Contribution ID: **115** Type: **Oral**

3D electronics

Monday, 25 September 2006 17:15 (45 minutes)

Traditional integrated circuits consist of a single layer of transistors interconnected with multiple layers of metal wiring.
Three-dimensional integrated circuits (3D-ICs) consist of two or more active circuit layers that are vertically stacked and interconnected at high density. In addition to reducing the wire length, 3-D interconnection of active devices offers the potential for radically new computer architectures, extremely dense memories, and advanced focal planes that utilize the inherent parallelism inherent in the 3D technology. In this talk we will present work at MIT Lincoln Laboratory over the last several years which targets new classes of focal planes which exploit the parallelism of dense vertical interconnection reaching to small pixel sizes.

Primary author: SUNTHARALINGAM, Vyshnavi

Presenter: SUNTHARALINGAM, Vyshnavi

Session Classification: Plenary session P1-Opening plenary