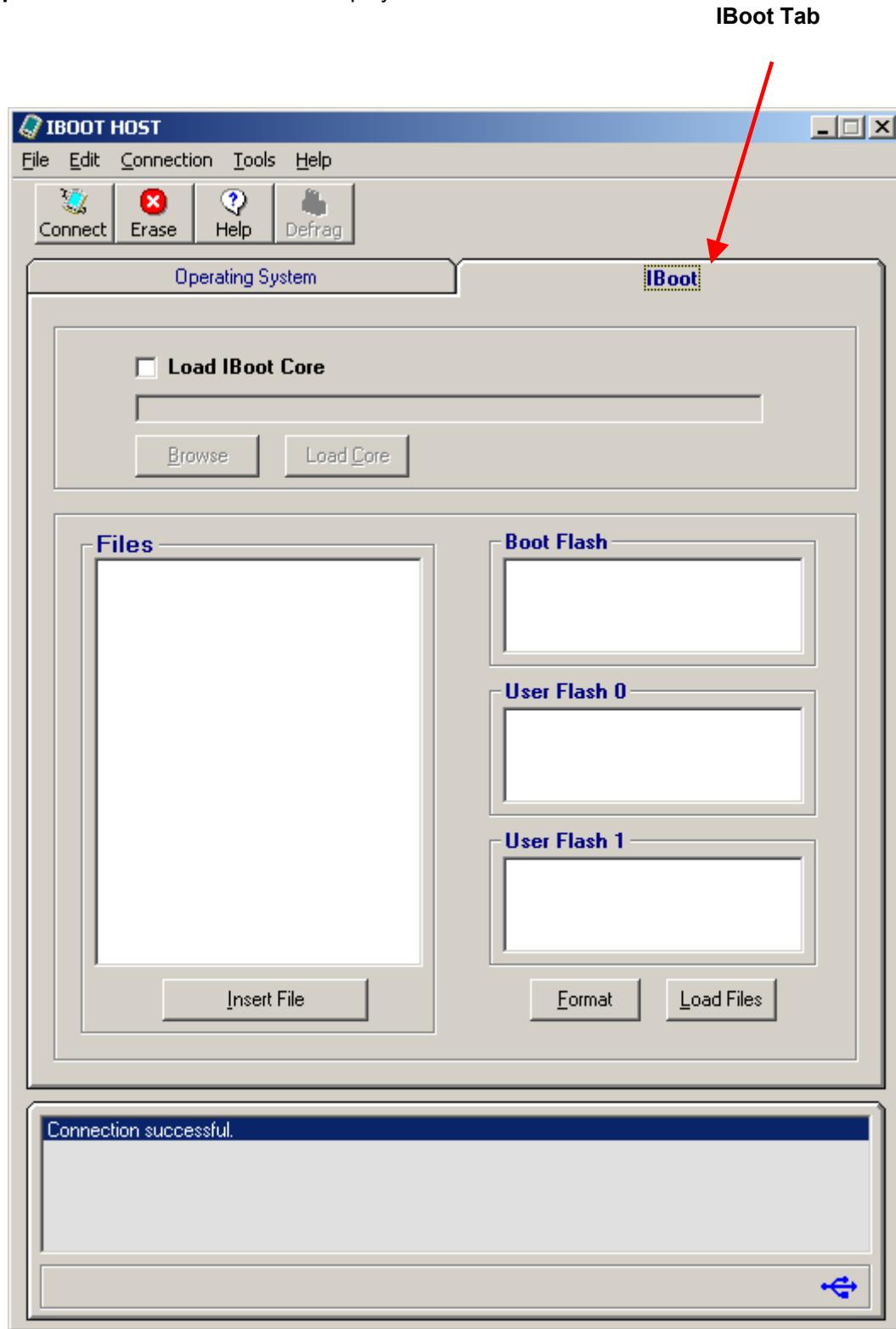


Figure 12. IBoot Tab

Step 22: Click once on the **Insert File** button to begin selecting Applets to load. Available applets are on the support CD located on the support website. Navigate to the CD to access these applets. They are located in the software folder.

Step 23: In the Select Source File window, highlight the Applets you want to load and click **Open**. You can highlight all the Applets and bring them all over at the same time.

