

# Silicon Lifecycle Management Platform

Optimizing each stage of the silicon lifecycle from design to in-field

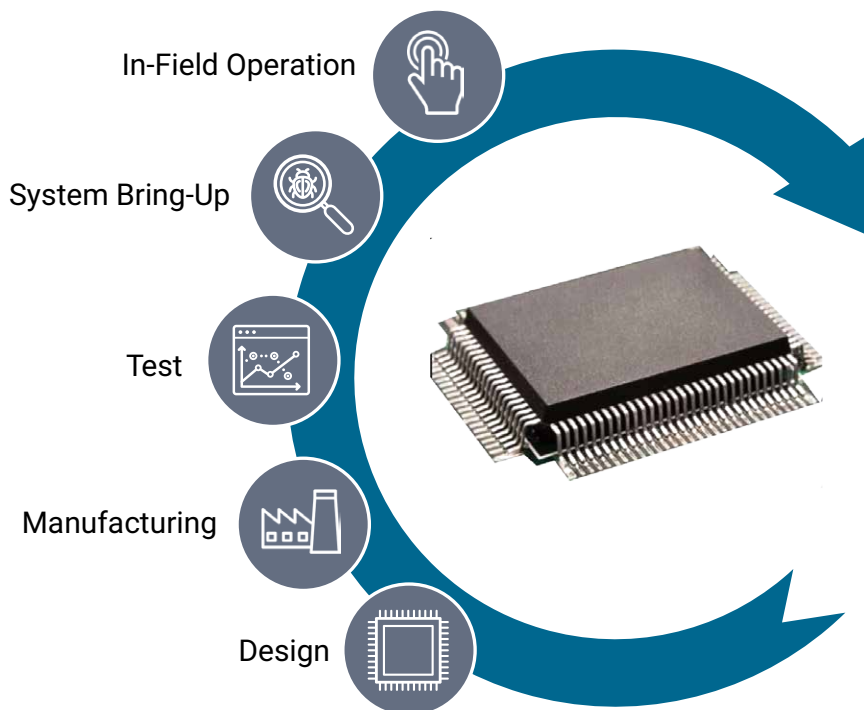
[www.synopsys.com/slm](http://www.synopsys.com/slm)

## Silicon Lifecycle Management (SLM) Platform

The Synopsys SLM platform enables new levels of insight for both SoC providers as well as their customers to optimize operational activities at each stage of the device and system lifecycles.

This analytics-driven platform extends traditional chip design, yield ramp, 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 lifespan.

### Optimizing each stage of the Silicon Lifecycle



## Key Benefits

### Design

- Silicon Aware Design
- Optimized Design
- Sensor Implementation

### Manufacturing

- Parametric Assessment
- Fast Product Yield Ramp
- Yield Improvement

### Test

- Feedback to Design
- Quality Management
- Test Time Reduction

### System Bring-Up

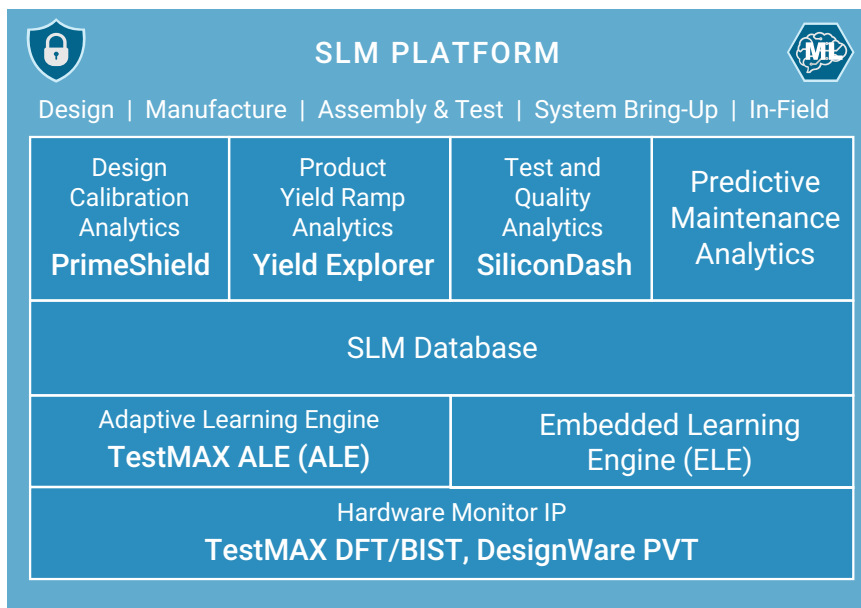
- Operational Insights
- HW/SW Optimization
- Full System Visibility

### In-Field Operation

- Performance Optimization
- Functional Safety and Security
- Predictive Maintenance



## SLM Platform Components

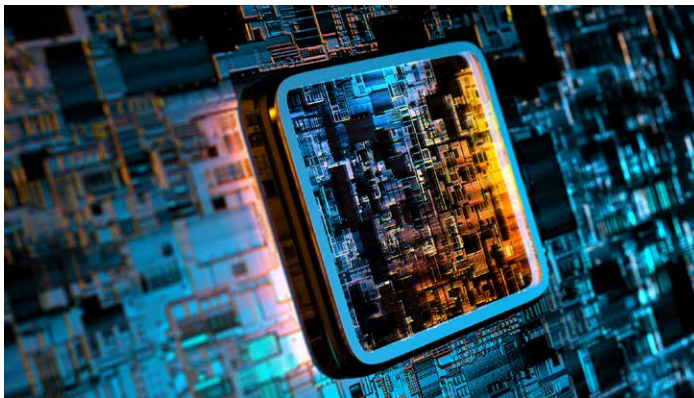


### Platform Features

- End-to-End Solution
- Integrated Platform
- Unified Database
- Application Specific Analytics Engines
- Flexible Sensing Fabric

## Deep Insights Throughout the Silicon Lifecycle

Targeting advanced node process technologies from 28nm down to 3nm. Improving silicon operational metrics throughout product lifecycle through intelligent analysis of ongoing silicon measurement.



The SLM Platform is tightly coupled to Synopsys' industry-leading design implementation, signoff and test solutions, including PrimeShield™, TestMAX™, SiliconDash™ and Yield Explorer.

## Supporting Applications where Performance and Reliability are Key

SLM targets applications where system performance and reliability are critical, such as Data Center, AI, Automotive, Medical and Industrial IoT, impacting quality, security and reliability concerns that cost companies billions of dollars to monitor and address.

SLM's end-to-end scope enables the ability to keep track of and maintain silicon data across multiple devices in multiple systems, hence identifying systematic issues that may occur over a large population of devices and systems.

For more information visit [synopsys.com/solutions/silicon-lifecycle-management](https://synopsys.com/solutions/silicon-lifecycle-management) or send an e-mail to [SLM@synopsys.com](mailto:SLM@synopsys.com)