

Mango ADK™

DSP Development Platform

Installation Guide

Release 1.0

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Detailed Revision History

Rev.	Date	Author	Approved	Description
A	14/04/03	Y. Mermelstein		Preliminary Release
B	26/01/04	N. Kanovsky		Release

1. Getting Started

Hardware Installation

Proceed with the following instructions to install the Mango card on your computer.

CAUTION!

Static electricity discharge may permanently damage your system. Leave the Mango card in its static resistant bag until you are ready to install it.

In order to avoid possible static electricity discharge during installation procedures, please follow the following instructions:

- Discharge any static electrical buildup in your body by touching a large grounded metal surface for a few seconds.
- Avoid any contact with metal parts during the installation process. Handle cards only by their edges.

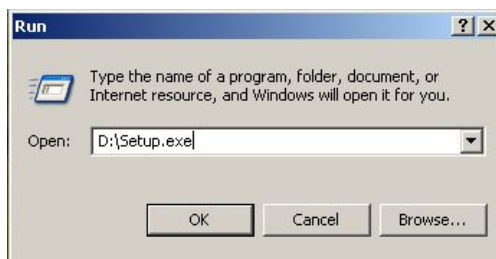
To install the Mango Board:

- Turn off the power to your computer.
- Open the computer case.
- Remove the slot bracket by unscrewing the holding screw and sliding it out.
- Insert the Mango board into the available PCI slot and fasten the screw tightly.
- Turn on the main power to the PC.

Windows Driver Installation:

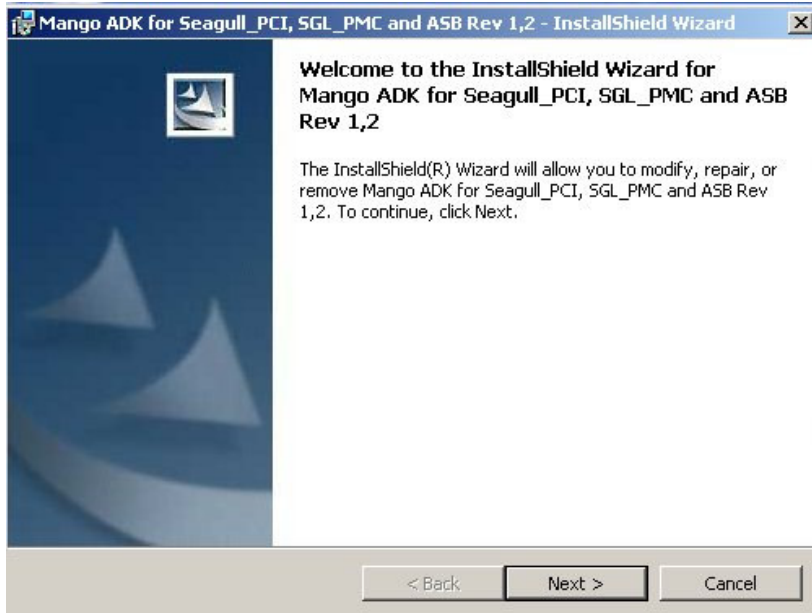


- When starting Windows for the first time after the board has been installed the “Found New Hardware” wizard will appear. Select “Cancel” for all four devices as they show up.
- Insert the CD driver into your CD-ROM drive.

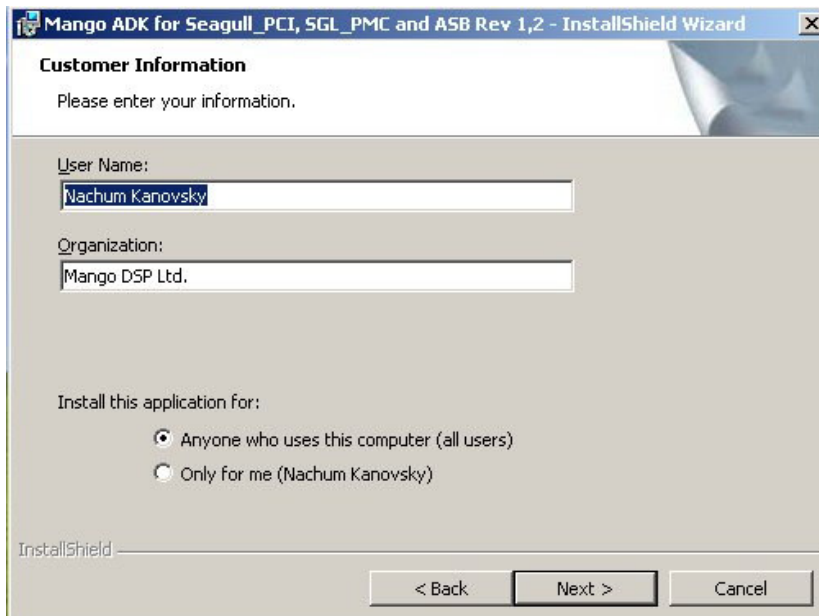


- Run setup.exe from the CD-ROM drive.

