USER MANUAL

UG00X | WE OrCAD library

Yingchun Shan

1. INTRODUCTION

Cadence 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.

Note: The following instructions pertain to Cadence 17.2-2016 Lite Version.

2. INSTALLING THE LIBRARIES

2.1 Downloads from Würth Homepage

Download WE latest OrCAD library from the Würth Elektronik homepage:

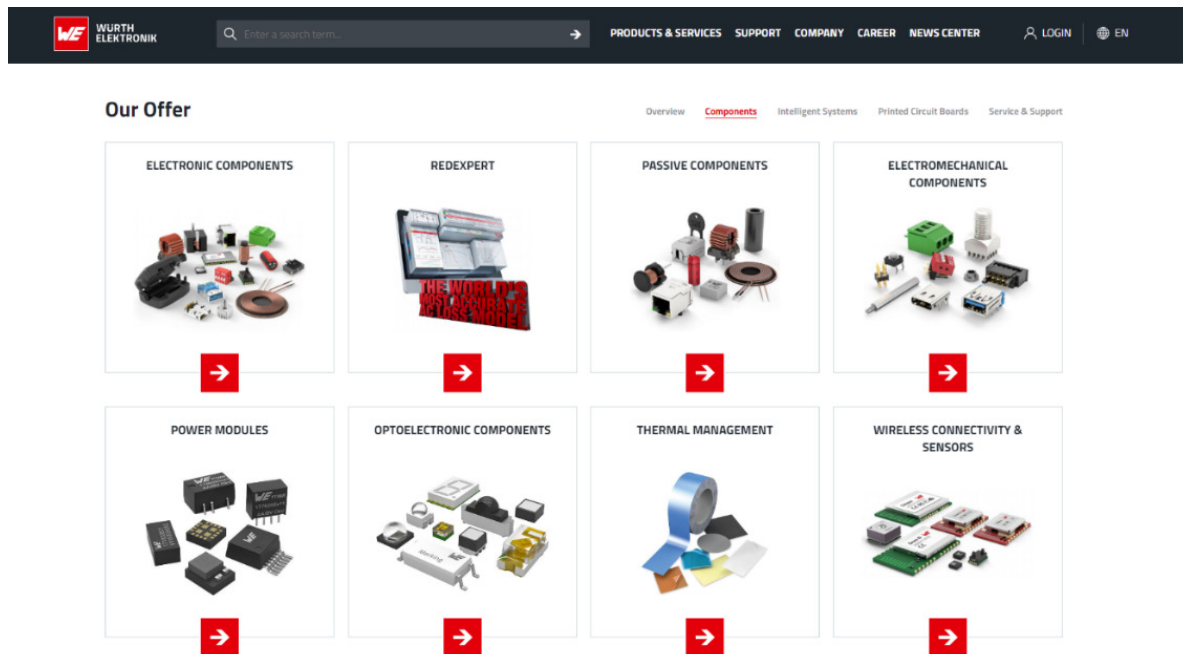Browse www.we-online.com >> Components >> Find the product unit according to the catalog.

Figure 1: Würth Elektronik homepage
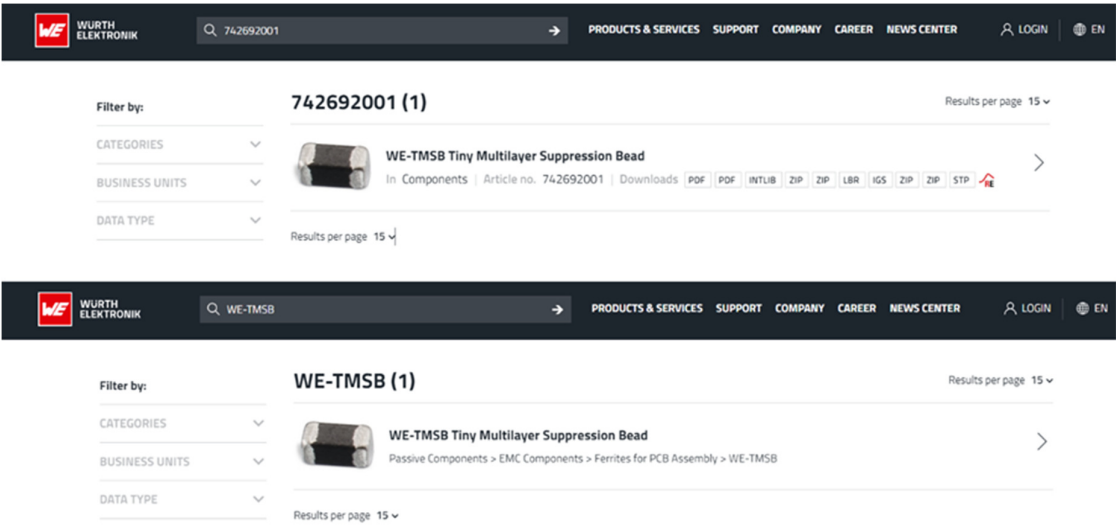
Or enter a search term such as part number or series.

