USER GUIDE

UGxxx | Using the Eagle Libraries

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1. INTRODUCTION

EAGLE is electronic design automation (EDA) software that lets printed circuit board (PCB) designers seamlessly connect schematic diagrams, components placement, PCB routing, and comprehensive library content.

Würth Elektronik has created Eagle libraries for most of our components, which allows Eagle users to easily design schematic and layout and view 3D model before producing PCB. Although all our models are pre-installed in the Eagle Managed Libraries, sometimes it is necessary to manually install Eagle Libraries in the local folders. Our libraries are available on these platforms: Würth Elektronik homepage, Eagle Managed Libraries and GitHub repository.

Note: The following instructions pertain to Eagle versions 9.0.1 or greater. Previous versions of Eagle might not support EAGLE Managed Libraries, and versions below 8.0.1 have some significant differences, especially the interface and the lack of the step model in the package.

2. INSTALLING THE LIBRARIES

2.1 Downloads from Würth Homepage

All our latest Eagle libraries can be downloaded from the Würth Elektronik homepage.

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

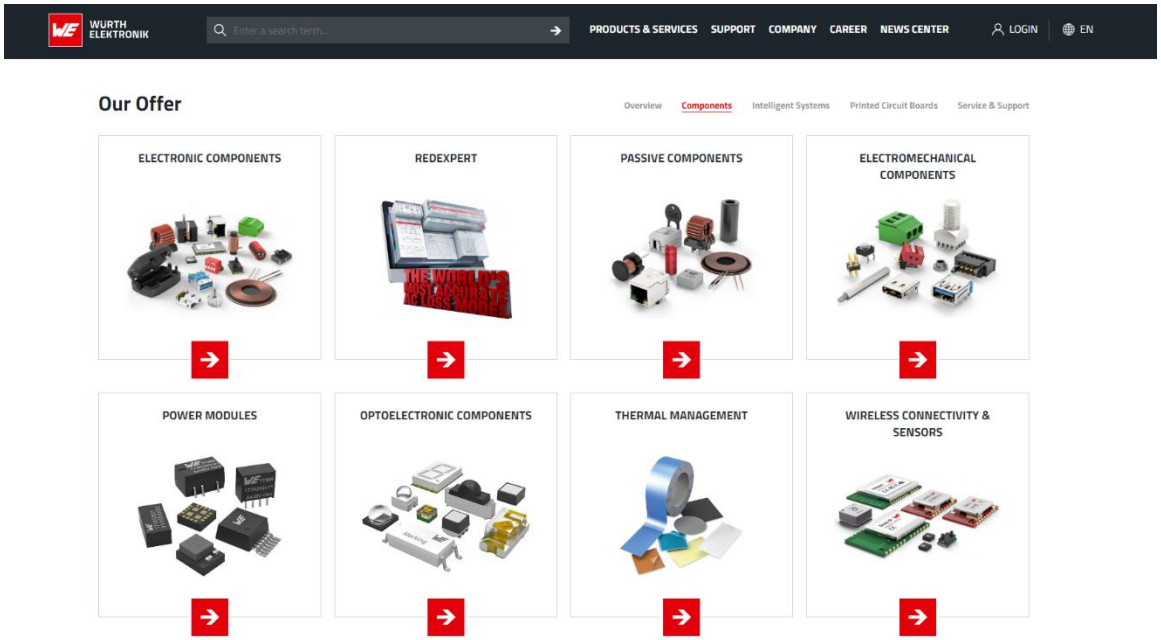

Figure 1: Würth Elektronik homepage

Or enter a search term such as part number or series.

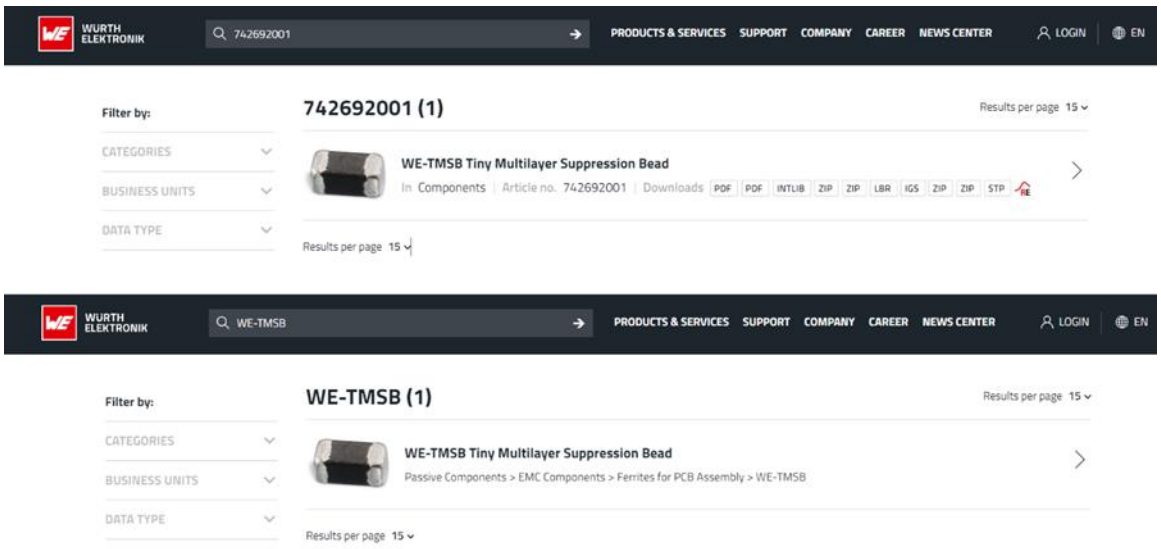

Figure 2: Search part number or series

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

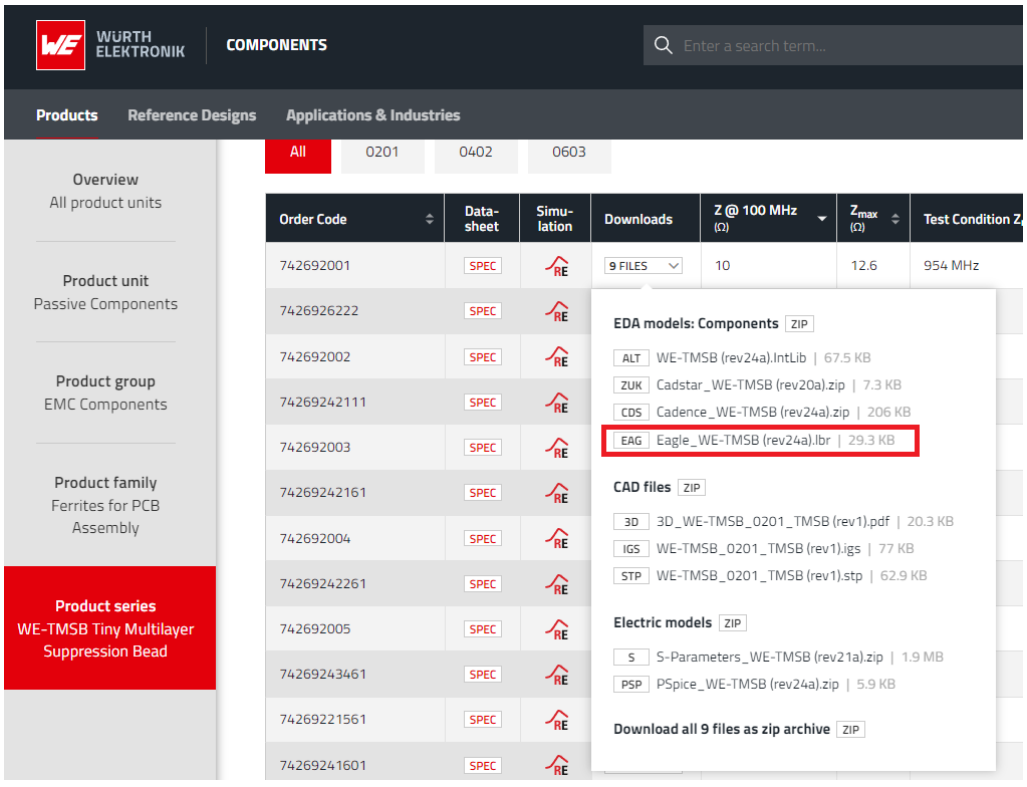

Figure 3: Download Eagle libraries on Würth Homepage

2.2 Save the Libraries

Note: This step is optional, it is so that you can quickly find the libraries in the next step of the installation, you can skip this step to store the library files in any folder, but you need to remember the path where you store the libraries.

If the Eagle libraries is only being used in a certain schematic, the *. lbr file can be saved in the same local folder as the schematic file (*.sch) and the circuit board file(*.brd).

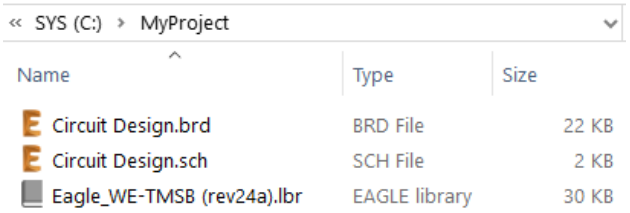

Figure 4: Model files in same folder as schematic

Or Library locations can also be defined directly in the Control Panel. (Control Panel>>Options). Under the "Directories" tab, define the location for libraries, and you can save all the Eagle libraries here.

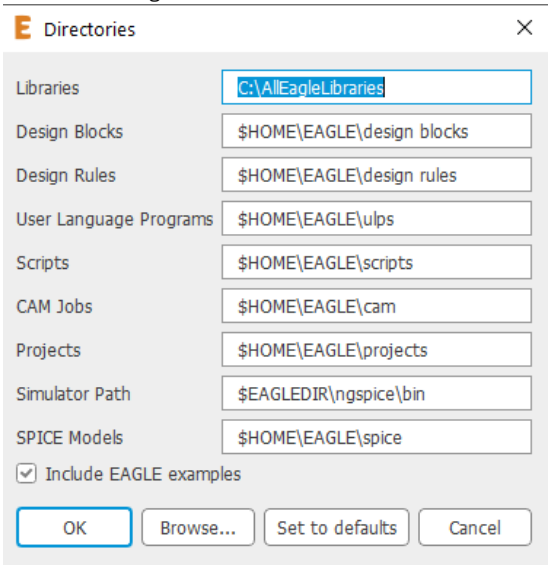

Figure 5: Define user library location

2.3 Install the Local Libraries

Run Eagle software, open or create schematic page, select Library in Toolbar >> Open library Manager >> Select In Use >> Browse the directory where the library saved >> select the library you need >> click open. Then the library is installed successfully, you can see all the installed libraries in In Use.

Note: If you define user library location in the previous step, the first time you click Browse, it will open with the path you preset.

