

## **NEWS ANNOUNCEMENT**

## FOR IMMEDIATE RELEASE

## US Department of Defense to Invest up to \$170M in SkyWater's Domestic Technology Foundry

- Broadens SkyWater's production capabilities for Strategic Rad-Hard electronics
- Enables Cu interconnect process for enhanced mixed-signal device performance and interposers for advanced packaging technologies
- SkyWater to expand facility and clean room to support new technology capabilities

BLOOMINGTON, MN, October 21, 2019 – SkyWater Technology, the innovator's trusted partner for a competitive edge, announced the US Department of Defense (DOD) is planning to invest up to \$170 million for a multi-phase project to enhance microelectronics capabilities for the DoD and the Strategic Radiation Hardened (Rad-Hard) market. SkyWater will be expanding its Trusted Foundry facility to add clean room area and supporting infrastructure to enable this and other complementary technologies. The initial phase is funded at \$80 million and SkyWater will leverage this investment to develop a new 90 nm rad-hard electronics production capability to complement its existing 90 nm rad-tolerant offering. In addition, it will fund SkyWater to add copper (Cu) dual-damascene interconnect technology to the facility which marks a significant advancement for the company's mixed-signal and interposer offerings. Future phases of the effort include options for more advanced microelectronics capabilities.

SkyWater's expanded rad-hard process will be based on PDSOI (partially depleted silicon on insulator) technology and will enhance reliability of critical microelectronic devices in harsh conditions such as space and military field deployments. This enhancement to SkyWater's U.S. production operation will extend new offerings for the company's aerospace and defense customers, ensuring manufacturing excellence and high efficiency for this unique chip category. Additionally, with SkyWater's strong focus on commercial markets, this postures the company to address non-defense related opportunities for hardened electronics such as commercial space operations, medical imaging and other applications in extreme environments.

The new Cu interconnect option at SkyWater increases IC (integrated circuit) performance with lower resistance and higher speed and interconnect density by exploiting the intrinsic electrical conductivity advantages of copper as compared to aluminum. This benefits mixed-signal technologies through higher density logic circuits and reduced losses in analog/RF circuits,

ultimately improving system performance and efficiency. The new interconnect capability is critical to support the company's roadmap for more advanced node geometries beyond 90 nm.

"We are very pleased to expand our support of DoD objectives with this new Strategic Rad-Hard foundry offering while also extending commercialization capabilities for related technologies," said Dr. Brad Ferguson, SkyWater Chief Technology Officer and head of SkyWater's government relations efforts.

Dr. Ferguson added, "The addition of copper interconnect represents an important material processing capability that SkyWater needs to support node scaling to 65 nm and 45 nm and aligns with our customers' technology roadmaps. Also, by entering the copper interposer market, we can help narrow the existing gap in North America for advanced packaging solutions and increase the breadth of our technology offerings."

"As a solely US owned and operated Technology Foundry, we are committed to supporting aerospace and defense customers. This investment marks a deepening of our relationship with this community, reinforces the credibility of our business model and expands our technology platforms allowing us to also increase the scope of our serviceable commercial markets," said Thomas Sonderman, SkyWater President.

SkyWater's new PDSOI technology platform for rad-hard applications will be presented at the RHET (Radiation Hardened Electronics Technology) conference on November 6, 2019 by Paul Chopelas, SkyWater Senior Director of Sales. Additional information on SkyWater's new rad-hard process as well as its interposer and high performance mixed-signal offerings is available by contacting swfoundry@skywatertechnology.com.

## **About SkyWater Technology**

SkyWater is a solely U.S.-based and owned, DMEA-accredited Category 1A Trusted Foundry. Through its Technology Foundry model, SkyWater provides custom design and development services, exclusive design IP, and volume manufacturing for integrated circuits and micro devices. The Company's world-class operations and unique processing capabilities enable mixed-signal CMOS, rad-hard and ROIC solutions. SkyWater's Innovation Engineering Services empower development of superconducting and 3D ICs, along with carbon nanotube, photonic and MEMS devices. SkyWater serves customers in growing markets such as aerospace & defense, automotive, cloud & computing, consumer, industrial, IoT and medical. For more information, please visit: www.skywatertechnology.com/.

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