Figure 2: Search part number or series

Enter Product series page >> expand the Downloads dropdown for the desired part number >> click Eagle file to download it.
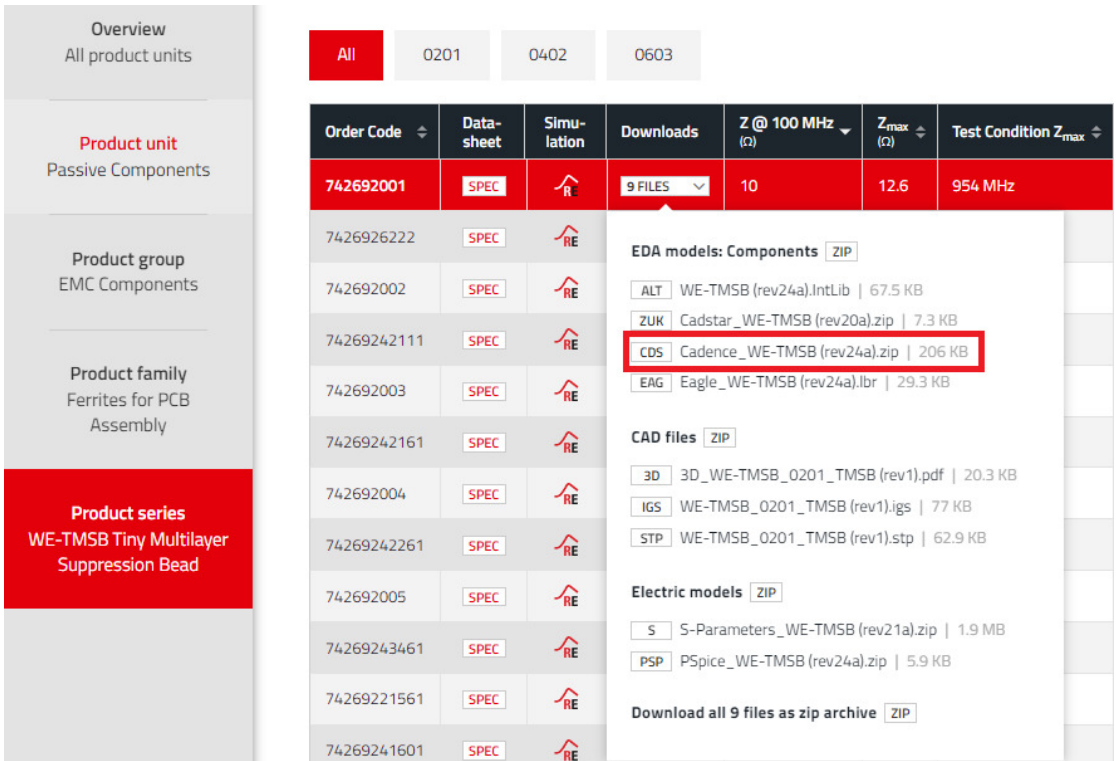

Figure 3: Download OrCAD libraries on Würth Homepage

2.2 Save the Libraries

Save the *.zip file directly in the user folder and expand it to the folder.
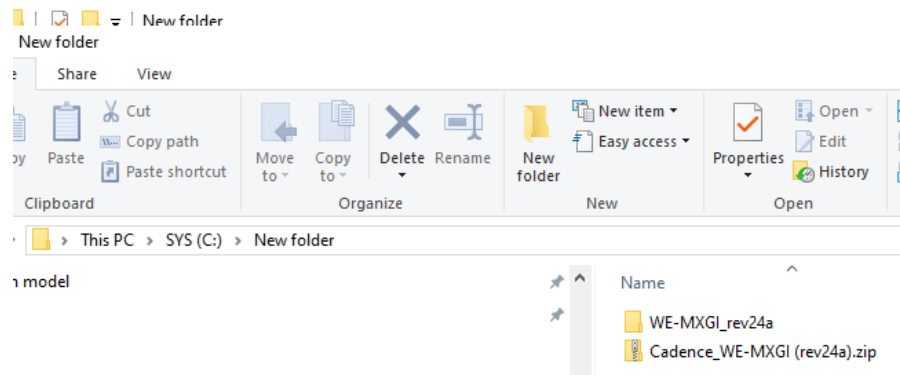Note: We OrCADlibraries are always provided by the "ZIP" format

