

USER GUIDE

UG022 | WE ADS Library



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1. INTRODUCTION

ADS (Advanced Design System) is developed by PathWave Design of Keysight Technologies, which is an electronic design automation software system and provides an integrated design environment to designers of RF electronic products.

Würth Elektronik has a growing portfolio of models available for use in ADS. These models allow ADS users to accurately simulate, troubleshoot and solve RF issues before going to production.

For any new users of a tool, the basic functionalities must be learned before the tool can be put to use. For ADS, knowing how to correctly install and find the models is crucial. Our models can be installed via two ways: Würth Electronics homepage, GitHub repository.

Note: The following instructions pertain to ADS versions 2012 or higher.

2. INSTALL FROM WEBSITE

Note: ADS models on homepage are always the latest.

2.1 Download from Würth homepage

Visit the [WE product portfolio](#) and navigate to the product you are interested in (Figure 1).

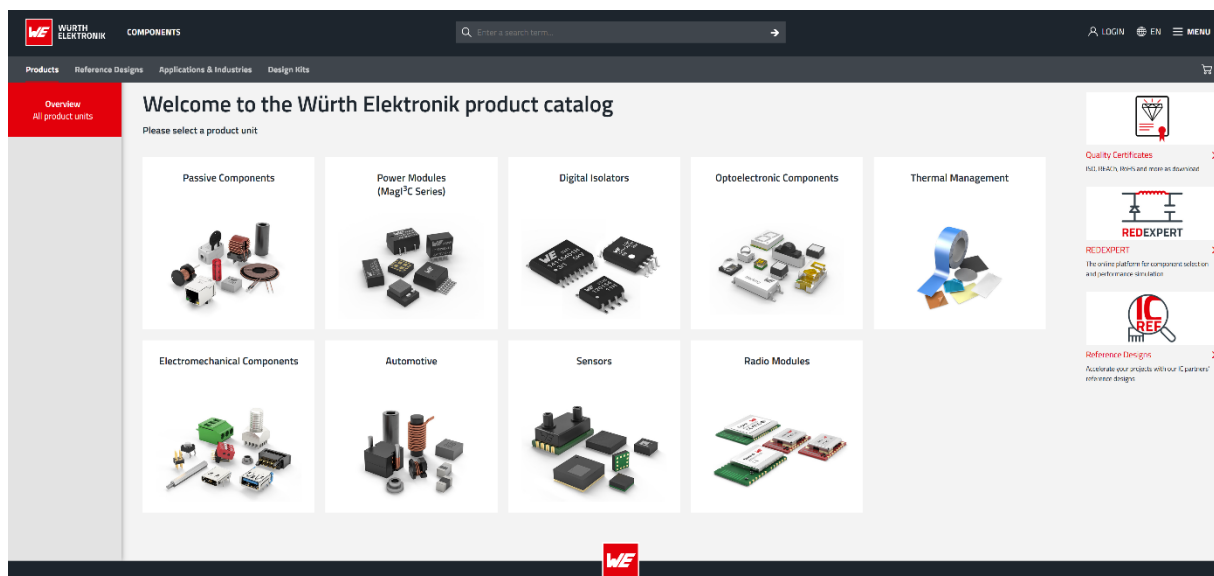


Figure 1: [Würth Elektronik Homepage](#).

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Alternatively, enter the part number or product series into the search bar located at the top of the page (Figure 2).