Installation Instructions

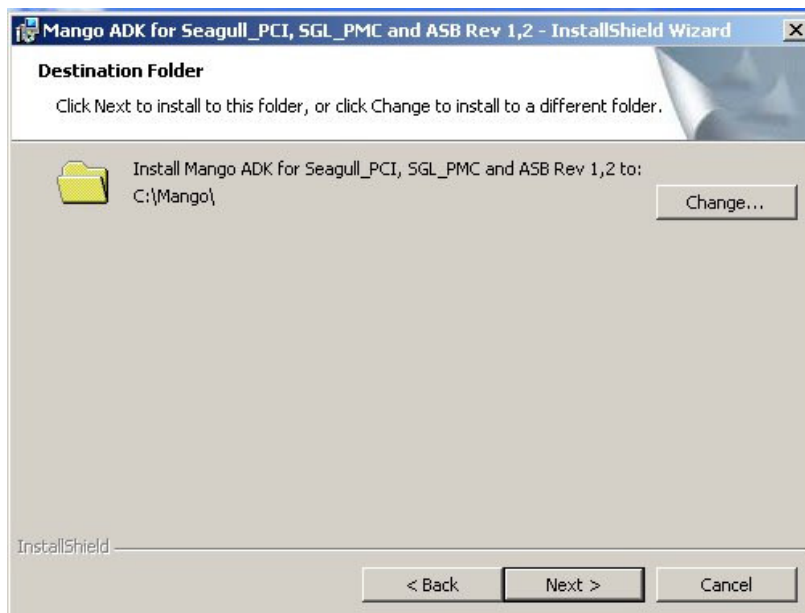


- Click Next to continue

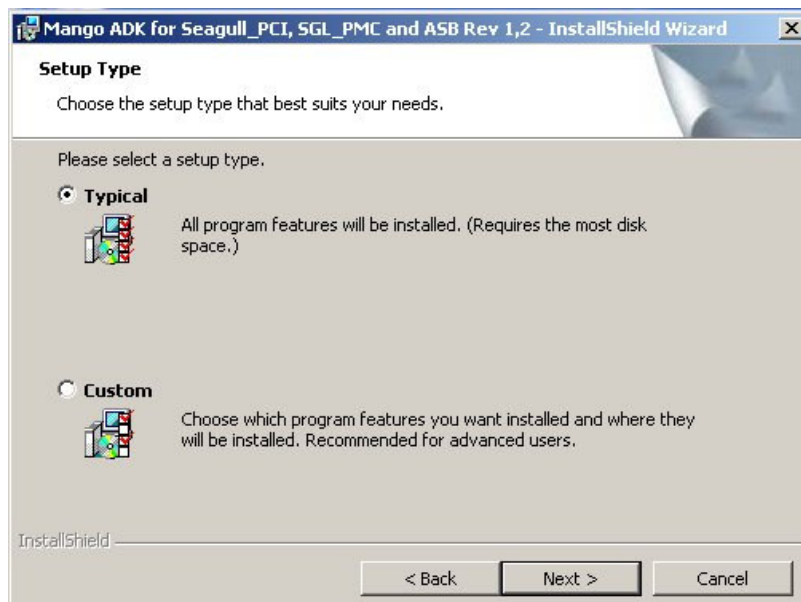


- Enter User Name and Organization and click Next to continue

Installation Instructions

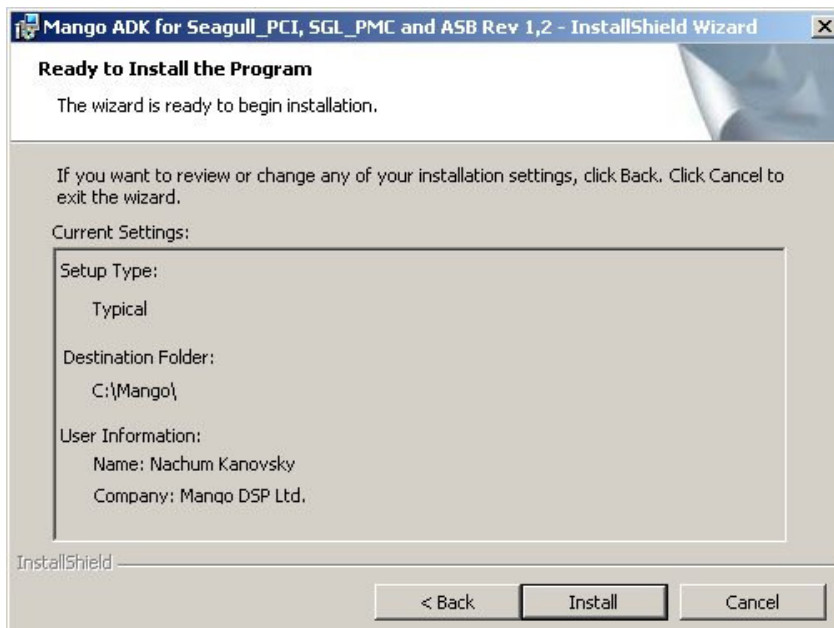


- The default directory for installation is C:\Mango. It is recommended not to change this setting. Click Next to continue