Figure 4 Save OrCAD libraries in your folder

2.3 Install the symbols

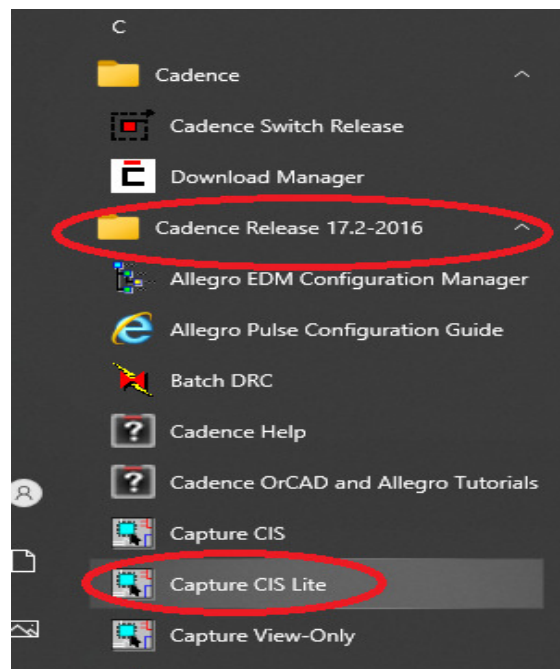Open Capture CIS(Lite) and create a new design

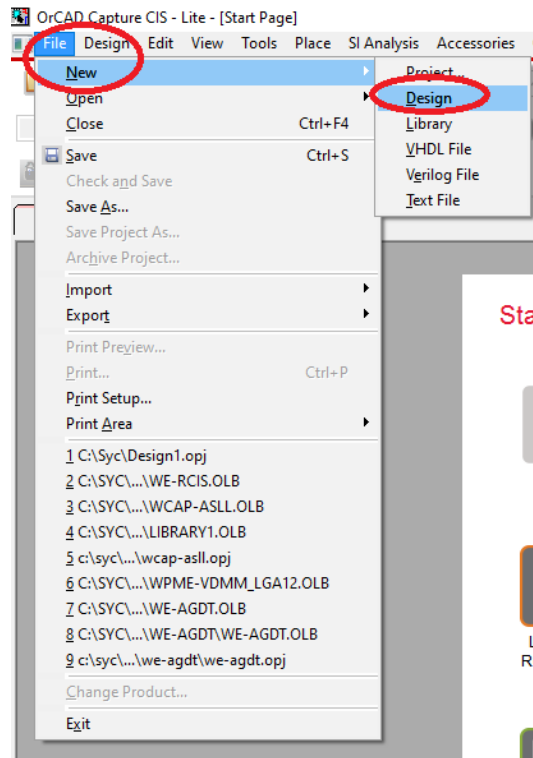

Figure 5 Open Capture

Figure 6 Create New Design

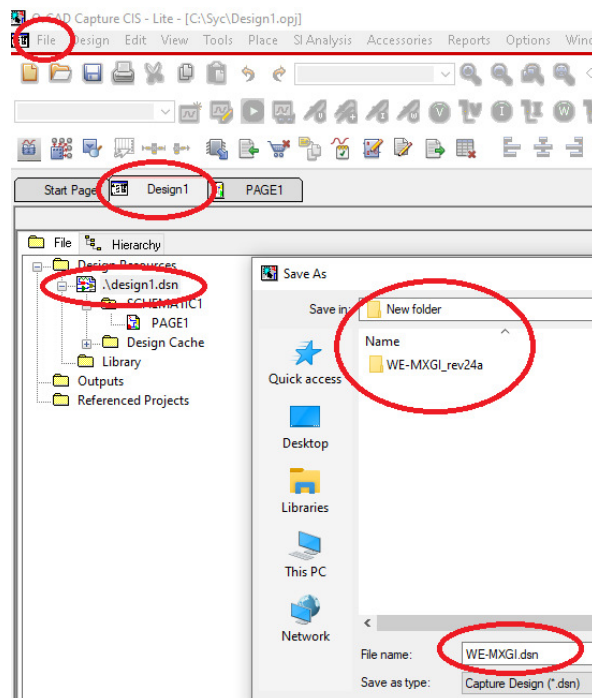Save .dsn file to user folder and rename it.

Figure 7 Save New Design and Rename the New Design

Add WE OrCAD library in the design, choose the part you need and add it, there're two ways you can choose.
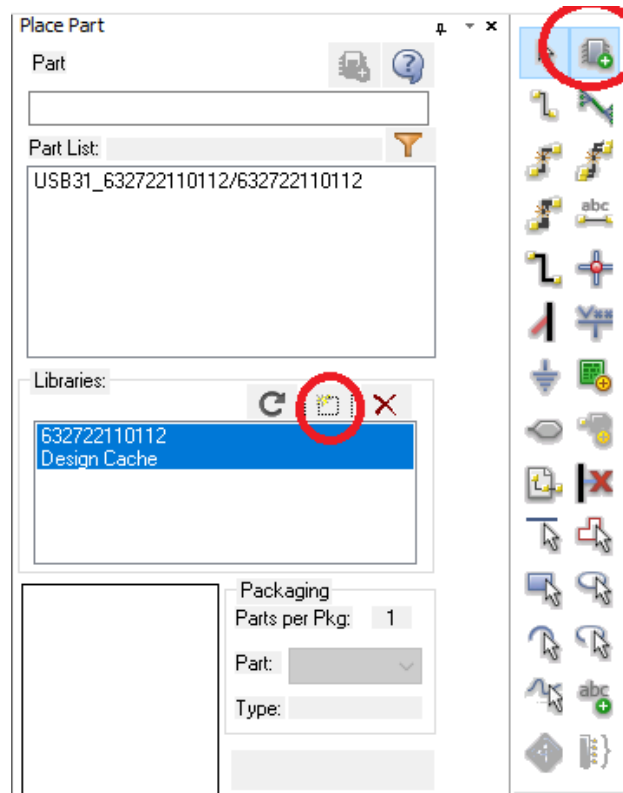