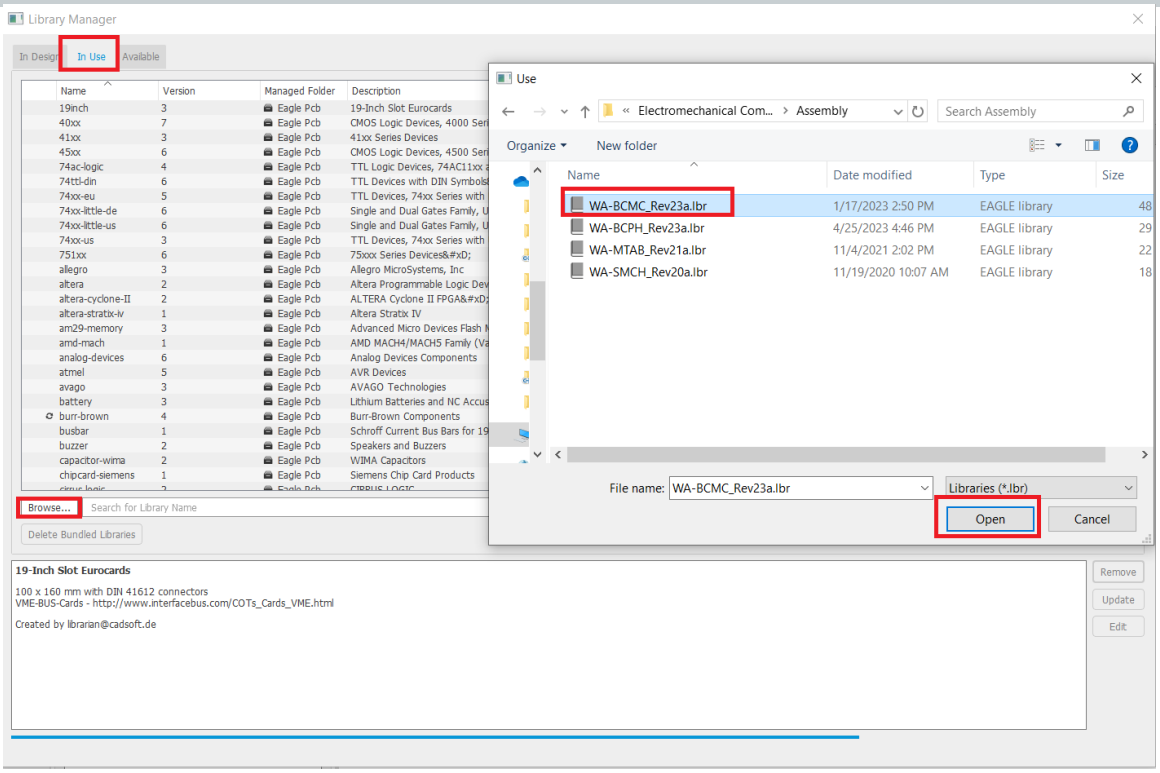

Figure 6: Install libraries in In Use

Add the symbol to your schematic by clicking the Add Part symbol from the toolbar (or type 'Ctrl+Shift +A').

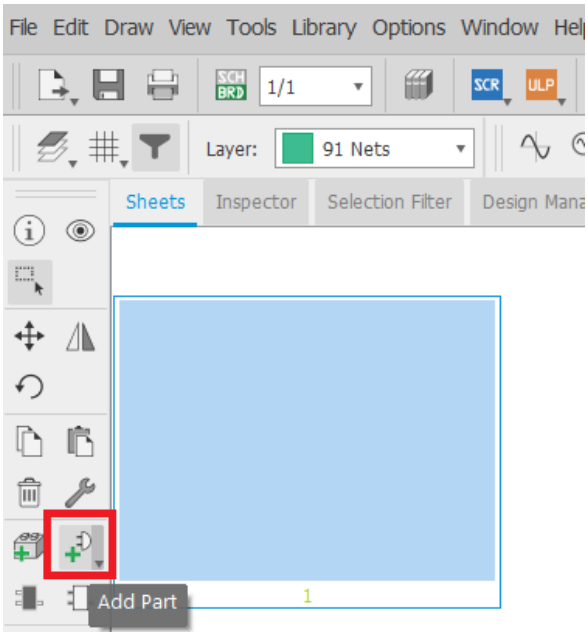

Figure 7: Add Part

Select Library and choose the part number. Or use Search and Attributes to find the components you need.

