

# Arena-OrCAD Bi-directional Integration

## Bringing Products to Market Faster

Design your products faster with fewer iterations and reduce errors by connecting engineering to the enterprise with an integrated OrCAD® and Arena® PLM design flow.

### OVERVIEW

Successfully designing electronic products requires an array of groups and disciplines to work together across the organization, from engineering and manufacturing, to procurement and others. All too often these groups are operating with a set of disconnected data sources, resulting in decisions being made in a vacuum without understanding the full impact on the product, its overall time to market, and eventual profitability. Without full access to the requirements of all stakeholders, errors may often go unnoticed until right before the product is ready to ship, resulting in schedule delays and the potential to miss the targeted window entirely.

The Arena-OrCAD Bi-directional Integration provides the ability to connect these various data sources together, giving the entire product team real-time visibility into all of the data required to make informed decisions early in the design cycle. Providing early access to this essential information reduces the potential for errors or miscommunication which greatly enhances the chances your product will ship on time and on budget.

### COMPLETE COMPONENT DATA ACCESS

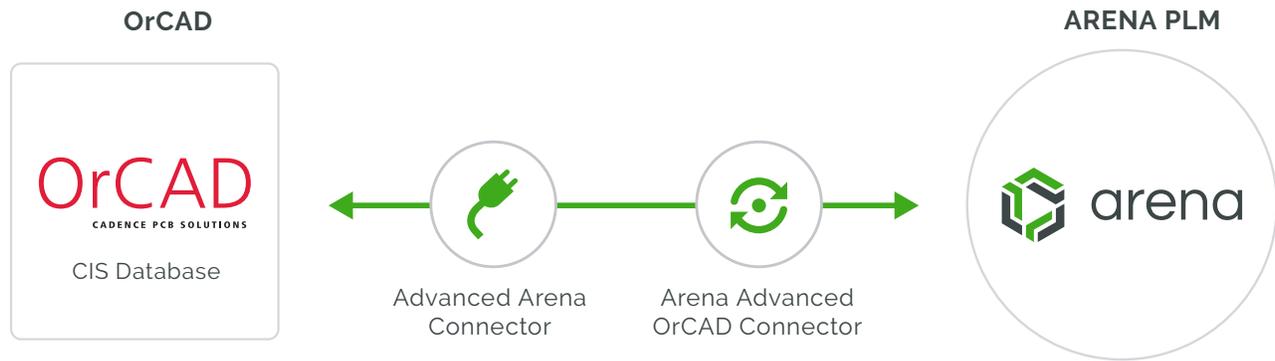
Component selection can be one of the most important factors impacting the success of a product. Selecting the right set of parts to meet your engineering requirements is crucial to ensuring project success. Beyond the electrical requirements, engineering teams also need to consider the business and procurement implications of their component selections. Will a given component be available in sufficient quantities to meet production requirements? Is the anticipated lifecycle of this part in line with the intended lifecycle of our product? Will the cost of particular components allow the design to stay within the intended total BOM cost target?

### HIGHLIGHTS

- ✔ Reduce time to market with direct integration between your OrCAD data and Arena PLM
- ✔ Access critical business information directly inside OrCAD during design time
- ✔ Empower engineering to make optimal part selection decisions early in the design cycle when the cost of change is lowest
- ✔ Ensure all stakeholders are on the same page by utilizing a common set of data
- ✔ Mitigate risk, avoid schedule delays, and reduce scrap with a connected product development environment

Without answers to these questions, design teams run the risk of potential schedule delays or even redesign. Some problems may not be identified until manufacturing occurs, if the parts you have selected cannot be ordered or will not be available long enough to support the intended life of the product. Unfortunately, engineering teams typically do not have access to this type of component information early in the design process when making their initial part selection, which leads to late-stage design changes and potential product recalls.

The Arena-OrCAD Bi-directional Integration links the business-level component data in your Arena PLM system with the engineering data in your OrCAD component database. This connection allows engineering teams to make optimal part selections based on both electrical and business-level criteria.



## “WHERE USED” AT THE TOUCH OF A BUTTON

It's a simple fact that changes to components are going to happen over time. The challenge is how to make sure all the designs that were using the now defunct component have been updated.

The Arena–OrCAD Bi-directional Integration provides a powerful “Where Used” function which allows engineering to identify all the BOMs that would be affected by a potential component change; all without having to leave OrCAD.

This functionality makes it easy for engineering teams to ensure all projects are in sync with the latest updates to their approved manufacturer and vendor lists (AML/AVL) which prevents affected designs from slipping through the cracks leading to weekend redesigns, or, worse, scrapping boards.

## ZERO-TOUCH BOM

Producing the final BOM is one of the last things the engineering team does in the design cycle. However, once that BOM is sent out, it triggers a whole set of actions inside the organization to order parts, prepare manufacturing, and so on. These various groups are expecting the BOM in a certain format or with specific data to satisfy their needs (e.g., manufacturer part numbers).

Engineering is often required to manually edit the BOM to include this required information since it is not traditionally available in the electrical CAD

system. Manually editing the BOM in this manner is time consuming and potentially error prone, leading to transcription issues that can have unintended consequences in production.

The Arena–OrCAD Bi-directional Integration BOM upload function allows a single-click process to upload a properly formatted BOM directly into the Arena PLM system for other impacted stakeholders to access. Since the integration also provides access to PLM-level component data at the engineering level, the BOM is already pre-populated with all the data that the rest of the organization requires to release the design into production.

## FULLY INTEGRATED NEW PART INTRODUCTION (NPI)

Adding a new part is not something that should be taken lightly. Each new added component requires someone to qualify that component and make sure it is ready and can be processed for production. If a new part is created on the engineering side, and this part qualification process is not initiated, then that part may not be available in time for production, leading to delays and schedule overruns.

The Arena–OrCAD Bi-directional Integration solves this problem by allowing approved users to attach a new Arena PLM part number to a part as it is being introduced in OrCAD, ensuring that part will be properly added to the system and vetted before production.

## ABOUT ARENA

Arena, a PTC Business, helps companies create innovative products that change the world. Arena unifies product lifecycle management (PLM) and quality management system (QMS) processes, allowing every participant throughout product development and commercialization to work together fast and effectively. With Arena, dispersed teams accelerate the design and delivery of quality products. For more information, visit [Arena, a PTC Business](https://arenasolutions.com).

## ABOUT EMA DESIGN AUTOMATION

EMA Design Automation, a Cadence® Channel Partner, is a leader in product development solutions; we offer a complete range of electrical CAD tools, data management and PLM systems, services, training, and technical support. Visit [ema-eda.com](https://ema-eda.com).