

Improving Product Visibility Across Design and Manufacturing



ABOUT THE COMPANY

FreeWire Technologies merges beautiful design with convenient services to electrify industries formerly dependent on fossil fuels. Their turnkey power solutions deliver energy whenever and wherever it's needed for reliable electrification beyond the grid. FreeWire's Mobi EV Charger product line offers mobile charging that can be quickly deployed to shift with the rapidly changing electric vehicle (EV) landscape, and the Mobi Gen product line offers clean and quiet on-site power to substitute or supplement the use of diesel generators for a variety of remote power needs. Their products are used by customers across industries including automotive, corporate campuses, utilities, entertainment, and fleet operators.

AT A GLANCE

Mission

Delivering electrification beyond the grid

Best Thing About Arena

"A single source for product information guarantees we are always working around the latest design."

Bottom-Line Impact

Accelerated product development processes and increased visibility across teams and partners.

Key Benefits

- Enhanced communication with suppliers
- Improved product information integrity
- Increased development and change process visibility
- Accelerated product development processes
- Cloud-based solution scales with the company

FREEWIRE



THE SOLUTION

Based on the team's prior experience with product lifecycle management (PLM) solutions, they knew PLM was a must-have. Arena PLM checked all the key "requirements boxes" for being easy to use, configure, scale, and integrate with existing design and manufacturing systems.

When it comes to PLM solutions, Arena is better than any system I have used in the past. The value Arena provides compared to other commercial systems is remarkable. And because it is cloud-based, we have a system that can scale as our needs change and our business grows. We know that Arena PLM can take us through the next two generations of our evolution.

—Mark Hanna, Vice President of Operations,
FreeWire Technologies

BUSINESS CHALLENGES

As a visionary company in the clean tech industry, it's important for FreeWire to stay ahead of the competition and get high-quality products to market fast. Using spreadsheets, shared drives, and other manual processes to manage their product development processes, engineering changes, and bills of materials (BOMs) made it difficult to share the latest design information.

As the business grew, the need to collaborate with contract manufacturers (CMs) in real time was essential to avoid quality issues and launch delays. To eliminate confusion around the latest design, FreeWire needed a single, centralized solution to keep everyone on the same page.

"We didn't manage our product information in a single location so we needed a better way to initiate, update, and track changes," stated Scott Bartlett, Director of Mechanical Engineering at FreeWire Technologies. "We had to make it easy for our team and partners to communicate around the same design while providing an audit trail of activities and decisions."

Today, Arena is used across multidisciplinary engineering groups, along with operations and even marketing. FreeWire's product is complex and consists of electrical, mechanical, and software components. Arena manages every aspect of the design in a revision-controlled environment including parts, BOMs, documents, and approved vendor lists (AVLs). As FreeWire continues to grow and add more CM partners, they rely on Arena's supplier licenses and access policies to control

FREEWIRE



what each partner can view. "This ensures that our external supply chain partners can review only the intellectual property (IP) that we designate as they participate in the engineering change review process," said Bartlett. Arena also provides FreeWire's field repair team with increased visibility into the product design to help quickly identify software revisions and speed issue resolution.

Arena has made it easy to pass information between FreeWire's Creo and SOLIDWORKS systems to better control design files, 3D CAD files, BOMs, electrical schematics, wire harnesses, and assembly documents. With a centralized product record, engineering teams can easily export BOMs, track the status of orders, and view progress on the latest designs. Arena also passes BOMs upon release to FreeWire's enterprise resource planning (ERP) system, providing access to current product information by operations. "All of our teams are aligned with Arena, which makes certain we are procuring and building everything correctly," said Mark Hanna, Vice President of Operations at FreeWire Technologies. Establishing controlled processes also positions FreeWire to better meet growing guidelines and directives like International Organization for Standardization (ISO) and other automotive-related regulations.

KEY BENEFITS

"The real power behind Arena PLM is that it remembers for me. I can easily search for any product or change information and it's instantly



available with a full historical audit trail showing who made a change and when," said Bartlett. "Arena is now part of the product design culture at FreeWire and acts as the brain of our product development infrastructure with other systems working around it. As people become more comfortable with the solution and stop relying on shared drives and other older silos of information, Arena becomes the answer and single source for finding all product information. If information is in Arena, we know it can be trusted. If it is found somewhere else, we can't trust the information because it is not controlled."

With Arena in place, FreeWire is confident that the product information is always accurate. Everyone can quickly find the latest design information, which saves time and eliminates uncertainty, delays, and quality issues. Arena is providing the necessary controls, flexibility, and visibility to help FreeWire accelerate their product development processes even while experiencing rapid growth.

"When it comes to PLM solutions, Arena is better than any system I have used in the past," noted Hanna. "The value Arena provides compared to other commercial systems is remarkable. And because it is cloud-based, we have a system that can scale as our needs change and our business grows. We know that Arena PLM can take us through the next two generations of our evolution."