

USER GUIDE

UG003 | How to use the WE Altium Database Library



Baojun Chen

01. INTRODUCTION

Altium Designer is a popular Electronic Design Automation (EDA) software used for PCB designs. One of its key features is the ability to place components directly from a company database using a database library. This can be done easily from the components panel, which acts as a browser into the database after installing a database library.

Once components are placed on the PCB, design parameter information can be synchronized between the placed components and their corresponding linked records in the database. This allows for full component updates, including graphical symbols, model references, and parameters. Parametric information from the database can also be included in the final Bill of Materials (BOM), making it easy for component procurement.

The Würth Elektronik Altium database library is constantly adding new footprints and symbols. To keep up to date with the database data, we recommend to use a Git tool to allow easy cloning of the library files.

02. 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.

03. CLONE THE LIBRARY

From GitHub Desktop, click the button **Clone a repository from the Internet** as shown in the following screen in Figure 1.

Let's get started!

Add a repository to GitHub Desktop to start collaborating

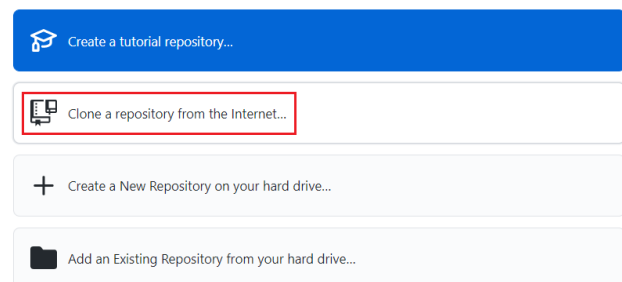


Figure 1: Clone a repository from the Internet

On the popup window, go to URL panel in Figure 2, enter the URL of Würth Elektronik Altium Database Library repository <https://github.com/WurthElektronik/Altium-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 to local.

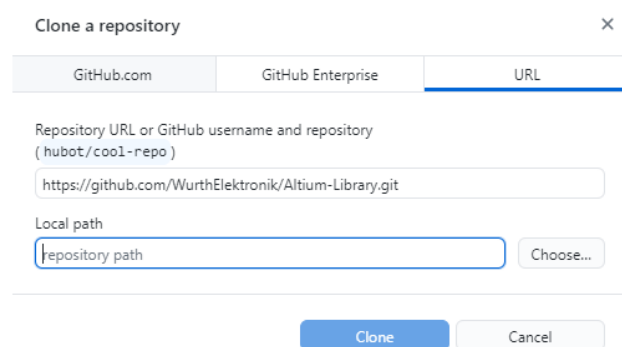


Figure 2: Clone setup

Cloning the Altium library will take some time.



Figure 3: Clone in progress

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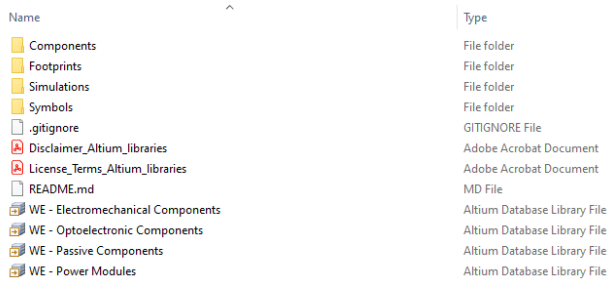


Figure 4: Files cloned from GitHub

04. INSTALL DATABASE LIBRARY IN ALTIUM

Go to **component panel** and click the following buttons.

If the component panel is not visible, navigate to the Menu bar and click View->Panels->Components to activate it, showing up on the right side of Altium Designer. Or click on the far top right sidebar menu.

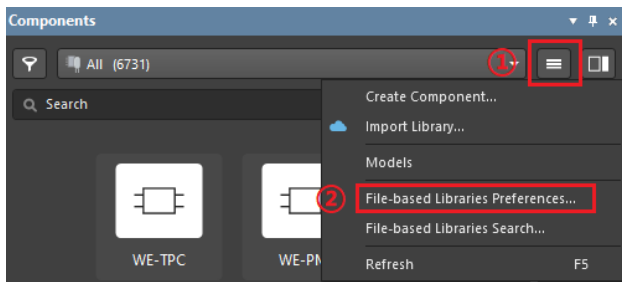


Figure 5: Install library from Components panel

From the popup panel, click **Install** button.

After clicking on the Install button, select the correct drive and folder. Could be on your local drive, shared drive or a cloud folder. If you don't remember where the Github import Library was saved, switch to the Desktop Github application, select on the top left: Altium-Library repository from WuerthElektronik -> click on it -> and then on the right panel click on "show in Explorer".

