

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).

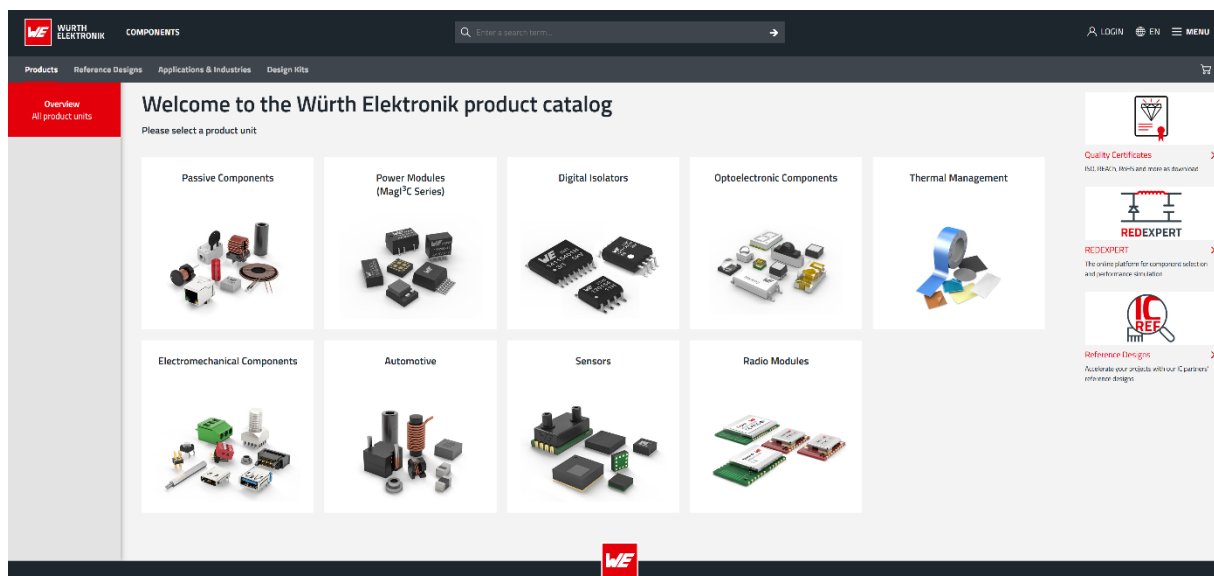


Figure 1: [Würth Elektronik Homepage](#).

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

7488960245 (2)

Results per page 15 ▾



WE-MCA Antennas

In Components | Article no. 7488960245 | Downloads

PDF ZIP INTLIB A3DCOMP ZIP ZIP LBR IGS ZIP S1P STP



WE-MCA (5)

Results per page 15 ▾



WE-MCA Antennas

Passive Components > Signal & Communications > Antennas > WE-MCA Antennas



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
WE-MCA Antennas

Order Code	Data-sheet	Simulation	Downloads	Status	Frequency Range	G _{peak} (dB)
7488910043	SPEC		10 FILES ▾	Active	423-443 MHz	-4
7488918022	SPEC					
7488910092	SPEC					
7488910915	SPEC					
7488920157	SPEC					
7488915724	SPEC					
7488912455	SPEC					
7488920245	SPEC					
7488960245	SPEC					
7488922455	SPEC					
74889102450	SPEC					
74889302450	SPEC					

EDA models: Components [ZIP](#)

[ALT](#) WE-MCA (rev25a).IntLib | 317 KB

[ANS](#) ANSYS_7488910043 (rev23a).a3dcomp | 3.4 MB

[CDS](#) Cadence_WE-MCA (rev25b).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](#)

[ADS](#) ADS_WE-MCA (rev24a).zip | 739.5 KB

[S](#) S-Parameter_7488910043 (rev20a).S1P | 34.7 KB

Download all 10 files as zip archive [ZIP](#)

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).

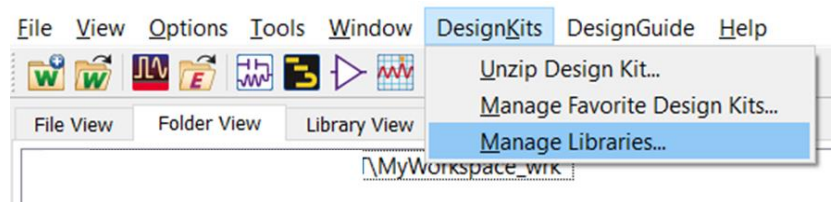


Figure 5: The location of the Manage Libraries.

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).

