

USER GUIDE

UG004 | Using the OrCAD Libraries

Yingchun Shan



1. INTRODUCTION

OrCAD is a popular Electronic Design Automation (EDA) software used for PCB design. It offers a variety of products, including the popular OrCAD Capture, which is Cadence's schematic capture tool, Padstack Editor, OrCAD PCB Designer and OrCAD PSpice Designer.

This user guide demonstrates how to locate, download and install WE component libraries for OrCAD (17.2-2016 Lite Version). WE component libraries for OrCAD consist of symbol file (*.olb) and package file (*.dra) You can access our libraries through the Würth Elektronik website or our GitHub repository. For the most up-to-date version, we recommend visiting our GitHub repository.

2. INSTALLING THE LIBRARIES

a. Downloads from Würth Homepage

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

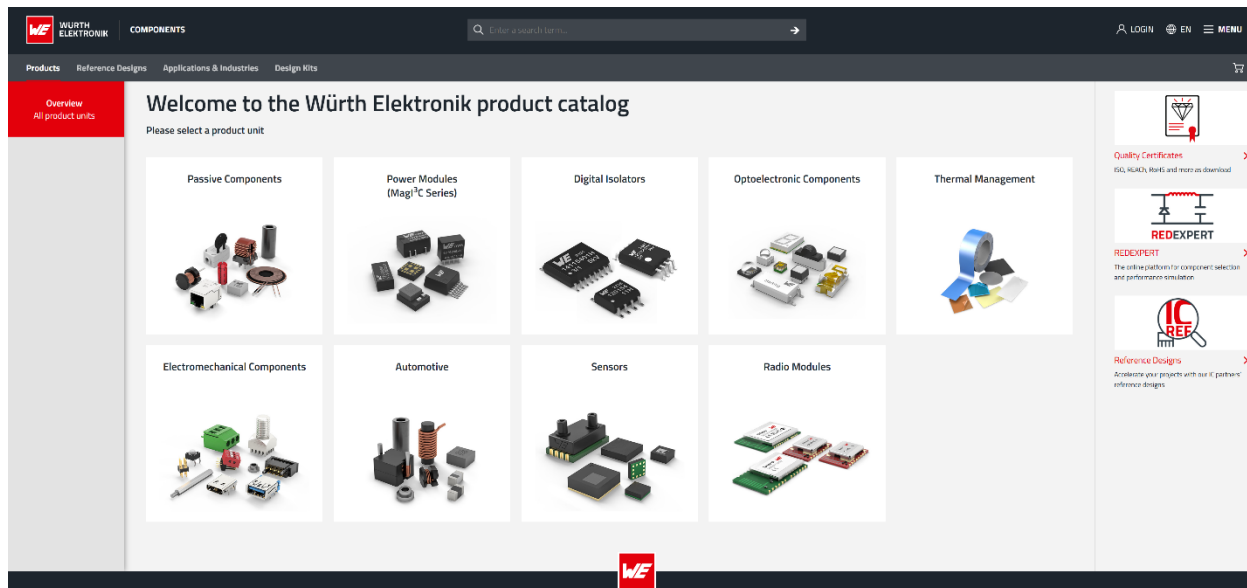


Figure 1: [Würth Elektronik Homepage](#).

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



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742692001 (1)

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CATEGORIES

BUSINESS UNITS

DATA TYPE



WE-TMSB Tiny Multilayer Suppression Bead
In Components | Article no. 742692001 | Downloads 

Results per page 15



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WE-TMSB (22)

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CATEGORIES

BUSINESS UNITS

DATA TYPE



WE-TMSB Tiny Multilayer Suppression Bead
Passive Components > EMC Components > Ferrites for PCB Assembly > WE-TMSB

PDF

USB connector application

Figure 2: Search part number or series.

On each product series page, you will find the download column in the product list. Locate the OrCAD library in the dropdown list.

Overview
All product units

Product unit
Passive Components

Product group
EMC Components

Product family
Ferrites for PCB
Assembly

Product series
WE-TMSB Tiny Multilayer
Suppression Bead

All | 0201 | 0402 | 0603

Order Code	Data-sheet	Simu-lation	Downloads	Status	Z @ 100 MHz (Ω)
742692001	SPEC		10 FILES	Active	10
7426926222	SPEC				
742692002	SPEC				
74269242111	SPEC				
742692003	SPEC				
74269242161	SPEC				
742692004	SPEC				
74269242261	SPEC				
742692005	SPEC				
74269243461	SPEC				
74269221561	SPEC				
74269241601	SPEC				

EDA models: Components

ALT

WE-TMSB (rev24a).IntLib | 67.5 KB

CDS

Cadence_WE-TMSB (rev24a).zip | 206 KB

EAG

Eagle_WE-TMSB (rev24a).lbr | 29.3 KB

KIC

KiCad_WE-TMSB (rev25a).zip | 110.1 KB

ZUK

Cadstar_WE-TMSB (rev20a).zip | 7.3 KB

CAD files

3D

3D_WE-TMSB_0201_TMSB (rev1).pdf | 20.3 KB

IGS

WE-TMSB_0201_TMSB (rev1).igs | 77 KB

STP

WE-TMSB_0201_TMSB (rev1).stp | 62.9 KB

Electric models

PSP

PSpice_WE-TMSB (rev24a).zip | 5.9 KB

S

S-Parameters_WE-TMSB (rev21a).zip | 1.9 MB

Download all 10 files as zip archive

Figure 3: Download OrCAD libraries on Würth Elektronik Homepage.

b. Save the Libraries

Save and extract the *.zip file directly into your chosen directory. Saving the libraries into the same folder as your design is recommended.

