

Aviza, Air Liquide to Develop Advanced Films for Sub-90-nm Manufacturing

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Aviza Technology, Inc., a leading supplier of production-proven thermal process systems and an industry innovator in atomic layer deposition (ALD), today announced the signing of a joint development agreement (JDA) between Aviza Technology and Air Liquide, the international gas leader. This JDA follows on the heels of the recent collaboration that led to the development of Aviza's low temperature chemical vapor deposition process (LPCVD) for silicon nitride (SiN) - dubbed Satin. Under this JDA, Aviza and Air Liquide will leverage their expertise as leaders in semiconductor equipment manufacturing and chemicals formulation, respectively, to improve precursor materials used for advanced single wafer and batch deposition processes for dielectric and electrode applications.

“We are very pleased to have expanded our joint collaborative efforts with Aviza,” said Christophe Fontaine, Vice President Electronics of Air Liquide. “We believe that our continued mutual cooperation will result in the development of new materials to address the manufacturing requirements of complex ICs.”

The growing demand of shrinking geometries for next-generation consumer applications is driving the need for continued development of new materials to keep pace with leading-edge semiconductor manufacturing processes. This partnership enables Aviza and Air Liquide to streamline the process for developing advanced films—reducing research and development costs and offering chipmakers the solutions they need to manufacture ICs at sub-90-nm

nodes. Air Liquide will provide the chemicals and associated analysis, while Aviza will utilize selected precursors to develop fully characterized films that meet the stringent requirements of next-generation applications.

“We are proud to be continuing our work with Air Liquide,” said Helmuth Treichel, Director of Process Technology at Aviza Technology. “We had quite a successful partnership with Air Liquide for development of our Satin process. As we continue to develop advanced films to meet the requirements of next-generation ICs, we feel that partnering with a leading materials supplier like Air Liquide to jointly address manufacturing challenges for sub-90-nm films is essential—and will enable us to offer global chipmakers advanced manufacturing solutions to produce leading-edge ICs.”

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