

Ubilite Licenses RISC-V Application Processor IP Core from CAST

RISC-V Summit, Santa Clara, California — November 7, 2023 — Semiconductor intellectual property provider CAST today announced that ultra-low-power Wi-Fi chipset developer Ubilite, Inc. has licensed a RISC-V IP core for use as an application processor in Ubilite’s next generation of products.

Ubilite designs and fabricates custom system chips that provide the advantages of Wi-Fi connectivity with ultra-low power consumption equivalent to or less than Bluetooth Low Energy. Their current [UBI206 Wi-Fi chip](#)

uses a tenth of the power of competing Wi-Fi chipsets, making it ideal for Internet of Things and other battery-powered applications that must wirelessly exchange significant amounts of data. It combines a Wi-Fi 802.11b/g/n radio, media access controller (MAC), power management unit (PMU), memories, a network application processor, and other functions to provide a complete Wi-Fi solution.



Ubilite previously licensed the BA20 Processor Core and a peripherals platform from CAST. The company’s upcoming new Wi-Fi products will now make use of the [BA51 Ultra-Low-Power Deeply Embedded RISC-V Processor](#) as an application processor.

“Like Ubilite with Wi-Fi, CAST provides extremely competitive IP core products that are high-quality, complete, and easy to integrate and use,” said Peter Gammel, chief executive officer for Ubilite. “We expect the RISC-V processor core we’ve licensed from CAST to help us maintain — and extend — the advantages of our low-power Wi-Fi SoCs over competing IoT products.”

Sourced from CAST partner Beyond Semiconductor, the BA51 Core is available royalty-free for ASICs or FPGAs. It supports the 32-bit RISC-V instruction set with an ultra-low-power, two-stage pipelined architecture. The processor is full featured yet uses remarkably little power and silicon area, and can run at over 500MHz in 16nm ASIC technologies. Learn more about the BA51 and other RISC-V cores from CAST at www.cast-inc.com/processors/risc-v.

About Ubilite, Inc.

Founded in 2014, Ubilite is a fabless semiconductor company developing the lowest-power SoC for IoT applications. Ubilite's UBI206 SoC has power consumption that is lower than Bluetooth at up to 10-20x the data rate. Its ultra-lower consumption in active and sleep states enables very long battery life or the ability to use energy harvesting to enable continuous operation for many years. Learn more about Ubilite at www.ubilite.com.

About CAST

Computer Aided Software Technologies, Inc. (CAST) is a silicon IP provider founded in 1993 and celebrating its 30th anniversary this year. CAST's ASIC and FPGA IP product line includes microcontrollers and processors; compression engines for data, images, and video; interfaces for automotive, aerospace, and other applications; various common peripheral devices; and comprehensive SoC security modules. All conform to CAST's strict quality standards for design, verification, and productization. Together with CAST's responsive technical support, this ensures that designers using IP from CAST enjoy *A Better IP Experience*. Learn more by visiting www.cast-inc.com.

CAST is a trademark of Computer Aided Software Technologies Inc.
Other trademarks are the property of their respective owners.

###

Media Contact:
Artemis Couroupaki, a.couroupaki@cast-inc.com