

IBM IntelliStation M Pro (Type 6868, 6878, 6889, 6898),
IntelliStation Z Pro (Type 6866, 6865, 6899) -- Instructions
for ADDCPU.EXE for adding support for a Second
Microprocessor in Windows NT Workstation.

Important:

Use this procedure to update your Windows NT installation prior to installing a second microprocessor. See the documentation supplied with your computer and with the second microprocessor for processor installation instructions.

This procedure replaces the instructions in ADDCPU.TXT on the IntelliStation Software Selection CD and the Ready to Configure CD.

Pay special notice to the Attention statements.

Attention: Back up the hard disk drive before performing this procedure. Perform the following steps in the order indicated. This procedure is not reversible and if performed incorrectly, your Windows NT installation might be unusable.

Procedure:

1. Verify you have the Windows NT I386 directory on your local hard disk drive.
 - A. For the IBM Preloaded Windows NT:
 - Open **My Computer**.
 - Open the **C:** drive labeled "IBM_Preload".
 - Open the **I386** folder.
 - Verify there are files in the I386 folder.
 - Close all open windows.
 - B. For Non IBM Preloaded Windows NT or if you are missing the I386 folder:
 - Open **My Computer**.
 - Right click on the **C:** drive.
 - Select **Properties** from the pop up menu.
 - Verify you have at least 130MB of free space, then close the windows.
 - Insert the IBM Product Recovery CD or the Microsoft Windows NT CD into the CD-ROM drive.
 - Open **My Computer**.
 - Open the **CD-ROM drive** icon.
 - Right click on the **I386** folder.

- Select **Copy** from the pop up menu.
- Open **My Computer**.
- Open the **C:** drive.
- Select **Edit**.
- Select **Paste**. (The I386 folder will be copied from the CD ROM to the hard disk drive C: partition.)
- Close all open windows.

2. Download ADDCPU.EXE from <http://www.pc.ibm.com/support>.

- Click on **Workstations**.
- In the **QuickPath** box enter the type and model number of your IntelliStation.
- Click **GO**.
- Click **Downloadable files**.
- Download ADDCPU.EXE and save it into the C: partition, I386 folder on the hard disk drive, (C:\I386).

3. Download the latest version of the Flash BIOS for your IntelliStation from <http://www.pc.ibm.com/support>. (You may need to use this software during Step 10.)

- Click on **Workstations**.
- In the **QuickPath** box enter the type and model number of your IntelliStation.
- Click **GO**.
- Click **Downloadable files**.
- Download the BIOS file to a temporary directory on your hard disk drive.
- Execute the BIOS file to create a BIOS flash update diskette.

4. Determine which Windows NT Service Pack is installed on your computer.

- Using the left mouse button double-click on **My Computer**.
- Single click with the left mouse button on **Help**.
- Single click with the left mouse button on **About Windows NT**.

You will see the following screen message:

<p>Microsoft (R) Windows NT (R) Version 4.0 (Build 1381: Service Pack ?) Copyright (C) 1981-1996 Microsoft Corp.</p>

- Note your Service Pack installed: **Service Pack** _____
- Left mouse click on **OK** and close **My Computer**.

5. Make sure you have a copy of the Windows NT Service Pack that is currently installed on your IntelliStation. Later in this procedure, you will need to reinstall the **same level** of Service Pack that is currently installed on your workstation. Make sure you have this software available now.

- A. If your IntelliStation is using the Windows NT Service Pack that was originally installed by IBM on your system (when the preload was installed), the Service Pack software is either stored on the hard disk drive in the C:\I386 folder or on the hard disk drive in the service pack folder or on the Ready-to-Configure Utility Program CD or on the Software Selection CD or on the Product Recovery CD.
- B. If you do not have the IBM preloaded Service Pack installed, for example, if you have updated the Windows NT Service Pack, obtain the Service Pack that is currently installed on your IntelliStation from the source you previously used to update your Service Pack.

You may also obtain the Windows NT Service Packs directly from Microsoft at

<http://www.microsoft.com/ntworkstation/>

Older Windows NT Service Packs can be obtained from Microsoft at

<http://support.microsoft.com/Support/NTServer/Content/ServicePacks/Default.asp>

6. Run ADDCPU.EXE.

- Close all open applications.
- Left mouse click on **Start**, then **Run**.
- In the Open: box, type **C:\I386\ADDCPU.EXE**.
- Left mouse click **OK**.
- Read the displayed instruction, then click **OK**.
- If you receive a warning message about a Service Pack having been installed, click on **Yes** to continue.
- ADDCPU.EXE will show **Select the location of the NT files** screen.
- Verify the location is C:\I386.

Attention: When ADDCPU.EXE shows the **Select the location of the NT files** screen, you must select the correct location of the Windows NT files, C:\I386. If you select the wrong path for the NT files, you might receive an error message and your NT installation might be unusable after it is restarted.

- Left mouse click **OK**.
- ADDCPU.EXE will complete quickly and **silently** if there are no errors. There will not be a notification that ADDCPU.EXE has finished if it completes properly. If it does not complete properly, you will see an error message.

Attention: DO NOT attempt to run ADDCPU.EXE more than once.
DO NOT shut down or restart Windows NT.

7. Reinstall your Service Pack.

A. If you are using the IBM Preloaded software Service Pack:

- Left mouse click on **Start**.
- Select **Find**.
- Select **Files or Folders...**
- Type **update.exe** in the **Named:** box.
- In the **Look in:** box select the C: drive.
- Left mouse click **Find Now**.
- Under **Name** in the lower window, double click the file **update.exe** that was found by the search. This will start the Service Pack update program. Follow the on-screen instructions.

B. If you are not using the IBM preloaded software Service Pack:

Run **UPDATE.EXE** from your Microsoft Service Pack CD or, if you downloaded a Service Pack from the Microsoft web site, run its install program.

Attention: If the following message appears, click on **No**. Selecting Yes might cause your computer to be unusable after it is restarted.

This file has been identified as an OEM installed file.
Would you like to overwrite the version of the file on your system with the Service Pack version?

Follow the Service Pack installation instructions and wait for the Service Pack program to complete.

Attention: When the Service Pack program has completed, **DO NOT** restart Windows NT, instead **Shut Down** Windows NT (by selecting **Start** and **Shut Down**) and turn the computer off.

8. Install the second microprocessor and voltage regulator (if required).

Refer to the documentation supplied with your computer and the second microprocessor for proper installation instructions.

9. Turn on the computer and press **F1** to enter the Configuration/Setup Utility.

You will see the **POST Startup Error(s)** screen and a 162 error message. This is normal for configuration changes. (If you also see a 167 error message, you will need to install the latest version of the Flash BIOS after you complete the other actions in this step.)

- On the **POST Startup Error(s)** screen, select **Continue** to get into the Configuration/Setup Utility.
- Select **Save Settings**.
- Press **Enter**.
- Press **Enter** again to confirm the Save Settings.
- Select **System Summary** and press **Enter**.
- Verify Dual Processors are installed.
- Escape to the main menu.
- Select **Exit Setup**.
- Press **Enter** to exit the Configuration/Setup Utility.

If you saw a 167 POST error, continue with Step 10, otherwise skip to Step 11.

10. If you receive a 167 POST error, you must update the BIOS.

- With the IntelliStation powered off, insert the BIOS update diskette that you created in Step 3 into your floppy disk drive.
- Turn on the IntelliStation and follow the instructions to update the system Flash BIOS.
- When the program completes, remove the Flash BIOS update diskette from the drive.

11. Restart the computer. You should not receive a post error message and you should boot into Windows NT with dual processor support.