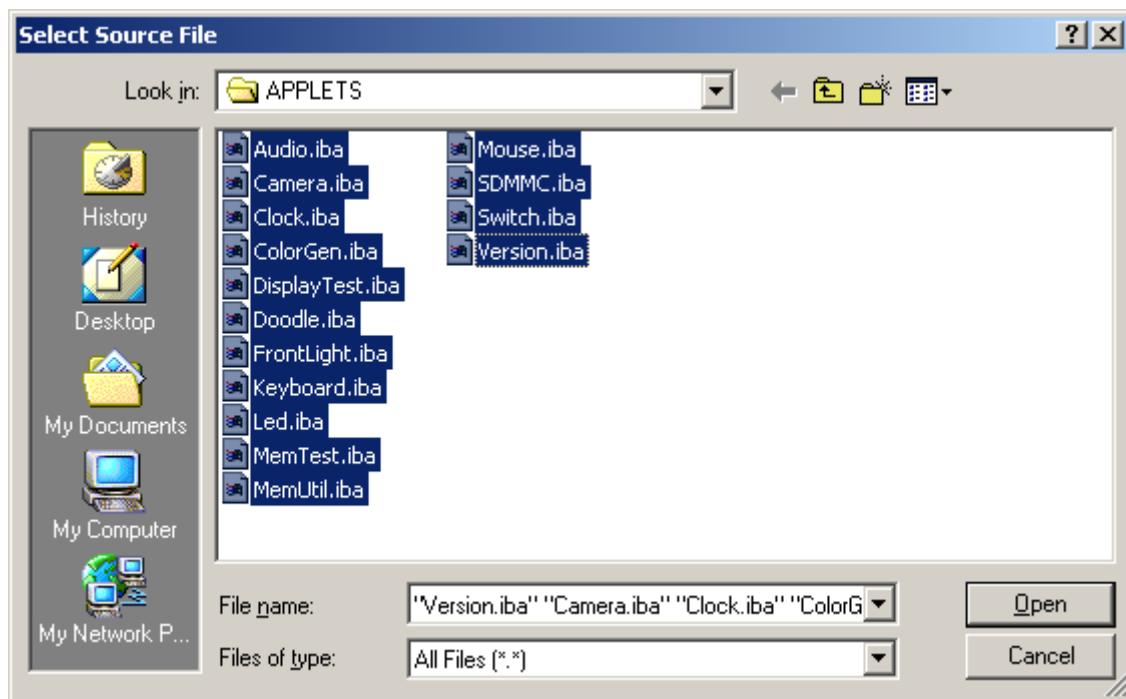
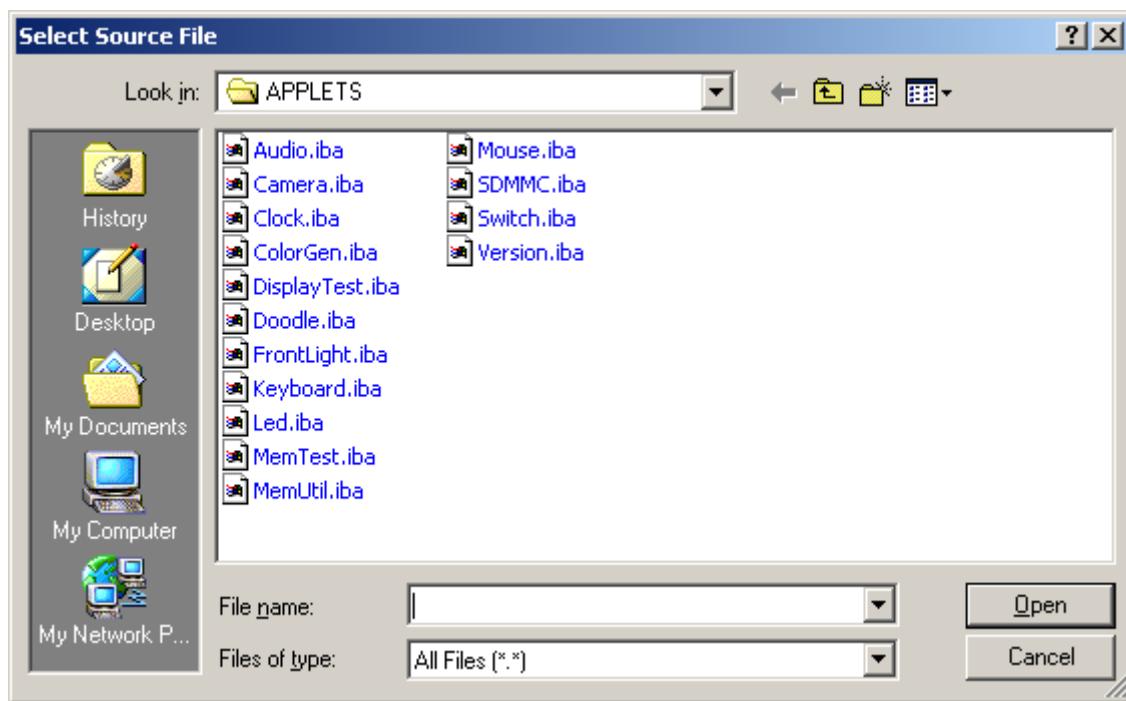


Figure 13. Select Source File Window

Step 24: Selected files will appear in the **Files** window on the IBoot Host GUI.