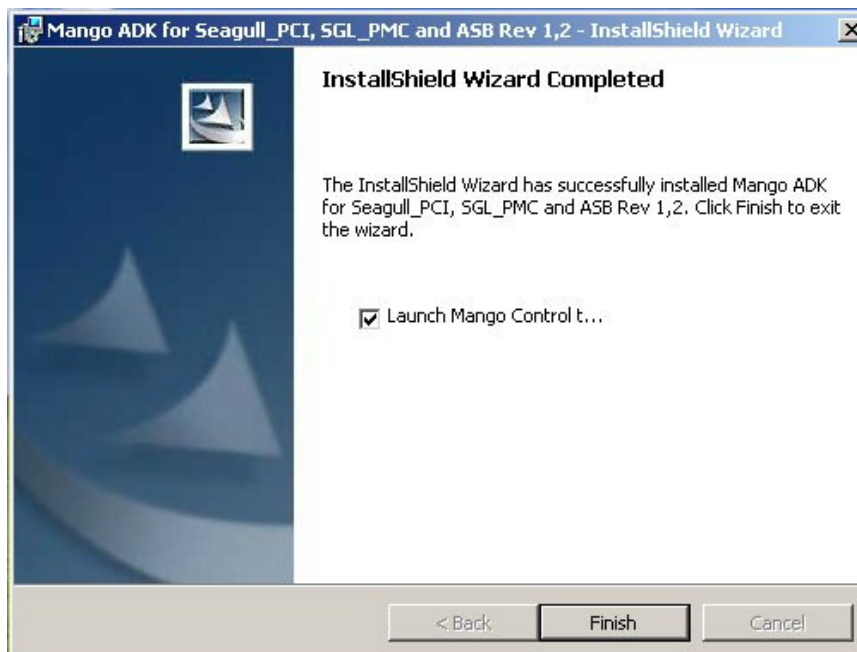


- Click through the options selecting Typical for easiest install and click Next to continue.