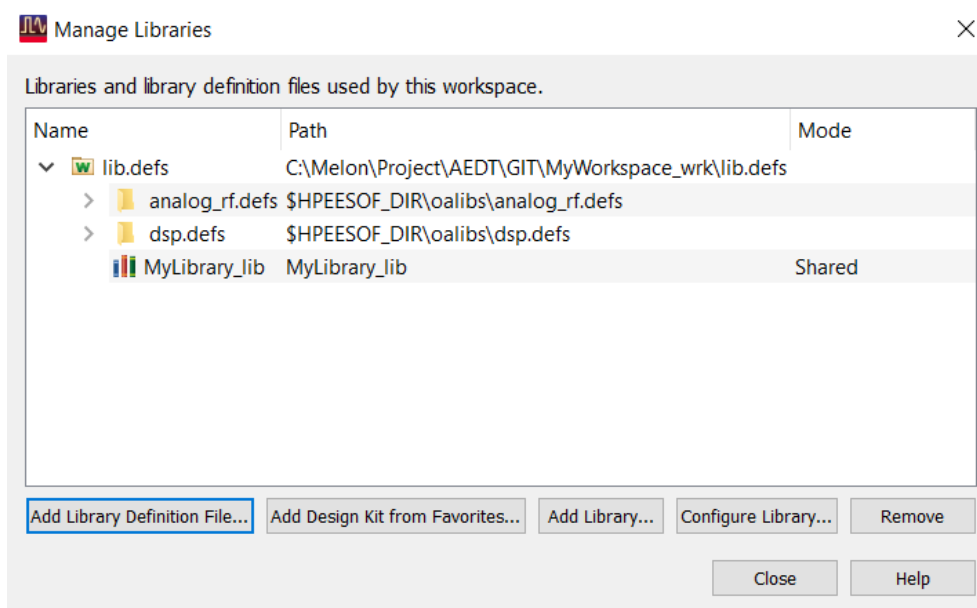


Figure 6: Adding the Library Definition File.

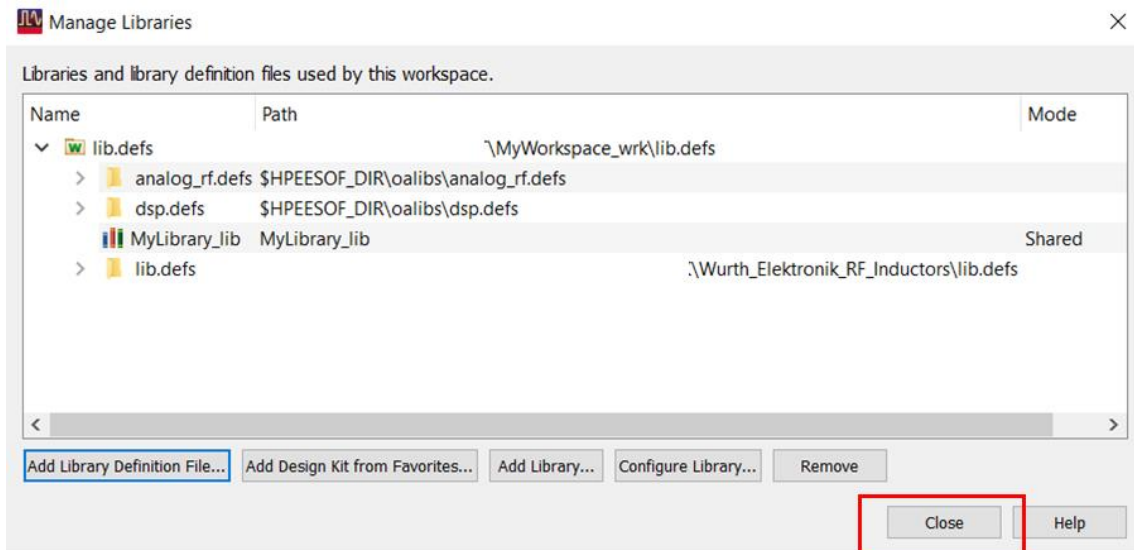


Figure 7: The new library's import in the "Manage Libraries" window.