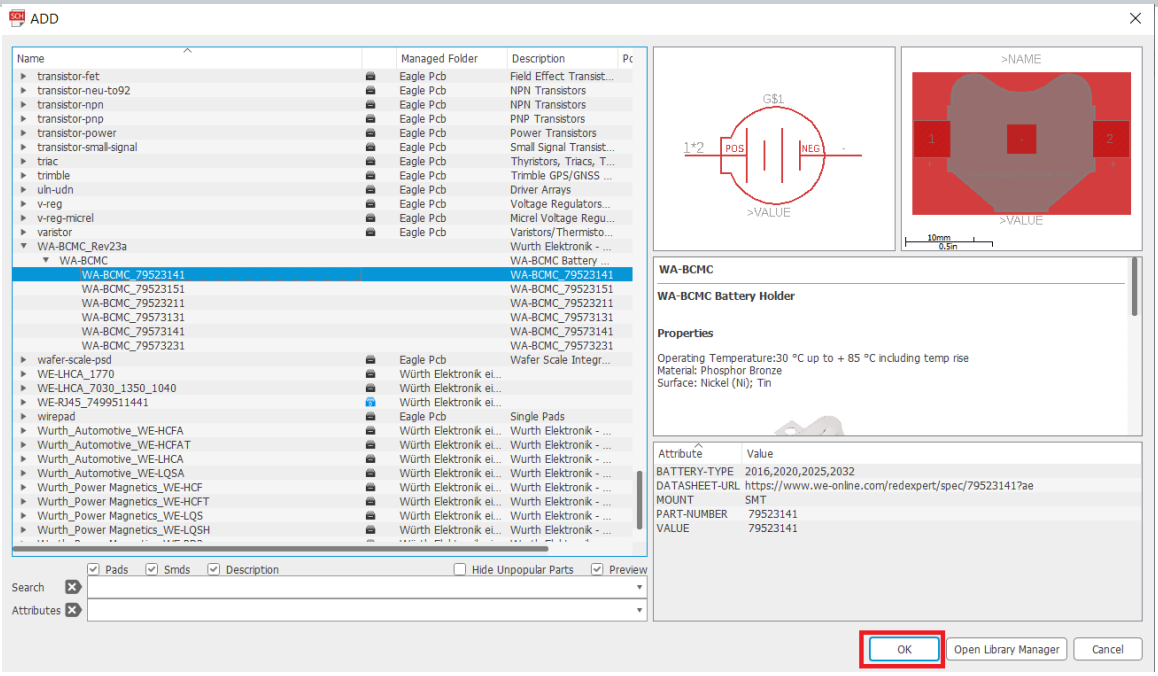

Figure 8: Select Library and choose the part number

2.4 Update the Local Libraries

Select Library in Toolbar >> Update >> Browse. the directory where the updated library saved >> select the updated library >> click open.

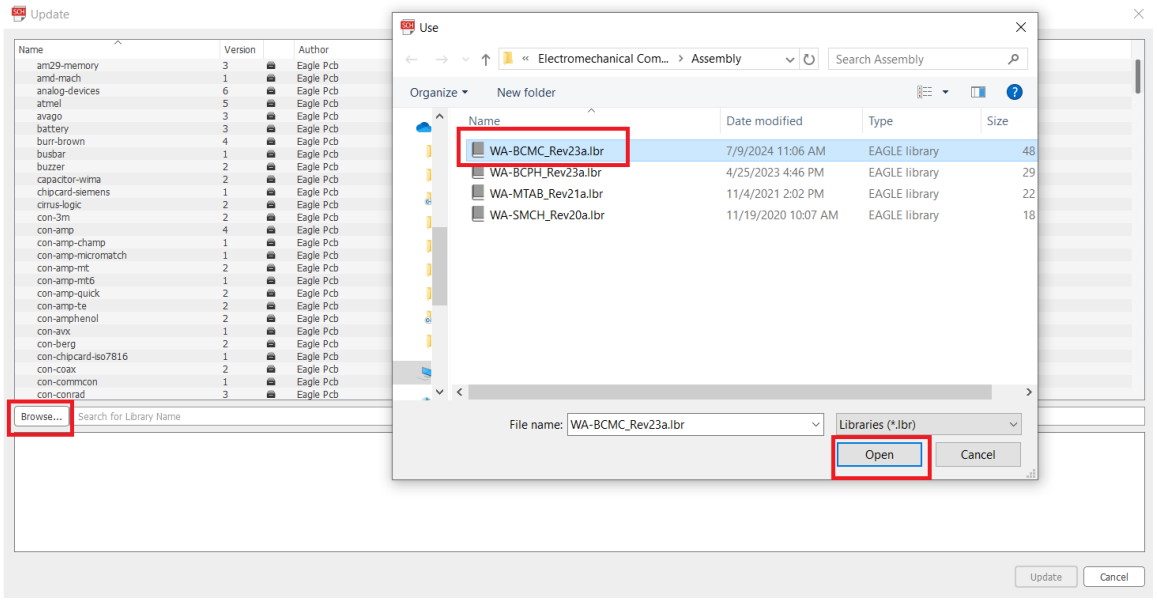

Figure 9: Update the Local Libraries

3. EAGLE MANAGED LIBRARIES

Library.io is a website provided by Autodesk, built to share, collaborate on, and store EAGLE libraries and 3D models.

EAGLE Managed Libraries are online EAGLE libraries and 3D models stored in the Managed folder of Library.io, which is available to users directly in the Eagle platform and alerts users when the library is updated.

