SiliconMAX Silicon Lifecycle Management Platform

The Synopsys SiliconMAX™ Silicon Lifecycle Management (SLM) Platform enables new levels of insight for both SoC providers as well as their customers to optimize operational metrics at each stage of the device and system lifecycles.

The analytics-driven platform extends traditional chip design, ramp, production test and in-field capabilities by using embedded sensing technologies to collect extensive silicon device data, providing visibility into optimization opportunities and critical issues across the silicon lifecycle.

Optimizing each phase of the Silicon Lifecycle

Key Benefits

In-Design
- Silicon Aware Design
- Optimized Design
- Sensor Implementation

In-Ramp
- Silicon to Design Feedback
- Fast Product Ramp
- Accurate Failure Analysis

In-Production
- Volume Test Analysis
- Quality Management
- Test Time Reduction

In-Field
- Performance Optimization
- Functional Safety and Security
- Predictive Maintenance
SiliconMAX Platform Components

Deep Insights Throughout the Silicon Lifecycle
Deployable in advanced nodes and mature nodes from 3nm to 28nm. Improving silicon operational metrics throughout product lifecycle through intelligent analysis of ongoing silicon measurement.

The SiliconMAX Platform is tightly coupled to the industry-leading Synopsys TestMAX family of test products and technologies as well as to the Synopsys Fusion Design Platform.

Supporting Applications where Power, Performance and Reliability are Key
SiliconMAX targets applications where system performance and reliability are critical, such as Hyperscaler, Automotive, Consumer, Medical and Industrial IoT, impacting quality, security and reliability concerns that cost companies billions of dollars to monitor and address.

The end-to-end scope of SiliconMAX allows SoC developers to keep track of and maintain silicon data across multiple devices in multiple systems in order to identify systematic issues that may occur over a large population of devices and systems.

For more information visit www.synopsys.com/slm or contact us.