SEGGER J-Link software update saves enough to power 50 German homes

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With the latest software update, SEGGER has further reduced the power consumption of its J-Link line of debug probes, introducing Standby and Eco modes.

Standby mode does not affect J-Link's legendary performance and requires nothing more than installing the latest software, which can be downloaded free of charge. For further power saving, Eco mode can be activated by the user.

The savings in the new Standby mode, which is entered automatically when a period of inactivity is detected, were achieved using a combination of methods.

In Standby mode, internal clock frequencies are reduced and LEDs are dimmed. Energy savings in operation are achieved using embOS-Ultra, which does not use a periodic tick interrupt, reducing CPU load.

The newly introduced Eco mode can be enabled by the user using the J-Link configurator. Eco mode reduces the amount of energy the J-Link uses while in operation, dimming LEDs and reducing clock frequencies as in Standby mode. The associated small reduction in performance is usually unnoticeable.

All J-Links are USB powered and have always used very little power - less than 1W. With the new standby mode update, the power consumption during periods of inactivity is cut approximately in half, i.e. down to less than 0.5W. Assuming that a debug probe on a developer's desk is typically idle 80% of the time, in a 10-hour day this brings consumption down from 10Wh to 6Wh. With an 80% efficient power supply, Standby mode can save 5Wh per J-Link per day; with 100,000 J-Links in daily use, this update saves 500kWh per day, more electricity than used by 50 average German homes!

"While we make sure our products offer high performance, we also strive to be as energy efficient as possible," says Ivo Geilenbruegge, Managing Director at SEGGER. "Whether it is the energy consumption of the company's buildings or its products, less is better and greener is better. This software update is an excellent example of SEGGER's approach to environmental friendliness. Making embedded systems more efficient saves energy, helps the planet, and is simply the right thing to do!"

SEGGER has always been focused on minimizing the power usage of its products — both hardware and software. No SEGGER product uses a fan, yet many of its products use less power in total than the fan alone uses in some competing products. And SEGGER's embedded software helps make its customer's products more energy efficient as well. For example, by simply switching to embOS-Ultra, which is 100% compatible with the classic embOS (RTOS), any project can save energy without having to modify a single line of the end application.

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About SEGGER

SEGGER Microcontroller GmbH has three decades of experience in Embedded Systems, producing cutting-edge RTOS and Software Libraries, J-Link and J-Trace debug and trace probes, a line of Flasher In-System Programmers and software development tools.

SEGGER's all-in-one solution emPower OS provides an RTOS plus a complete spectrum of software libraries including communication, security, data compression and storage, user interface software and more. Using emPower OS gives developers a head start, benefiting from decades of experience in the industry.

SEGGER's professional embedded development software and tools are simple in design, optimized for embedded systems, and support the entire embedded system development process through affordable, high-quality, flexible and easy-to-use tools.

The company was founded by Rolf Segger in 1992, is privately held, and is growing steadily. SEGGER also has a U.S. office in the Boston area and branch operations in Silicon Valley, Shanghai and the UK, plus distributors on most continents, making SEGGER's full product range available worldwide.

For more information on SEGGER, please visit www.segger.com.

Why SEGGER?

In short, SEGGER has a full set of tools for embedded systems, offers support through the entire development process, and has decades of experience as the Embedded Experts.

In addition, SEGGER software is not covered by an open-source or required-attribution license and can be integrated in any commercial or proprietary product, without the obligation to disclose the combined source.

Finally, SEGGER offers stability in an often volatile industry, making SEGGER a very reliable partner for long-term relationships.

For additional information please visit: www.segger.com

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