EAGLE IDF Exporter Instructions

1. Open .brd file in the EAGLE application. Run EagleIDFExporter.ulp.
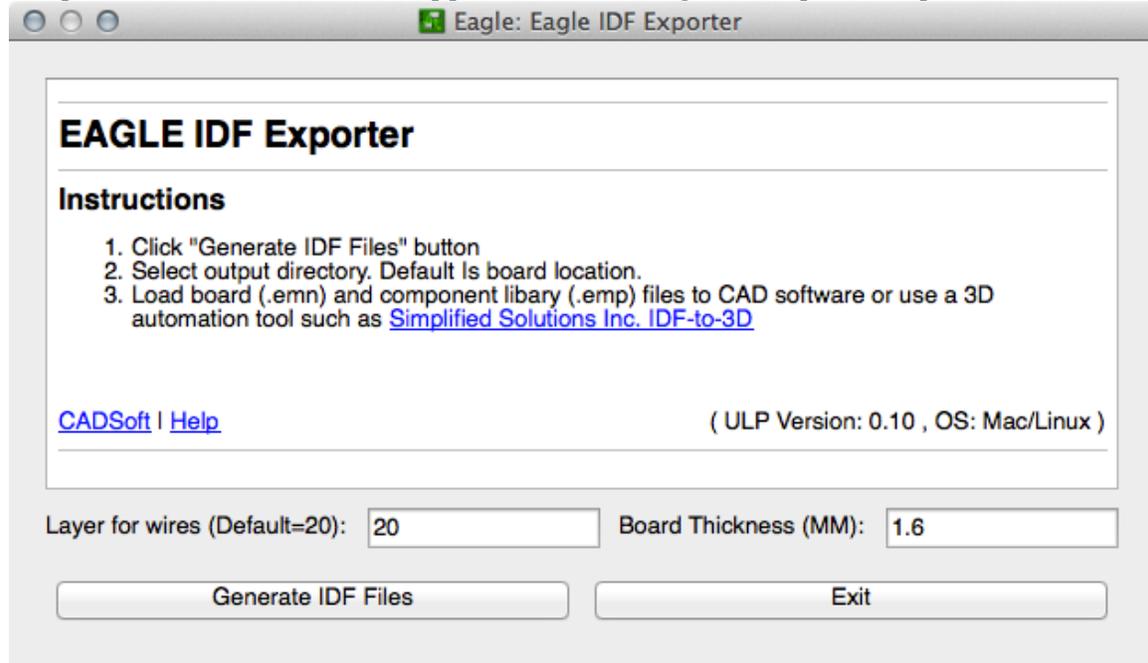
Update "Layer for wires" and "Board Thickness" options if you do not want to use the default values.

2. Click "Generate IDF Files." You will prompted to select the directory to write the .emn and .emp IDF files. IDF files are all written out in MM units. EAGLE will handle the conversion from other units to MM if the .brd file is not in MM units.

Once the files are written you will receive a confirmation messages for the files written.
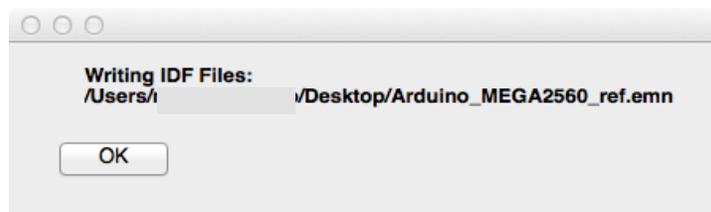
Component outlines in the IDF file will be generated by establishing a bounding box. The bounding box considers all layers of the package which can result in a worst case keep out box. The box considers all contacts, wires, circles, polygons, and rectangle outlines in the package. Text elements are not considered.
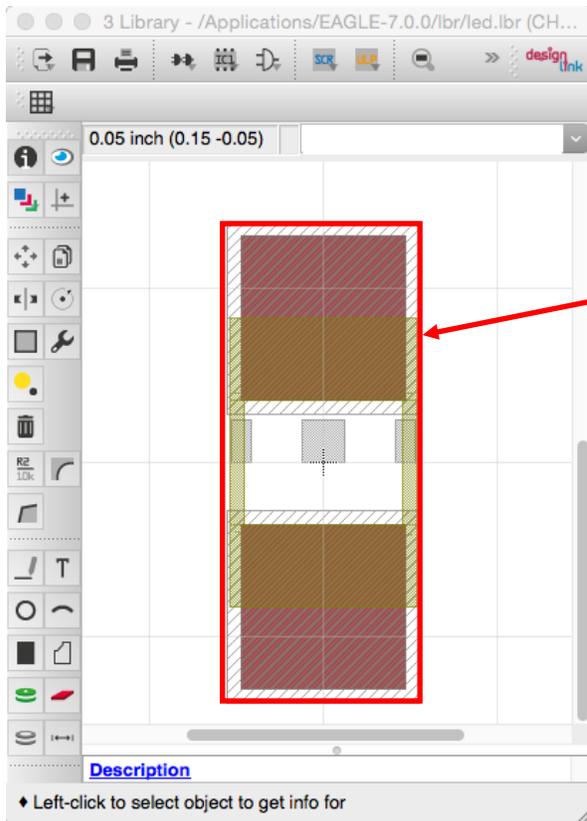
Bounding Box