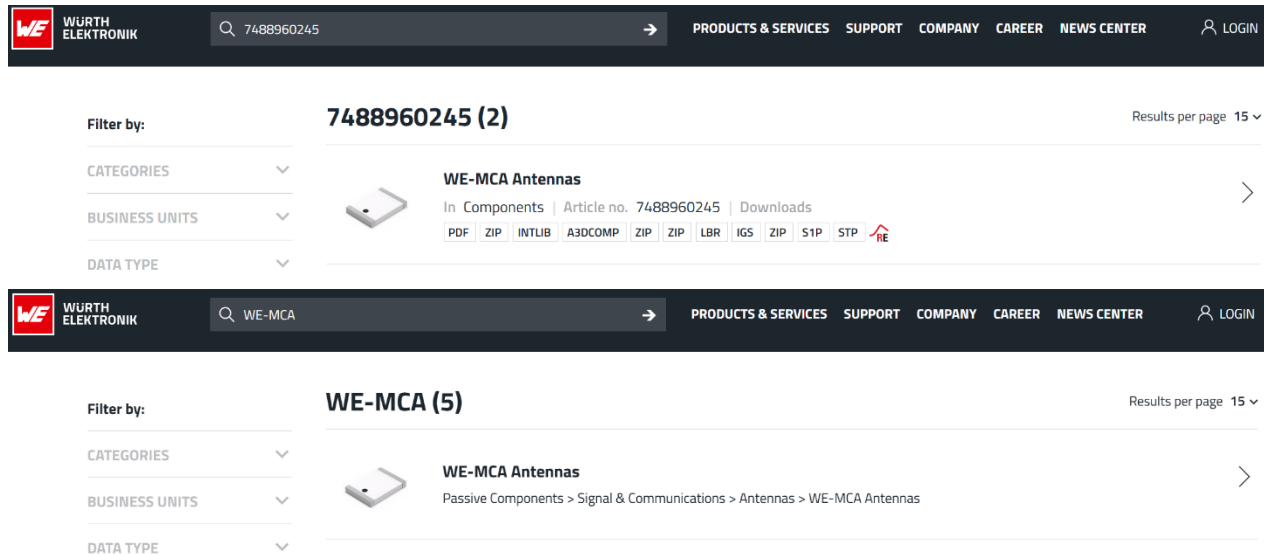


Figure 2: Search part number or series.

On each product series page, you will find the download column in the product list. Locate the ADS library in the dropdown list (Figure 3).

Overview
All product units

Product unit
Passive Components

Product group
Signal & Communications

Product family
Antennas

**Product series
WE-MCA Antennas**

Order Code	Data-sheet	Simu-lation	Downloads	Status	Frequency Range
7488910043	SPEC	RE	10 FILES	Active	423-443 MHz
7488918022	SPEC	RE	<div>EDA models: Components ZIP ALT WE-MCA (rev25b).IntLib 332 KB ANS ANSYS_7488910043 (rev23a).a3dcomp 3.4 MB CDS Cadence_WE-MCA (rev25c).zip 1.1 MB EAG Eagle_WE-MCA (rev25a).lbr 86.6 KB KIC KiCad_WE-MCA (rev25a).zip 344.2 KB ZUK Cadstar_WE-MCA (rev21b).zip 14.4 KB CAD files ZIP IGS 7488910043 (rev1).igs 238.8 KB STP 7488910043 (rev1).stp 92.4 KB Electric models ZIP <div>ADS ADS_WE-MCA (rev24a).zip 739.5 KB</div> S S-Parameter_7488910043 (rev20a).S1P 34.7 KB Download all 10 files as zip archive ZIP</div>		
7488910092	SPEC	RE			
7488910915	SPEC	RE			
7488920157	SPEC	RE			
7488915724	SPEC	RE			
7488912455	SPEC	RE			
7488920245	SPEC	RE			
7488960245	SPEC	RE			
7488922455	SPEC	RE			
74889102450	SPEC	RE			
74889302450	SPEC	RE			
74889502450	SPEC	RE	11 FILES	Active	2400-2500 MHz
74889402450	SPEC	RE	11 FILES	Active	2400-2500 MHz

Figure 3: Download ADS libraries on Würth Elektronik Homepage.

2.2 Installing the model

Unzip the downloaded file to a folder of your choice (Figure 4).

Würth_Elektronik_RF_Inductors		Search Würth_Elektronik_RF_Inductors		
Name	Date modified	Type	Size	
circuit	6/13/2024 3:36 PM	File folder		
config	5/2/2024 4:06 PM	File folder		
de	6/13/2024 3:36 PM	File folder		
doc	6/13/2024 3:36 PM	File folder		
Würth_Elektronik_RF_Inductors	6/13/2024 3:36 PM	File folder		
Disclaimer_READ_ME.txt	9/15/2022 1:55 PM	Text Document	4 KB	
for_editing_pdk.defs	5/2/2024 4:06 PM	DEFS File	1 KB	
lib.defs	5/2/2024 4:06 PM	DEFS File	1 KB	

Figure 4: Unzip library.

Open ADS and select "DesignKits" from the toolbar and click "Manage Libraries..." (Figure 5).

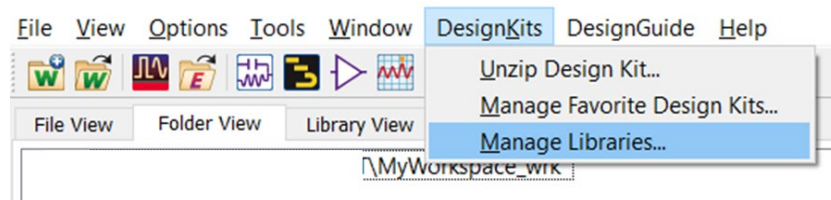


Figure 5: The location of the Manage Libraries.

