Optima Launches New IC Security Verification Solution

Optima will present Optima-SEC™, IC-Security verification solution this July at Design Automation Conference (DAC59 - 2022).

NAZARETH, ISRAEL, June 30, 2022 /EINPresswire.com/ -- Optima Design Automation, a leader in next-generation functional safety and IC-security verification, today announced its new hardware security verification solution, Optima-SEC™. Optima-SEC™ enables Pre-Silicon verification of Fault Injection Attacks and certifies the counter-measures adopted against such attacks, which target the extraction of secret information by side-channels.

> Optima-SEC™ enables our customers to verify these countermeasures right at the RTL level, so that Differential Fault Analysis (DFA) of proposed fault attacks are simulated and verified at RTL."
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> *Sesha Sai Kumar C.V.*

Optima-SEC™ is a next-generation platform for the IC-Security countermeasure verification and vulnerability analysis. With Optima-SEC, security verification is highly automated and accelerated all in pre-silicon. Today most of the security verification is done post-silicon, in very expensive labs. It comes late in the design cycle, with low visibility and high costs for correcting any vulnerability found at that stage. "Security verification is done in post-silicon mostly because none of EDA solutions available nowadays can effectively verify security vulnerabilities and do fault attack simulation at the RTL level", noted Jamil R. Mazzawi, Founder and CEO of Optima Design Automation.

"Optima-SEC™ provides a specialized modelling layer, on top of its fault-simulator, that allows our customers to model any type of attacks they want. This is in addition to the provided built-in models for laser-attack and EM-attack", added Jamil.

"Optima-SEC™ is based on the patented FIE (Fault Injection Engine) technology, with orders of magnitude faster fault-simulator. FIE was originally developed for Functional Safety, and now adopted for the needs of security Fault-Attack-Simulation (FAS), to verify security vulnerabilities", noted Sesha Sai Kumar C V, Applications Engineering Director.

Designers plan and implement countermeasures to avoid leakage of the information due to the Fault Injection Attacks. “Optima-SEC™ enables our customers to verify these countermeasures right at the RTL level, so that Differential Fault Analysis (DFA) of proposed fault attacks are simulated and verified at RTL” added Sesha.

Optima-SEC™ will be for the first time presented to the public at Design Automation Conference (DAC59, 2022) this July as well as the paper on IC-security verification solution. A live demo can be scheduled upon request.

ABOUT OPTIMA DESIGN AUTOMATION
Optima Design Automation is the pioneer of next-generation fault analysis for automotive functional safety and IC-Security verification. The company’s product portfolio of automated solutions targets specific fault conditions, accelerating fault simulation stipulated by the ISO 26262 standard by orders of magnitude and enabling a dramatic increase in analysis coverage and ultimate device quality. Optima partners with leading automotive semiconductor vendors and EDA tool providers to create complete solutions that shorten safety-critical device time-to-market. The company is privately held and is based in Nazareth, Israel. For more information, please visit Optima-DA.com.

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