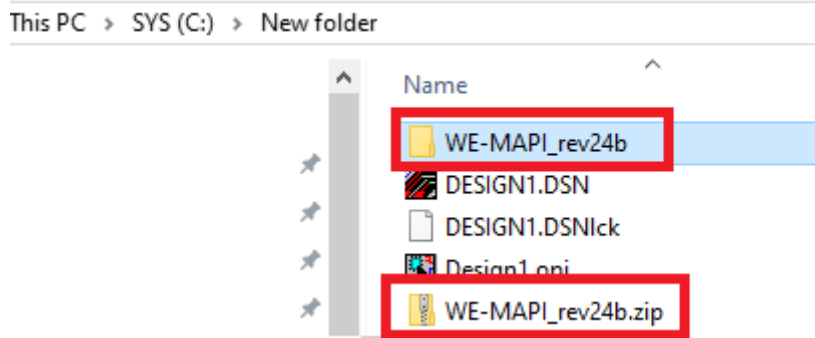


Figure 4: Model files in the same folder as schematic files.

c. Install the symbols

Run OrCAD Capture and open or create a design. Open the schematic page.

Add a symbol library to your design by clicking the “Add Library” symbol in the “Place Part” window. Open the “Browse File” window, select the desired symbol file (*.olb) and then open it.

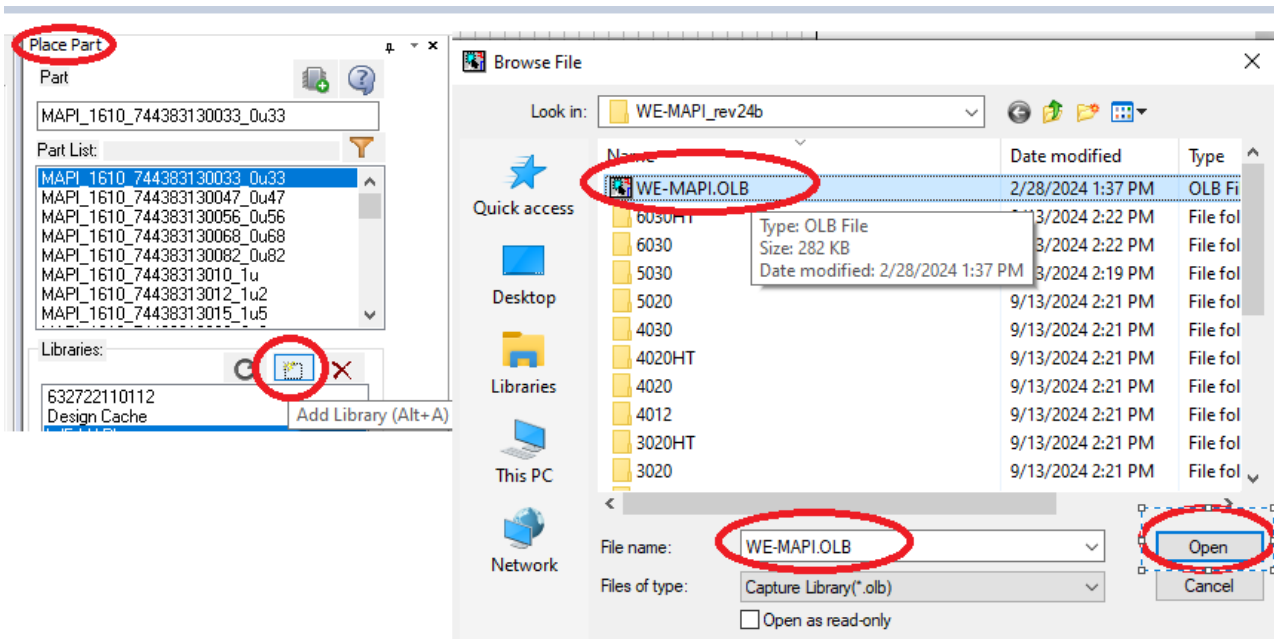


Figure 5: Adding the library to the “Place Part” window.

Place the symbols by clicking the “Place” tab and select “Part” option from the menu or pressing the “P” key directly. Alternatively, select “Place” in the action toolbar.

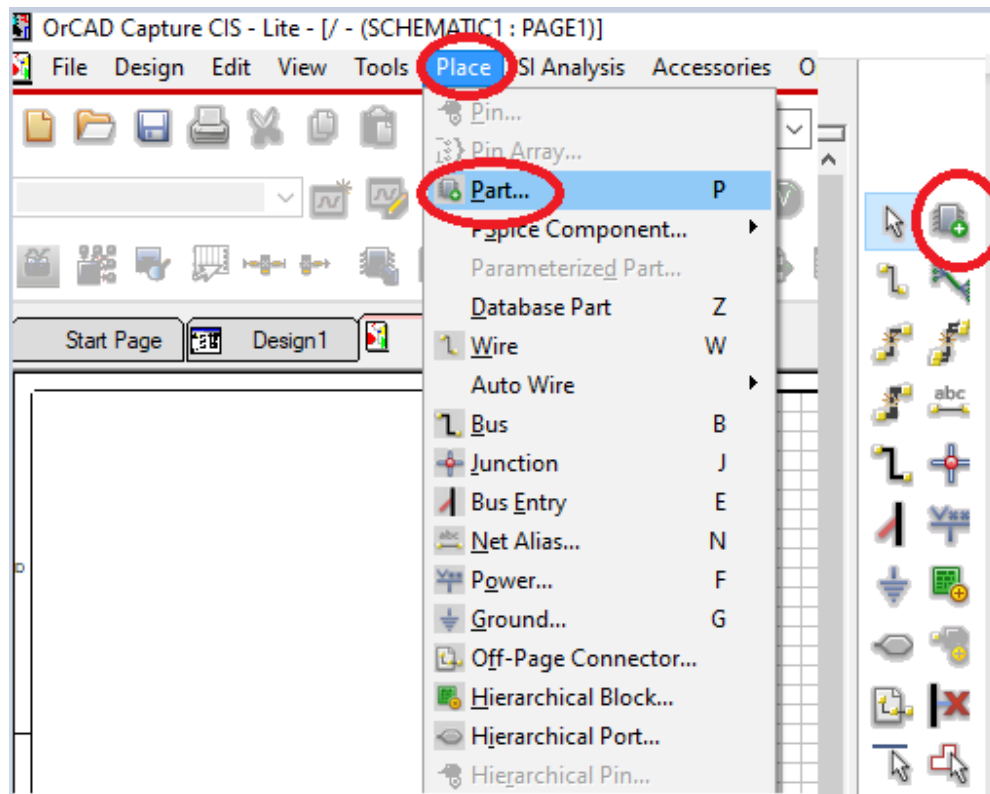


Figure 6: Navigating to the "Place Part" window using the menu (left) and using the toolbar (right).

Double click on the desired part number and place the symbol in the schematic.

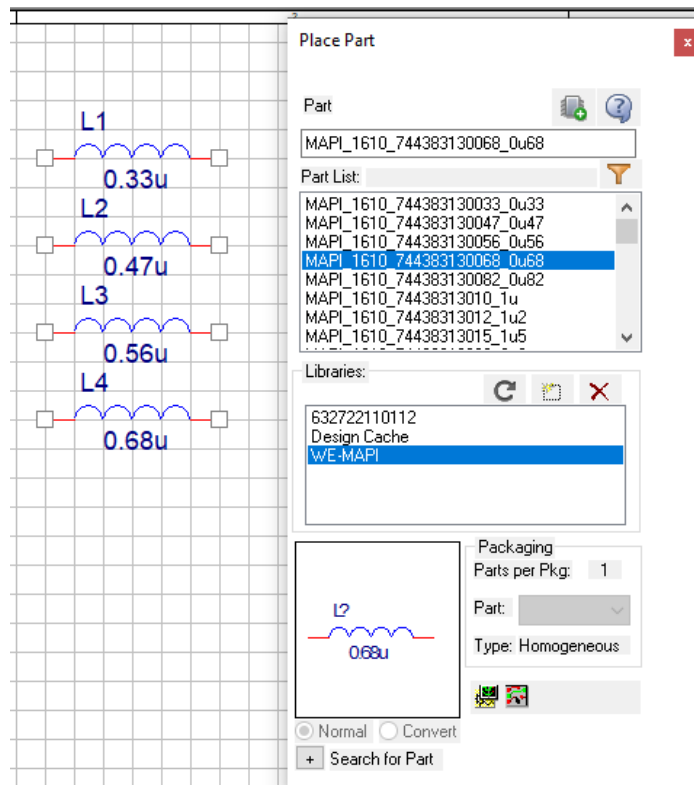


Figure 7: Place symbols in the schematic from the "Place Part" window.

Edit the properties of the symbols. selecting the symbols, double click them or click the right mouse, select "Edit Properties" to open the properties window and check the footprint information.

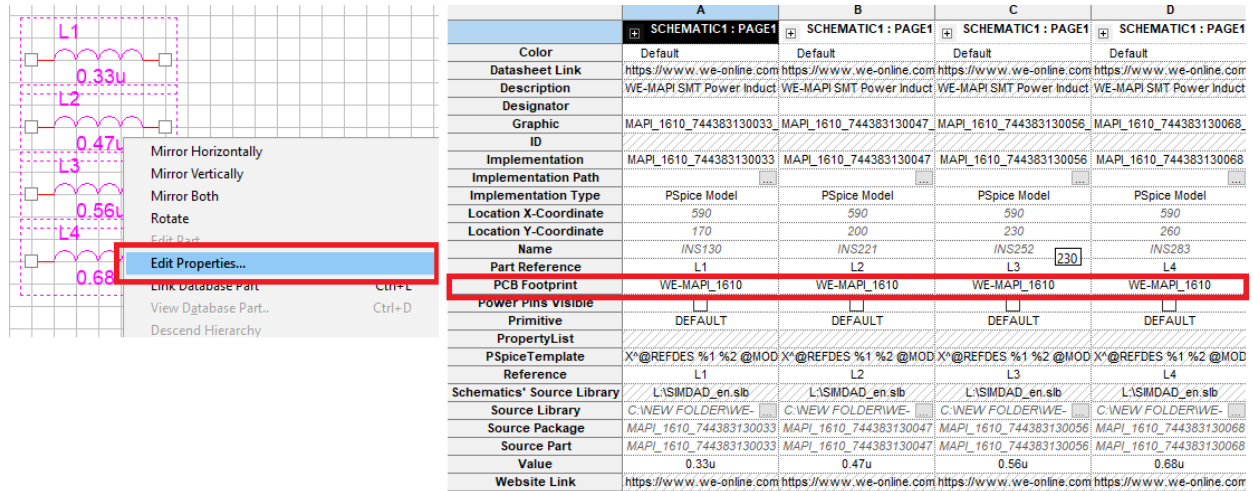


Figure 8: Information in the properties.