Click the "Add Library Definition File..." button and browse to the unzipped folder. Select the "lib.defs" file and click "Open". The library import should now be complete and you can click the "Close" button (Figure 6 and Figure 7).

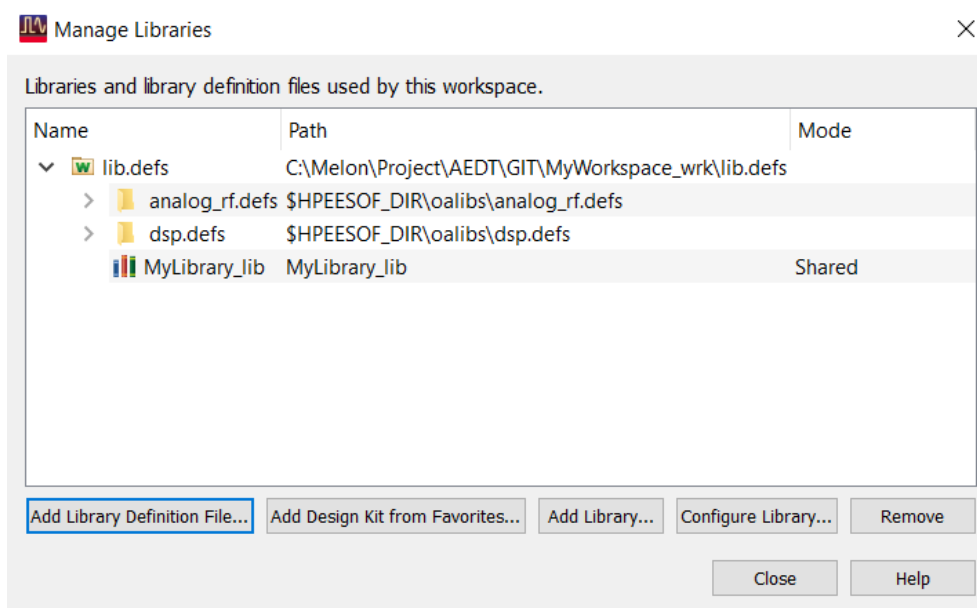


Figure 6: Adding the Library Definition File.

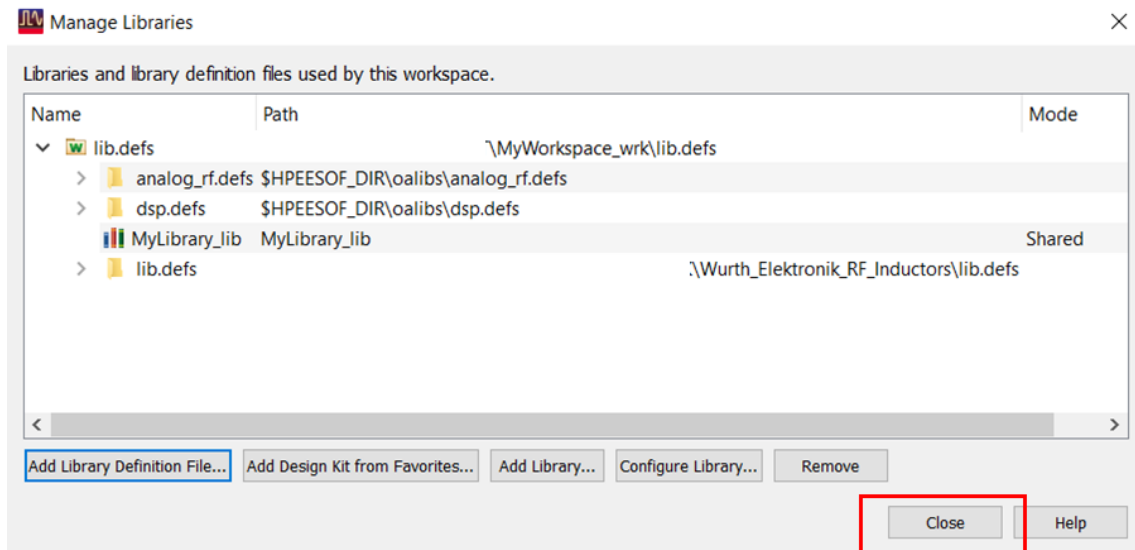


Figure 7: The new library's import in the "Manage Libraries" window.

Now you can use library in your schematic design or simulation (Figure 8).

