**ARTERIS** **IP**

Datasheet

Harmony Trace ™

Overview

Introducing Harmony Trace by Arteris, the innovative design data intelligence solution for complex SoC and system of SoCs projects. Accelerate quality and functional safety certifications effortlessly with seamless traceability across all artifacts. Harmonize disparate systems, tools, and domains, integrating requirements, specifications, hardware designs, software code, tests, and documentation. Enjoy the freedom to use the best tools with multi-domain linking and compatibility with popular systems like IBM DOORS, Jama Connect, Atlassian Jira, and more. Extend and customize effortlessly, leveraging a domain-independent API. Connect designs to their digital twins through IP-XACT for enhanced traceability. Experience the future of design data intelligence with Harmony Trace.

Highlights

- Comprehensive traceability: Maintain traceability between separate systems for all artifacts.
- Systems integration: Unify disparate systems for end-to-end traceability.
- Freedom to use best tools: Link information from leading tools across domains.
- Multi-domain linking: Enable traceability across multiple domains.
- Seamless compatibility: Works with existing systems and popular tools.
- Design-centric traceability: Connect design to its digital twin via IP-XACT.
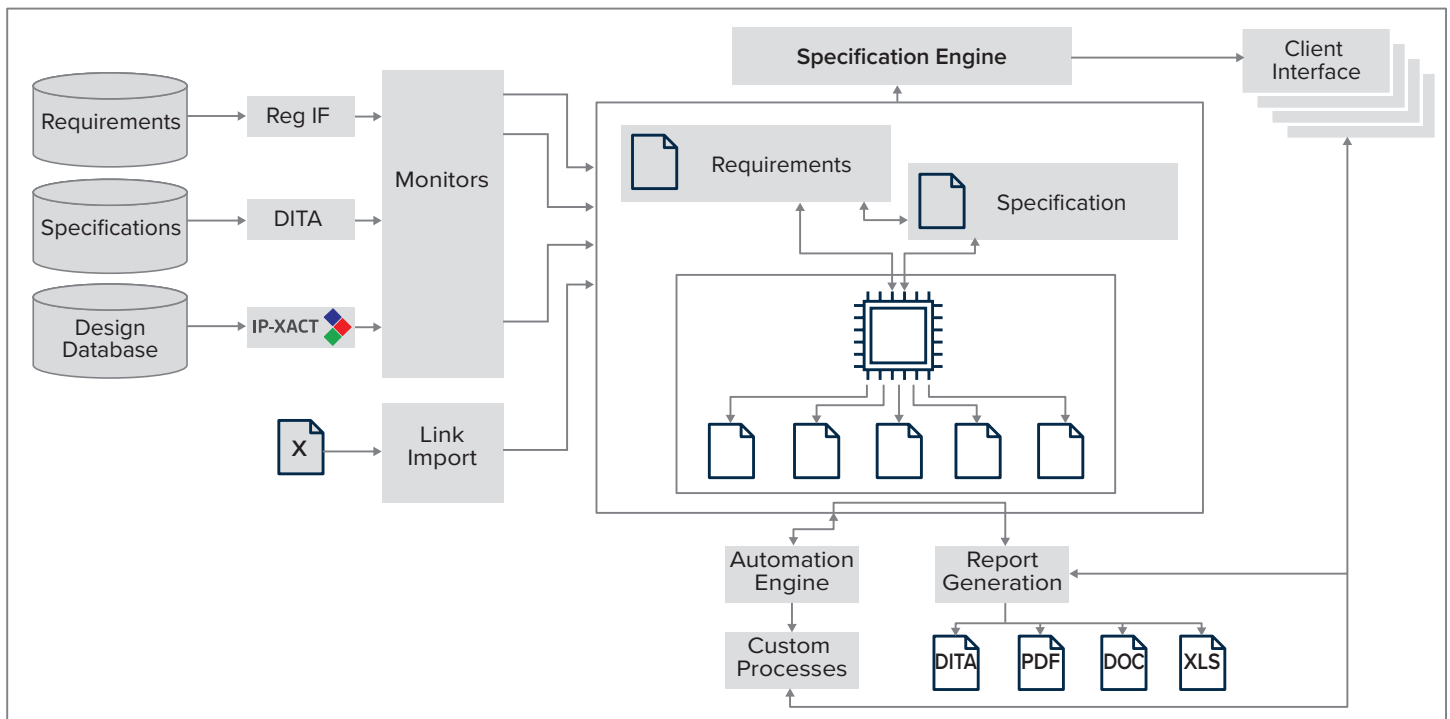
Benefits

Increased system quality and functional safety certifications.
Harmony Trace enables design teams to achieve higher system quality and obtain functional safety certifications, ensuring the reliability and robustness of complex SoCs or systems of SoCs.

