



## Weebit Nano ReRAM IP now available in SkyWater Technology's S130 process

Weebit's first ReRAM product provides a differentiated NVM for analog/mixed-signal, IoT, medical, automotive, industrial, and other applications

**HOD HASHARON, Israel and BLOOMINGTON, Minnesota, U.S. – 7 March 2023** – Weebit Nano Limited (**ASX:WBT**), a leading developer of advanced memory technologies for the global semiconductor industry, and SkyWater Technology (**NASDAQ: SKYT**), the trusted technology realisation partner, announce availability of Weebit's resistive RAM (ReRAM) IP in SkyWater's 130nm CMOS (S130) process. SkyWater customers can now easily integrate Weebit's innovative, proven non-volatile memory (NVM) in their system-on-chip (SoC) designs. Weebit is demonstrating its S130 ReRAM IP module at Embedded World 2023, 14-16 March 2023.

Weebit ReRAM enables semiconductor designs to be faster, lower cost, more reliable and more energy efficient than those using flash or other emerging NVMs. Weebit ReRAM technology in S130 is an ultra-low power, radiation tolerant and secure NVM that companies can use in developing highly integrated SoCs for applications including analog/mixed-signal, IoT, automotive, industrial, and medical.

Demo chips produced by SkyWater integrating Weebit's ReRAM module were recently received from manufacturing and proven fully functional. These chips are currently under qualification, and are being used for customer demonstrations, testing and prototyping.

**Coby Hanoch, CEO of Weebit Nano**, said: "Our valuable partnership with SkyWater has enabled us to bring this first Weebit ReRAM product to market. Our teams have worked tirelessly towards commercialisation of the technology, with our ReRAM IP now commercially available for customers to design their products in SkyWater's U.S. foundry. ReRAM is no longer the technology of the future – it is here now. We are now working with a number of potential customers to map the technology's advantages to their specific design requirements."

**Steve Kosier, CTO of SkyWater**, said: "Weebit ReRAM offers our customers a differentiated NVM solution they can use in developing highly integrated products at ultra-low power. Weebit's technology has excellent reliability even at high temperatures, and is tolerant to radiation and electro-magnetic fields, making it a great fit for many of our customers' demanding target markets. The IP will be supported in our process design kit in the near future, allowing customers to confidently and easily integrate Weebit ReRAM into their designs. We look forward to partnering with our customers as they use this innovative NVM to embed more intelligence and capabilities in their next-generation products."

### Weebit ReRAM IP in S130

SkyWater is a U.S.-based pure-play foundry. Its S130 process has been used reliably for billions of devices to-date. The automotive-grade, extended temperature, mixed-signal CMOS platform is well suited for IoT and edge computing as it enables a combination of both digital and analog circuit performance, now with embedded NVM for a wide range of SoC architectures.

Weebit ReRAM IP is an embedded module with a complete set of collateral and EDA views compatible with the industry leading design flows to enable smooth integration by SoC architects. The module in S130 includes a 256Kb ReRAM array, control logic, decoders, IOs (Input/Output communication

elements) and error correcting code (ECC). Its scalable, modular design enables customization according to a customer's specific design requirements (e.g., memory density, word size, system interface). The module is designed with unique patent-pending analog and digital smart circuitry running smart algorithms that significantly enhance the memory array's technical parameters.

Highlights of Weebit ReRAM IP:

- High write cycle endurance, up to 100K cycles, supporting applications with recurring memory updates
- Supports 10 years' data retention at high temperatures
- Ultra-low power consumption, including down to zero standby power
- Fast access time for quick bootup/instant-on capability
- Fast programming time with byte addressability
- Tolerant to ionizing radiation and electromagnetic interference (EMI)
- Inherently secure technology, deeply embedded between two metal layers

Full qualification of the Weebit ReRAM memory module in SkyWater's U.S. production fab is expected to be completed in the first half of 2023.

#### **Demonstration at Embedded World**

Weebit Nano is demonstrating its S130 ReRAM IP module at Embedded World 2023, being held 14-16 March in Nuremberg, Germany. The Company will be in Hall 4, booth #650a.

#### **Availability**

The Weebit ReRAM IP module in SkyWater's 130nm CMOS process will be available with full support in the next production release of SkyWater's S130 process design kit (PDK), once qualification is complete.

Upon request, the module is available as part of a complete subsystem including a RISC-V microcontroller (MCU), system interfaces, Static Random-Access Memory (SRAM), and peripherals. Weebit ReRAM can be easily scaled to other processes.

*Approved for release by the Board of Weebit Nano Limited.*

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## **About Weebit Nano Limited**

Weebit Nano Ltd. is a leading developer of advanced semiconductor memory technology. The company's ground-breaking Resistive RAM (ReRAM) addresses the growing need for significantly higher performance and lower power memory solutions in a range of new electronic products such as Internet of Things (IoT) devices, smartphones, robotics, autonomous vehicles, 5G communications and artificial intelligence. Weebit's ReRAM allows semiconductor memory elements to be significantly faster, less expensive, more reliable and more energy efficient than those using existing Flash memory solutions. As it is based on fab-friendly materials, the technology can be quickly and easily integrated with existing flows and processes, without the need for special equipment or large investments. See [www.weebit-nano.com](http://www.weebit-nano.com) and follow us on <https://twitter.com/WeebitNano>.

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## **About SkyWater Technology**

SkyWater (NASDAQ: SKYT) is a U.S.-based, U.S. investor-owned semiconductor manufacturer and a DMEA-accredited Category 1A Trusted Foundry. SkyWater's Technology as a Service model streamlines the path to production for customers with development services, volume production and heterogeneous integration solutions in its world-class U.S. facilities. This pioneering model enables innovators to co-create the next wave of technology with diverse categories including mixed-signal CMOS, ROICs, rad-hard ICs, power management, MEMS, superconducting ICs, photonics, carbon nanotubes and interposers. SkyWater serves growing markets including aerospace & defense, automotive, biomedical, cloud & computing, consumer, industrial and IoT. For more information, visit: [www.skywatertechnology.com](http://www.skywatertechnology.com).

## **SkyWater Technology Forward-Looking Statements**

This press release contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements that are based on the Company's current expectations or forecasts of future events, rather than past events and outcomes, and such statements are not guarantees of future performance. Forward-looking statements are subject to risks, uncertainties and assumptions, which may cause the Company's actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements. Key factors that could cause the Company's actual results to be different than expected or anticipated include, but are not limited to, factors discussed in the "Risk Factors" section of its annual report on Form 10-K and quarterly reports on Form 10-Q, and in other documents that the Company files with the SEC, which are available at <http://www.sec.gov>. The Company assumes no obligation to update any forward-looking statements, which speak only as of the date of this press release.