Figure 8 Place OrCAD library Way1

or

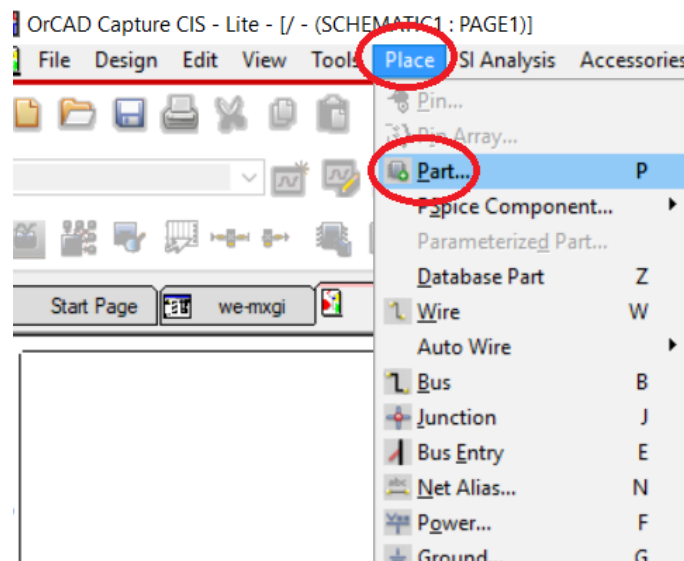
Figure 9 Place OrCAD library Way2
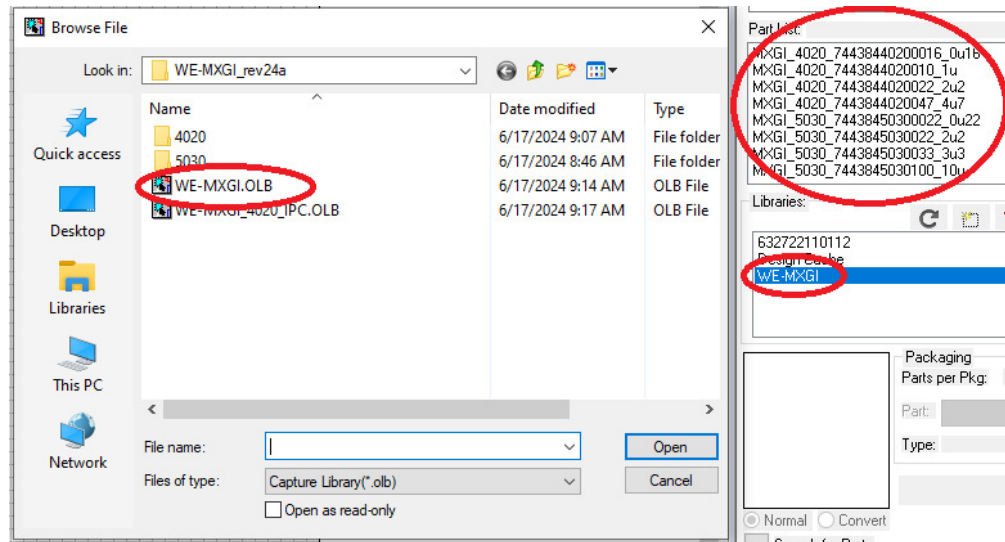
Figure 10 Place OrCAD library Parts

Then the library is installed in your design, you can start your schematic.

