Ashling and Imagination announce Ashling's *RiscFree*™ C/C++ SDK support for RISC-V-based Catapult family.

Embedded World, Mar-14 2023, Nuremberg, Germany. [Ashling](#) and [Imagination Technologies](#) announced today that Ashling's **RiscFree** SDK will provide software development support for [Imagination's Catapult](#) RISC-V-based IP cores.

RTXM-2200 is the first commercial, licensable CPU IP from the RISC-V Catapult family featuring a real-time, highly scalable, 32-bit embedded design drawing on Imagination's decades of experience in CPU design.

"In partnering with Ashling we are enabling support for the RiscFree SDK on our RISC-V processor cores. This means our customers will benefit from a wider range of development tools, supporting their RISC-V-based design journey and enabling them to significantly speed up their time to market. We are excited to grow and consolidate the Catapult RISC-V ecosystem with Ashling through both market-leading hardware as well as comprehensive software support for future technologies in this space," said **Peter Lewin, Director of CPU ecosystems, Imagination**.

RiscFree is Ashling's SDK including an IDE, compiler and debugger and provides software development and debug support for Catapult. Since its introduction, Ashling's **RiscFree** SDK has been steadily building market share within the embedded tools market and is particularly strong in the RISC-V market where its ease-of-use, broad functionality, plug-in architecture and real-time trace support have made it the go-to choice for 32-bit and 64-bit RISC core software development.

"We are pleased to announce our support for Imagination's recently released Catapult RISC-V CPU cores and that our RiscFree is now part of Imagination's tools eco-system for development and debug. We look forward to further co-operation, particularly between our engineering teams to ensure that RiscFree can leverage all the additional debugging and analysis capabilities earmarked for future Catapult devices," said **Hugh O'Keeffe, CEO of Ashling**.

Ashling **RiscFree** SDK support for Imagination's Catapult includes:
- IDE with full source & project creation, editing, build & debug support
- **RiscFree** includes a single-shot installer that installs & automatically configures all the component tools to work "out-of-the-box"
- Automatic source-code formatting, syntax colouring & function folding
- Integrated compiler toolchain
- ROM or RAM based debugging support (e.g. hardware breakpoints for flash-based support)
- Integrated QEMU ISA simulator
- Support for other industry standard instruction & cycle accurate simulators
- High-level RISC-V register viewer
- Integrated RTOS (e.g. FreeRTOS or Zephyr) & OS (e.g. Linux) debug support.
- Project wizards, templates & examples

For more information on Ashling's **RiscFree** see: https://www.ashling.com/ashling-riscv/ and for details on Imagination's Catapult see https://www.imaginationtech.com/products/cpu/

About Ashling
Ashling have been a leading provider of Embedded Development Tools & Services since 1982 with design centres in Limerick Ireland and Kochi India and sales and support offices in Europe, Asia Pacific, the Middle East and America. Visit www.ashling.com for more details.

About Imagination
Imagination is a UK-based company that creates silicon and software IP (intellectual property) designed to give its customers an edge in competitive global technology markets. Its GPU, CPU, and AI technologies enable outstanding power, performance, and area (PPA), fast time-to-market, and lower total cost of ownership. Products based on Imagination IP are used by billions of people across the globe in their smartphones, cars, homes, and workplaces. See https://www.imaginationtech.com/. Follow Imagination on Twitter, YouTube, LinkedIn, Facebook and Blog.

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About RISC-V
The RISC-V open architecture ISA is under the governance of the RISC-V International. Visit https://riscv.org for more details.

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