Copy the footprint files (*.dra,*.psm,*.pad,*.step) for the symbols from the library to below folder:

C:\Cadence\SPB_17.2\share\pcb\pcb_lib\symbols

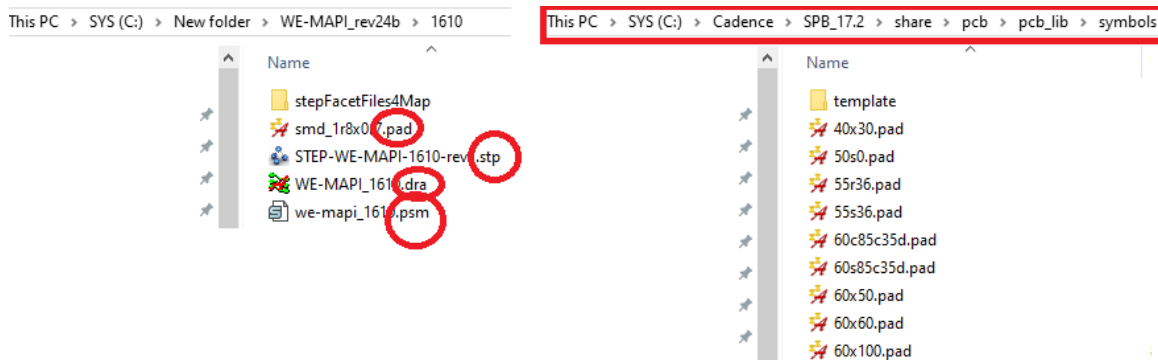


Figure 9: Copy the footprint files to Cadence.

Next, the netlist can be exported.

d. Export Netlist File

Go back to your design page, select your design, click "Tools" and select the "Create Netlist" option from the menu. The "Create Netlist" window will then open.

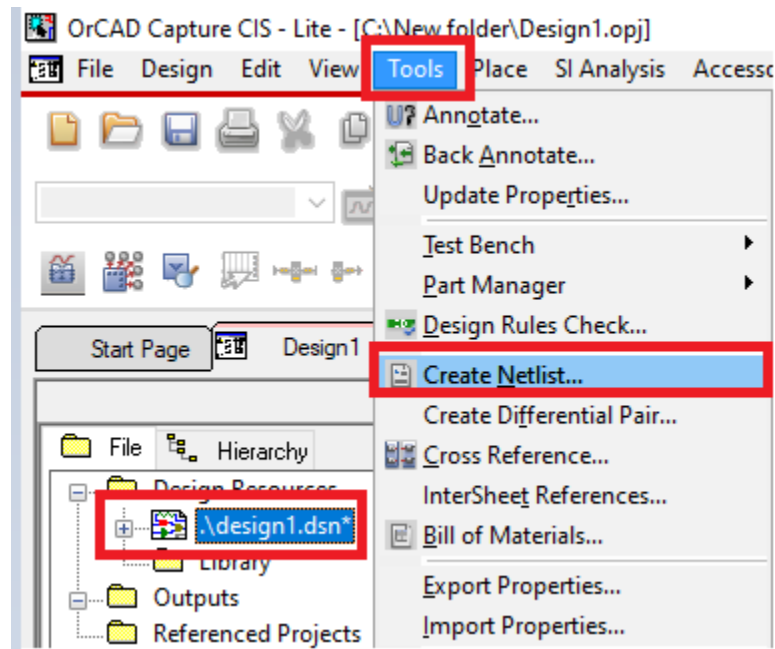


Figure 10: Navigating to the "Create List" menu options.

In the "Create Netlist" window, make sure "Create PCB Editor Netlist" is selected, click "Create or update PCB Editor Board (Netrev)", change the board name if you want, click "Open Board in OrCAD PCB Editor", then click "OK" button. Click "Yes" in the new Pop-up window and the Click "OK" for the second Pop-up window.

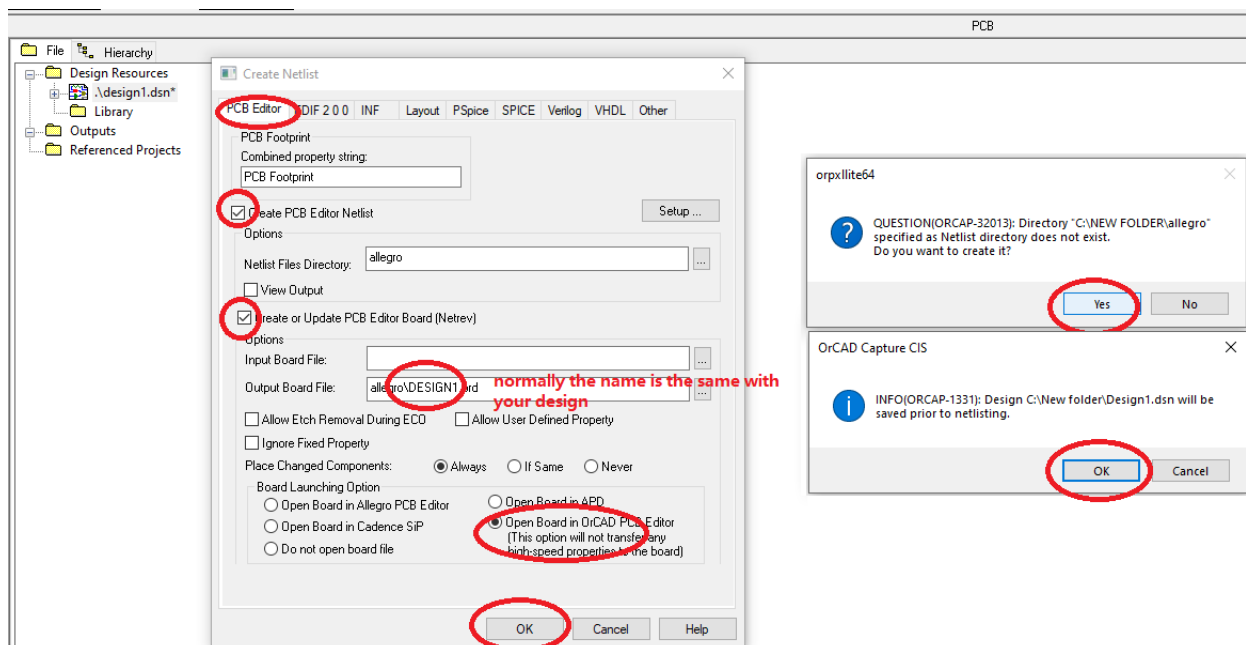


Figure 11: Navigating the "Create List" window.

In this way, you can create and open a new board directly.

If the process goes well, we can get three files "pstxnet.dat", "pstxprt.dat", "pstchip.dat", and two folders named "allegro" and "signoise.run" in the same folder as your design is saved. The files, "pstxnet.dat", "pstxprt.dat", "pstchip.dat" are all saved automatically in the "allegro" folder.

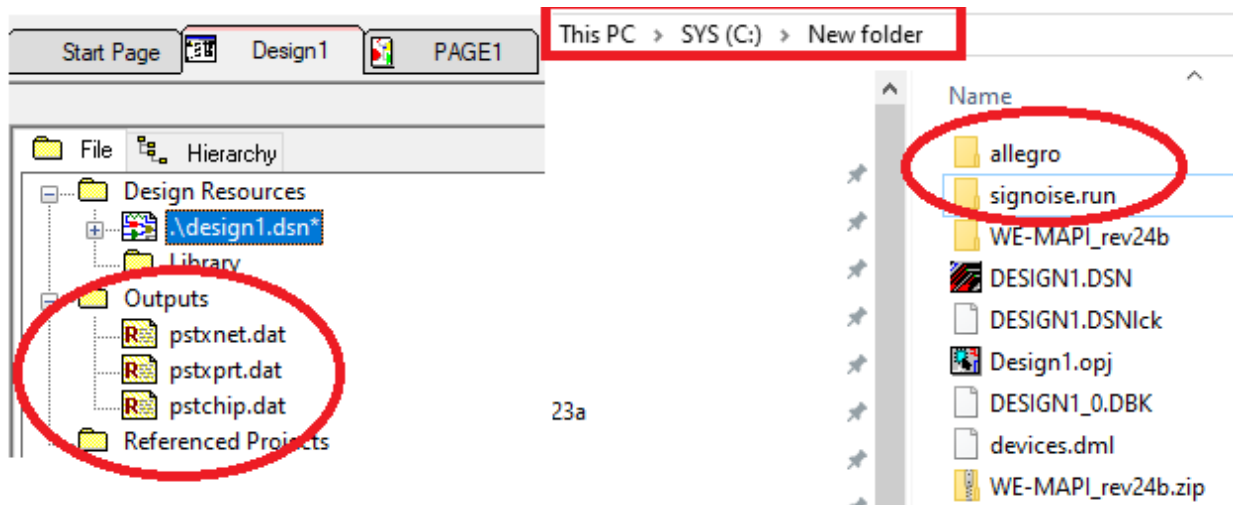


Figure 12: Netlist files and saved location.

e. Import Netlist File

Open the board directly or run the "OrCAD PCB Editor" to create a new board, the *.brd" file. Click "Import" tab and select "Netlist" option, then "Import Logic" window will be open. Click "import logic type" according to your need, you can choose "Design entry CIS (Capture)". The most important point is to change the "Import directory" to the directory where your netlist files are saved.

