

Introduction

Symbols and footprints for most MaxLinear Power and Interface products are available for use across a wide variety of popular CAD tools utilizing Ultra Librarian's binary translator .bxl files. This application notes covers how to download the .bxl files and then export and install the symbols and footprints into a CAD tool.

The .bxl files and the link to their free reader can be found on the product page, after clicking on the Design Tools tab. The product page can be found from searching on the part number or clicking on the part number link in the parametric search. Alternatively the reader can be found on <https://www.ultralibrarian.com/products/free-reader> and the .bxl files can be found on <https://www.ultralibrarian.com>. Once on this site, search for the part number and click on the "Models Available" link to either preview or download the files. An example preview is shown in Figure 1, using the XR76203RLTR-F.

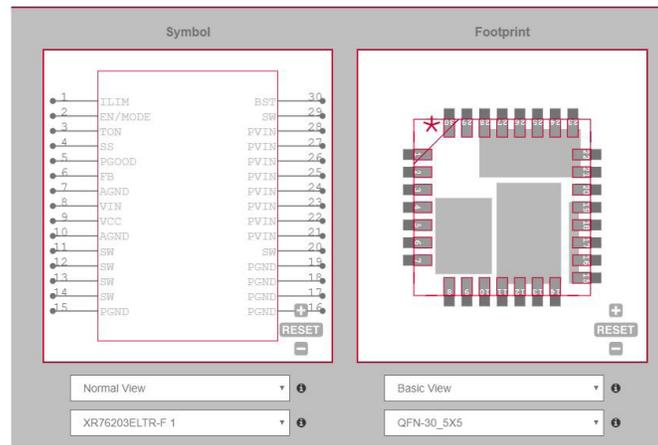


Figure 1: .bxl

Step A: Download the Ultra Librarian Reader and the .bxl File

If you don't already have it, click on the link for the reader, which goes to <https://www.ultralibrarian.com/products/free-reader> and sign-up for the Ultra Librarian Free Reader. You will be sent an email with a link to a zip file that includes the reader's ULADI.exe installation file. Note that if you don't receive the email right away, you may want to check your Spam settings on your email. Extract the zip file to a folder of your choosing. Open the .exe and follow instructions to install the reader application.

To get the .bxl file for the desired product, go to its product page on <https://www.exar.com>, click on Design Tools (tab on the left), scroll to the CAD Symbols and Footprints section, and then click on the [desired partnumber].bxl. Note that the .bxl filename will match the orderable part number that may include codes for package type, lead-free and tape and reel. Orderable part numbers are found in the Ordering Information section of the datasheet or in the Parts and Purchasing tab on the product page. So for example, to download the .bxl file for the XR76208ELTR-F, which is the version of the XR76208 that includes lead-free and tape and reel, click on XR76208ELTR-F.bxl and save the file where desired.

Step B: Open the Ultra Librarian Reader Application and the .bxl File

Once the Reader is opened, click on the Load Data button as shown in Figure 2 under the Ultra Librarian Step 1 instructions, navigate to the location where the bxl file is (from Step A) and open it. For example, when the XR76203ELTR-F.bxl file is opened, it is shown underneath the Load Data button in red as seen in Figure 2.

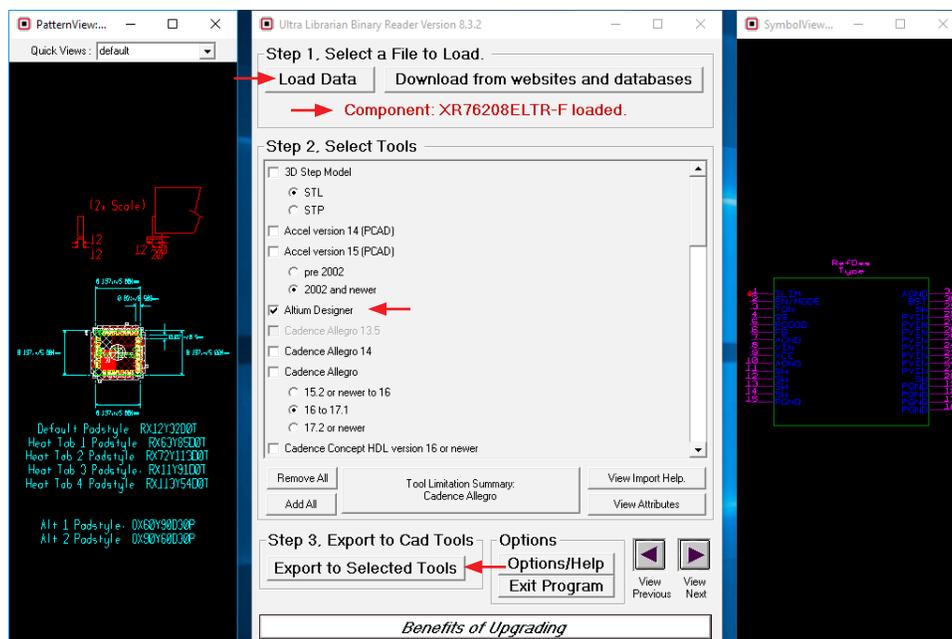


Figure 2: .bxl File Loaded into Ultra Librarian

Step C: CAD Tool Selection

Notice that the PatternView (the footprint) is to the left of the instructions, and the SymbolView (the symbol) is to the right of the instructions as shown in Figure 2. Follow Step 2 of Ultra Librarian by scrolling to and selecting the desired CAD Tool where the footprint and symbol will be used. In our example, the Altium Designer is chosen as shown in Figure 2.

