



NEWS RELEASE

# Bravechip and Ambiq Bring Low Power Innovation to Smart Rings with BCL603S3L

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Austin, TX, June 04, 2024 – Ambiq®, a leading developer of ultra-low-power semiconductor solutions that enable energy-efficient AI on edge devices, collaborates with Bravechip, a technology leader in Artificial Intelligence of Things (AIoT) Systems in a Package (SiP) solutions and printed circuit board assembly (PCBA), for the BCL603S3L chiplet that uses the Apollo3 Blue Systems-on-a-Chip (SoC) for increased energy efficiency, functions, performance, and reliability for smart ring designs.

The BCL603S3L is a high-performance, ultra-low power chiplet with the Apollo3 Blue as its master control, optimizing the CPU to achieve 6 uA/MHZ power levels and significantly decreasing active power consumption for a range of tasks such as heart rate, blood oxygen, blood pressure, sleep, step counting, 3DoF, 6DoF, and other applications.

The Apollo3 Blue SoC comes with BLE 5.2, embedded low-power Bluetooth protocol stacks, and GATT services connecting smart rings to smartphones. Integrating the Apollo3 Blue also allows for a more compact design with a 4\*6.8mm LGA package, enabling Smart Ring manufacturers to design with a two-layer FPC board, reducing the number of BOMs by 30%, decreasing the fail rate, and shortening the design cycle.

“Our partnership with Ambiq has helped to enable the BCL603S3L with an incredibly low power and high performing SiP. The support of the Apollo3 Blue provides smart ring manufacturers with improved flexibility, reliability, and power efficiency designed to minimize the development lifecycle,” said Zongming Jin, the CEO of Bravechip.

“Working with Bravechip helps bring our low-power solution to a specialized segment within digital health devices. Our Apollo3 Blue System-on-a-Chip within Bravechip’s Systems-in-a-Package will help to create even higher performing smart rings capable of meeting consumer needs,” said Terry Pan, VP of Sales, Ambiq China.

#### About Bravechip

Founded at the end of 2018, Bravechip Technology is a chiplet chip-level solution provider for the AIoT market. The company has abundant chiplet “core” resources and packages multiple bare dies together through advanced packaging to provide chip-level solutions for downstream users. The company’s products can be widely used in narrowband IoT scenarios with tens of billions of connections such as medical, industrial, and home. The company will combine high-quality industry, academia, and research resources such as Tsinghua University School of Integrated Circuits and Nanjing Linkwah Institute of Integrated Circuit Technology to become a world-class chip company. For more information, visit <http://www.bravechip.com/>.

#### About Ambiq

Ambiq’s mission is to develop the lowest-power semiconductor solutions to enable intelligent devices everywhere and drive a more energy-efficient, sustainable, and data-driven world. Ambiq has helped leading manufacturers worldwide create products that last weeks on a single charge (rather than days) while delivering a maximum feature set in compact industrial designs. Ambiq’s goal is to take Artificial Intelligence (AI) where it has never gone before in mobile and portable devices, using Ambiq’s advanced ultra-low power system on chip (SoC) solutions. Ambiq has shipped more than 230 million units. For more information, visit [www.ambiq.com](http://www.ambiq.com).

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