2.4 Export the netlist
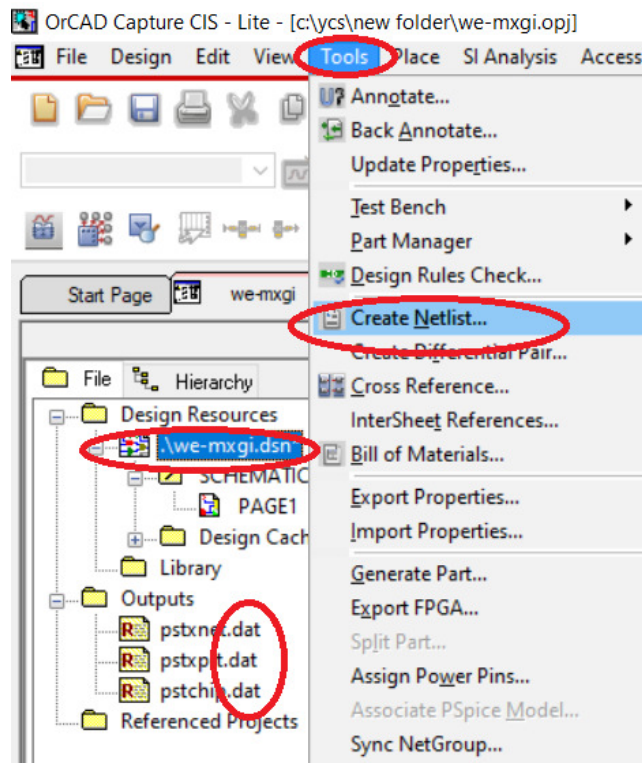
Figure 11 Create the .dat files
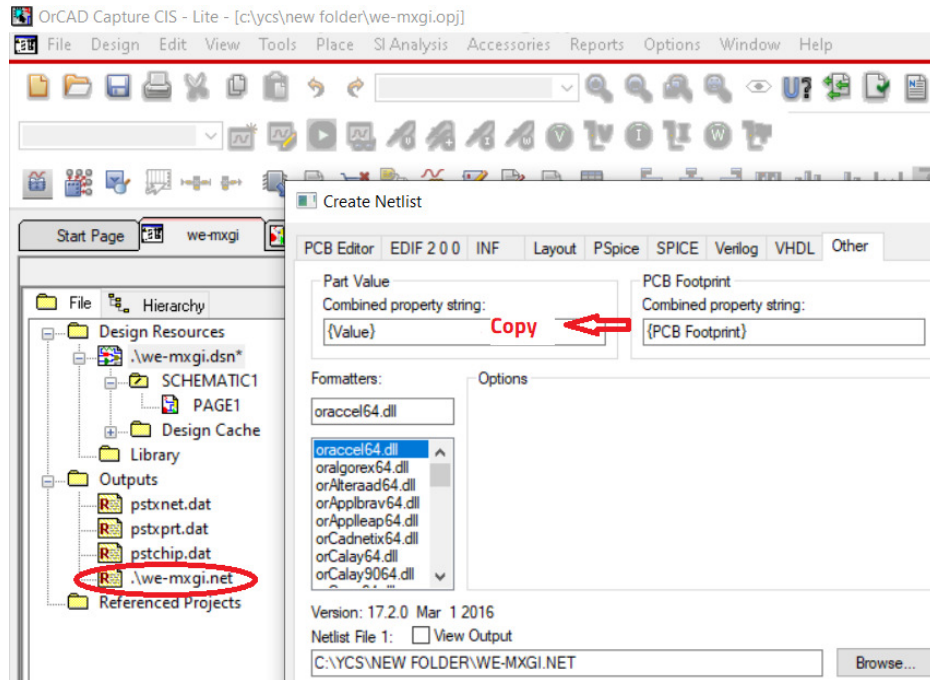
Figure 12 Create .Net File

2.5 Important Footprint

Copy footprint files to below folder: C:\Cadence\SPB_17.2\share\pcb\pcb_lib\symbols
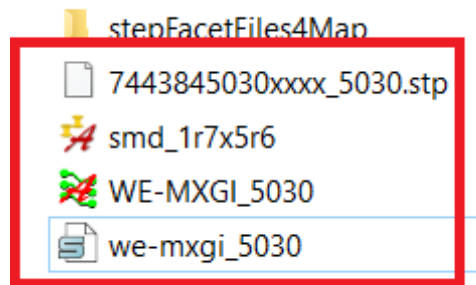
Figure 13 Files needed to copy

Figure 14 Copy files to this folder

Open PCB Editor and create new Board

Figure 15 Open PCB Lite

Import the Netlist

Figure 16 Import Netlist

Put Footprint to the PCB layout

Figure 17Choose footprint

OrCAD Library is installed to your Board.

2.6 Update Libraries

Making sure to click the "Refresh" button after changing the pad dimensions
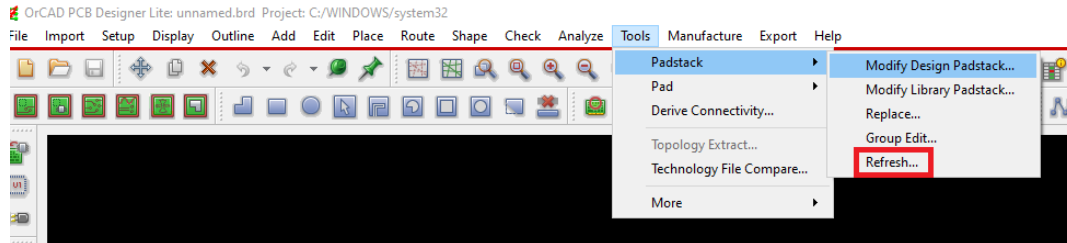
Figure 18 Refresh button in pcb editor

3.INSTALL FROM GITHUB REPOSITORY

3.1Install GitHub Desktop

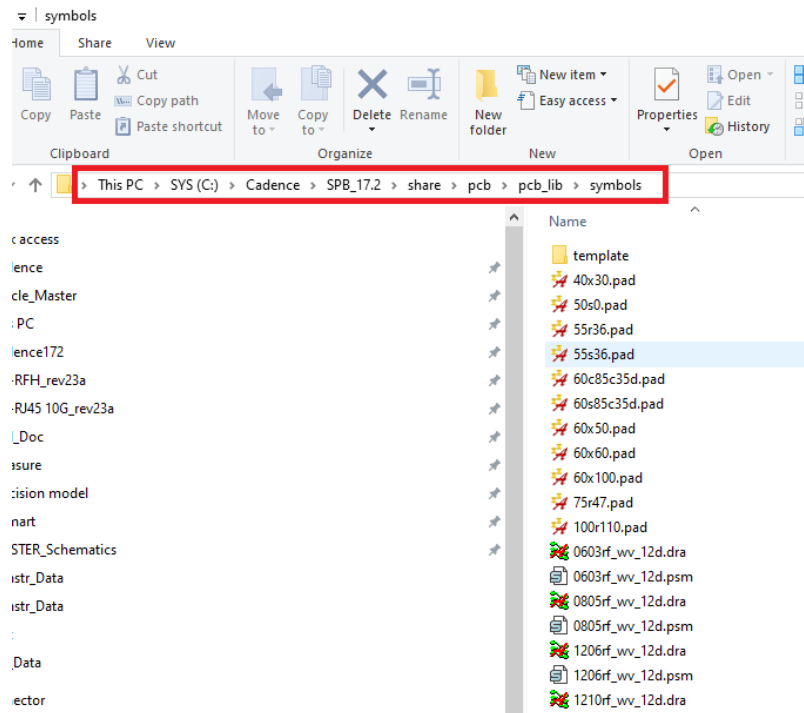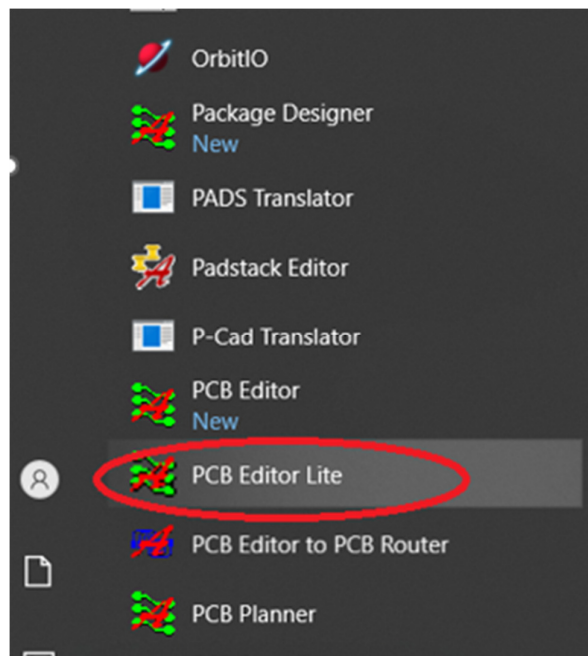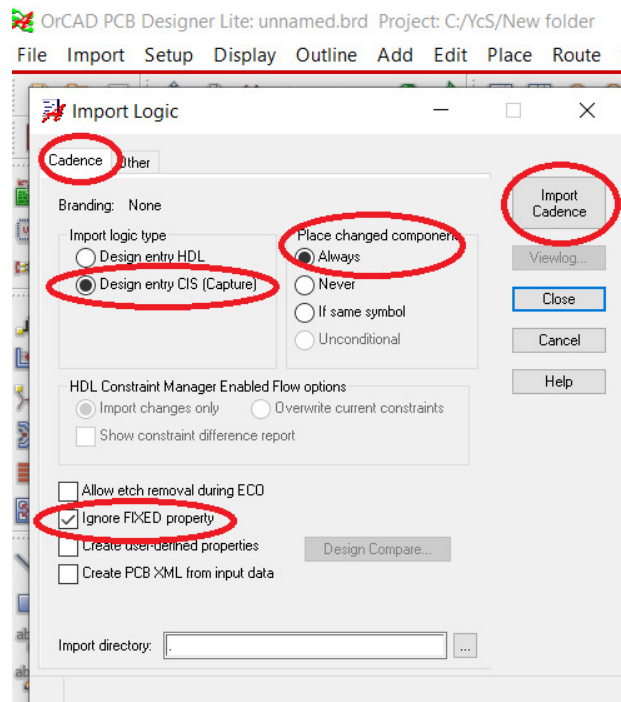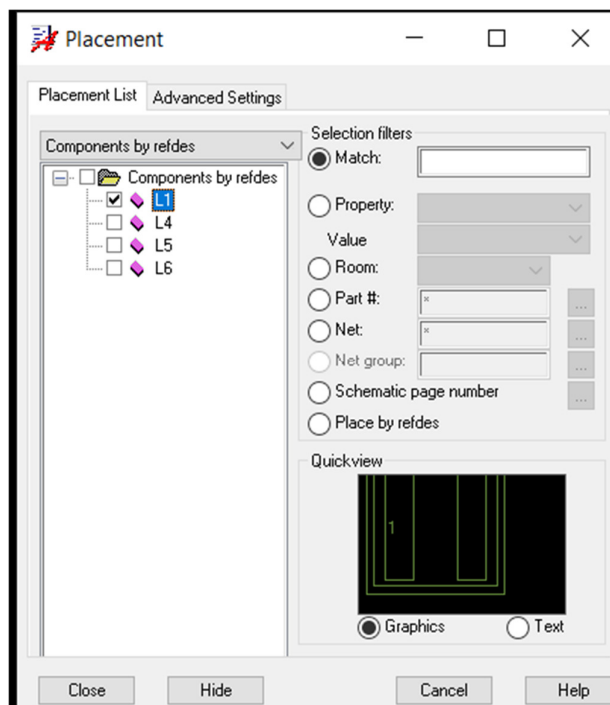GitHub Desktop is the most user-friendly tool for working with GitHub projects, and we recommend you use it for keeping your library files up to date.

