RomCert Benefits

- Automates certificate management using OCSP and SCEP protocols
- Communicates with most any Certificate Authority (CA) using HTTP
- Optional add-on to RomSTL TLS/DTLS/SSL Solution
- Small RAM/ROM footprint
- ANSI-C Implementation
- Fully configurable
- Highly portable across OS and TCP/IP implementations
- Interface files for leading RTOS vendors provided

RomCert is a platform-independent implementation of the Online Certificate Status Protocol (OCSP) and the Simple Certificate Enrollment Protocol (SCEP) that makes embedding security certificate management into resource-sensitive embedded systems and consumer electronics fast, easy, and reliable, while decreasing time to market.

Billions of devices now have the capability to communicate on their own to retrieve the latest application data and firmware updates across the Internet. Each of these network-enabled devices — from printers and health appliances to network routers, switches, and more — are now potential targets for malicious intent. The important and unprecedented need for secure communications has never been higher.

Public Key Infrastructure (PKI) and certificate-based authentication play an integral role in securing and administering networked devices and services on the Internet today. PKI is widely deployed and many wireless and wired technologies depend on it, including WiMax, 802.11i, TLS, DTLS, SSL, SSH, DTCP-IP, Wi-Fi, 3G, and more. In many cases, PKI and certificates ensure networks and services are being accessed by assigned users and devices in addition to properly administering privileges. In real-world situations, certificates need to be updated to maintain integrity of security policies as roles and operating environments change. Manually updating certificates, especially on remote network devices, is error-prone, inefficient, and simply cannot scale with the rapid growth of network-enabled embedded devices in today’s high-tech environments.

RomCert

RomCert is specifically engineered for resource-sensitive embedded devices, such as consumer electronics, dedicated healthcare products, energy and Smart Grid devices, military applications, and enterprise network management and control products.

As with all Allegro Integrated Embedded Device Security products, RomCert is hardware architecture, RTOS, and TCP/IP stack agnostic and automates certificate management in your embedded design. Offered as an option for Allegro’s RomSTL TLS/DTLS/SSL embedded solutions, RomCert can communicate with most any Certificate Authority (CA) via HTTP to request certificates, renew certificates, and pull down Certificate Revocation Lists (CRL) that have been issued.