Folder Name: Würth Elektronik eiSos GmbH & Co. KG www.we-online.com

3.1 Install Managed Libraries

On the Library Manager window, select Available >> Type "Wurth" or Series in search box >> select the library >> click Use, then you can find the library in In Use

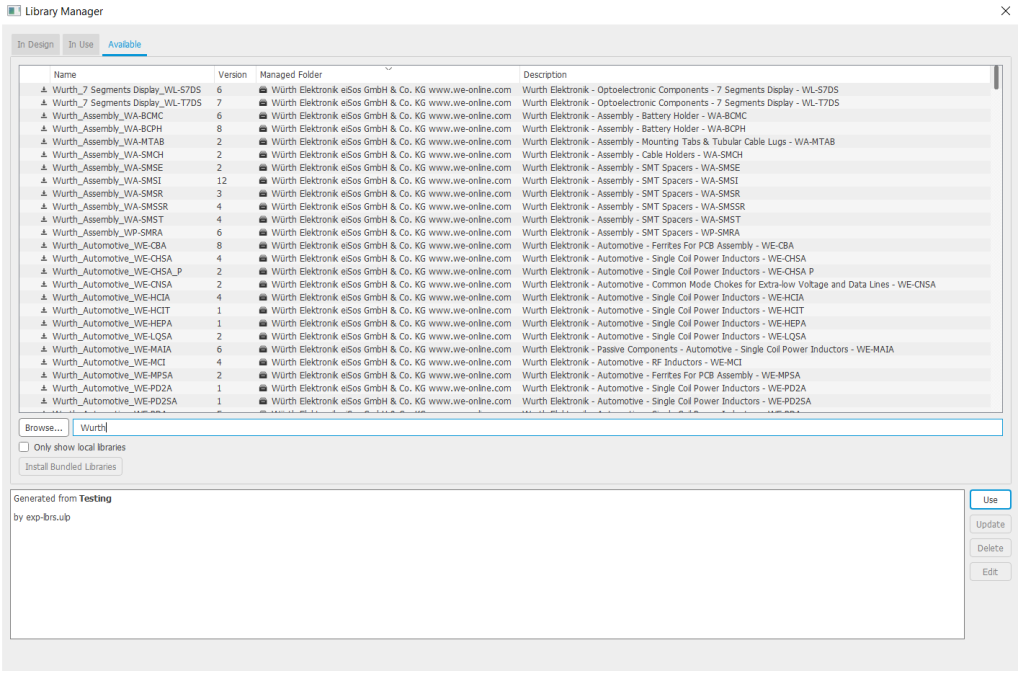

Figure 10: Search Managed Libraries

3.2 Managed Folder from Würth

On the Control Panel window, expand Libraries >> expand Libraries >> expand Managed Libraries >> expand Würth Elektronik eiSos GmbH & Co. KG www.we-online.com, all the libraries from Würth you have downloaded can be found in the folder.

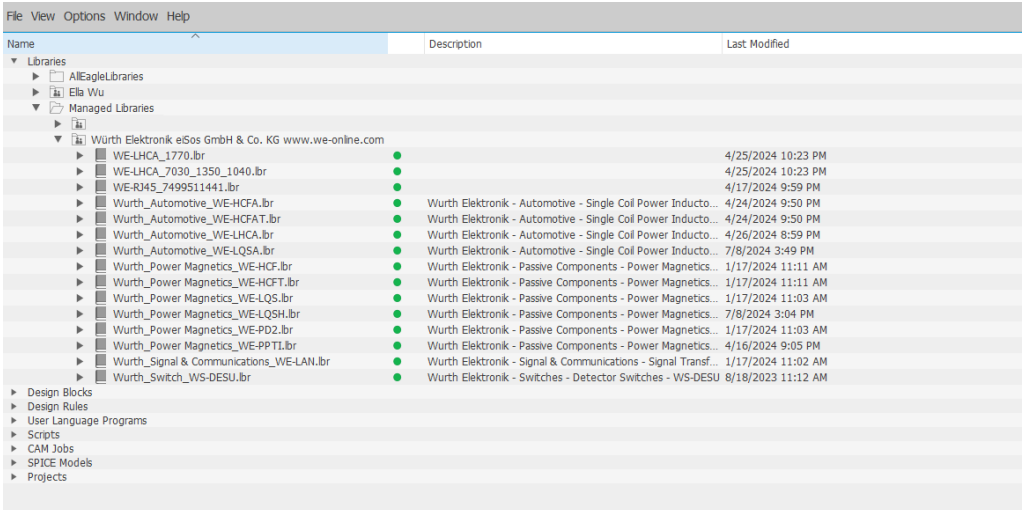

Figure 11: Managed Folder from Würth Elektronik

3.3 Update Managed Libraries

When the first column of a library has a small cyclic icon, it means that the library has been updated.

