Title: OpenTitan as an Integrated Chiplet RoT

Speakers: Michael Schaffner (lowRISC)

Abstract:

OpenTitan® has striven to embody the principles of zero trust in the most straightforward way possible, by making the full logical implementation open source. The project's implementation principles of transparency, quality, and flexibility have enabled the creation of a dynamic ecosystem of compatible IP — one able to be rapidly remixed into different configurations (i.e. "top-levels" in project parlance) quickly.

This talk will describe how the OpenTitan project was able to move from a discrete silicon root of trust (RoT) design to an integrated top-level configuration suitable as an integrated chiplet RoT. This was made possible by the fertile collaborative soil of the lowRISC Community Interest Corporation's Silicon Commons, OpenTitan's host organization, which enabled seamless leverage of prior designs to an entirely new design space on a parallel track in under a year.

Bio: Dr. Michael Schaffner is a senior designer at lowRISC US. Previously, he has worked on OpenTitan and the TPU project at Google in California, and was a postdoctoral researcher at the Integrated Systems Laboratory at ETH Zurich, Switzerland. He received his MSc and PhD degrees from ETH Zurich in 2012 and 2017, where he has been a research assistant at the Integrated Systems Laboratory and Disney Research.