WIBU SYSTEMS

CmCard/SD

Description

The CmCard/SD is the heart of the CodeMeter Digital Rights Management system in a Secure Digital (SD) Memory Card. It contains a smart card chip including a secure memory of about 328 kByte available for storing thousands of licenses. The basic idea of the revolutionary CodeMeter concept is that licenses can be stored for many products even from many different vendors at the same time.

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 / Extended Protected Data (128x256 bytes read-only data), Hidden Data (128x256 bytes only readable with password; usable as secret/private key), Secret Data (128x256 bytes non-readable, only usable as secret/private key), User Data (256 bytes, unsecured), Customer Owned License Information (256 bytes).
Encryption algorithms used in firmware 4.50 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: SD Card, SD 2.0, SD 3.0 (UHS-I)
- 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 to one license
- Flash memory: 4GByte SLC flash memory, high performance S8 flash controller
  - Data retention: >10 years at room temperature
  - Endurance:
    - 1.8 TBW (BBM)
    - 16.1 TBW (hyMap) based on JEDEC model
  - Performance: Read seq. up to 75MB/s, Write seq. up to 35 MB/s
- Power supply: 2.7 - 3.6 V bus-powered, typ. 25 mA
- Temperature: -40° C ... + 85° C, non-condensing
- MTBF (Mean Time Between Failures):
    - > 3 million hours
- Case / Dimensions: 32 mm x 24 mm x 2.1 mm
- Weight: 2 g
- Warranty: 36 months

Certificates

The CmCard/SD is tested and qualified with the following standards.

CE-Conformity | European Certificates

CmCard/SD's are fully compliant with all applicable European regulations.

- 2014/30/EU EMC: Report Fujitsu File SWG-14002-PR01-E01-01, 2015-04-20
  - EN55022:2010, IEC/CISPR 22:2008 modified
  - EN55024:2010, IEC/CISPR 24:2010
  - EN 55032:2012, AS/NZS CISPR22:2009 + A1:2010
- 2014/35/EU Low Voltage Directive: CB Report UL File E211202-A6001-CB-1, 2025-08-22
  - EN IEC 62368-1:2020+A11:2020
- All CmCard/SD's also comply with EU Directives 2011/65/EU (RoHS), 2015/863/EU (RoHS amendment), 2012/19/EU (WEEE), 1907/2006/EC (REACH), 207/2011/EU (PFOS -REACH Annex XVII)

International Certificates

- FCC 47 CFR, Part 15, Subpart B (2013)
- VCCI Class B ITE
- KCC. MSIP-REM-XWK-1040-03-1XY (South Korea, 2016-02-24)
- SJ/T 11364-2014 (China RoHS)

Other Certificates

- C-UL-US listed I.T.E. Accessory 10 WB, E-File 211202, AZOT / AZOT7, 2025-08-22: Report UL E211202-A6001-UL

This encryption device is only for use with UL Listed PCs. It meets UL 62368-1, 3rd Ed and CAN/CSA C22.2 No. 62368-1:19, 3rd Ed Safety of Audio/video, Information and Communication Technology Equipment standards

Ordering Information

- P/N 1040-03-106: CmCard/SD 4GB bulk

Other storage capacities on request.

RoHS compliant
WEEE-Reg-No:
DE 90465365

SD Association

c(UL)us LISTED ACCESSORY
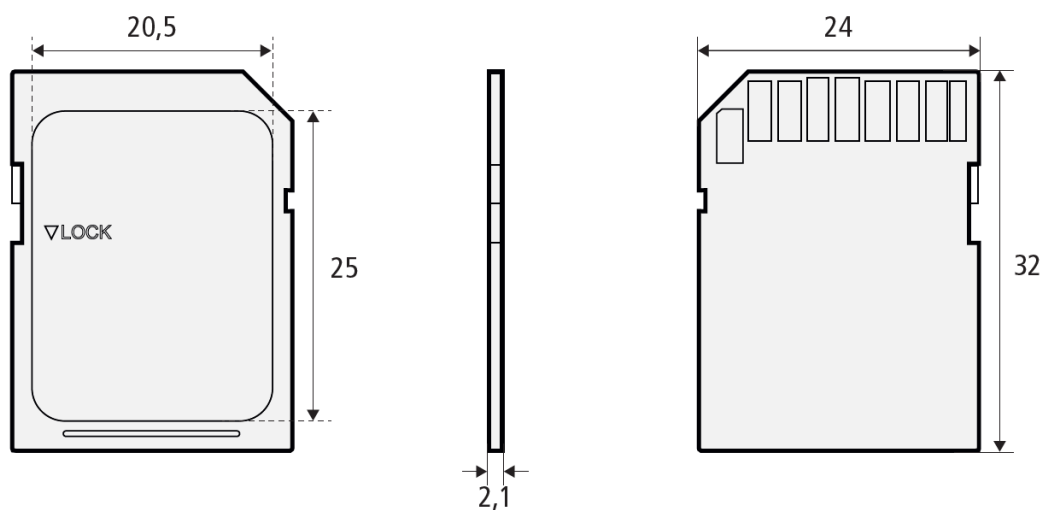
CE

UKCA

FC

VCI

KC

방송통신위원회

Technical Drawing