In the case of non-rectangular components a bounding box will be fit to the maximum horizontal and vertical values.
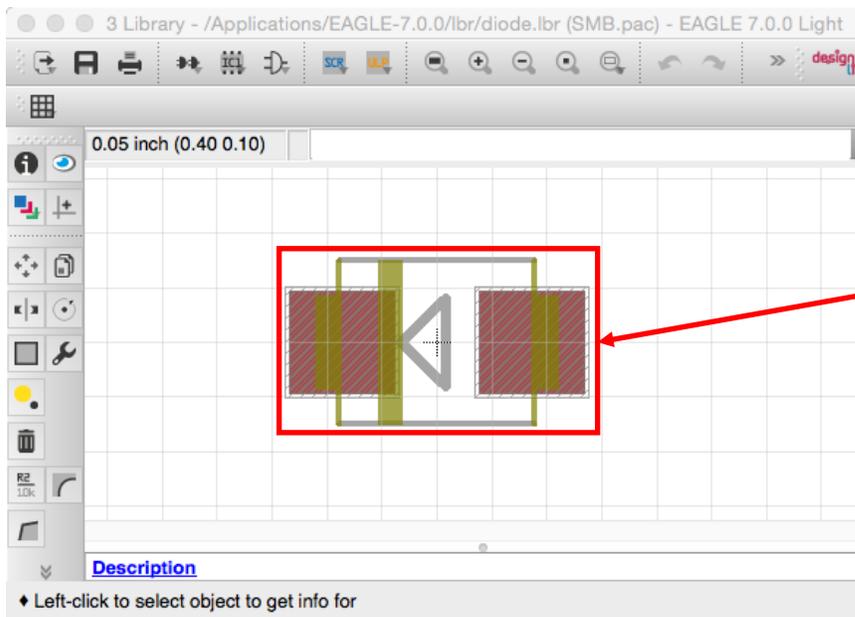
Bounding Box

3. After writing files the ULP will also show you a table with the packages written out to the files. A default height value is given for the output heights of the packages and colored in yellow. If you set a custom height the value will be shown in white. All heights are in MM.
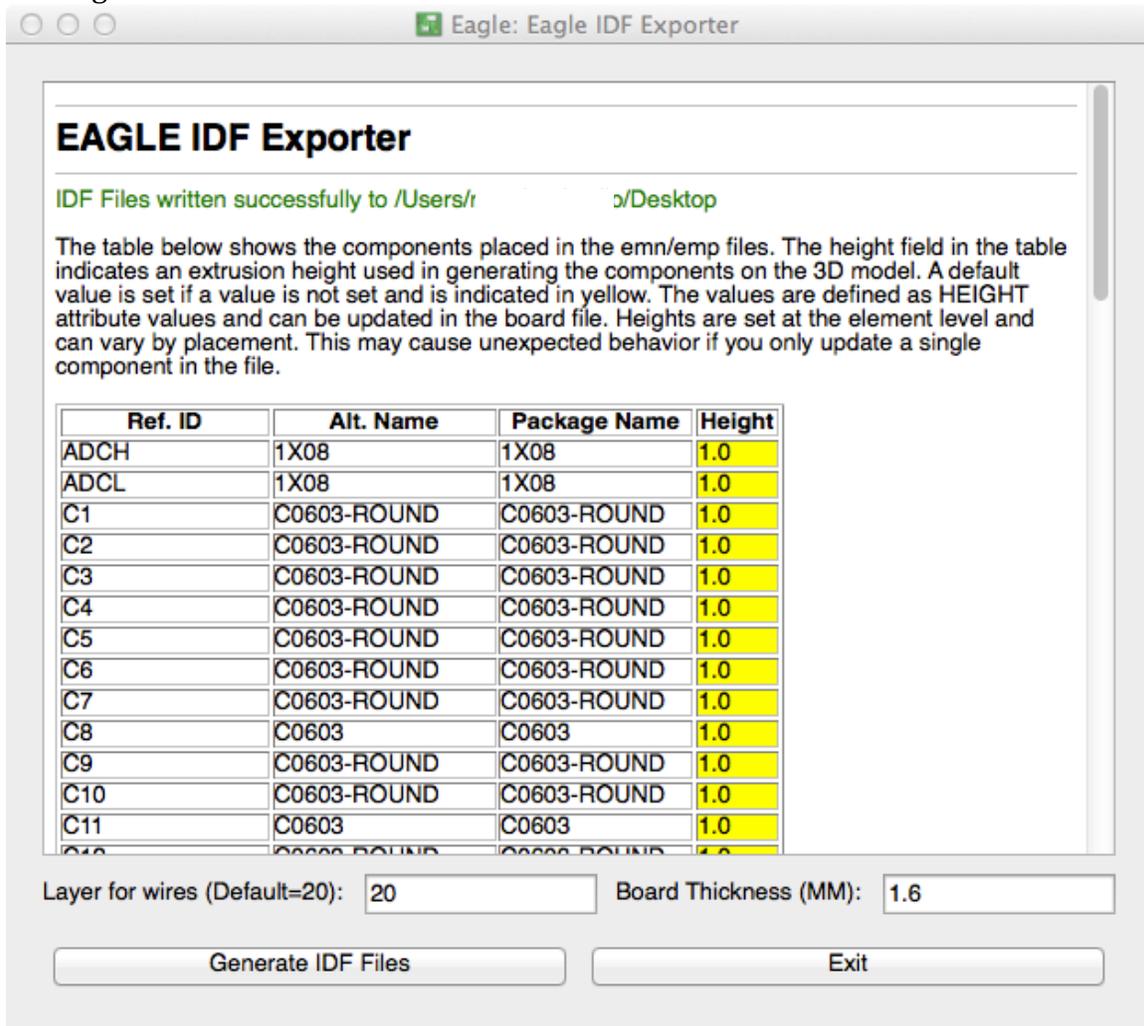
To set custom heights select the Attribute Tool and then click on a package. Create a new attributed named HEIGHT and set the value the height you would like to extrude the package to.