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

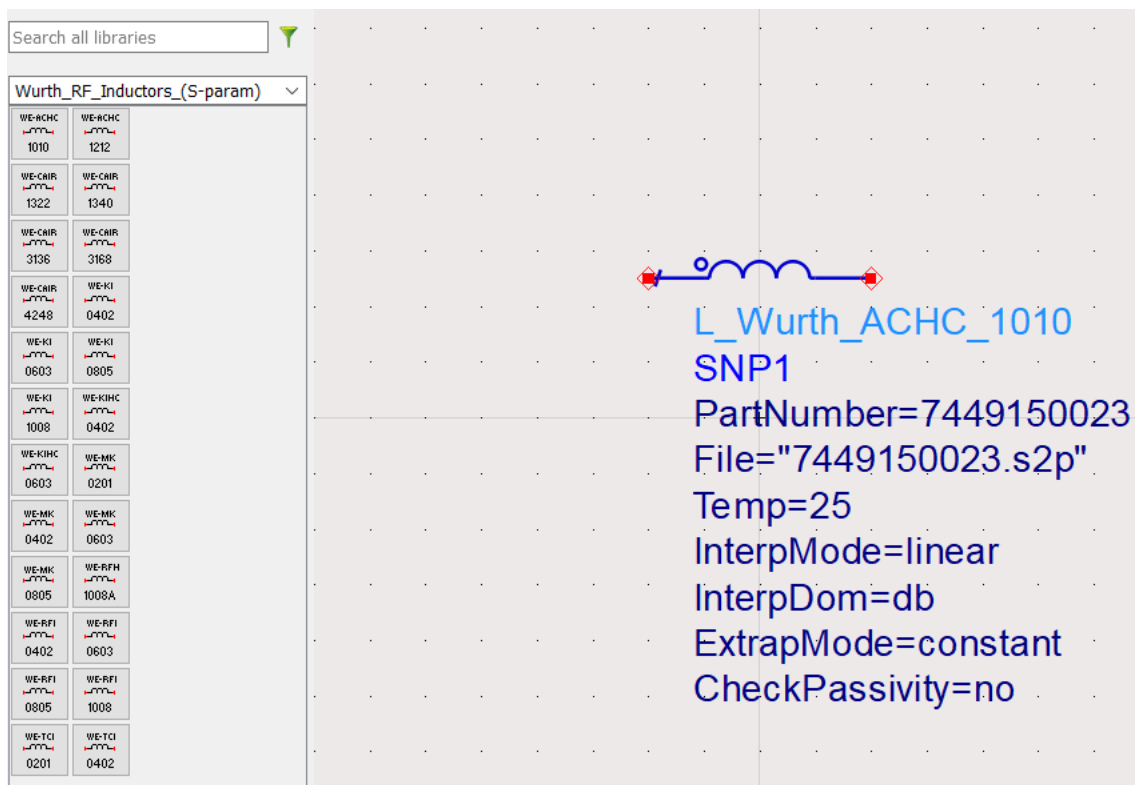


Figure 8: Use for simulation.

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).

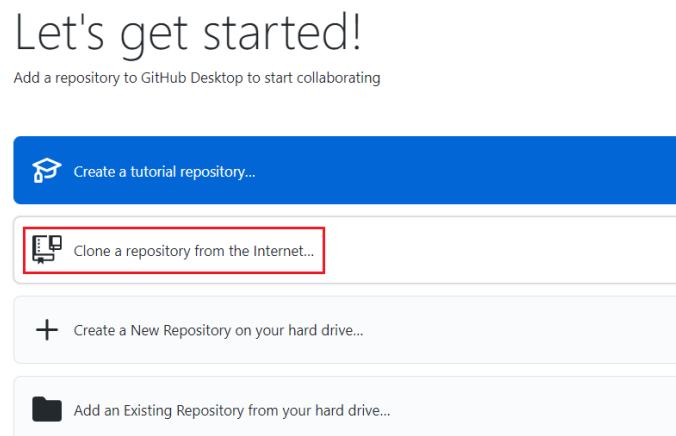


Figure 9: Clone a repository from the Internet.

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).

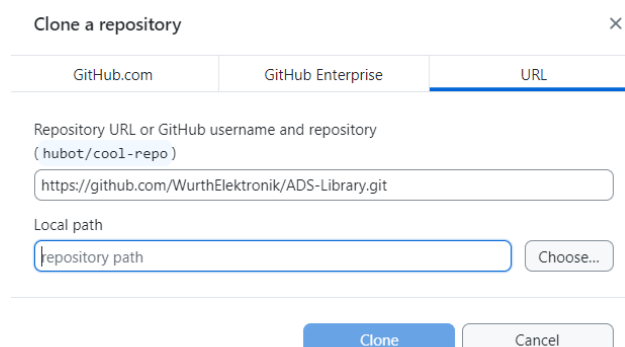


Figure 10: Cloning the Würth Elektronik ADS Library repository to your local directory.

Cloning ADS-Library

Receiving objects: 63% (7/11), 212.00 KiB | 38.00 KiB/s

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).

No local changes

There are no uncommitted changes in this repository. Here are some friendly suggestions for what to do next.



Pull 1 commit from the origin remote

The current branch (main) has a commit on GitHub that does not exist on your machine.

Pull origin

Always available in the toolbar when there are remote changes or **Ctrl** **Shift** **P**

View the files of your repository in Explorer

Repository menu or **Ctrl** **Shift** **F**

Show in Explorer

Open the repository page on GitHub in your browser

Repository menu or **Ctrl** **Shift** **G**

View on GitHub

Figure 12: Pulling the repository to your local directory.

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

master	1 Branch	0 Tags	Go to file	Code
mehu-eisos	content rename	cf39493 · 9 months ago	3 Commits	
EMC Components	initial commit	10 months ago		
Power Magnetics/Power Inductors	initial commit	10 months ago		
Signal & Communications/RF Component	initial commit	10 months ago		
Disclaimer_WE_ADS_library.pdf	content rename	9 months ago		
License_Terms_WE_ADS_library.pdf	content rename	9 months ago		
README.md	content rename	9 months ago		
User_Guide_WE_ADS_Library.pdf	initial commit	10 months ago		

Figure 13: View the updates on GitHub.

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Application Notes

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www.we-online.com/redexpert



Toolbox

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Product Catalog

www.we-online.com/products

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