End-to-end traceability of all artifacts in the semiconductor product life cycle.
Harmony Trace establishes and maintains traceability between various systems, including requirements, specifications, hardware designs, software code, tests, and documentation. This comprehensive traceability ensures transparency and accountability throughout the entire product development process.

Integration of existing systems and tools for a cohesive "system-of-systems" approach.
By integrating disparate systems and tools, Harmony Trace creates a unified "system-of-systems." This integration eliminates silos and allows for seamless collaboration, reducing errors and streamlining the design process.

Freedom to use the "best tool for the job" without being limited to a single environment.
Harmony Trace empowers engineers to choose the most suitable tools for their specific tasks. It links information from leading tools in different domains, such as requirements management, code repository, EDA, software engineering, verification, test, and documentation, allowing for optimal efficiency and productivity.

Multi-domain linking fills gaps in existing flows and enhances understanding.
With Harmony Trace, traceability extends across multiple domains, providing a more comprehensive and interconnected view of the design. This helps identify and bridge gaps in existing flows, ensuring a cohesive and holistic understanding of the system.

Compatibility with a wide range of existing tools and systems.
Harmony Trace seamlessly integrates with popular tools and systems used in the industry, including IBM DOORS, Jama Connect, Atlassian Jira, DITA, IP-XACT, and EDA tools. This compatibility ensures a smooth transition and minimizes disruptions to existing workflows.

Extensibility to support custom, internally developed systems.
Harmony Trace can be easily extended to accommodate custom, internally developed systems through customizable monitors. This flexibility enables organizations to tailor the solution to their specific requirements and workflows.

Domain-independent API for custom reporting and automation.
Harmony Trace provides a domain-independent API, allowing for custom reporting and automation across different domains. This enables engineers to extract actionable insights, generate custom reports, and automate repetitive tasks, improving productivity and decision-making.

Design-centric traceability connected to the digital twin for closer correlation.
Harmony Trace establishes a close connection between design and the product's digital twin through IP-XACT. This design-centric traceability enhances the correlation between the virtual and physical aspects of the system, facilitating better analysis, debugging, and optimization.

Actionable knowledge and insights through semantic computing and data analytics.
Harmony Trace leverages semantic computing and data analytics to extract actionable knowledge and insights from the integrated data. By analyzing the linked information, engineers gain valuable insights that can drive informed decision-making, optimize processes, and improve overall system performance.

Features

Comprehensive traceability.
Create and maintain traceability between requirements, specifications, hardware designs, software code, tests, and documentation.

System-of-systems integration.
Harmonize disparate systems for end-to-end traceability of all artifacts.

Tool integration.
Link information from leading tools in requirements management, code repository, EDA, software engineering, verification, test, and documentation.

Multi-domain linking.
Enable traceability across multiple domains, providing a comprehensive understanding of the design.

Seamless compatibility.
Work with existing requirements management, specifications, hardware design, verification, software engineering, and documentation systems. Support popular tools including IBM DOORS, Jama Connect, Atlassian Jira, DITA, IP-XACT, EDA tools, and more.

Extensibility and customization.
Support custom, internally developed systems through customizable monitors, ensuring adaptability to specific project needs.

Domain-independent API.
Built-in API for custom reporting and automation, regardless of the specific tools or domains being used.

Design-centric traceability.
Connect design to the digital twin of the product through IP-XACT, establishing a closer link between design and physical implementation.

Actionable knowledge and insights.
Leverage semantic computing and data analytics to generate actionable knowledge and insights for informed decision-making.

Auditable change impact.
Receive immediate notifications and audit the impact of requirement violations, ensuring improved system integrity.

Complementary Product

Harmony Trace can help with augmenting your functional safety flow. Arteris has several system IP products and SoC integration products that have available safety features that help support up to ASIL D designs.

About Arteris

Arteris is a leading provider of system IP for the acceleration of system-on-chip (SoC) development across today's electronic systems. Arteris network-on-chip (NoC) interconnect IP and SoC integration technology enable higher product performance with lower power consumption and faster time to market, delivering better SoC economics so its customers can focus on dreaming up what comes next. Learn more at arteris.com.

ARTERIS IP