Attributes of U$3

Name	▲	Value	Display	
HEIGHT		10	off	

New Change Del Cancel OK
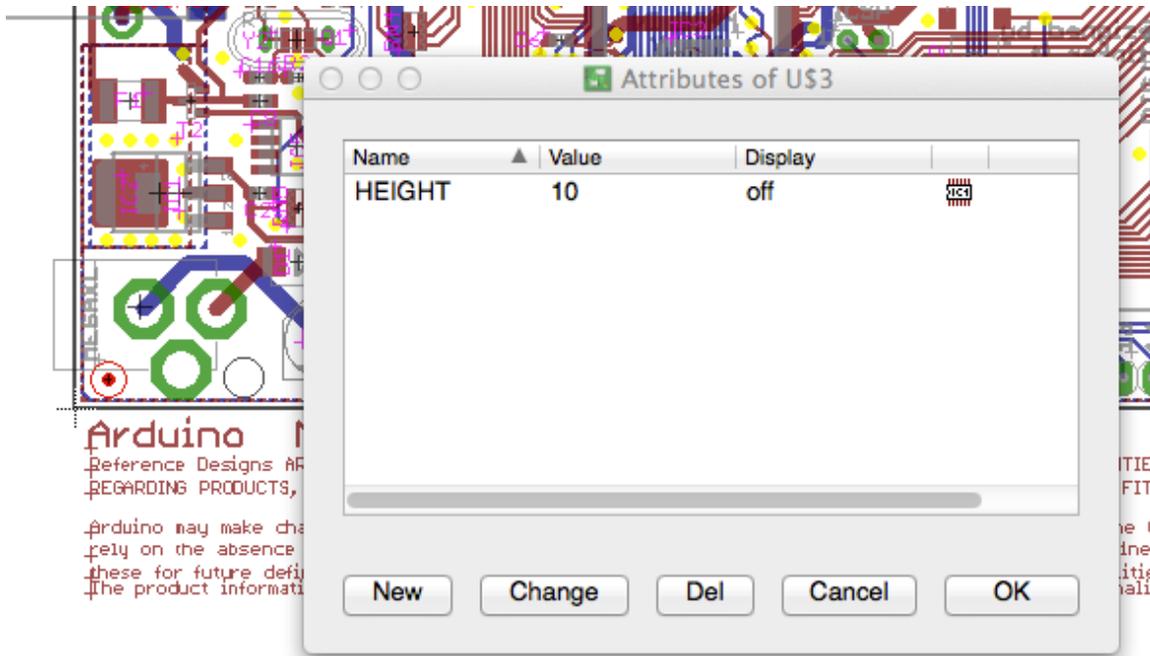
Heights are set at the individual package instance and will not be shared across multiple instances of the package on the board. For example in the below board the package U$3 has a user set height of 10 while other instances of the FIDUCIAL-MOUNT package are using the default value of 1.0.

Eagle: Eagle IDF Exporter

TX	FDN340P	SOT-23	1.0
TX	CHIP-LED0805	CHIP-LED0805	1.0
U$2	FIDUCIA-MOUNT	FIDUCIA-MOUNT	1.0
U$3	FIDUCIA-MOUNT	FIDUCIA-MOUNT	10
U$4	FIDUCIA-MOUNT	FIDUCIA-MOUNT	1.0
U$5	FIDUCIA-MOUNT	FIDUCIA-MOUNT	1.0
UBOOT	UBOOT_SJ	SJ	1.0
X1	DC21MMX	DC-21MM	1.0

When one of the components has a distinct height value it will be written to the .emn/emp files with a unique naming convention that includes the package name "_" height value. For example "FIDUCIA-MOUNT_10" in the above board. This may result in unexpected values if you are using local 3D model names to load in detailed components as the name will not match the model files due to the unique height value being set.