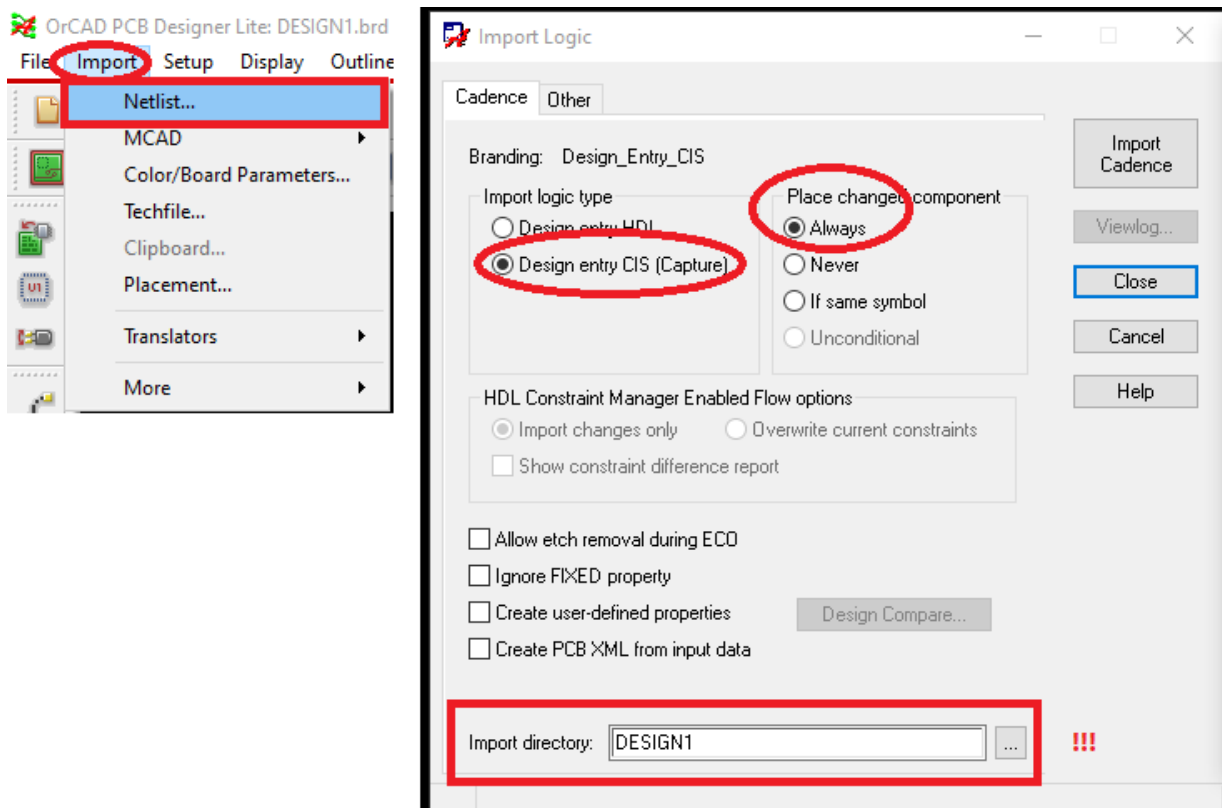


Figure 13: Navigating to the "Import Logic" menu options.

Click the "..." button on the right of the "Import directory" to change the path of the netlist files saved, open the browser window, choose the folder named "allegro" you've just created and then click "OK".

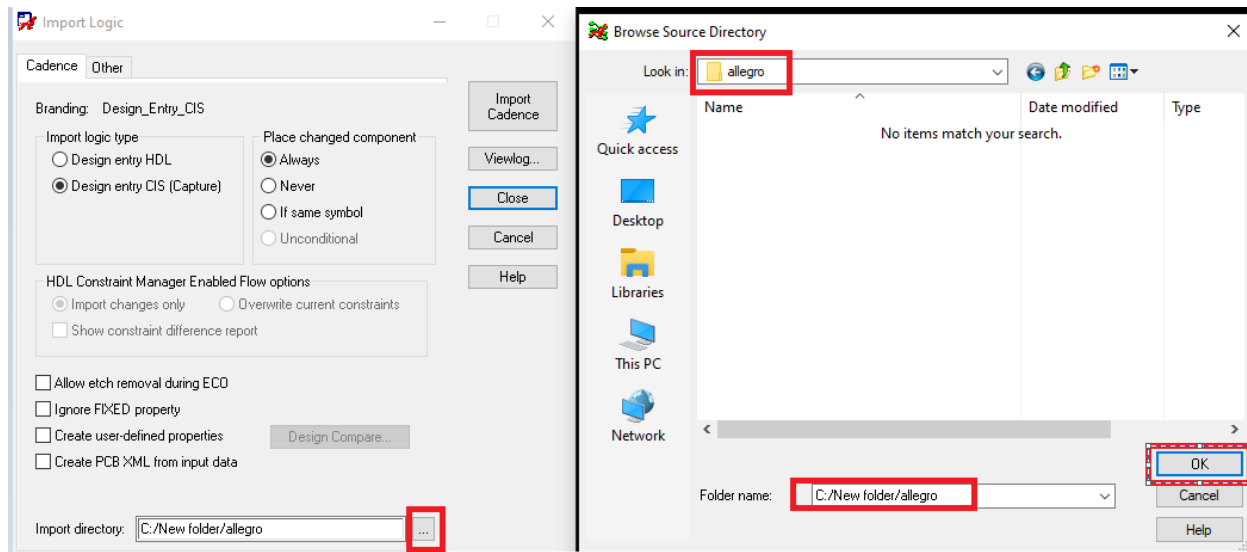


Figure 14: Navigating to find the netlist files.

Then click "Import Cadence". If there's no error information informed, it means the netlist files are imported successfully.