Installation Instructions

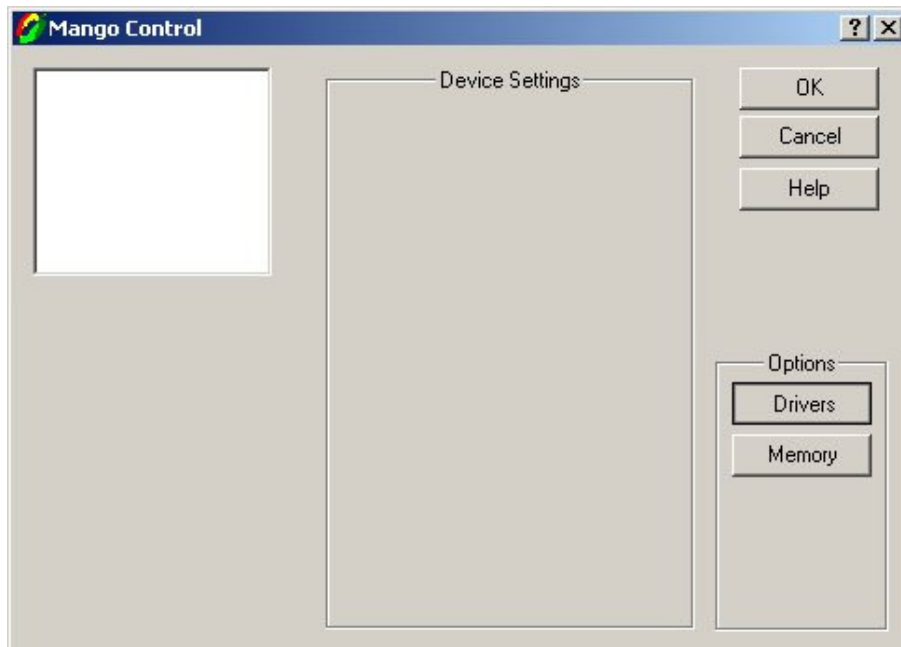


- Click Install

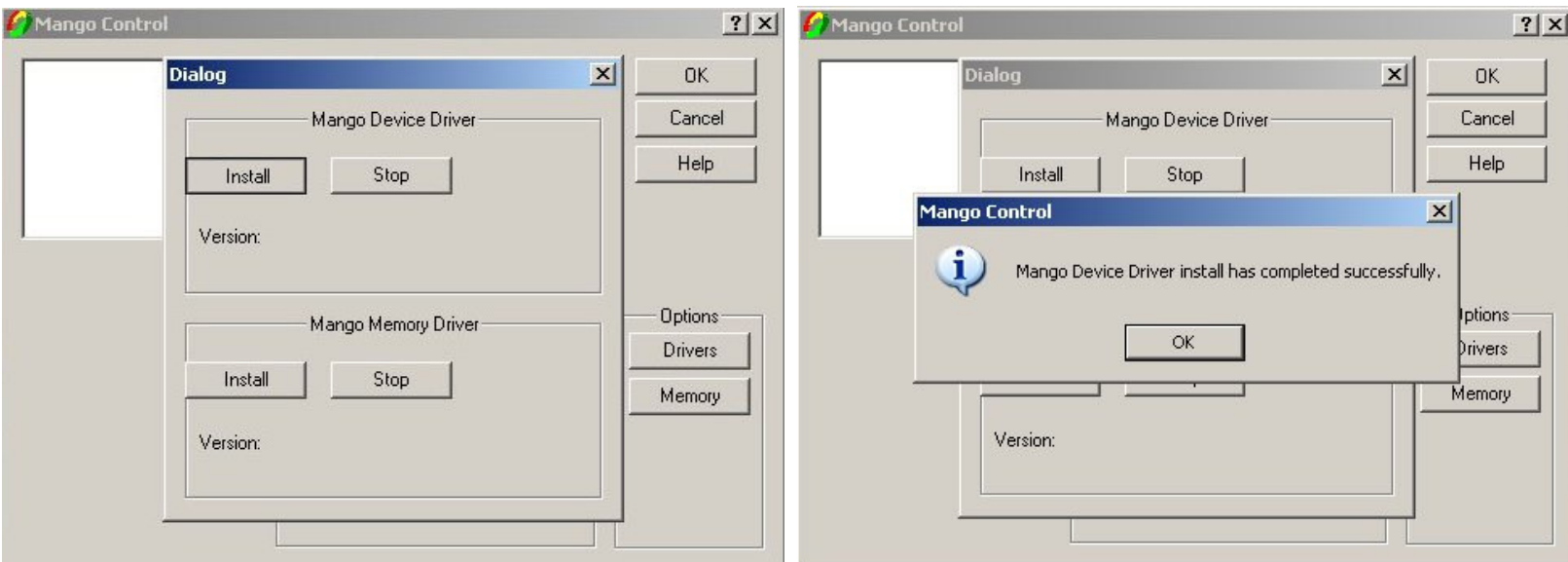


- When installation is complete, you will be presented with an option to launch the Mango control applet. Leave it checked and click Finish.

Installation Instructions

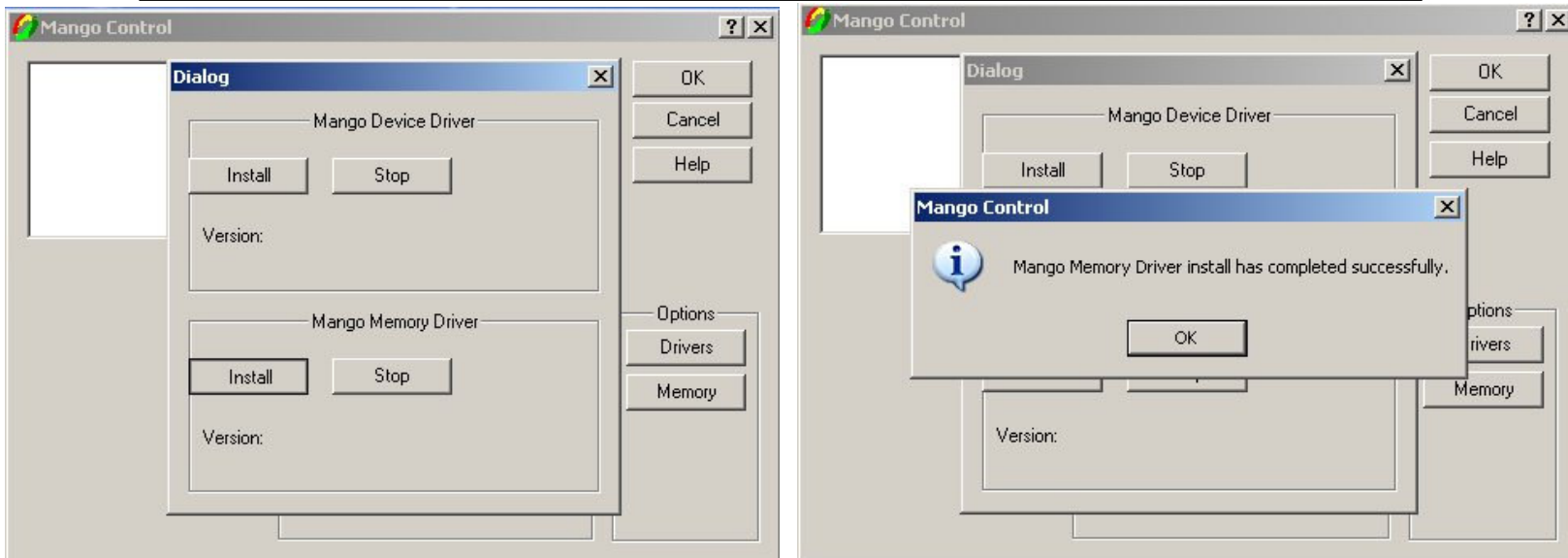


- Click “Drivers” from under “Options.”