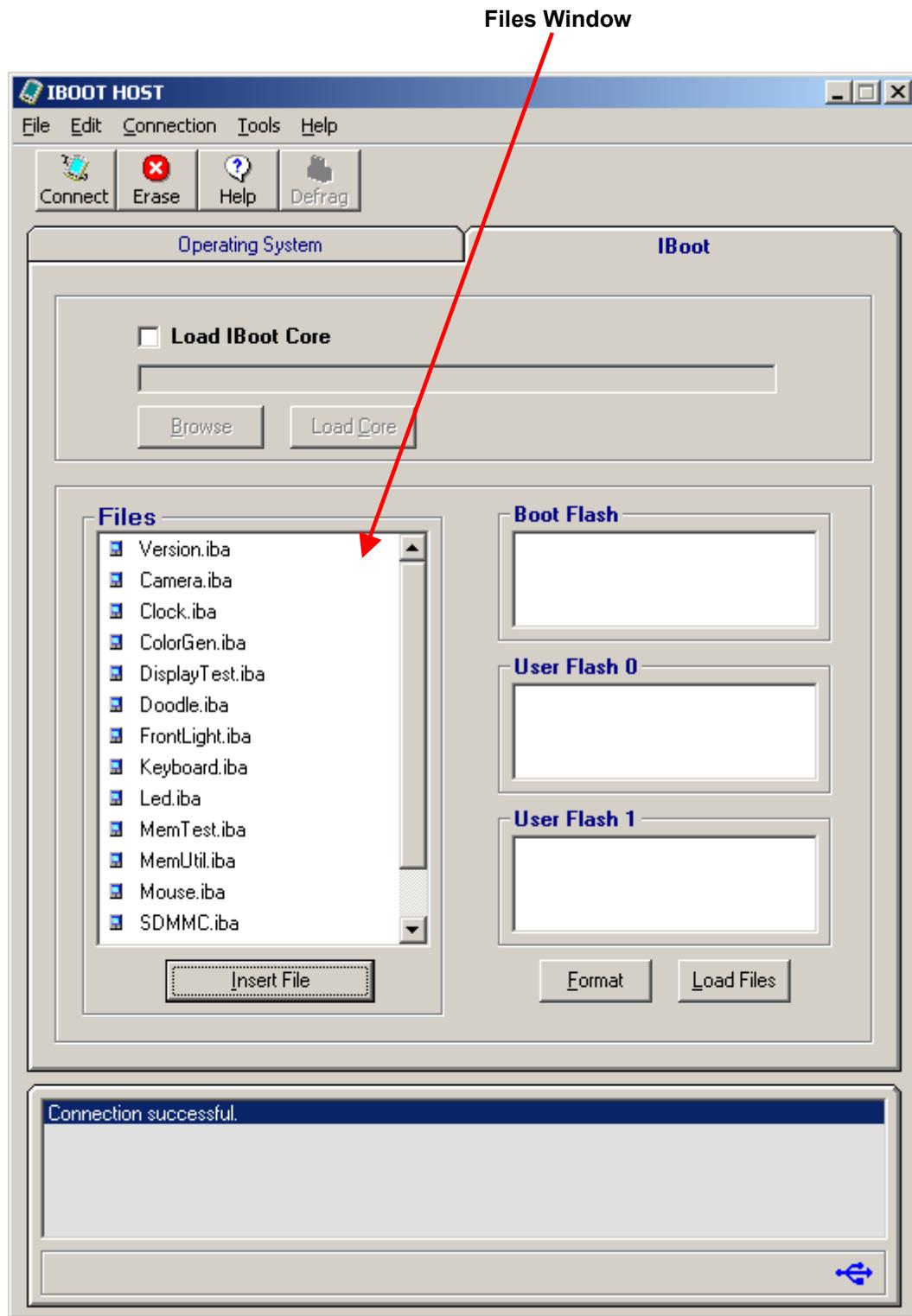


Figure 14. Applet Files in Files Window

Step 25: Before the Applets can be loaded, the destination Flash **must** be formatted. It is recommended that all Applets reside in Boot Flash and Operating Systems reside in User Flash. Put a check in the box next to the Flash destination that is to be formatted.

