



NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

SkyWater Chosen for Volume U.S. Manufacturing of Temperature Sensing Chip for Low-Cost Wearable Solution that Detects Early Stage Symptom of COVID-19

Smartphone-enabled wireless patch provides self-health monitoring and public health contact tracing to support roadmap to reopen the country

BLOOMINGTON, MN, May 26, 2020 – [SkyWater Technology](#), the innovator’s trusted foundry partner, announced today it was chosen by investment firm, [Asymmetric Return Capital](#) (ARC) and [Linear ASICs](#), a fabless analog and mixed-signal semiconductor company, to volume manufacture a microchip with temperature sensing capabilities used in a low-cost, smartphone-enabled wireless patch that assists in the remote detection of COVID-19. The patch monitors elevated body temperatures which can indicate early onset of the virus. It is a small, circular-shaped adhesive device, approximately the same thickness, size, and flexibility of a small Band-Aid®. The patch is placed on the skin and wirelessly paired to a mobile device.

The temperature sensing chip being produced by U.S.-based SkyWater is planned to be used as part of a health monitoring solution being developed through additional partnerships with AI innovator, [SensiML](#), a subsidiary of QuickLogic and [Upward Health](#), an in-home and virtual care medical provider. This solution is intended to provide an end-to-end tool that enables early detection of physiological indicators tied to COVID-19 such as fever and unique cough patterns. The platform is also intended to allow integration with contact tracing applications such as the upcoming exposure notification systems from Apple and Google. Other benefits range from helping people get back to work safely to reduced anxiety and less spread of the virus to safer patient care.

“Now that temperature checks are becoming ubiquitous in return-to-work policies, a domestic supply of low-cost, no-touch thermometers is critical,” said Bryan Wisk, ARC Founding Partner. “SkyWater and Linear ASICs have enabled us to develop a high volume of wireless temperature sensing tags that can remotely monitor temperature and keep those with symptoms at home. This will be especially important as we head into flu season later this year.”

As businesses reopen, health monitoring will play a critical role in supporting necessary behavior modifications to improve safety for workers and individuals in our communities. In this interim period where widespread testing and an approved vaccine are not yet available, this wearable self-monitoring solution will enable large segments of the population to consistently check their temperatures and helps public health officials identify community spread to prevent larger outbreaks. The solution is expected to aid businesses, governments, and other organizations in developing effective return to normal policies and action plans.

“Given the opportunity to address a critical need that has national interest, we were able to respond with rapid development of this vital temperature sensing solution in a U.S. manufacturing facility,” said Thomas Sonderman, SkyWater President. “Our Technology Foundry business model enables us to provide volume manufacturing with IP security in a flexible and agile environment which facilitates rapid time to market and minimizes supply chain disruption risks by offering a domestic sourcing option.”

Over the last year, ARC, Linear ASICs and SkyWater have spearheaded a U.S.-based technology development and manufacturing consortium that is focused on leveraging key supply chain elements to support rapid product development while maintaining supply chain transparency, assurance of supply, and integrity of intellectual property. In light of the COVID-19 outbreak, crisis response activities and policies have further shed light on distributed supply chain dynamics which have been a point of reconsideration following recent global trade conflicts. For this immediate COVID-19 application, the consortium was able to respond with unusual speed by quickly pivoting complementary technologies already on their way to the market for the food industry, consumer wearables, and wireless battery management systems for the transportation industry.

SkyWater’s 130 nm mixed-signal ASIC process (S130) was selected as the best ASIC platform to develop the temperature sensor due to its long heritage of providing an ideal combination of analog and digital performance at the right value point. “We are pleased to collaborate with ARC on this important health monitoring solution and to work within SkyWater’s ecosystem to quickly conceptualize, streamline development and move this product quickly into the market,” said Mike Ward, CEO, Linear ASICs.

SkyWater is certified to the ISO 13485 Quality Standard for Medical Devices to support the design, development and fabrication of biochip applications in a wide range of emerging biomedical market segments.

About SkyWater Technology

SkyWater is the only U.S.-owned and U.S.-based pure play semiconductor foundry and is a DoD-accredited Trusted supplier, specializing in custom design and development services, design IP, and volume manufacturing for integrated circuits and micro devices. Through its Technology Foundry model, SkyWater's world-class operations and unique processing capabilities enable mixed-signal CMOS, power, 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. The company serves customers in growing markets such as aerospace & defense, automotive, biomedical, cloud & computing, consumer, industrial, and IoT. For more information, please visit: www.skywatertechnology.com/.

###

SkyWater Company Contact: Ross Miller | 952.851.5063 | ross.miller@skywatertechnology.com

SkyWater Media Contact: Lauri Julian | 949.280.5602 | lauri.julian@skywatertechnology.com