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 the opening GitHub Browser webpage authenticate yourself and give permission to the GitHub desktop application. Then the process jumps back to the Desktop tool/application.

3.2 Clone the Library

From GitHub Desktop, click the button Clone a repository from the Internet as shown in the following screen in Figure19.
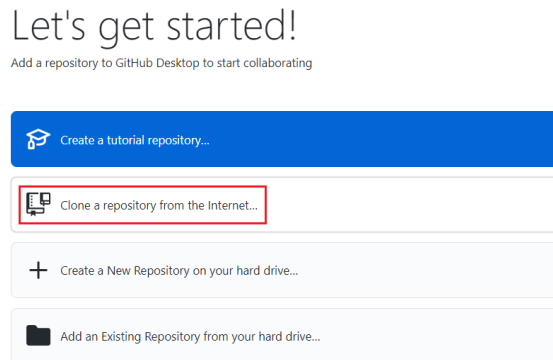
Figure 19 Clone a repository from the Internet

Enter the URL of Würth Elektronik Eagle Library repository https://github.com/WurthElektronik/Cadence-Library.git and define the local directory to clone the repository.
Then click the Clone button, all the files from the online repository will begin to synchronize into local.
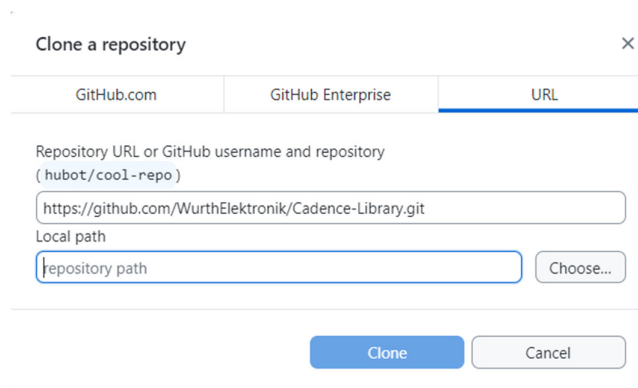
Figure 20 Clone setup

Cloning repository will take some time.

3.3 Synchronize Local Library from GitHub

If there is update in GitHub repository, GitHub Desktop will detect it and you can "Pull" the update to your local. Once there's 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 local folder immediately.
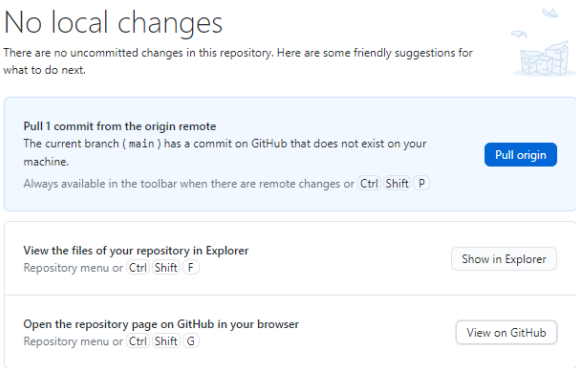
Figure 21 Local repository update option