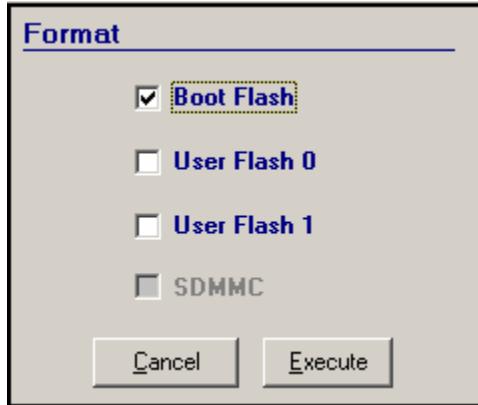


Figure 15. Format Selection Window

NOTE: The entire contents of the Flash destination selected will be erased (EXCEPT for IBOOT). Applets in the boot flash area are always formatted by default whenever one of the User Flashes or Boot Flash is formatted FROM the IBOOT SCREEN. If an Applet is loaded into a User Flash, and an Operating System is loaded into that same User Flash, the Applet will be erased. When loading an OS from the OPERATING SYSTEM SCREEN, the selected user flash is auto-formatted, but applets will NOT be lost in the boot flash area.

Step 26: Click on the Execute button to begin formatting.

Step 27: An acknowledgment to the command sent to the Innovator is displayed in the IBoot Host Status window. The Innovator Module will display the status of the formatting process taking place on it.

