

#### DATASHEET

Article-No: 1043-03-xx

## **CmCard/CFast**

#### Description

The CmCard/CFast represents the heart of the CodeMeter Digital Rights Management system in Compact Flash cards. It is equipped with Solid State Drive (SSD) with SATA interface and a smart card chip with 384 kByte secure memory for storing thousands of licenses, as well as additional flash memory for use as a removable drive. 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. The minimum set of License Options includes: Text (description of an entry), Unit Counter (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 to), 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 4.10 with serial number 3-3440000 or higher: 128 and 256-bit AES, SHA-256, 1024, 2048 and 4096-bit RSA, 224-bit FCC

The integrated smart card chip contains a random number generator that complies with FIPS140-1 and the evaluation level EAL 4+ (Common Criteria certified).

#### **Technical Specifications**

The CodeMeter technology is covered by US 7.145.297 patent and others.

- Interface: 7+17 pin (SATA+power) CFast connector
- CodeMeter license memory:
  - Data retention: >10 years at room temperature
  - Endurance: >10 million license updates. depending on the license type
- Flash memory:
  - Data retention: >10 years at room . temperature
  - Endurance: 2 million program / erase • cycles typically
  - Power supply: 3.3V, typ. 100 mA
  - Temperature: -25° C ... +85° C, non-condensing
  - Case / Dimensions: 36.5 mm x 43 mm x 3.5 mm
- Weight: 10 g

- MTBF > 2,500,000 hours
- Data Transfer Mode: SATA Rev 2.6 3 Gbit/s
- (1.5 Gbit/s compatible), max. UDMA6 MDMA2, PIO4
  - High Performance:
    - Up to 300 MB/s burst transfer rate in SATA II -3.0 Gb/sec
    - Sustained Write: up to 120 MB/s
    - Sustained Read: up to 120 MB/s
  - Warranty: 36 months



#### Certificates

The CmCard/CFast is tested and gualified with the following standards.

### **CE-Conformity | European Certificates**

CmCards/CFast's are 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/CFast'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

- CB Test Certificate DE1-54874 CISPR 24(ED.2), 2014-11-20
- CB Test Certificate DE1-54888 CISPR 22(ED.6), 2014-11-20
- FCC 47 CFR, Part 15, Subpart B (2013), ETC File 14-12-MAS-152-01
- VCCI Class B ITE, ETC File 14-12-MAS-152-02
- KCC. MSIP-REM-XWK-1040-03-1XY (South Korea, 2016-02-24)

#### **Other Certificates**

C-UL-US listed I.T.E. Accessory 10 WB, E-File 211202

This encryption device is only for use with UL Listed PCs (low power systems). It meets UL 60950-1 and CSA C22.2 No. 60950-1 Safety of Information Technology Equipment standards.

#### **Ordering Information**

- P/N 1043-03-205: CmCard/CFast 2 GB bulk
- P/N 1043-03-206: CmCard/CFast 4 GB bulk
- P/N 1043-03-207: CmCard/CFast 8 GB bulk
- P/N 1043-03-208: CmCard/CFast 16 GB bulk

**RoHS** compliant WEEE-Reg-No: DE 90465365











방송통신위원회



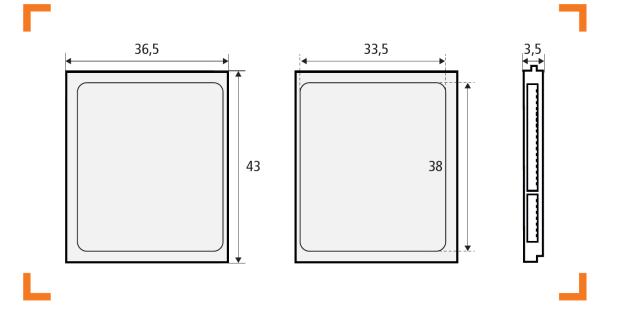
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# **Technical Drawing**



All dimensions in millimeters.

Subject to change without notice.

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