To update the libraries in use to the most recent version, on the Library Manager window, select In Design or In Use >> select the library you want to update>> click Update.

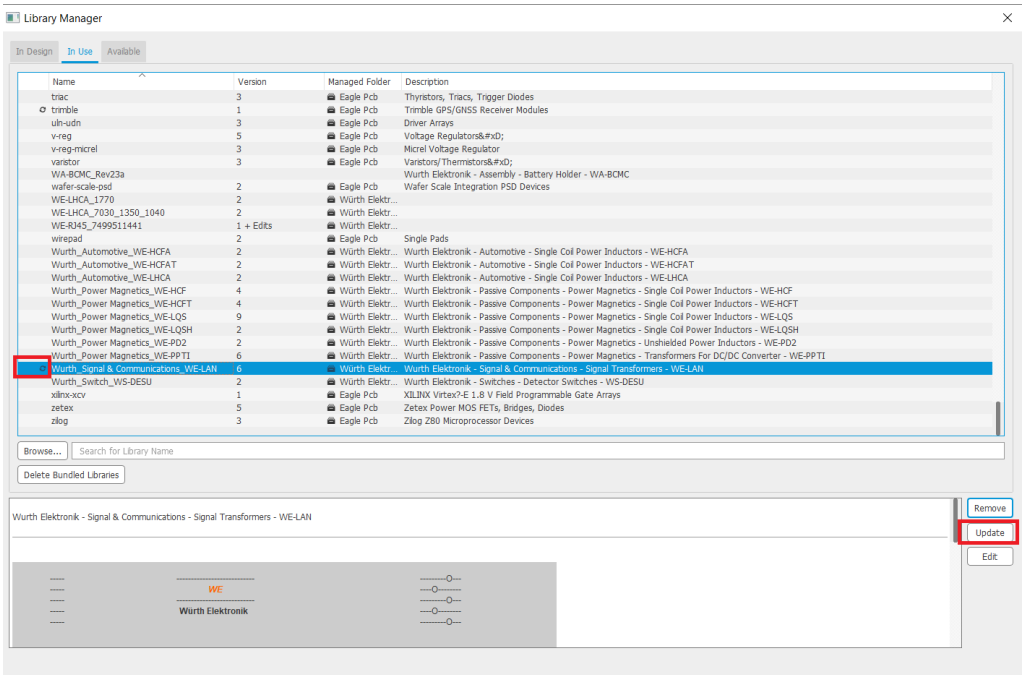

Figure 12: Update Managed Libraries

4. INSTALL FROM GITHUB REPOSITORY

4.1 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 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.

4.2 Clone the Library

From GitHub Desktop, click the button Clone a repository from the Internet as shown in the following screen in Figure13.

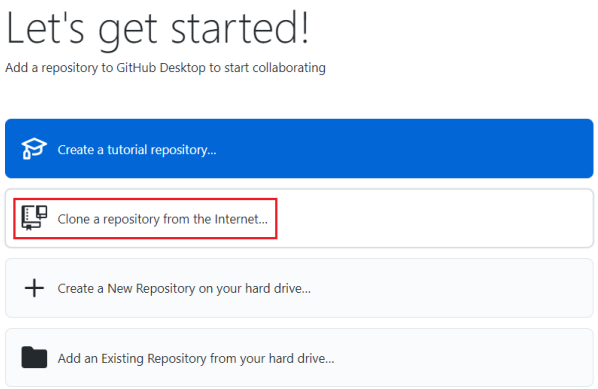

Figure 13: Clone a repository from the Internet

Enter the URL of Würth Elektronik Eagle Library repository https://github.com/WurthElektronik/Eagle-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.

