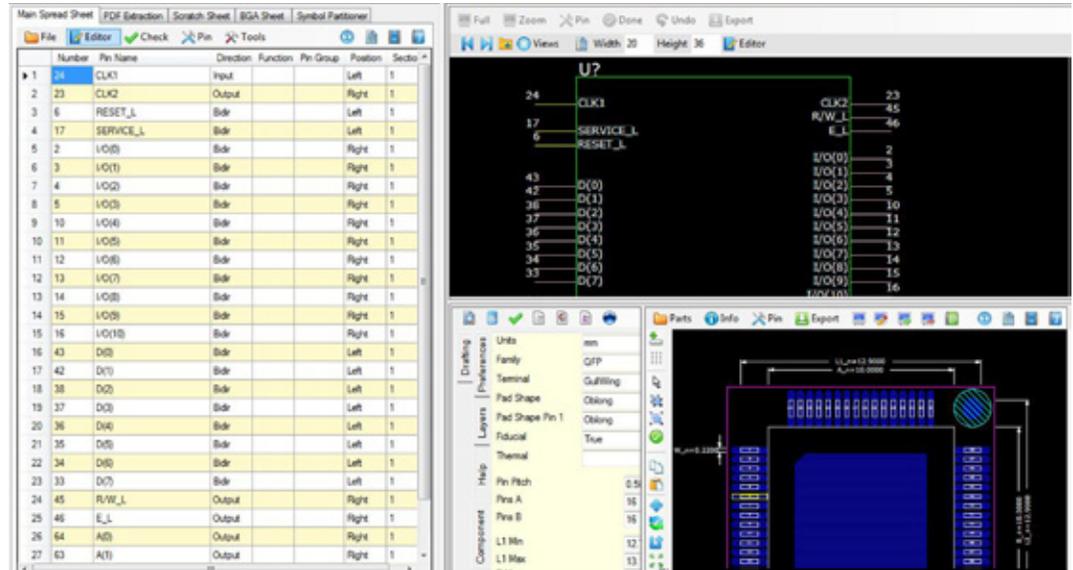


EMA Customer Success

First-hand user experiences from the trenches

Testimonial

EDABuilder is a powerful tool that accelerates the symbol and footprint creation process. Key features include advanced PDF extraction, automated pin assignment, IPC-7153 spec footprint creation, and comprehensive error checking and verification.



Rapid Symbols and Footprints with EDABuilder

By Joe Graham, Marketing Specialist, EMA Design Automation

“I’m a designer by trade so the less time I spend on the library creation process, the better.”

“I was doing a 48 pin symbol from scratch, that probably used to take me 10-12 minutes. With EDABuilder it took about 2 minutes.”

Accurate component libraries are a key factor to the success of any PCB Design. EMA's EDABuilder is a powerful library creation solution that accelerates the symbol and footprint generation process while ensuring libraries are built to spec. Its next generation technology provides a complete set of tools necessary for quick and effective PCB library development. Using EDABuilder, designers are able to rapidly create first-time correct symbols and footprints, reducing mundane library creation tasks from hours to minutes.

EMA interviewed Mike Crittenden to learn about his experience with EDABuilder. Mike is a PCB Designer at Technology Services Corporation (TSC); a producer of electronic components for microwave and digital processing systems, and prototype demonstration systems. Mike has over 17 years of experience and specializes in PCB layout and component library management.

What products or services does your company offer, and what design tools do you use?

My division of TSC focuses on Radar Applications for the military. We primarily produce 1st order prototypes and simulations of radar systems. We also do some refurbishment work, replacing the internal electronics of older systems. In the past the other TSC offices outsourced most of their design work; however, they have been increasingly sending it to my TSC office to take advantage of our employees' expertise. This shift means we need to be as efficient as possible. The change also virtually doubled my workload overnight.

I primarily use Cadence® OrCAD® Capture CIS (Component Information System), as well as Allegro® PCB Editor, and of course EDABuilder. CIS is ideal for me because I am able to share data with engineers from TSC's other locations, eliminating any wasted effort due to rework.

