

# CmCard/SD



Article-No:

1040-03-106

## 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 are at least: Text (description of an entry), Unit Counter (number of runs or actually run time of a license), Activation Time (the license is valid from), Expiration Time (the license is valid until), Usage Period (starts at first time), 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 (unsecured 256 bytes), Customer Owned License Information (256 bytes).

Used algorithms: 128 bit AES, SHA-256, 2048 bit RSA, 224 bit ECC.

The used SmartCard chip contains a random number generator and fulfills EAL 5+ (Common Criteria certified).

## 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

## Certificates

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

### CE-Conformity | European Certificates

CmStick is fully compliant with all applicable European regulations.

- 2014/30/EU EMC:
  - EN55022:2010, IEC/CISPR 22:2008 modified
  - EN55024:2010, IEC/CISPR 24:2010
  - EN 55032:2012, AS/NZS CISPR22:2009 + A1:2010
- All CmCard are fully compliant according to 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)

### Other Certificates

- VDE License No. 129382
- C-UL-US listed I.T.E. Accessory 10 WB, E-File 211202

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.

### Ordering Information

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

Other capacities on request

RoHS compliant  
WEEE-Reg-No:  
DE 90465365



All dimensions in millimeter. Subject to change without notice.

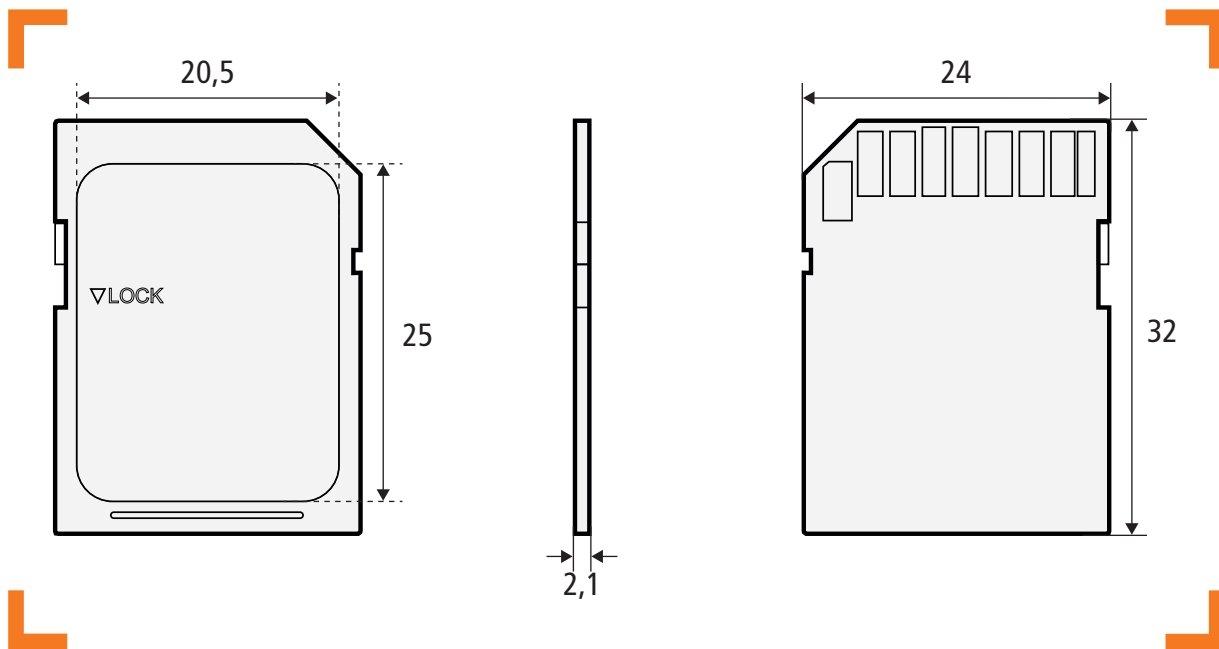
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# Technical Drawing

Article-No:

1 0 4 0 - 0 3 - 1 0 6

RoHS compliant  
WEEE-Reg-No:  
DE 90465365



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