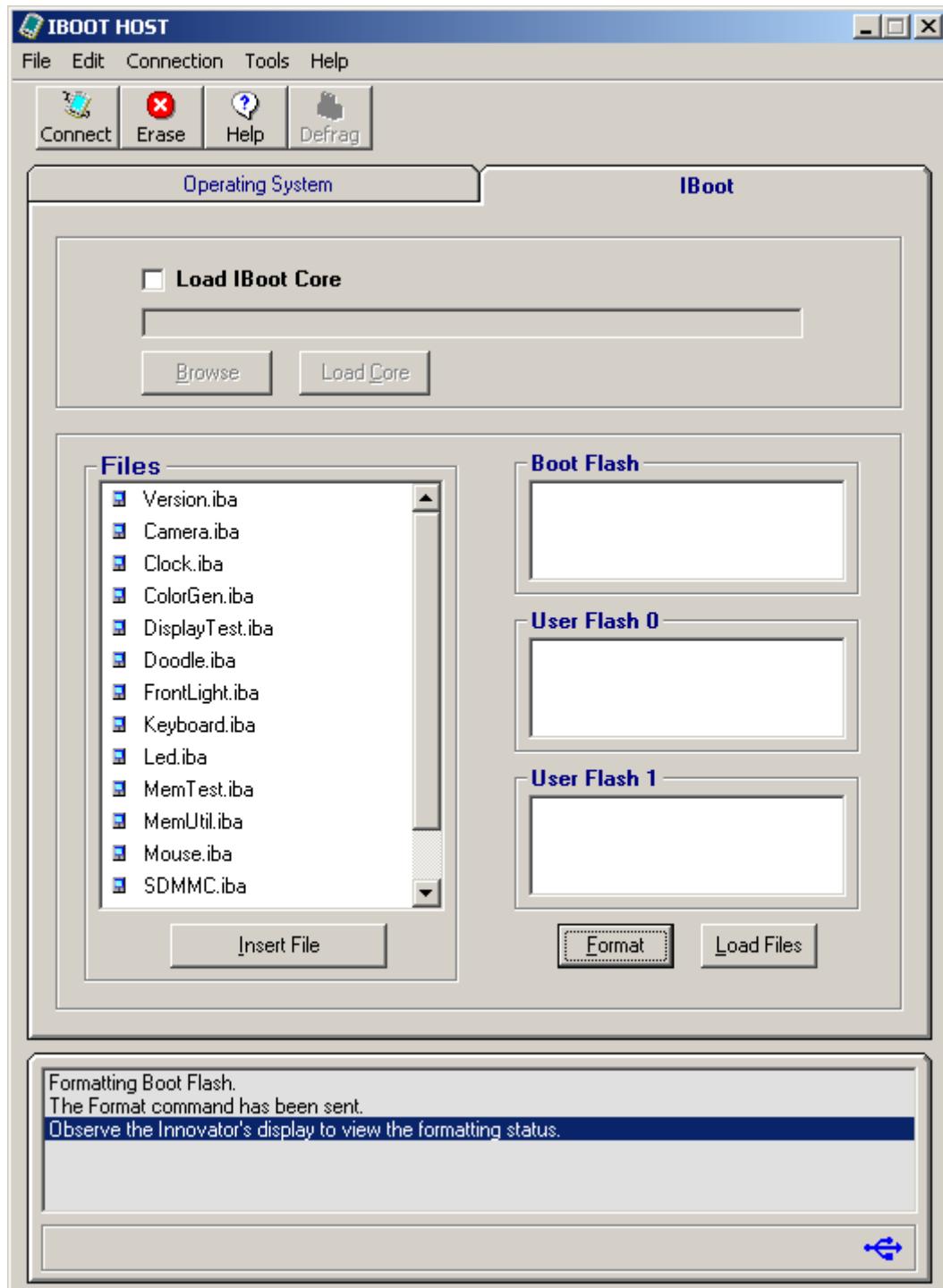


Figure 16. Command Acknowledgment

Step 28: To select the first Applet file, click once to highlight it.

Step 29: Click the Applet File again and drag it to the Flash destination window. You **must** release the mouse button after you highlight the Applet file. You cannot click and drag in one motion.

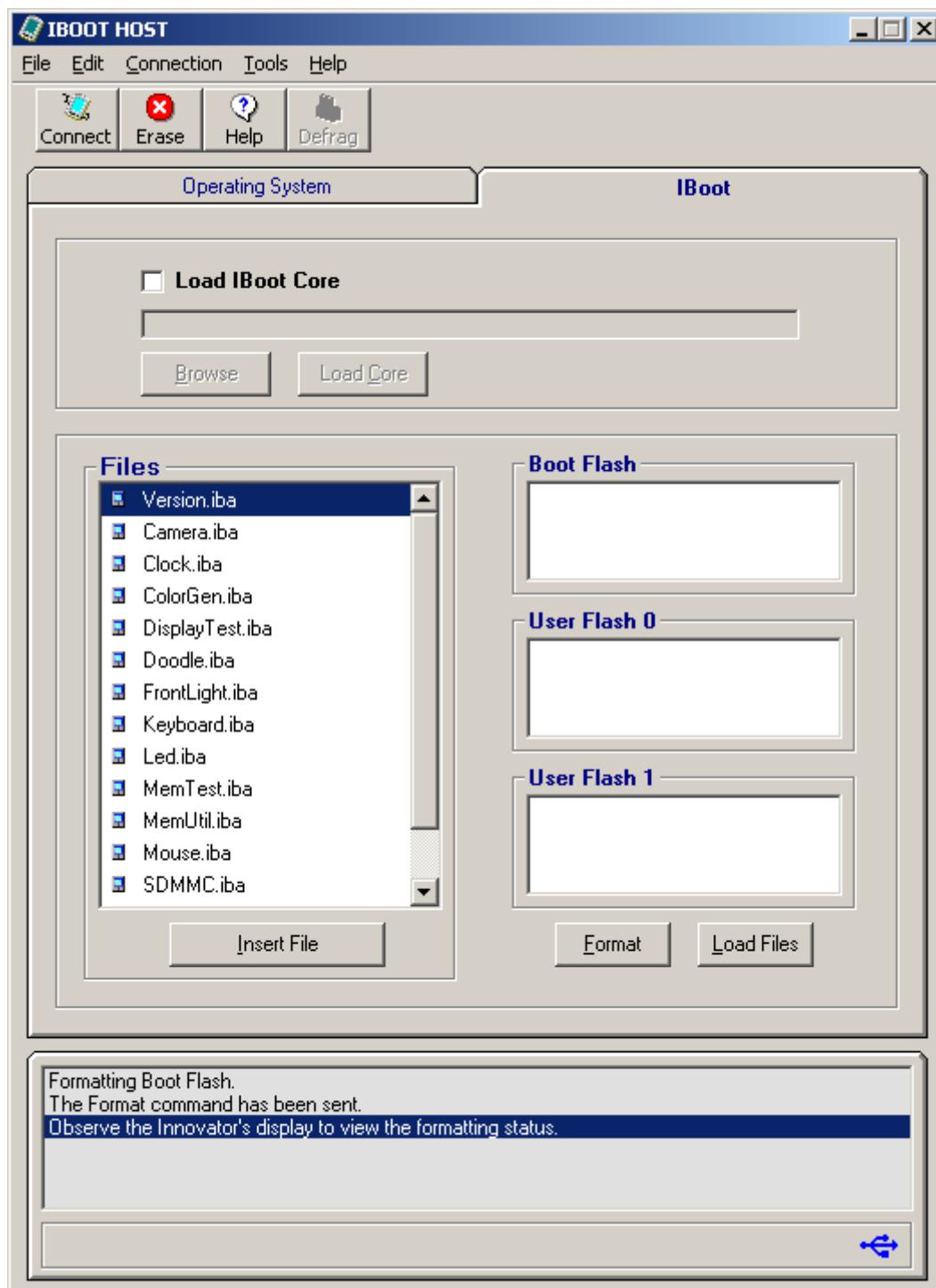


Figure 17. Highlighting an Applet File

Step 30: Continue highlighting and dragging until all desired Applets files are in a Flash window.