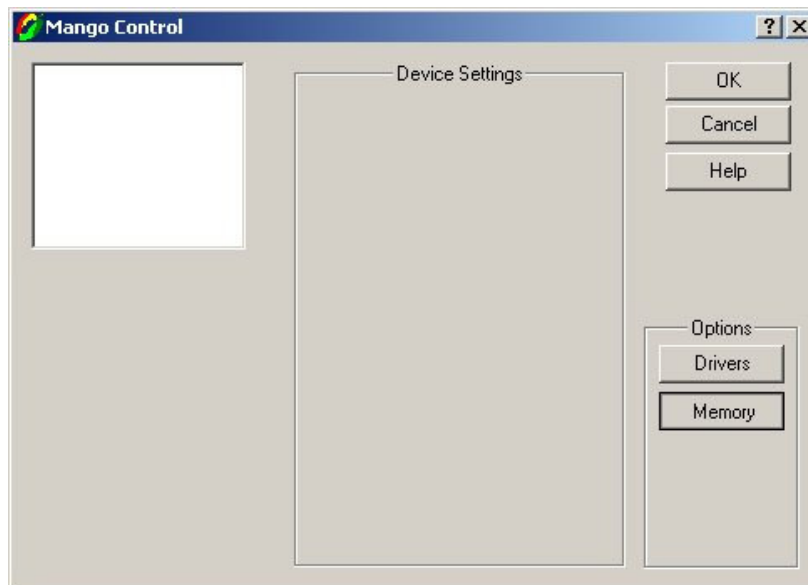


- Click “Install” from under “Mango Memory Driver” wait until it says it’s done. Click OK for completion.

Installation Instructions



- Click “Install” from under “Mango Device Driver” wait until it says it’s done. Click OK for completion.

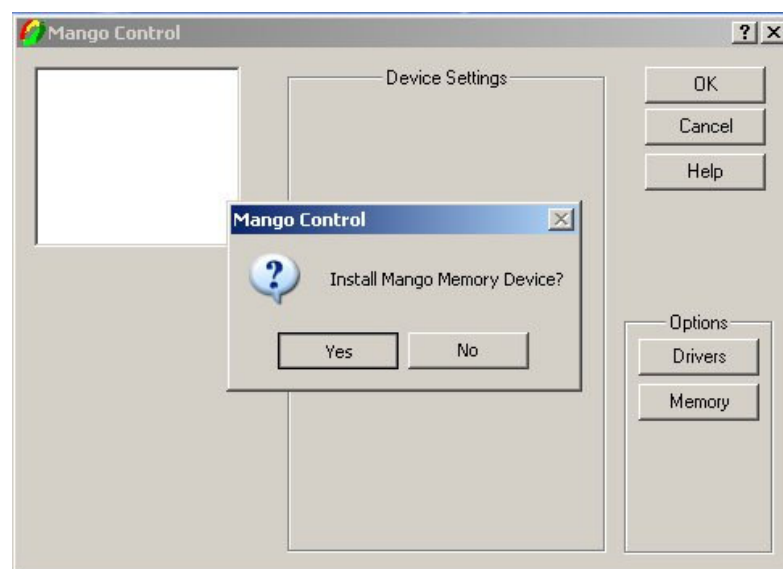


- Click “Memory” from under “Options.”

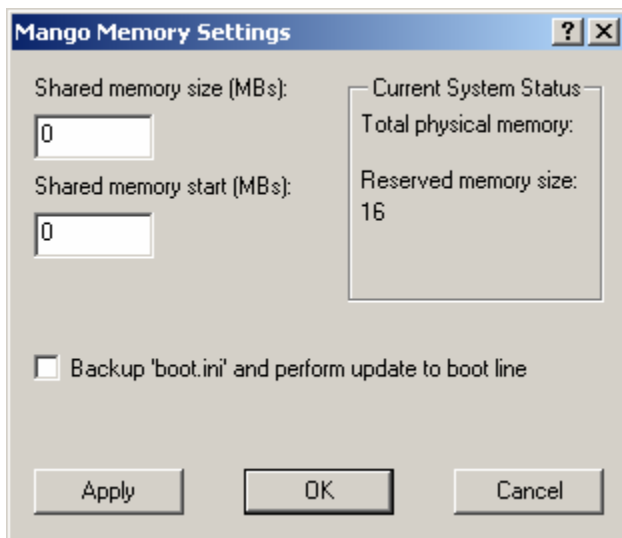
Installation Instructions



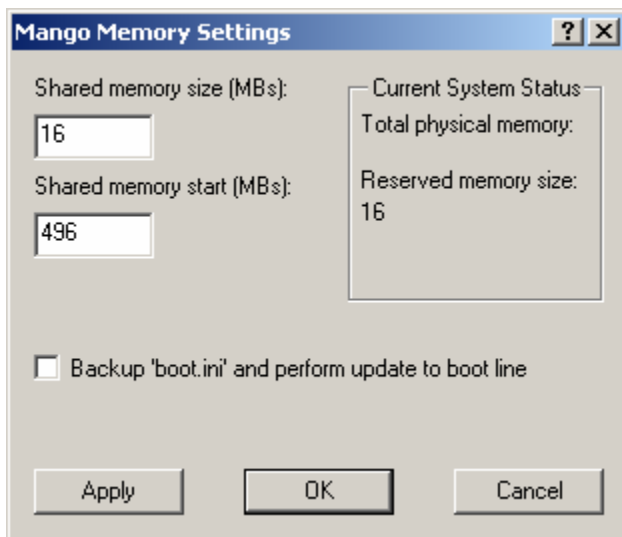
- Click “OK” when it says the Memory Device is not installed.



