

The cutting-edge information you need on SOP

From the Packaging Research Center—a comprehensive book
Introduction to System-on-Package (SOP)

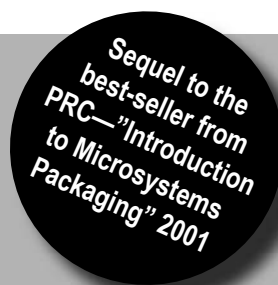
The SOP, System-On-Package, is a new and emerging microsystem paradigm with applications not only for electronic systems but also for bio-medical systems. It goes beyond System-on Chip (SOC) and System-In-Package (SIP) technologies that are widely practiced in the industry today. It overcomes the fundamental limits to computing and integration limits to wireless communications and to consumer electronics that SOC and SIP present. Prof. Tummala, the Founding Director of NSF-ERC, Packaging Research Center at Georgia Tech and pioneer of SOP, calls it the second Moore's Law for System Integration. In contrast to SOC, SIP and MCM, which drive the first Moore's Law for IC integration leading to package or modules, SOP drives mega-function integration by both component density and functional density at system level.

Each chapter will review in about 30-40 pages the latest status of each of the technologies that make up SOP technology around the world with appropriate introduction followed by in-depth review, supported by extensive graphics, tables and references.

The following chapters are planned for the book:

- The Trend to Convergent systems
- Introduction to System-on-Chip (SOC)
- Introduction to System-in-Package (SIP)
- Introduction to System-on-Package (SOP)
- Mixed Signal Design
- Integrated RF SOP
- Integrated Optoelectronics SOP
- Digital SOP
- SOP Reliability
- MEMS and Sensors
- Wafer Level Packaging and Flip Chip Assembly
- Thermal Management
- Mixed Signal Electrical Test

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