

## Installation Instructions for the Motorola ADS Library Installer v1200

Welcome to the release of the Motorola ADS Library Installer v1200. This new installer provides a single convenient Java graphic user interface for installing Motorola libraries written for Agilent Technology's Advanced Design System 1.3. The use of this library requires that ADS Service Pack 3 to be installed before starting the installation process. The installer does not require the installation of any additional software (Java runtime environment or Java virtual machine), simply download the file appropriate for your platform and follow the instructions provided below. The user is prompted for a directory to extract the installer to, once installation has begun. If any difficulties arise during the installation process review the "log" directory for a more detailed explanation. Once the installation has completed, you may delete the installer and any directories used for the extraction. The new installer includes the latest version of the Motorola LDMOS Model Library release 1.3.1200.

Should an issue arise during the installation process, you can consult the log file. Open the directory you selected to extract the installer to. A directory named "log" contains a text file for the library you selected to install/upgrade. Review the text file for a detailed listing of the operations completed.

Agilent Technologies will not officially support ADS on Windows 2000 until the release of ADS 1.5. For those users that are currently using ADS 1.3 on Windows 2000 computers, please note that the installer has not been tested on Windows 2000.

If you have an older version of the Motorola LDMOS Model Library installed, please review the following instructions before using the new installer.

1. Move the \$HPEESOF\_DIR/custom directory to a temporary name, i.e. custom\_old.
2. Remove any references to the ADS\_MOT\_LIBRARY environment variable.

### **Windows 95, 98 and NT4.0 Instructions:**

1. Make sure that you have administrative privileges for the ADS 1.3 installation directory (\$HPEESOF\_DIR) when running the Java installer.
2. Download the windows version of the Java Installer, MotADSLibExt\_v1200\_win.exe
3. After downloading, double-click the MotADSLibExt\_v1200\_win.exe file.
4. Make sure that the permissions of the ADS executable file hpeesofsim.exe are such that all users can execute the file. The file, [hpeesofsim.exe](#), is located in the following directory:  
\$HPEESOF\_DIR/custom/ADS\_MOT\_LIBRARY/senior\_objects

### **Solaris 2.6 Instructions:**

1. Make sure that you have administrative privileges for the ADS 1.3 installation directory (\$HPEESOF\_DIR) when running the Java installer.
2. Download the Solaris version of the Java Installer, MotADSLibExt\_v1200\_sun.bin
3. After downloading open a shell
4. Change the directory to where the Java installer was downloaded  
e.g., cd directory\_where\_installer\_is\_located
5. At the prompt type: sh ./MotADSLibExt\_v1200\_sun.bin
6. Make sure that the permissions of the ADS executable file hpeesofsim.sun are such that all users can execute the file. The file, [hpeesofsim.sun](#), is located in the following directory:  
\$HPEESOF\_DIR/custom/ADS\_MOT\_LIBRARY/senior\_objects

**HP-UX 10.20 Instructions:**

1. Make sure that you have administrative privileges for the ADS 1.3 installation directory (\$HPEESOF\_DIR) when running the Java installer
2. Download the HP-UX version of the Java Installer, MotADSLibExt\_v1200\_hp.bin
3. After downloading open a shell
4. Change the directory to where the Java installer was downloaded  
e.g., cd directory\_where\_installer\_is\_located
5. At the prompt type: sh ./MotADSLibExt\_v1200\_hp.bin
6. Make sure that the permissions of the ADS executable file hpeesofsim.hp are such that all users can execute the file. The file, [hpeesofsim.hp](#), is located in the following directory:  
\$HPEESOF\_DIR/custom/ADS\_MOT\_LIBRARY/senior\_objects

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**Appendix A Building a New *hpeesofsim* executable (PC and UNIX Users)**

You will be required to generate a new [hpeesofsim](#) executable if you have your own User Defined Models (UDM) you would like linked with the Motorola Object UDM files. Following the installation of Motorola's LDMOS Model library, building a new [hpeesofsim](#) executable file with additional UDMs is possible. The simulator object files for each platform are available within the following directory:

\$HPEESOF\_DIR/custom/ADS\_MOT\_LIBRARY/senior\_objects

Follow the online documentation on how to build a new [hpeesofsim](#) executable file using the supplied **Motorola Object UDM** files. Within each platform directory, Sun, HP, or NT, all files required to build a new simulator file are included as well as the shell or batch script called [buildsr](#) and a [user.mak](#) compiler definition make file. Copy your UDM object files to the appropriate directory. Make the appropriate modifications to the [cui\\_indx.c](#), [userindx.c](#), [buildsr](#) and [user.mak](#) files. Then run the [buildsr](#) script from a command line to recompile your new simulator [hpeesofsim](#) file which will be placed within the senior\_objects directory. For Solaris, rename the [hpeesofsim.sun](#) to [hpeesofsim.old](#) and then rename the newly compiled [hpeesofsim](#) file to [hpeesofsim.sun](#). For HP, rename the [hpeesofsim.hp](#) to [hpeesofsim.old](#) and then rename the newly compiled [hpeesofsim](#) file to [hpeesofsim.hp](#).

