

# Accelerating Mixed-Signal Design Verification: Turn a SPICE netlist into a SystemVerilog Model

*Thursday, 5 July 2018 13:00 (1 hour)*

Today's image sensor solutions for demanding applications like automotive driver assist image sensing, high speed machine vision, and low power battery operated cameras started from relatively modest solutions for pixels and analog readout design. These initial solution options have evolved along different paths. Now the designer must understand the overall image system requirements to decide where and what to process in the pixel domain, analog circuit domain, and digital processing domain. These decisions rely on understanding the fundamentals of imager photon capture, noise components, analog/digital signal processing topology efficiency, and now the impact of 3D wafer stacking on sensor architecture solutions. This talk will review some of the fundamentals of image sensor technology, design, how it evolved to its current state, and the trajectory for what is possibly next.

**Primary author:** Mr PANICACCI, Roger

**Presenter:** Mr PANICACCI, Roger

**Session Classification:** Plenary Talks