NOTE: Applets will be displayed on the Innovator in the order they are placed in the Flash windows. The Applets will build from left to right and top to bottom. Applets placed in Boot Flash will load first followed by User Flash 0 and User Flash 1. Applets can be placed in any order you choose. There is no particular order that must be followed. You may load all the applets at once or load some, disconnect and load others later. Additional

formatting is NOT required if loading into the same flash area and existing applets will NOT be lost when adding new ones.

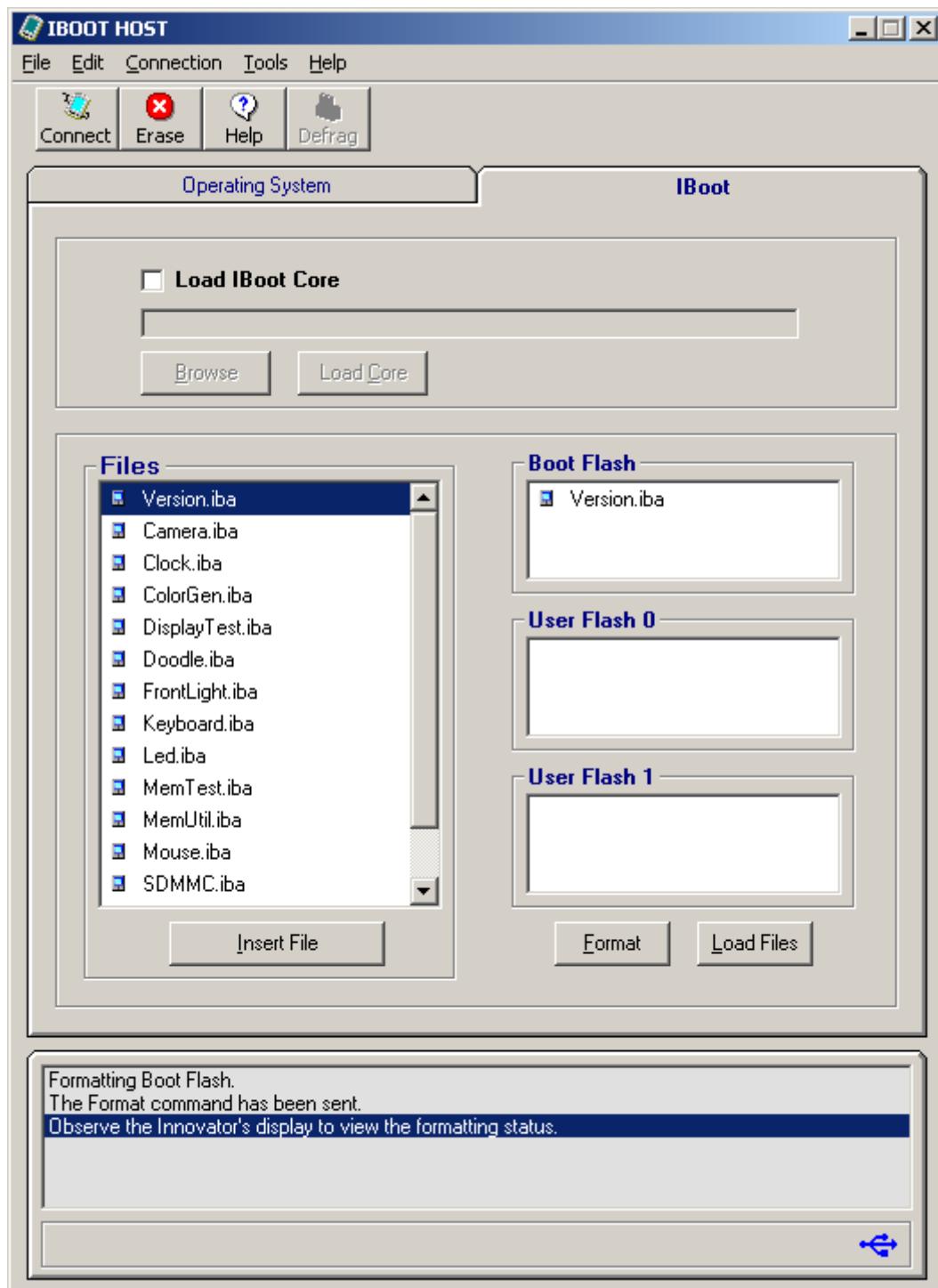


Figure 18. Applet File in Boot Flash Window

Step 31: Click on the **Load Files** button to begin loading Applet files to the Innovator Module.

