CmStick/BMC

Description
CmStick/BMC represents the heart of the CodeMeter Digital Rights Management system in a USB device form factor with a noble and robust metal case. It contains a smart card chip with a secure memory of about 328 kbyte, which is available for storing thousands of licenses; the additional flash memory, coming in different capacities, can be configured as a removable disk or a private, encrypted disk or a CD-ROM partition or a secure, encrypted disk with CodeMeter API read and write control. Combinations of the different disks are also possible.

The basic idea of the revolutionary CodeMeter concept is that licenses can be stored for many products at the same time, with full multi-vendor capabilities.

License Options include: Text (description of an entry), Unit Counter (i.e. number of runs or actually run time of a license), Activation Time (time the license is valid from), Expiration Time (time the license is valid until), Usage Period (starts at first use), Maintenance Period (according to release date), Feature Map (up to 32 modules or versions), License Quantity (concurrent use / floating network licenses), Protected Data / Information (256 bytes).

Encryption algorithms used in firmware 4.22 with serial number 3-3440000 or higher: 128 and 256-bit AES, SHA-256, 1024, 2048 and 4096-bit RSA, 224-bit ECC. The integrated smart card chip fulfills the evaluation level EAL 5+ (Common Criteria certified) and contains a random number generator.

Technical Specifications
The CodeMeter technology is covered by US 7,145,297 and other patents.

- Interface: USB 3.1 type A connector, Super Speed, compatible to USB 1.1, 2.0, 3.1g1
- Communication protocols: Mass Storage Device (MSD), default, or Human Interface Device (HID)
- Flash memory configuration:
  - removable disk
  - private, encrypted disk
  - CD-ROM partition
  - secure, encrypted disk
- CodeMeter License memory:
  - Data retention: 10 years at room temperature
  - Data endurance:
  - Unit Counter: up to 500 million decrements
  - Other license parameter: up to 10 million updates each license

- MLC flash memory:
  - Data retention: > 1 year at 2.5 TBW (terabyte written) at 55 °C
  - Data retention: > 3 years at 250 GBW (gigabyte written) at 55 °C
  - Performance: up to 40 MB write, up to 148 MB read
  - Endurance: 3,000 P/E Cycles (Flash Cell Level)
- Power supply: 5 V bus-powered, < 130/180 mA @ USB 2.0 / USB 3.1
- Operating and storage temperature: 0 °C ... + 55 °C, non-condensing
- MTBF (Mean Time Between Failures): > 3 Million hours
- Case dimensions: 12.1 mm x 22 mm x 4.5 mm
- Weight: 3.1 g
- Warranty: 36 months

Certificates
CmStick/BMC is tested and qualified in accordance with the following standards:

CE-Conformity | European Certificates
CmStick/BMC is fully compliant with all applicable European regulations.
- 2014/30/EU EMC: Report Bureau Veritas File CE180718D10, 2018-08-15
- All CmStick/BMC units are fully compliant with EU Directives 2011/65/EU (RoHS), 2015/863/EU (RoHS amendment), SJ/T 11363-2014 (China RoHS2), 2012/19/EU (WEEE), 2009/127/EC (DINP-REACH Annex XVII), 2013/30/EU (PAH-REACH Annex XVII), and 2012/30/EU (DINP-REACH Annex XVII).

International Certificates
- VCCI Class B ITE: Acceptance No. 2018048608, 2018-09-19
- KCC (South Korea): R-R-XWK-CmStick, 2018-08-08
- BSMI (Taiwan): D43250 RoHS
- ACMA (RCM): RCM20180091804-C, 2018-09-19

Other Certificates
- VDE License No. 129382

The encryption device is only for use with UL Listed PCs (low power system). Meets UL 60950-1 and CSA C22.2 No. 60950-1 Safety of Information Technology Equipment specifications.

Ordering Information
P/N 1011-03-562: CmStick/BMC 16 GB MLC-Flash bulk
P/N 1011-03-563: CmStick/BMC 32 GB MLC-Flash bulk Variants with different memory capacities, custom cases or laser engravings available on demand.