“I feel more comfortable knowing the tool is making the part accurately, especially when I’m in a time crunch. Even a mistake as small as missing a single pin is \$3,000-\$6,000 if we don’t catch it.”

SymbolGen and FootprintGen Apps

The SymbolGen and FootprintGen apps each contain a subset of EDABuilder’s capabilities. These tools are specialized to perform the tasks they are named after.

These apps are available through the OrCAD Capture Marketplace and offer free 7 day trials. They are a great option for designers who only need specific functionality. To access these apps visit the Marketplace at orcadmarketplace/storehome.aspx



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Tell me about the work you do at TSC?

I’m responsible for the PCB layout work and I’m the component librarian for the entire team. I’m a designer by trade, so the less time I spend on the library creation process, the better. As librarian my responsibility is to accurately create symbols and footprints based on datasheets I receive from the engineers. A significant amount of my time is spent verifying that symbols and footprints match. I then place them in the CIS database so everyone has access. The flow of work can vary greatly, and because I support many engineers, it’s key for me to be efficient.

What motivated you to purchase EDABuilder?

As a designer and a librarian I was looking for something to help me be more efficient, and EDABuilder has done that.

I needed to increase my efficiency and productivity because of my dual roles. I was using LP Wizard® to help with footprint creation, but LP Wizard has no capabilities for generating symbols. Additionally, verifying that the symbols matched the footprints was eating up a lot of my time.

One of my co-workers used the SymbolGen app [*Learn more about SymbolGen in the sidebar*] and recommended it as a solution. After evaluating SymbolGen I took a look at the options and determined that EDABuilder best fit my needs. EDABuilder was virtually the same price as the LP Wizard tool I was using, and had the additional capability of symbol creation. It would also provide time savings because the symbols and footprints could be automatically verified.

What features of EDABuilder have been most useful?

Checking of parts has been very helpful. I feel more comfortable knowing the tool is making the part accurately, especially when I’m in a time crunch. Even a mistake as small as missing a single pin is \$3,000-\$6,000 if we don’t catch it. The more we can take the human element out of it and use software, the more accurate we can be. I used to have a co-worker double check my pin tables with the datasheet, but with the EDABuilder checking tools that is no longer necessary.

Another benefit is the advanced datasheet extraction; it is very cool. This is one of the major areas where EDABuilder saves time; 8 pins,

10 pins, that’s not too bad to make manually, but when you are talking 700-800 pins, that’s a real process! Even on smaller pin count devices the time savings are significant. Just the other day I was doing a 48 pin symbol from scratch, that probably used to take me 10-12 minutes. With EDABuilder it took about 2 minutes.

EDABuilder’s feature to import LP Wizard files works very well. This has been key because it saved me from having to redo my work from LP Wizard.

Are there any features you would like to see added to EDABuilder?

I would like to see the ability to set different colors for the layers of the footprints created. I find using different colors is really helpful for identifying parts quickly.

Editor: Mike is in luck because this is currently possible with XML setup files. Future versions will bring this capability into the user interface.

Were you able to easily learn the software? Were any resources particularly helpful?

Once I was using EDABuilder on a regular basis I became very efficient with the tool. The biggest challenge was learning how the PDF extraction worked best. The tutorials were very helpful when learning how to use all the features of the tool; they really accelerated the learning curve.

How was your experience with EMA’s sales and support teams?

I have been very satisfied with EMA during all of my purchases. With EMA I can expect to talk to real people and receive fast responses to my questions. In particular, Ron Smith was exceptionally helpful when I was learning the tool; he played a big role in my success.

Learn More

For more information on the latest features and pricing for EDABuilder, please visit www.ema-eda.com/EDABuilder. An on-demand webinar with a demonstration of EDABuilder’s capabilities is available at www.ema-eda.com/Events/Webinars/LibraryCreationSolutions.aspx