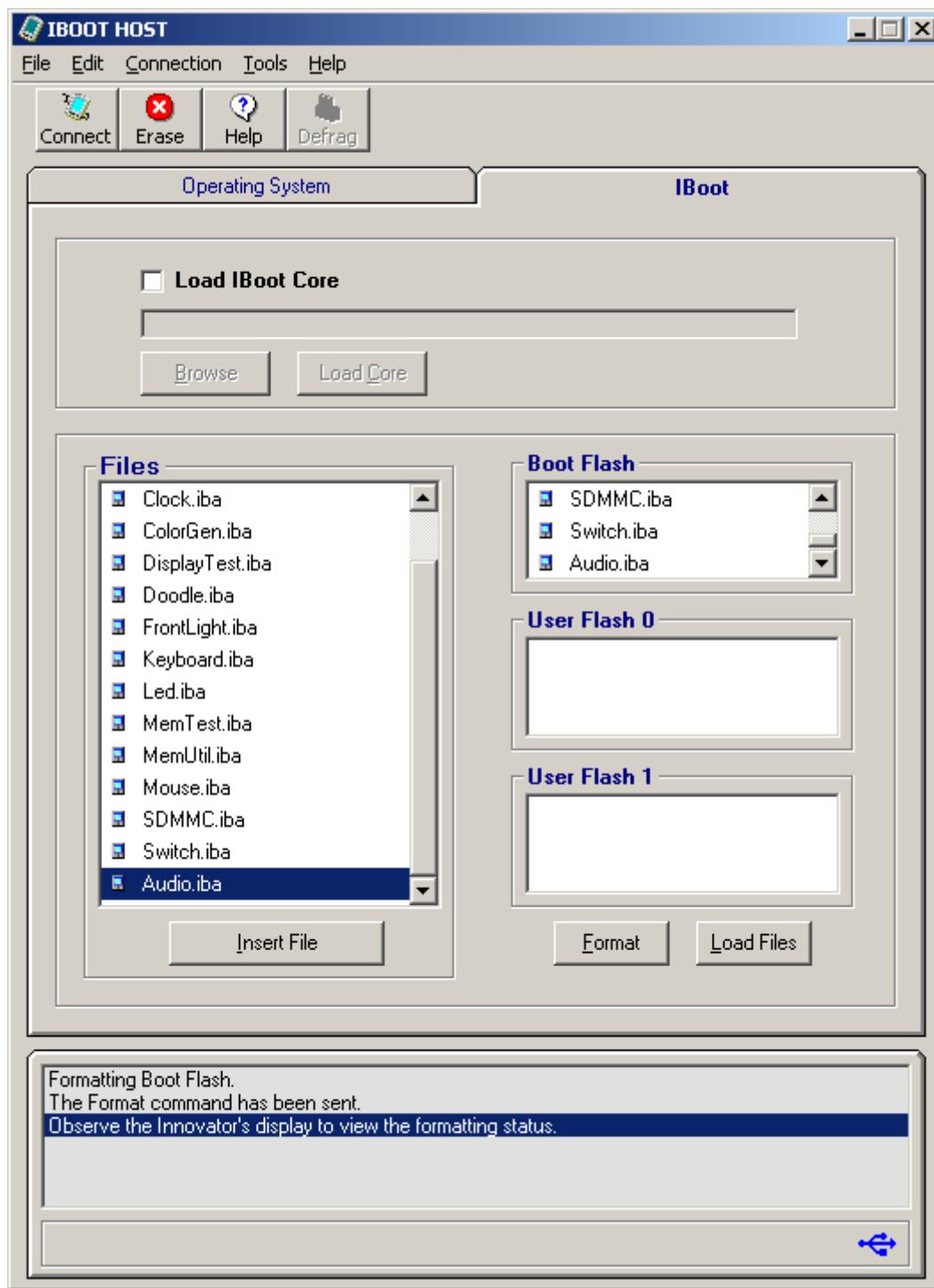


Figure 19. All Applet Files in Boot Flash Window

Step 32: As files are sent, an acknowledgement is displayed at the bottom of the IBoot Host GUI.

