Datasheet CodeMeter ASIC



Description

The CodeMeter ASIC is the heart of the CodeMeter Digital Rights Management system. It contains a SmartCard chip including a secure memory with a minimum of 128 kbyte including about 60 kbyte available for storing more than 1000 licenses. The basic idea of the revolutionary CodeMeter concept is that this memory can be used by many different vendors at the same time.

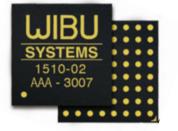
License Options are: Text (description of an entry), Unit Counter (number of runs or actually running time of a license), Activation Time (the license is valid from), Expiration Time (the license is valid until), Usage Period (starts at first use), Feature Map (up to 32 modules can be programmed in one Feature Map), License Quantity (concurrent use / floating licenses within one network), Protected Data (read-only data, up to 256 bytes), Extended Protected Data (128x256 bytes read-only data), Hidden Data (only readable with password; useful as secret/private encryption key, 128x256 bytes), Secret Data (non-readable; usable as secret/private encryption key, 128x256 bytes), User Data (unsecured 256 bytes), Customer owned license information (i.e. serial number, 256 bytes).

Used algorithms: 128 bit AES, TDES, SHA-256, RSA, 224 bit ECC.

The used SmartCard chip contains a random number generator according to FIPS140-1 and fulfills EAL 4+ or better (Common Criteria, not certified).

CodeMeter ASIC 1501-xx

The CodeMeter ASIC 1501-xx is a Smart Card Chip with CodeMeter firmware and is available as a die, one chip with about 5mm x 5mm size. Delivery is as sawn wafer or packaged on request. It needs only a crystal or low tolerance resonator externally and 2 LEDs optionally. The interface is full speed USB 1.1 (12 Mbit, USB 2.0 compliant, USB listed silicon) or a synchronous serial communication similar to I2C alternatively.



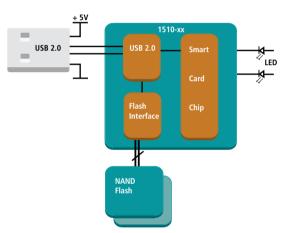
CodeMeter ASIC 1510-xx

The CodeMeter ASIC 1510-xx is a die stack in a WIBU LGA64 package containing the CodeMeter Smart Card Chip and a fast USB 2.0 (High Speed, 480 Mbit) Nand flash interface controller. It allows the use of SLC or MLC NAND flash chips for flash drive support of up to 16 Gbyte with high performance read and write. Using 2 Samsung SLC NAND flash memories, reading on USB is faster than 30 Mbyte/s, writing 20 MByte/s. The CodeMeter Smart Card chip inside communicates with the USB 2.0 controller so that only one USB interface is towards the host. The LGA 1510-xx needs a crystal or low tolerance resonator externally, 2 LEDs optionally, at least one flash memory and some additional components.





RoHS compliant WEEE-Reg-No: DE 90465365



All dimensions in millimeter. Subject to change without notice.



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