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List of publications/patents:

<https://scholar.google.com/citations?user=xXV4oIMAAAJ&hl=en>

Picture: (if needed)



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Title: Flexible Hybrid Electronics 2.0

Speaker: Subramanian Iyer, UCLA

Abstract:

In the last few years, electronics packaging has rightfully emerged from the shadows of CMOS scaling to make a significant impact in high performance and mobile appliance computing. The area of Flexible Hybrid Electronics (FHE) has also developed and is making a significant impact in the area of medical and wellness electronics. The first generation of these devices have, for most part, adapted Printed Circuit Board (PCB) technology by using thinner PCBs and assembling either thinned or thin packaged “older” generation of chips on to these platforms, typically with coarse printed wiring to connect a small number of such chips. This approach, while immensely useful to get the field going, needs to adapt and borrow from the both silicon and advanced packaging technology trends, so that we can advance this trend to the next level. The key paradigm challenges ahead are: scaling FHE in general – this includes the adoption of dielet (chiplet) technology in more advanced CMOS nodes including edge-AI, higher performance interconnects, flexible high-density energy storage, wireless communication and advanced ergonomics and all of these at lower cost and higher reliability. In this talk we will address these challenges and outline a possible technology roadmap to achieve these goals in the next few years.