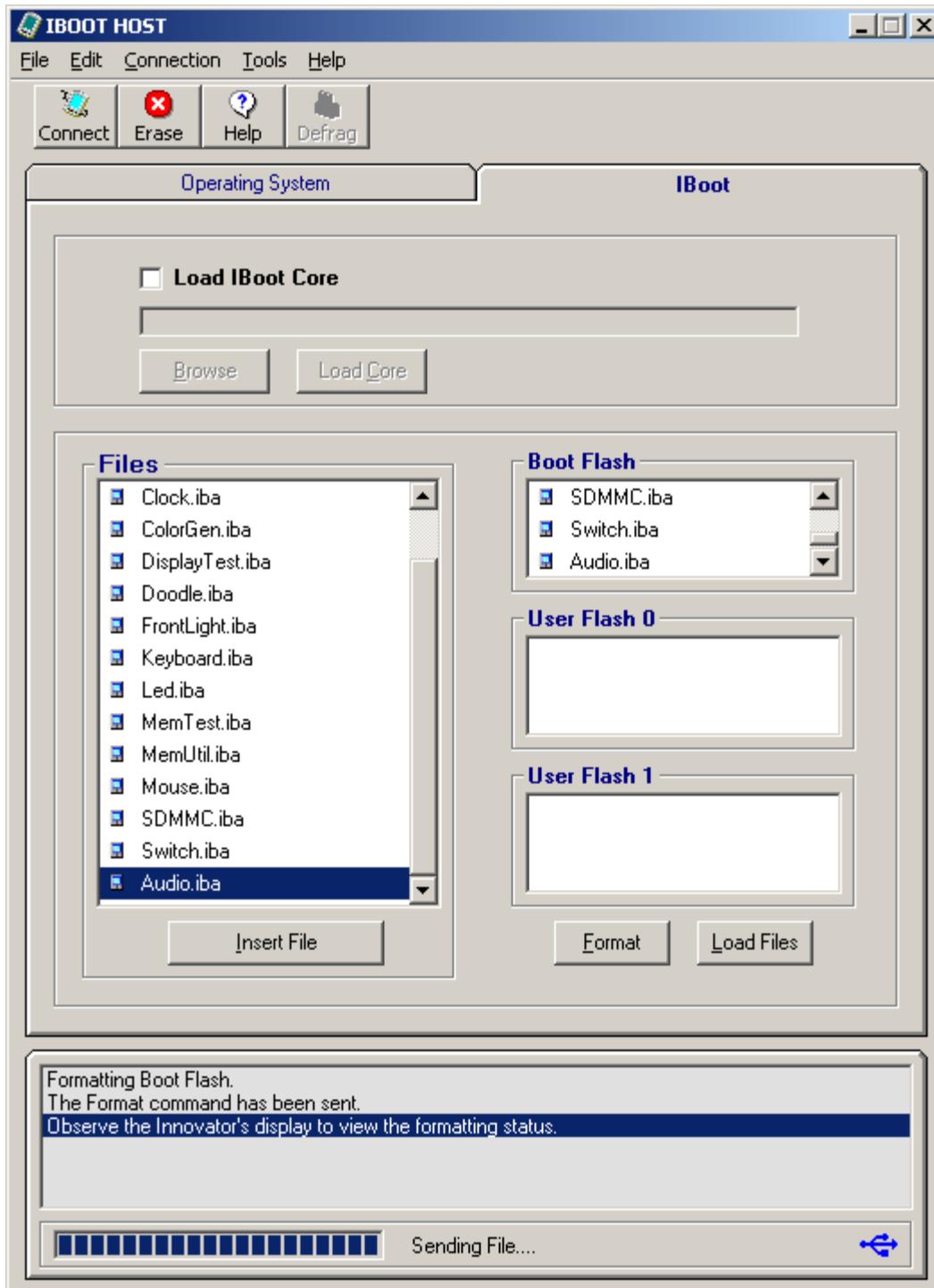


Figure 20. Sending Files to the Innovator Module

Step 33: The LED on the Innovator Module will blink orange, as files are loaded, and then to solid orange when the download is finished.

Step 34: Remove the USB cable from the Innovator Module.

Step 35: Press SW4 on the Innovator Module to display the Applets or power cycle the unit.

Step 36: To load an operating system into user flash 0 or 1, select the “Operating System” tab at the top of the IBootHost screen. Select the desired user flash (0 or 1) and open the desired OS file by selecting the “Open File” button. There is no need to set a starting address unless desired. Click on the “Load File” button to start the load. As previously stated, an automatic user flash format will occur before the OS is loaded. Once the load is complete, set SW2 on the processor board as follows to view the contents of the user flash areas: Sw 3 on only for user flash 0. Sw 3 & 4 on for user flash 1. Set Sw1 on only for IBoot display. Power cycle the unit after each switch change.