



IEEE 2019 INTERNATIONAL 3D SYSTEMS INTEGRATION CONFERENCE
October 8-10, 2019 Sendai, Japan
October 8 at Hotel Metropolitan Sendai
October 9-10 at Miyagino Ward Cultural Center, Sendai

INVITED TALK

10:35-11:05, October 9, 2019 Paper ID-4079

Advances in Substrate Manufacturing for AI/HPC and 5G Packaging

Dr. Farhang Yazdani

President & CEO

BroadPak Corporation, USA



<Abstract>

Substrate is regarded as the foundation of semiconductor packaging. A substrate dictates overall form factor with first order effect on performance and cost of the finished product. Emerging heterogeneous chiplet integration, AI/HPC and 5G megatrends has created the need for advanced substrate technologies with superior performance and lower costs. With the industry embarking on heterogeneous integration of fine pitch devices there are even more pressure on end customers to manage fine bump pitch integration as well as performance and costs. We will present, emerging substrate technologies and manufacturing requirement for AI/HPC and 5G packaging.

<CV>

Farhang Yazdani is the President and CEO of BroadPak Corporation. BroadPak is internationally recognized as the "key provider of innovative total solution for 2.5D/3D products". Through his 19 years with the industry, he has served in various technical, management, and advisory positions with leading semiconductor companies worldwide. He is the author of the book "Foundations of Heterogeneous Integration: An Industry-Based, 2.5D/3D Pathfinding and Co-Design Approach". He is the recipient of 2013 NIPSIA award in recognition of his contribution to the advancement and innovations in packaging technologies. He has numerous publications and IPs in the area of 2.5D/3D Packaging and Assembly, serves on various technical committees and is a frequent reviewer for IEEE Journal of Advanced Packaging. He received his undergraduate and graduate degrees in Chemical Engineering and Mechanical Engineering from the University of Washington, Seattle.