



## Highly Productive Spatial ALD platform for Memory Applications

Rajkumar Jakkaraju - Senior Global Product Manager Applied Materials

Adoption of Atomic Layer Deposition (ALD) for semiconductor manufacturing has more than doubled over the past 3 years driven by inflections in both logic and memory devices from planar to 3D structures requiring conformal deposition, and is set to double again over the next 3 to 5 years driven by the need for unique ALD films to enable continued device scaling and new memories like PcRAM and ReRAM. Spatial ALD technique serves as a disruptive means, compared to conventional ALD, to deposit high quality metal and dielectric films at low temperatures to meet requirements of conventional and new memories. In this presentation, we will review challenges associated with adapting spatial ALD technology to high volume semiconductor manufacturing, and our design approach used in developing a new ALD platform to address those challenges.

Organized by:

