Asynchronous IC technology research in Nokia

Jukka T. Liimatainen

Research Manager

Nokia Research Center, Helsinki, Finland

Asynchronous IC technology research has been carried out in Nokia Research Center. The main advantages of asynchronous circuits have been analyzed and compared to both conventional synchronous and clock-gated synchronous circuits. The purpose of this paper is to present the results of the measurements and the technology used for the circuit design. Furthermore, the concept of productization of asynchronous technologies will be described.