Click **View on GitHub** to explore more details of the latest updates.
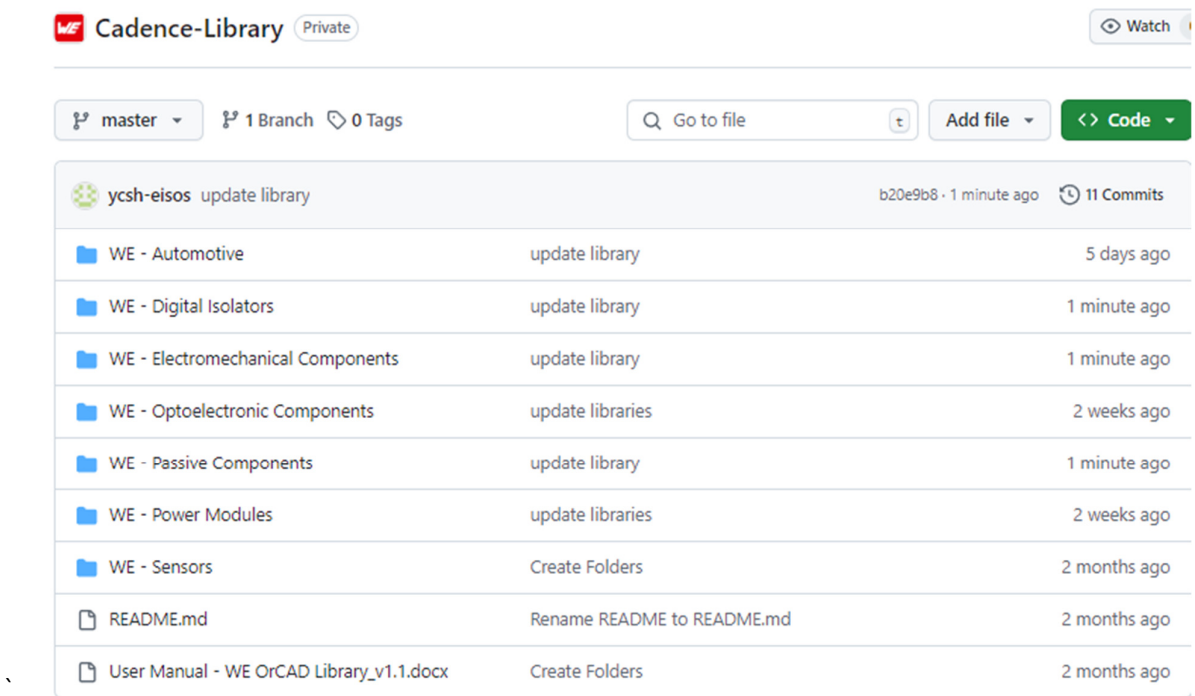
Figure 22 View the updates on GitHub

IMPORTANT NOTICE

The Application Note is based on our knowledge and experience of typical requirements concerning these areas. It serves as general guidance and should not be construed as a commitment for the suitability for customer applications by Würth Elektronik eiSos GmbH & Co. KG. The information in the Application Note is subject to change without notice. This document and parts thereof must not be reproduced or copied without written permission, and contents thereof must not be imparted to a third party nor be used for any unauthorized purpose.

Würth Elektronik eiSos GmbH & Co. KG and its subsidiaries and affiliates (WE) are not liable for application assistance of any kind. Customers may use WE's assistance and product recommendations for their applications and design. The responsibility for the applicability and use of WE Products in a particular customer design is always solely within the authority of the customer. Due to this fact it is up to the customer to evaluate and investigate, where appropriate, and decide whether the device with the specific product characteristics described in the product specification is valid and suitable for the respective customer application or not.

The technical specifications are stated in the current data sheet of the products. Therefore the customers shall use the data sheets and are cautioned to verify that data sheets are current. The current data sheets can be downloaded at www.we-online.com. Customers shall strictly observe any product-specific notes, cautions and warnings. WE reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services.

WE DOES NOT WARRANT OR REPRESENT THAT ANY LICENSE, EITHER EXPRESS OR IMPLIED, IS GRANTED UNDER ANY PATENT RIGHT, COPYRIGHT, MASK WORK RIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT RELATING TO ANY COMBINATION, MACHINE, OR PROCESS IN WHICH WE PRODUCTS OR SERVICES ARE USED. INFORMATION PUBLISHED BY WE REGARDING THIRD-PARTY PRODUCTS OR SERVICES DOES NOT CONSTITUTE A LICENSE FROM WE TO USE SUCH PRODUCTS OR SERVICES OR A WARRANTY OR ENDORSEMENT THEREOF.

WE products are not authorized for use in safety-critical applications, or where a failure of the product is reasonably expected to cause severe personal injury or death. Moreover, WE products are neither designed nor intended for use in areas such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc. Customers shall inform WE about the intent of such usage before design-in stage. In certain customer applications requiring a very high level of safety and in which the malfunction or failure of an electronic components could endanger human life or health, customers must ensure that they have all necessary expertise in the safety and regulatory ramifications of their applications. Customers acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of WE products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by WE. CUSTOMERS SHALL INDEMNIFY WE AGAINST ANY DAMAGES ARISING OUT OF THE USE OF WE PRODUCTS IN SUCH SAFETY-CRITICAL APPLICATIONS

USEFUL LINKS

Application Notes
www.we-online.com/appnotes

REDEXPERT Design Platform
www.we-online.com/redexpert

Toolbox
www.we-online.com/toolbox

Product Catalog
www.we-online.com/products

CONTACT INFORMATION

appnotes@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