Ashling and GigaDevice Semiconductor announce Ashling’s RiscFree™ C/C++ Toolchain for GigaDevice’s GD32 RISC-V Microcontrollers

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Silicon Valley, California, USA. Ashling and GigaDevice Semiconductor jointly announced today that Ashling’s RiscFree Toolchain for RISC-V will provide specific software development support for GigaDevice’s GD32V series of RISC-V based microcontrollers (GD32V).

The GD32V device is a 32-bit general-purpose microcontroller based on the RISC-V core with an impressive balance of processing power, reduced power consumption, and peripheral set. GD32V devices are suitable for a wide range of interconnected applications, especially in areas such as industrial control, motor drives, power monitor and alarm systems, consumer and handheld equipment, POS, vehicle GPS, LED display, and others.

"As the RISC-V market is growing, we are happy to see a leading RISC-V toolchain provider like Ashling adding support for our GD32V RISC-V based microcontrollers. Ashling RiscFree will be a strong addition to our ecosystem of tools and solutions that will benefit our expanding customer base and will result in rapid time-to-market for our end customers," said Eric Jin, Product Marketing Director at GigaDevice.

RiscFree is Ashling’s Integrated Development Environment (IDE) including a Compiler and Debugger and provides software development and debug support for GigaDevice GD32V series. Since its introduction, Ashling’s RiscFree toolchain 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 upcoming Real-time Trace support have made it the go-to choice for 32-bit and 64-bit RISC core software development for the aerospace and defense industries.

"We are happy to announce our support for GigaDevice RISC-V based MCUs and that our RiscFree is now part of Giga device’s ecosystem of development and debug. We are confident RiscFree support will offer the user base of GigaDevice a leading Toolchain which will help in speeding up the deployment of any GD32V MCU powered solutions." said Hugh O’Keeffe, CEO of Ashling.

Ashling RiscFree toolchain support for GD32V MCUs includes:

- Project Manager and Build Manager including Make and CMake support
- Source-code Creation and Navigation support
- GCC toolchain fully integrated into the RiscFree IDE with support for newlib run-time library
- Run-time Debug
- Debugger Register View support for Peripheral and CSR Registers
- RTOS Debugger FreeRTOS Task and Queue Views
- Custom instruction support including additions to the standard RISC-V ISA
For more information on Ashling's **RiscFree** see: [https://www.ashling.com/ashling-riscv/](https://www.ashling.com/ashling-riscv/) and for details on GigaDevice see [https://www.gigadevice.com/products/microcontrollers/gd32/risc-v/](https://www.gigadevice.com/products/microcontrollers/gd32/risc-v/)

**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](http://www.ashling.com) for more details.

**About GigaDevice Semiconductor**
GigaDevice Semiconductor (603986. SSE), founded in Silicon Valley in 2005, is a global leading fabless semiconductor company engaged in advanced memory technology, MCU, and sensor solutions. GigaDevice provides a wide range of high-performance Flash Memory products. It is one of the companies that pioneered SPI NOR Flash Memory and has powered up more than 19 billion electronic devices in the world since 2010. GD32 series microcontrollers have become the mainstream choice for the 32-bit general-purpose MCU market. With more than 1 billion units shipped, more than 20,000 customers, and 35 series with more than 450 part numbers, GigaDevice can provide solutions for a breadth of applications and rank at the forefront of the market. For more information, please visit www.GigaDevice.com.

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

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