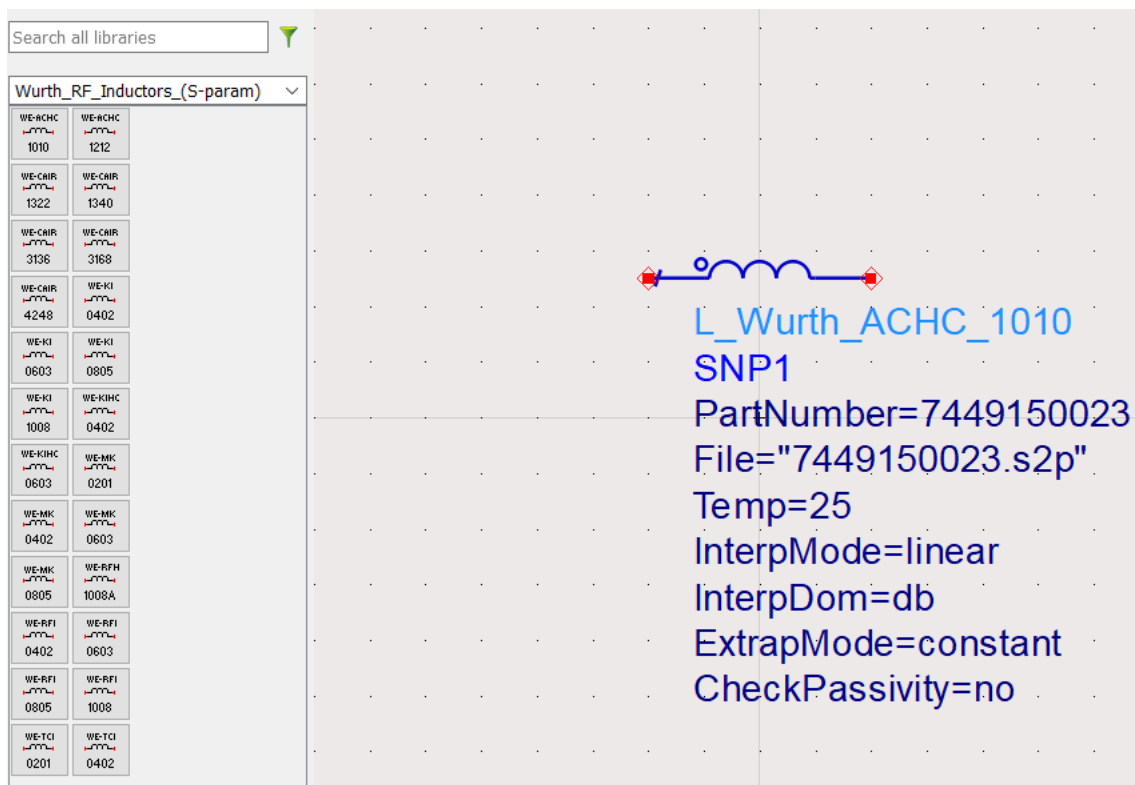


Figure 8: Use for simulation.

3. INSTALL FROM GITHUB REPOSITORY

3.1 Install GitHub Desktop

GitHub Desktop is the most user-friendly tool for working with GitHub projects, and we recommend you use it for keeping your library files up to date.

Go to <https://desktop.github.com/> to download the appropriate package for your operating system and install it on your computer.

During the Desktop installation, register or sign in with your GitHub Account and click next. On opening the GitHub Browser webpage, authenticate yourself and give permission to the GitHub desktop application. The process will then return you to the desktop application.

3.2 Clone the Library

From GitHub Desktop, click the button "Clone a repository from the Internet..." (Figure 9).

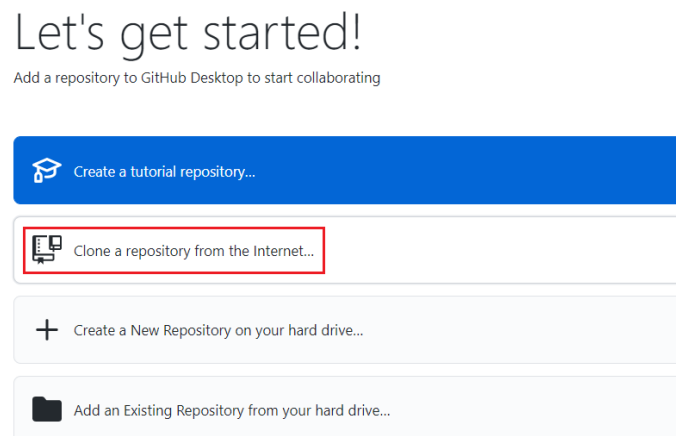


Figure 9: Clone a repository from the Internet.

