



CUSTOMER STORY

See How Monolithic Power Systems Uses Jama Connect® to Manage Complexities Across Globally Distributed Teams with Efficiency and Scalability

Jama Software® helps this innovative semiconductor company efficiently manage complex requirements by delivering a platform that provides greater visibility, more efficiencies, and structured collaboration across teams.

- 2000+ employees
- Founded in 1997
- Specialty: Delivering highly integrated monolithic products that offer energy efficient, cost-effective power solutions

Monolithic Power Systems (MPS) is a high-performance analog semiconductor company based in the United States. MPS has over 2000 employees and operates in 15+ locations worldwide.

MPS produces the highest quality power solutions for industrial applications, telecom infrastructures, cloud computing, automotive, and consumer applications. The company has three core strengths; deep system-level and applications knowledge, strong analog design expertise, and innovative proprietary process technology. These combined advantages enable MPS to deliver highly integrated monolithic products that offer energy efficient, cost-effective solutions.

MPS CUSTOMER STORY OVERVIEW

Jama Connect Helps MPS Manage Complexities and Increase Efficiency and Scalability Across Globally Distributed Teams

Companies with globally dispersed teams, complex products, and expanding product lines require a modern, centralized system to manage requirements. Jama Connect is giving MPS newfound efficiencies to manage very complex tiers of products by simplifying their requirements and change management processes and improving collaboration and visibility across distributed teams.

CHALLENGES

- Adapting to increasing complexities
- Managing document and tracking disparities
- Collaborating across distributed teams
- Demonstrating compliance

SOLUTIONS

- The Jama Connect platform allows for structured collaboration and information to be accessed seamlessly across globally distributed teams
- MPS now has a single source of information and end-to-end visibility throughout the product development lifecycle.
- Jama Connect is making the path for teams to prove regulatory compliance easier

RESULTS

- Teams can easily and quickly produce required documentation, reducing the need for lengthy meetings
- Increased visibility and real-time communication have effectively decreased product development cycles
- Structured collaboration using a single source of information is creating new efficiencies across global teams

Managing Complexities Across Geographies with Scalability and Efficiency

Producing the highest quality power solutions for industrial applications is no simple undertaking. Like many other organizations tackling complex projects, MPS' Automotive and Battery Management groups were facing critical business challenges that Jama Connect is helping them address.



1 Adapting to increasing complexities



2 Managing document and tracking disparities



3 Collaborating across distributed teams



4 Demonstrating compliance

1. Adapting to Increasing Complexities: One of the key issues MPS faced was their ability to address the challenges of developing increasingly complex product tiers. The rapid expansion into new high-value markets called for a matching evolution of the internal requirements and documentation management processes.

At MPS, systems engineers, digital designers, and technical marketing engineers all need the ability to collaborate and exchange massive amounts of information both upstream and downstream using a complex register map. As semiconductor design continues to increase in complexity, the use of traditional documents to accomplish this had become more challenging for the MPS team. The current system in place for revision controls wasn't functioning well for them; it needed to be synchronized, clearly organized, and scalable.

2. Managing Documentation While Keeping Pace With Emerging Technologies: Each of MPS' distributed teams is focused on a different stage of the constant research and development (R&D) needed for emerging technologies. In today's rapidly changing environment, market requirements are constantly evolving, which drives the need for even tighter collaboration between teams. When the sustained growth of the MPS portfolio was also considered, it became evident that a new solution was needed, which would offer increased cross-team visibility over requirements, design reviews, and test results.

3. Collaborating Effectively Across Distributed Teams: When companies are developing complex products, the size of their team grows accordingly, but growth is as efficient as the infrastructure in place to support it. For MPS, that meant moving from an approach where most of the R&D activity was geographically localized in one area to a more de-centralized model with centers located in the United States, Asia and Europe. The challenge of engineering teams working across multiple time zones emphasized the need for a solution that enabled all the contributors to collaborate seamlessly on a project regardless of their physical location.

4. Proving Products Meet Industry Standards and Compliance: Another core challenge that MPS faced was having a system that both enables requirements management tracking and helps demonstrate that functional safety standards and industry regulations have been met. Jama Software is the first SaaS and Agile vendor to be ISO 26262 fit-for-purpose certified by TÜV SÜD.

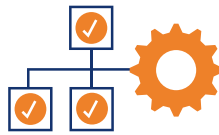
Complex Information Management and Exchange with Clarity and Efficiency

After implementing Jama Connect, MPS has been able to solve its collaboration challenge, provide a real-time cross-team visibility and engagement, and prove compliance. Jama Connect is helping MPS make an impact in these significant areas:



1

The Jama Connect platform allows for structured collaboration and information to be accessed seamlessly across globally distributed teams



2

MPS now has a single source of information and end-to-end visibility throughout the product development lifecycle



3

Jama Connect is making the path for teams to prove regulatory compliance easier

1. Structured Collaboration for the Win: Jama Connect has helped MPS by delivering a structured collaboration platform that allows their engineers to access information seamlessly across teams. The web-based system enables everything to be shared through a web portal and stored in a shared database where everyone involved in the review process can easily engage with information in real-time.

By using Jama Connect, MPS designers can now follow the progress of their designs and testing, collaborate with their teams, and answer questions in real-time. For example, the validation progress can be monitored daily, in real time, showing which tests are being run and the issues they've identified.

When everyone works from the same document version and single source of information, differing time zones becomes almost irrelevant. In fact, there are times MPS has found this to work in their favor. MPS has found this to be an advantage because globally distributed teams are no longer working under the added pressure of having to complete everything by the end of their business day. One team, in one time zone, can start working precisely where the other team, in a different time zone, left off. This allows for more thoughtful, less stressful efficiencies in the test feedback and review cycles.

2. Single Source of Information with End-to-End Visibility: Jama Connect is extremely flexible in the way it can be set up and allows for the ability to define the structures that contain the data. MPS can adapt and customize the structure in Jama Connect to hold information in a way that's specific to each product line and the different degree of complexity that each product carries. This capability is making it much easier for their teams to identify and store critical information and specific goals related to a project or product line.

With Jama Connect, the MPS teams have also been able to consolidate all reviews, revisions, and issues into one place, making it easy for everyone to immediately see when problems arise and address them quickly. This capability has increased efficiencies and provided critical end-to-end visibility between their distributed teams and across the product lifecycle.

3. An Eased Path to Compliance: Jama Connect supports ISO 26262 compliance standards right out-of-the-box, allowing MPS automotive group to complete functionally safety analysis more efficiently. MPS is dedicated to being ISO 26262 compliant and tracing requirements, implementation, and testing in a way that is methodically structured and controlled. When searching for an application lifecycle management tool to help MPS ease the path to proving compliance, this was a key capability requirement.

RESULTS

A Single Solution to Effective Requirements Management

Now that MPS teams have the enhanced visibility, communication, and collaboration capabilities provided by Jama Connect, they've been able to streamline their requirements management process, effectively decreasing their development cycles.

Their engineers can easily and quickly produce required documentation and no longer need to spend time in multiple time-consuming meetings and scrums to get a clear picture of what's happening with their products. And with Jama Connect, they can automatically generate — at times — 70-80 pages of documentation (entered correctly one time, in one place) and they can efficiently generate any additional documentation they need, saving their engineers countless hours of documentation time.

Each engineering team can now simply log into Jama Connect, have a clear picture regarding the latest issues and quickly interface with key stakeholders to clarify what is expected and take appropriate steps to diagnose and resolve the problem, involving other teams as needed, in real time.



The Future is Bright

Seeing how effective Jama Connect has been at solving their core challenges, MPS is looking into internally expanding the use of the software and increase the scope of the integration with other internal systems.

In addition, Jama Connect's reuse feature is something MPS is actively working to leverage. By combining Jama Software's experiences with the intellectual property (IP) they've developed, MPS plans to transfer existing IP blocks into Jama Connect to streamline and increase the pace of its IP development cycle.



ABOUT JAMA SOFTWARE

Jama Software is focused on maximizing innovation success. Numerous firsts for humanity in fields such as fuel cells, electrification, space, software-defined vehicles, surgical robotics, and more all rely on Jama Connect® requirements management software to minimize the risk of defects, rework, cost overruns, and recalls. Using Jama Connect, engineering organizations can now intelligently manage the development process by leveraging Live Traceability™ across best-of-breed tools to measurably improve outcomes. Our rapidly growing customer base spans the automotive, medical device, life sciences, semiconductor, aerospace & defense, industrial manufacturing, consumer electronics, financial services, and insurance industries. To learn more, visit us at: jamasoftware.com.