- Click “YES” when it asks to install the Mango Memory Device

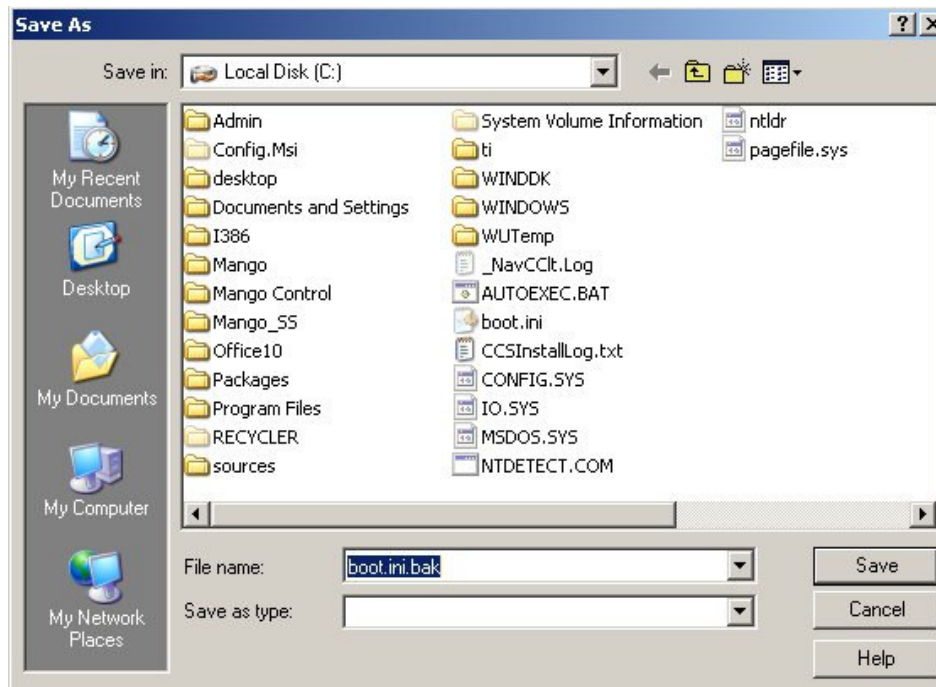


- It will now show the Memory Device configuration screen

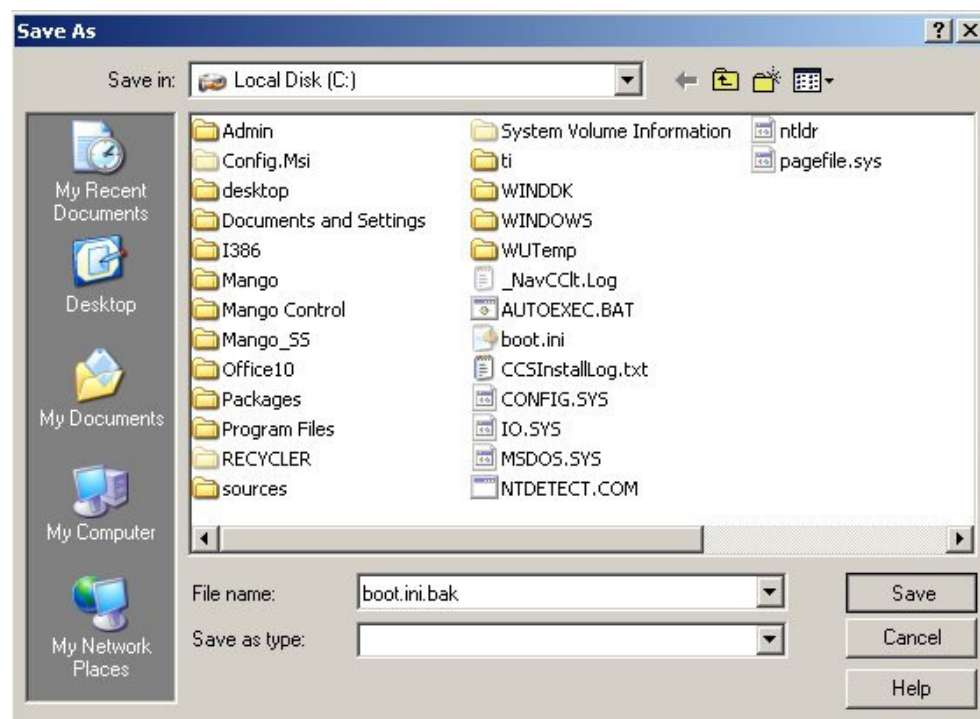


- In this window you define the amount of RAM that is permanently set aside for use as shared memory between the DSP and host. Do not allocate too much of it, as this lowers the amount of memory Windows is allowed to use. Set 16 MB as the Shared memory size (this can be changed later) and set your Shared memory start as your total memory minus the shared memory size, and click the checkbox indicating backup and update of the boot.ini file. The other checkbox will allow you to directly set the memory addresses that will be used; this is not recommended unless there is a specific need.