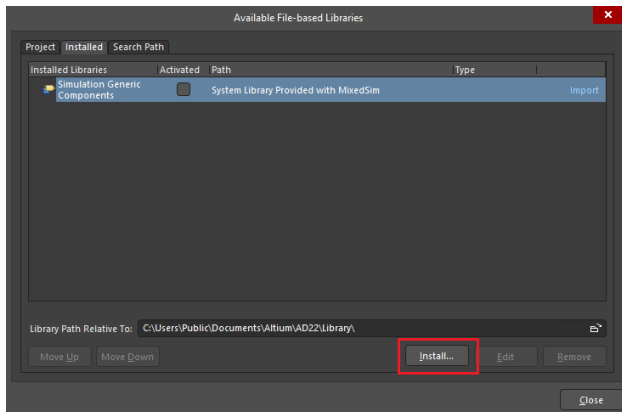


Figure 6: Install library

Select all the .DbLib files in the folder which cloned from GitHub.

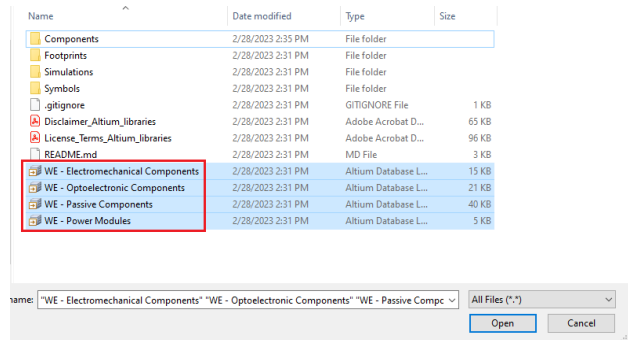


Figure 7: Select database library

After installing the database libraries successfully, all the database libraries will be listed in the component panel.

You can use the component directly onto your PCB designs as the integrated library.

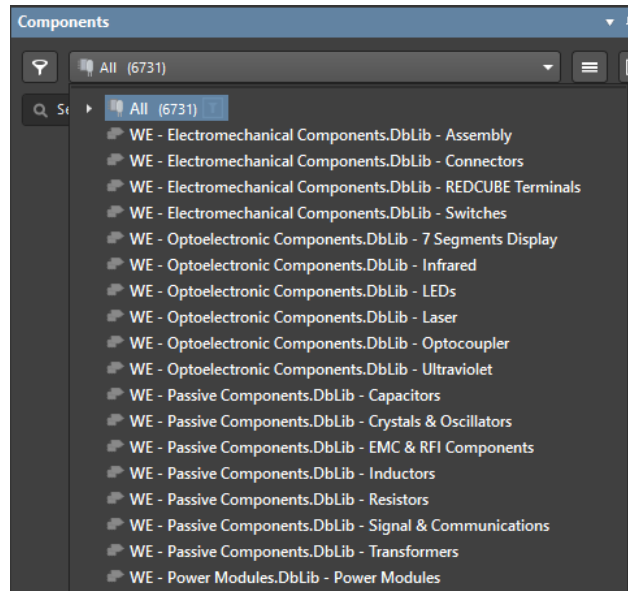


Figure 8: Database library list

05. SYNCHRONIZE LOCAL LIBRARY FROM GITHUB

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.

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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.
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**

Open the repository page on GitHub in your browser
Repository menu or **Ctrl + Shift + G**

Figure 9: Local repository update option

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

File	Commit Message	Time
Components	added simulation model for WE-CMDC	6 minutes ago
Footprints	added new match code: WE-PPTI (18 parts)	2 weeks ago
Simulations	added simulation model for WE-CMDC	6 minutes ago
Symbols	added new match code: WE-PPTI (18 parts)	2 weeks ago
.gitignore	Update .gitignore	last month
Disclaimer_Altium_libraries.pdf	Add files via upload	3 months ago
License_Terms_Altium_libraries.pdf	Add files via upload	3 months ago
README.md	Update README.md	3 weeks ago
WE - Electromechanical Components...	initial upload	last month
WE - Optoelectronic Components.Db...	initial upload	last month
WE - Passive Components.DbLib	initial upload	last month
WE - Power Modules.DbLib	add	2 months ago

Figure 10: View the updates on GitHub (added simulation model for WE-CMDC)

The left screenshot shows the 'Components' panel with a search for 'WE-CMDC'. The component list includes '744237102' with a description of 'Common Mode Choke'. The right screenshot shows the same panel after the update, with a red box highlighting the 'Simulation File' property for the '744237102' component, which is now set to 'Simulation\WE-CMDC.sst'.

Figure 11 Local library after updated (added simulation model)

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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