Step D: Exporting from Ultra Librarian / Importing to the CAD Tool

In Step 3 of Ultra Librarian, click on the Export to Selected Tools button, located at the bottom left of the instructions as illustrated in Figure 2. A readme.txt file appears, similar to Figure 3 where Altium Designer is used. It contains the location of where the files are exported, along with further Ultra Librarian instructions on importing into the CAD tool. Figures 4 and 5 show the symbol and footprint imported into Altium Designer.

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*****
***** Important Instructions Follow *****
*****

→ All files exported to: C:\UltraLibrarian\Library\Exported\Altium\2018-08-28_16-08-36\2018-08-28_16-08-36

→ To import your new library part into Altium follow these steps:

1. After running the Ultra Librarian export for the first time,
you will need to copy the following files into an area where
they can be accessed for all future translations. They are script
files that Altium will need to be able to find.
  a. UL_Form.dfm
  b. UL_Form.pas
  c. UL_Import.pas
  d. UL_Import.prjScr

2. The above script file will need to be run from within Altium.
This can be done by going to File, Open and selecting the
UL_Import.PrjScr file stored above.

3. Select the UL_Form.pas file from the new project that has loaded,
and then select run from the drop down menu. You will need to select
the form again. Run the form.

3. When the script is run, it will ask you for the file name of the
Ultra Librarian file to run. You should select the latest file

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Figure 3: readme.txt Example Excerpt

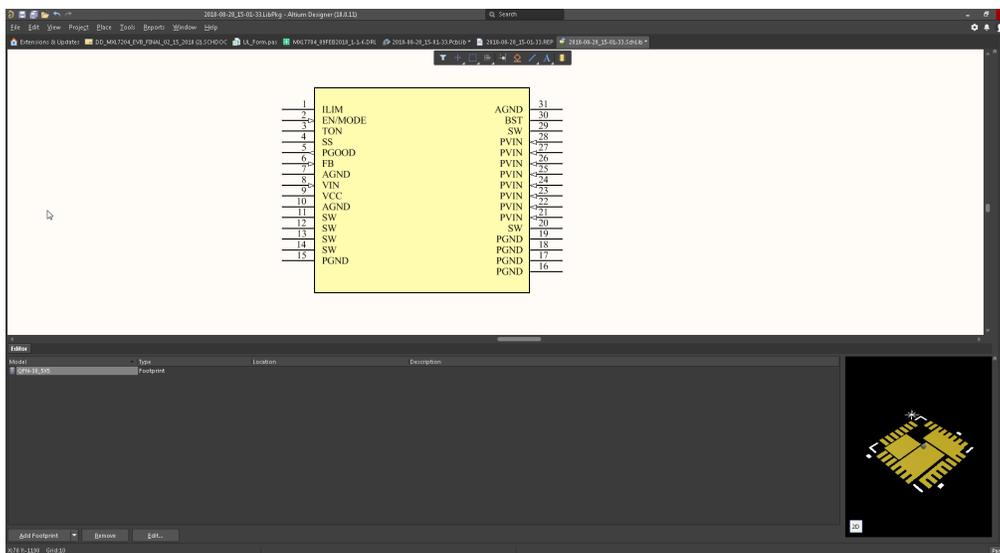


Figure 4: XR76208ELTR-F Symbol in Altium Designer

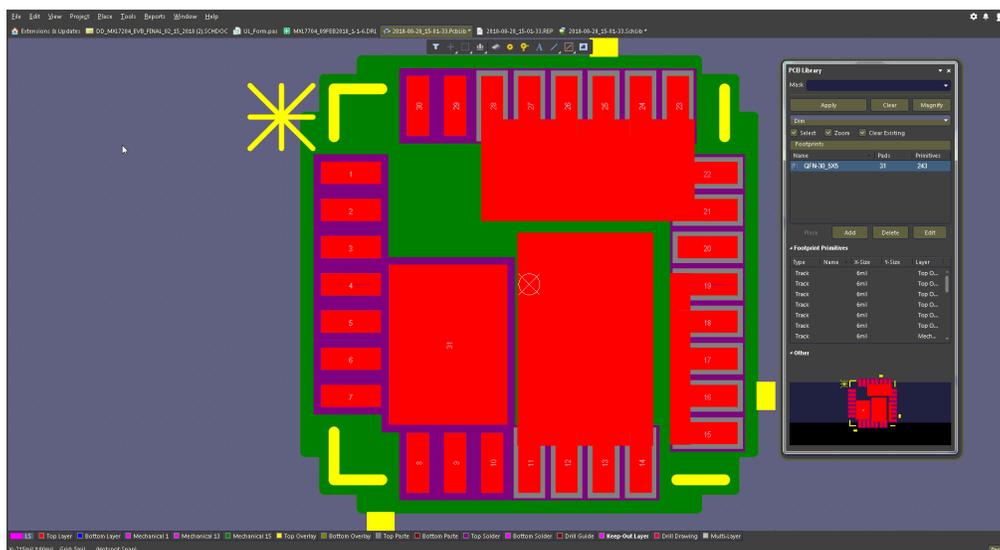


Figure 5: XR76208ELTR-F Footprint in Altium Designer

Conclusion

The Ultra Librarian reader application provides symbols and footprints for a wide variety of CAD tools. Use the reader to open the .bxl for the desired MaxLinear device, export it to your chosen CAD tool, and refer to the resulting readme.txt for further instructions. Much more information and help is available on <https://www.ultralibrarian.com> and YouTube.

Revision History

Revision	Date	Description
200AN00	9/21/18	Initial Release

**Corporate Headquarters:**

5966 La Place Court
Suite 100
Carlsbad, CA 92008
Tel.: +1 (760) 692-0711
Fax: +1 (760) 444-8598
www.maxlinear.com

High Performance Analog:

1060 Rincon Circle
San Jose, CA 95131
Tel.: +1 (669) 265-6100
Fax: +1 (669) 265-6101
www.exar.com

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