Enter the URL of Würth Elektronik ADS Library repository <https://github.com/WurthElektronik/ADS-Library.git> and define a local directory to which to clone the repository.

Then click the "Clone" button. A window will then open, synchronizing the libraries into your local directory from the online repository. Cloning repository may take some time (Figure 10 and Figure 11).

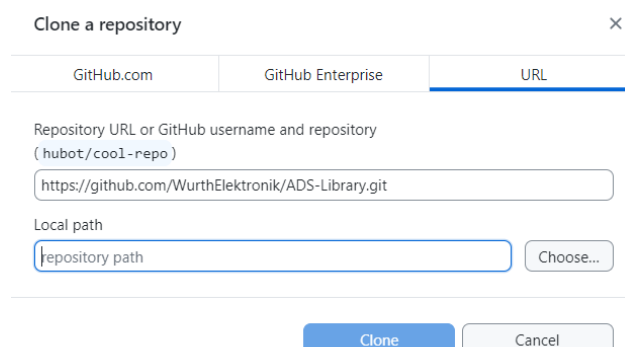


Figure 10: Cloning the Würth Elektronik ADS Library repository to your local directory.

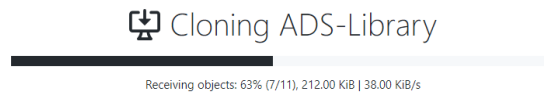


Figure 11: Cloning in progress.

3.3 Synchronize Local Library from GitHub

If there are updates in GitHub repository, GitHub Desktop will detect it. You can “Pull” the update to your local directory. If there are any new commits on the online master repository, from GitHub Desktop you’ll receive the update information automatically.

Click “Pull origin” button to fetch the updates to your local directory immediately (Figure 12).

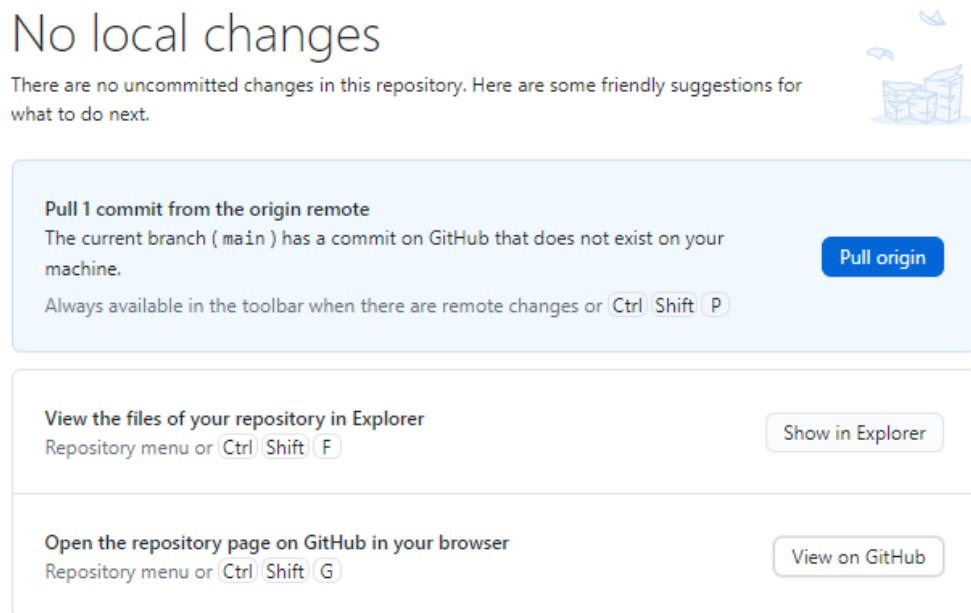


Figure 12: Pulling the repository to your local directory.

Click “View on GitHub” to explore more details of the latest updates (Figure 13).

hywu-eisos Upload User Manual		6c9b5d9 · 2 minutes ago	🕒 4 Commits
📁 library	create folder	14 minutes ago	
📁 symbol	create folder	14 minutes ago	
📄 README.md	Create README.md	2 days ago	
📄 User Manual - WE Pspice Library.pdf	Upload User Manual	2 minutes ago	

Figure 13: View the updates on GitHub.

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Application Notes

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REDEXPERT Design Platform

www.we-online.com/redexpert



Toolbox

www.we-online.com/toolbox



Product Catalog

www.we-online.com/products

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