Finally, make sure that the new hpeesofsim executable simulator file has executable permissions. The configuration file which identifies which simulator file to use is contained within the \$HPEESOF\_DIR/custom/config directory and is called hpeesofsess.cfg. The identifier within this text file points to the correct simulator file to use. **Modify at your own risk!**

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**Appendix B Common Problems and TroubleShooting**

Below is a table of common problems and answers to questions that may help you complete your installation if you are having problems.

Problem	Possible Solution:
Under Unix, when starting ADS following the installation, the messages <i>Loading Motorola's ADSv1.3.1200a LDMOS Model Library ... Motorola's ADSv1.3.1200a LDMOS Model Library Load Complete!</i> do not appear upon startup.	1.) Check that the ADS_MOT_LIBRARY directory and all of its subdirectories are present in the ADS <a href="#">custom</a> directory. 2.) Verify that you are running ADS v1.3 with Service Pack 3. 3.) Verify that the design_kit directory exists within the custom directory and that the ads.lib file exists and is similar to the file shown in Appendix C.
Under PC or Unix, after ADS is open, the <a href="#">Motorola LDMOS Model Library</a> does not appear in the schematic palette or within the Component Library window.	4.) Verify that the config directory exists within the custom directory and the de_sim.cfg file exists and is the same as the file shown in Appendix C.
Under PC or Unix, the <a href="#">Motorola LDMOS Model Library</a> palette exists within the schematic window; however, when picking and placing an element, I get several message windows saying that component symbol not found.	

Problem	Possible Solution:
<p>Under PC or Unix, the <a href="#">Motorola LDMOS Model Library</a> palette exists within the schematic window and I can pick and place model parts to the schematic; however, when I try to simulate, I get the following simulation error messages within the simulator window:</p> <p><b>Warning detected by HPEESOFSIM during netlist parsing. Not and HP Ptolemy model</b></p> <p><b>Error detected by HPEESOFSIM during netlist parsing 'MRF1' is an instance of an undefined model 'METMOS'</b></p> <p>Under PC or Unix, the <a href="#">Motorola LDMOS Model Library</a> palette exists within the schematic window and I can pick and place model parts to the schematic; however, when I try to simulate, a window pops up indicating <b>OPEN_SIMULATOR ERROR</b></p>	<ol style="list-style-type: none"> <li>1.) Verify that the config directory exists within the custom directory and the hpeesofsess.cfg file exists and is similar to that shown in Appendix C.</li> <li>2.) Verify that the proper hpeesofsim executable file identified within the hpeesofsess.cfg file has executable permissions for all users.</li> </ol>
<p>Under PC or Unix I have done everything above and nothing seems to have an effect. The Motorola Library does not load at all or partially loads with errors.</p>	<ol style="list-style-type: none"> <li>1.) A users de_sim.cfg is conflicting with the Motorola Library de_sim.cfg file. ADS uses the de_sim.cfg to define several environmental variables. The loading and definition hierarchy is as follows, first the simulator reads the variables defined in the ADS installation directory, second it reads and loads any variables defined in the users home directory (de_sim.cfg is located in a directory named hpeesof/config), finally the ADS design environment will read and load any additional environmental variables defined in the de_sim.cfg file located in the current ADS project. If a variable is redefined in the second or third location described above, only the latest definition will be used. Verify that the following environmental variables are not being redefined in either the user's home directory or the current ADS project directory:  <b>DESIGN_KIT_DIRECTORY</b>  <b>USER_AEL</b>  <b>LOCAL_AEL</b> </li> <li>2.) Verify that all references to the ADS_MOT_LIBRARY environmental variable have being removed from your ADS startup wrapper script.</li> </ol>

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## Appendix C Example ads.lib, de\_sim.cfg, and hpeesofsess.cfg files

Example ads.lib file contained within the custom/design\_kit directory:

```
ADS_MOT_LIBRARY$HPEESOF_DIR\custom\ADS_MOT_LIBRARY\de\ael\startup.atf
```

Example de\_sim.cfg file contained within the custom/config directory:

```
DESIGN_KIT_DIRECTORY=$HPEESOF_DIR/design_kit  
USER_AEL=%DESIGN_KIT_DIRECTORY/design_kit_startup  
LOCAL_AEL=%DESIGN_KIT_DIRECTORY/design_kit_project_attach  
USER_MENU_FUNCTION_LIST=
```

Example hpeesofsess.cfg file contained within the custom/config directory:

```
HPEESOFSIM_BIN=$HPEESOF_DIR\custom\ADS_MOT_LIBRARY\senior_objects\hpeesofsim.exe
```