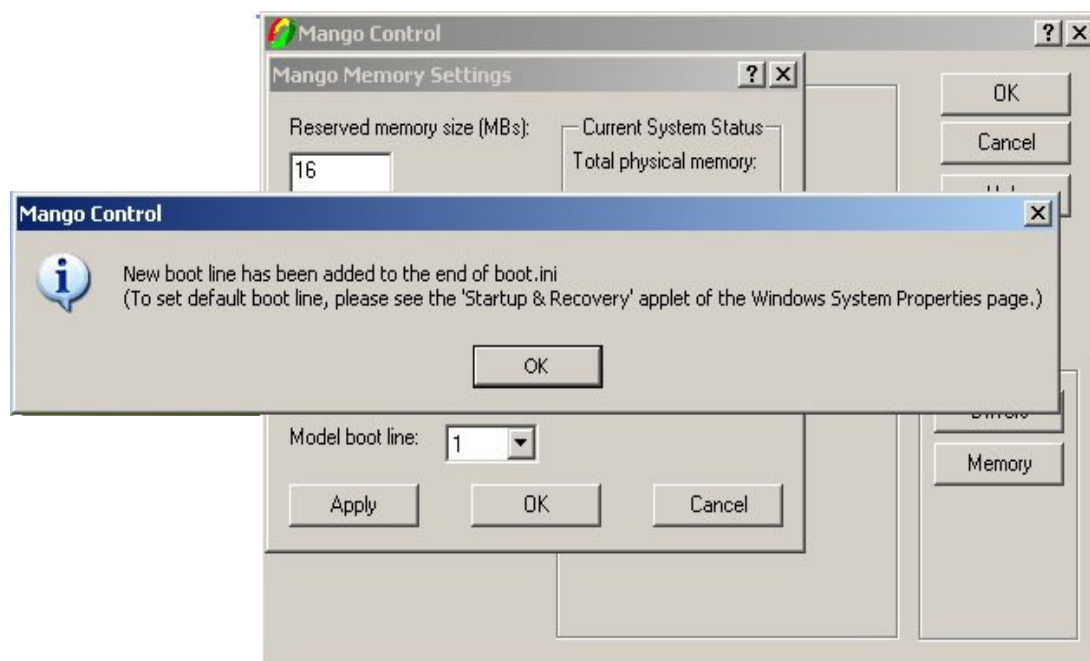
Installation Instructions



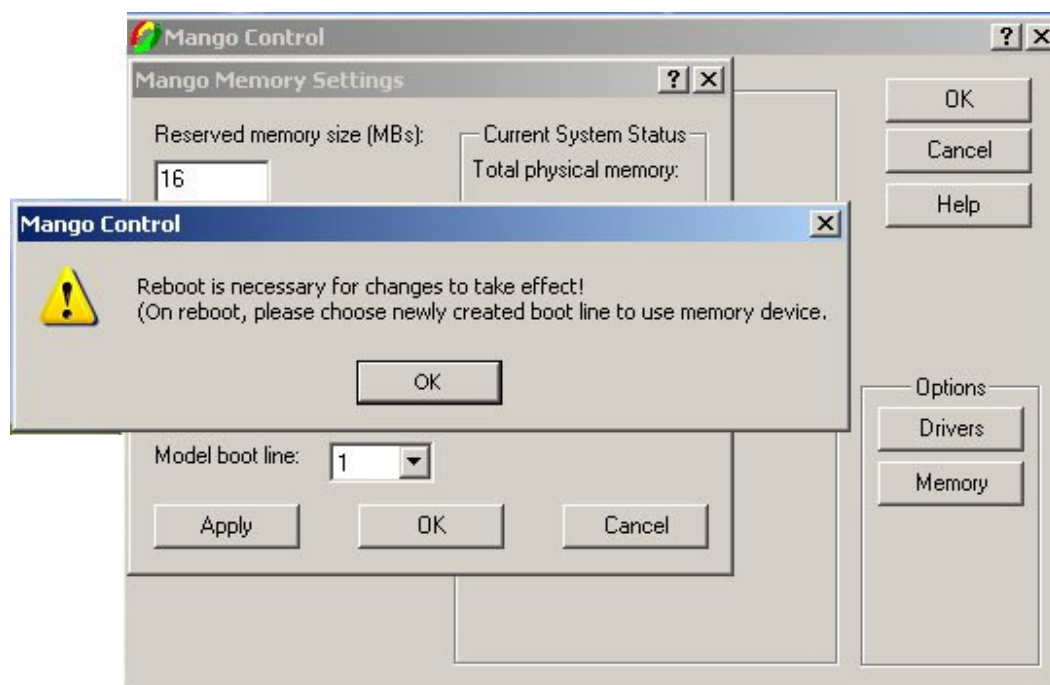
- Choose a name for a backup file



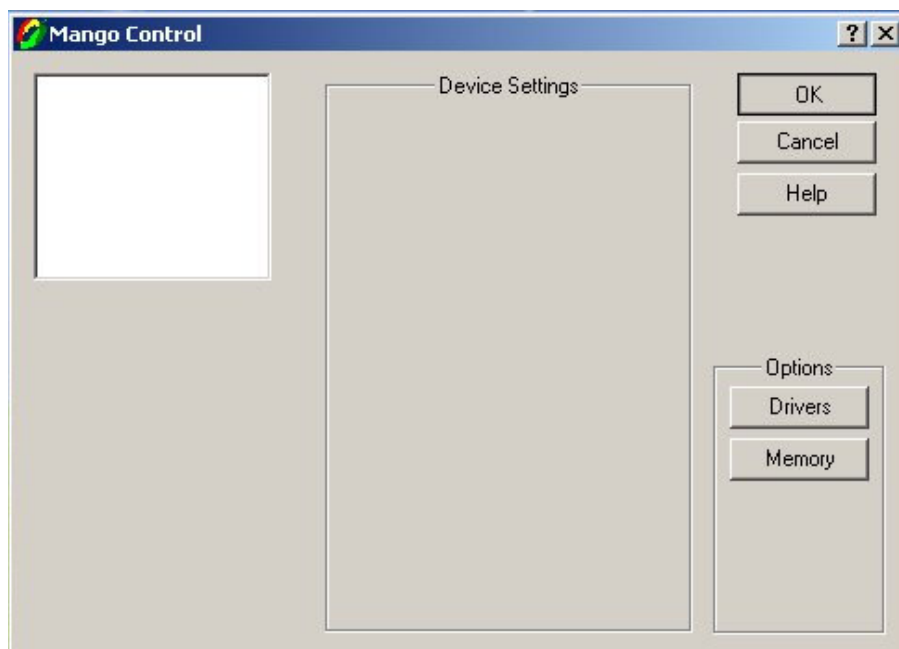
- Click “OK” to accept the changes.



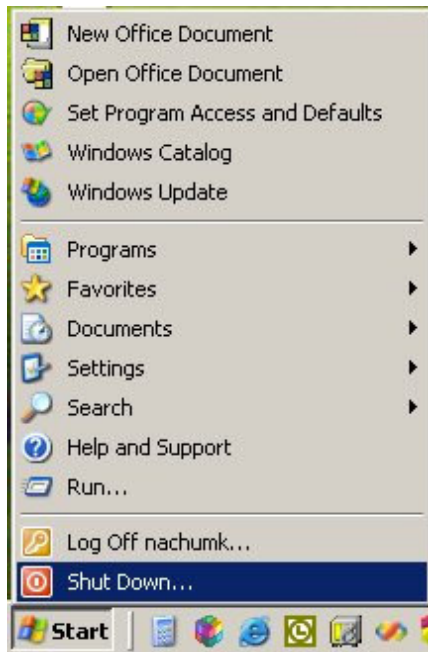
- A message now appears telling you that you've added a line to the boot.ini file. Click "OK" to continue.



- A prompt will inform you that a reboot is necessary



- Close Mango Control.



- Reboot. When the OS choices menu appears, choose the newly created entry in the boot configuration. You will notice that Windows now reports 16 MB less than it did before (see My Computer>right-click>Properties). As soon as you are comfortable with the new configuration, you may wish to make it the default: My computer>right-click>Properties>Startup and Recovery>System startup.

Any changes to the configuration may now be modified by accessing the control applet: Start>Programs>Mango DSP Ltd>Mango ADK.

If the need ever arises to reinstall the drivers manually, they are located in C:\Mango\binHost\Release.

In Device Manager, you should now notice the following added components:

- A category named Digital Signal Processing Devices, and under it a number of devices corresponding to the number of DSPs on your Mango card.
- A category named Memory technology driver (Win 2000) or PCMCIA and Flash memory devices (Win XP), and under it Mango Memory Device.

None of these components should be displaying a “?” or “!” icon. If they are, please try reinstalling the drivers manually; the files are located at C:\Mango\MangoBIOS\Drivers\Win2000_XP\src\Mango Control. If there are still problems please contact Mango DSP for technical support.

If there are no problems, you may now try compiling and running the example programs supplied under C:\Mango\MangoBIOS\MangoC64Boards\Examples and under

Installation Instructions

C:\Mango\MangoBIOS\Libraries\h2d_pci_stream_ints. Please read the relevant readme.txt file before attempting each example.

Please read the **Mango DSP Developer's Startup Guide** for further information on DSP development on Mango DSP boards.