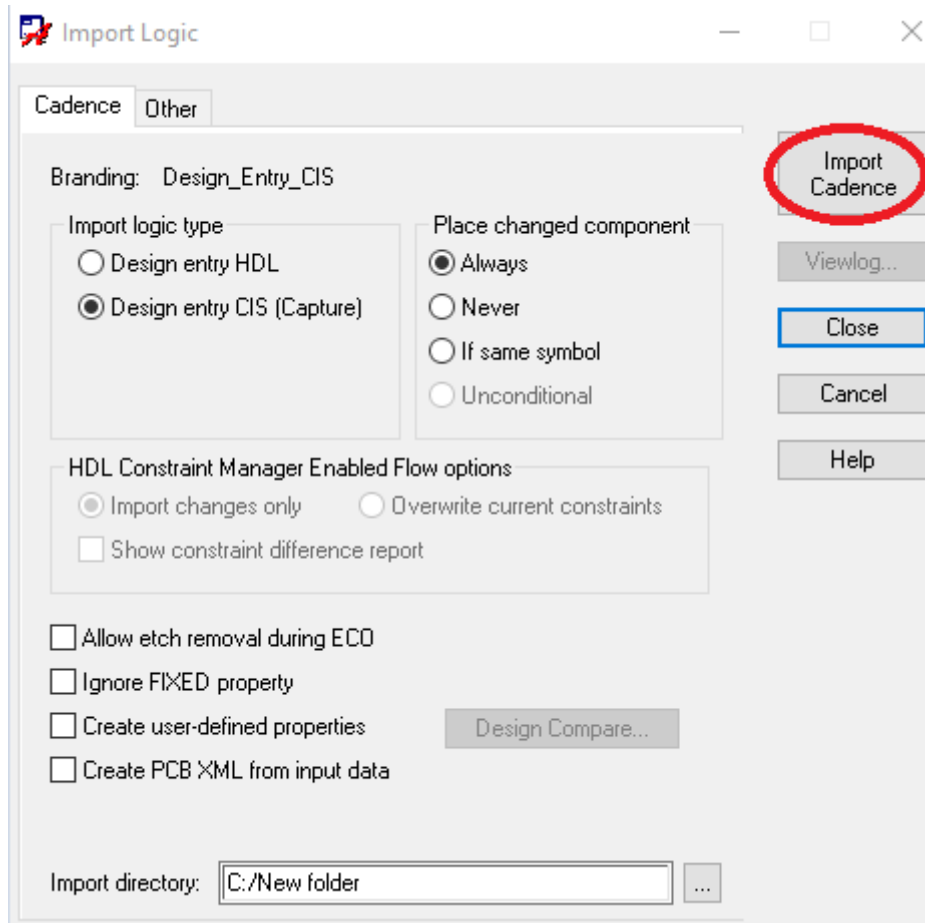


Figure 15: Import Cadence Option.

Place a footprint by clicking the "Placement" bar to open the "Placement" window and click a component to add it to the board.

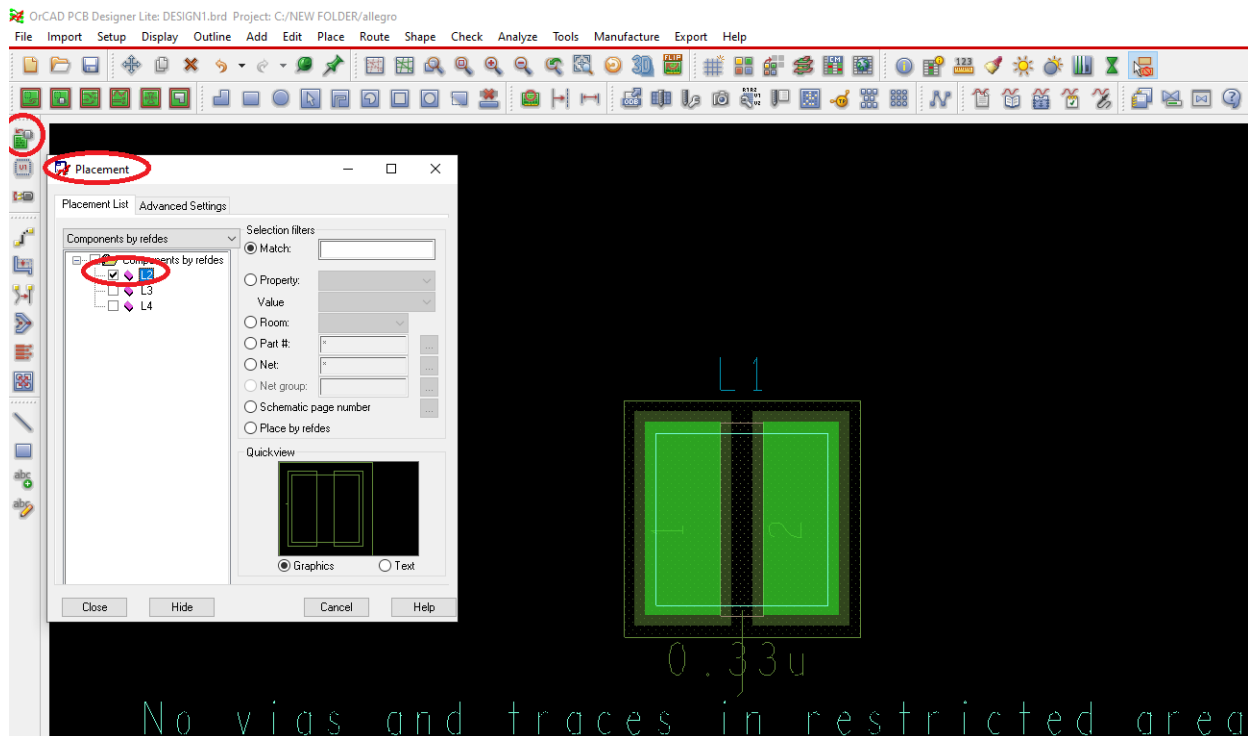


Figure 16: Add Components to board.

