# emSSL V2 – The SSL/TLS solution for single-chip systems

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SEGGER is releasing a new version of its emSSL secure sockets implementation with both client and server capability.

The minimized RAM usage allows operation on singlechip systems. A secure connection between browser and the webserver supported by emSSL requires only 7KB of RAM.

With such small RAM requirements, even small embedded devices can send e-mail via encrypted connections and retrieve or serve secure web pages using HTTPS. Example code demonstrates how to access cloud-based services such as Dropbox and Twitter.



"We are thrilled to bring SSL/TLS technology to small and inexpensive chips," says Dirk Akemann, Partnership Marketing Manager at SEGGER. "With its high efficiency in terms of RAM, ROM and processor load, our emSSL solution makes it very easy to establish secure connections to small IoT devices."

The product works seamlessly with SEGGER's embOS/IP, the high performance IP Stack, as well as with the embOS/IP Web Server extension. Alternatively, it runs smoothly with any IP Stack supporting plain sockets, or any bidirectional communications channel.

emSSL comes as a complete package with all modules provided in source code. This way the user has full control over the code used and does not need to worry about possible back doors or weaknesses in the code. It supports TLS version 1, 1.1 and 1.2 out of the box.

More information about emSSL is available at: <u>www.segger.com/emssl.html</u>

## About embOS/IP

embOS/IP is a high performance IP stack specifically designed for embedded systems. The flexible stack supports all popular protocols such as ACD, ARP, AutoIP, DHCP, DNS, FTP, HTTP, ICMP, IPv4, Multicast, NetBIOS Name Service, PPP/PPPoE, SMTP, SNTP, TCP, UDP, UPnP, VLAN, and many more. embOS/IP is fully compliant to all related RFCs.

Full product specifications are available at: <a href="http://www.segger.com/embOS-IP.html">www.segger.com/embOS-IP.html</a>

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## About SEGGER

**SEGGER Microcontroller** develops and distributes hardware and software development tools as well as software components for embedded systems. An "embedded system" is one in which a microprocessor and associated components are incorporated into a device helping to accomplish difficult and complex tasks in products such as cell phones, medical instruments, instrument clusters, measurement instruments, satellite radios, digital cameras etc.

SEGGER was founded in 1997, is privately held, and is growing steadily. Based in Hilden with distributors in all continents and a local office in Massachusetts, SEGGER offers its full product range worldwide.

SEGGER software products include: embOS (RTOS), emWin (GUI), emFile (File System), emUSB (USB host and device stack) and embOS/IP (TCP/IP stack). With emSecure, a unique software to generate and verify digital signatures, and the TLS-solution emSSL, SEGGER is also offering software for the growing field of data and product security.

With the experience in programming efficiently on embedded systems, SEGGER created highly integrated, cost-effective programming and development tools, such as the Flasher (stand-alone flash programmer) and the industry leading J-Link/J-Trace emulator.





SEGGER cuts software development time for embedded applications by offering affordable, high quality, flexible and easy-to-use tools and software components allowing developers to focus on their applications. Find out more at www.segger.com.

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