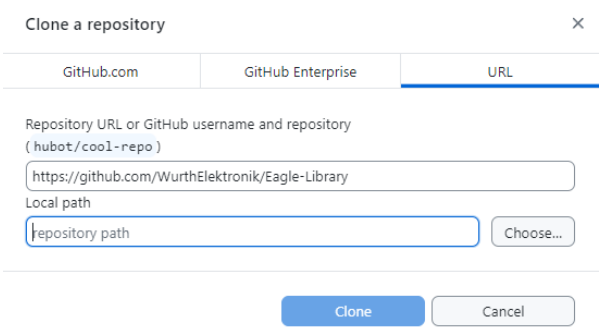

Figure 14: Clone Setup

Cloning repository will take some time.

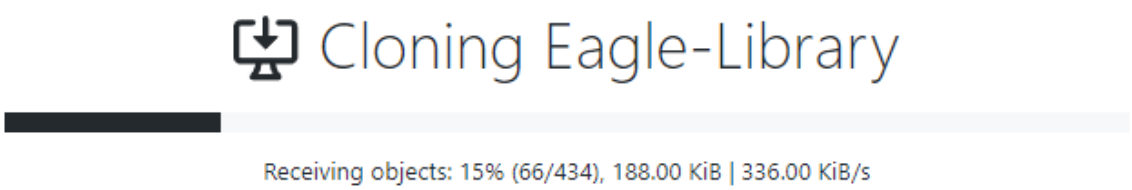

Figure 15: Clone in progress

4.3 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.

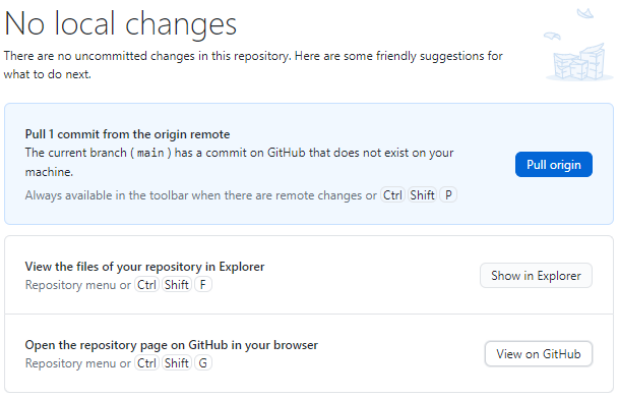

Figure 16: Local repository update option

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

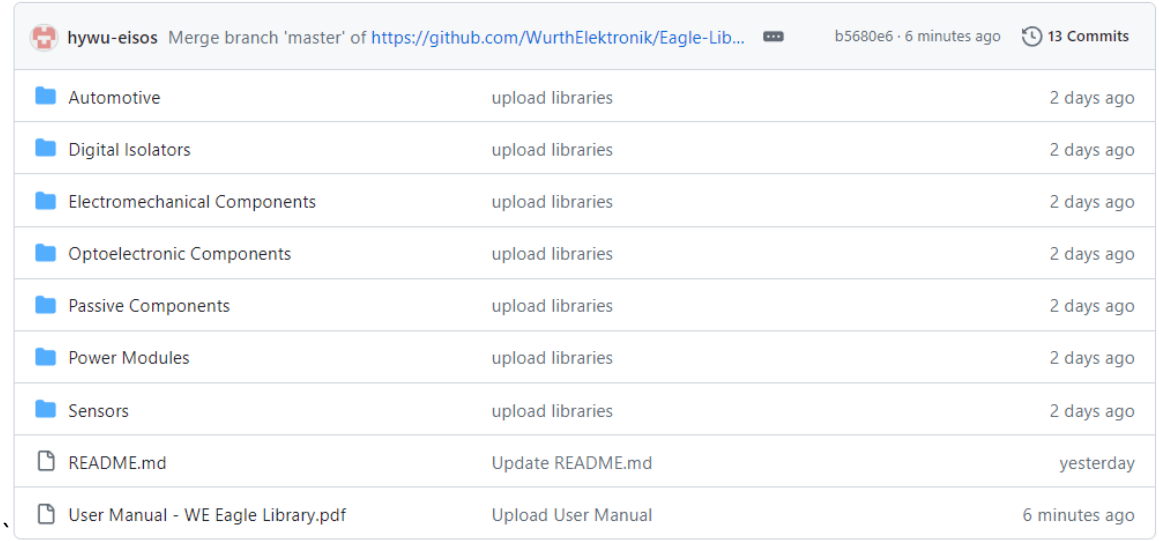

Figure 17: View the updates on GitHub

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