3. INSTALL FROM GITHUB REPOSITORY

a. 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.

b. Clone the Library

From GitHub Desktop, click the button “Clone a repository from the Internet...”.

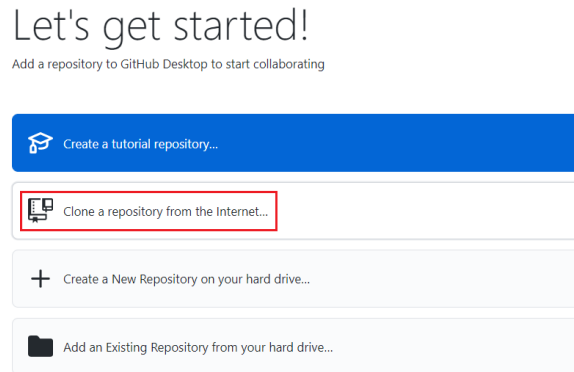


Figure 17: Clone a repository from the Internet.

Enter the URL of Würth Elektronik OrCAD Library repository: <https://github.com/WurthElektronik/CadenceLibrary.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.

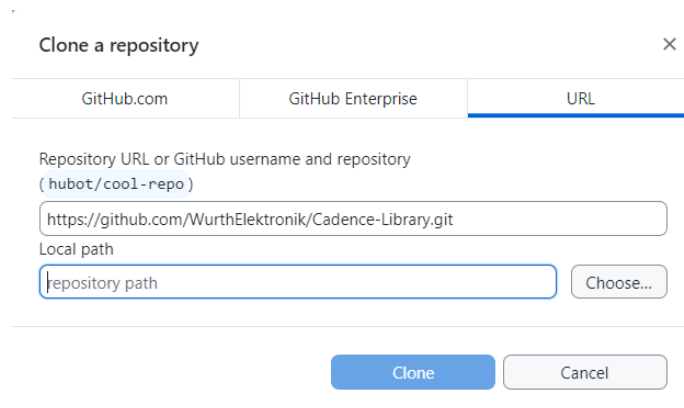


Figure 18: Cloning the Würth Elektronik OrCAD Library repository to your local directory.

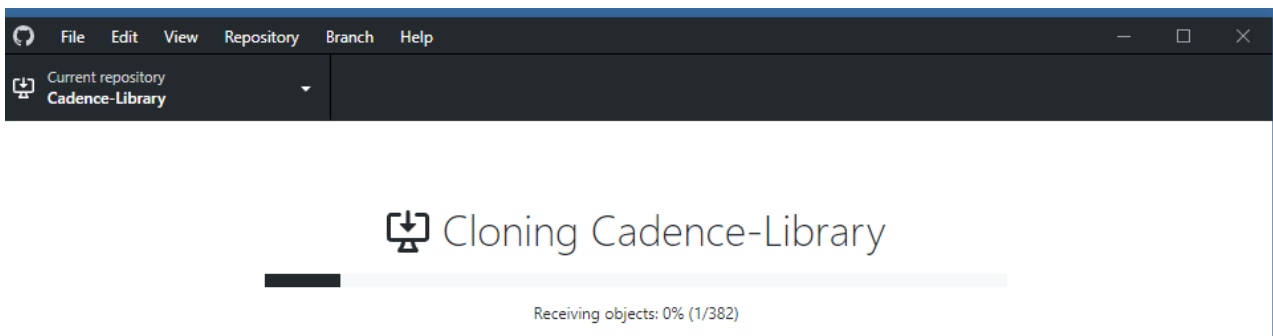


Figure 19: Cloning in progress.

c. 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.

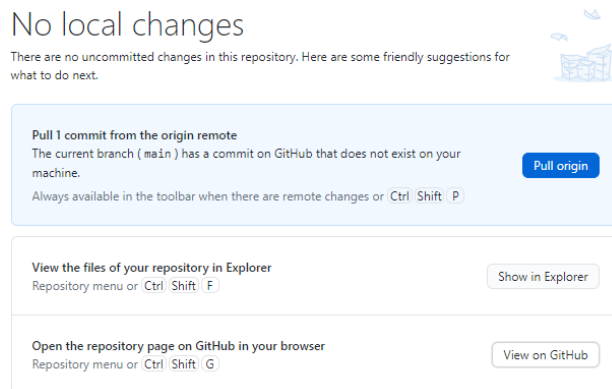


Figure 20: Pulling the repository to your local directory.

Click “View on GitHub” to explore more details of the latest updates.

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 21: View the updates on GitHub.

IMPORTANT NOTICE

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Toolbox

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Product Catalog

www.we-online.com/products

CONTACT INFORMATION



apnotes@we-online.com

Tel. +49 7942 945 - 0



Würth Elektronik eiSos GmbH & Co. KG

Max-Eyth-Str. 1 74638 Waldenburg Germany

www.we-online.com