

K1-CAM provides a professional platform to implement content protection solutions for Digital Broadcasting services. K1-CAM is a Common Interface PCMCIA module based on K1 chipset which offers cutting-edge security features making this module the ideal solution to host the most demanding conditional access systems in terms of security. The multi-descrambling capability (up to 16 services can be decrypted simultaneously), the standard ISO-7816 smart-card interface and the possibility of upgrading the module via Over The Air add more advantages to this Common interface module. K1-CAM operation is completely independent of encoding and display resolution used in DVB service so, any kind of video or audio encoding (MPEG-2, H.264, HEVC, ...) is completely supported.



KEY FEATURES

- Compliant with PCMCIA Common Interface standard: EN-50221 (Common Interface Specification for Conditional Access and other Digital Video Broadcasting Decoder Applications) and TS 101699 (Extensions to the Common Interface Specification).
- Multi-CAS CI module: several CA systems can run simultaneously.
- Compatible with set-top-boxes, professional IRD's and iDTVs supporting Common Interface standard.
- Provides one smart card interface compliant with ISO-7816-3 and EMV TM
- Support for T=0 and T=1 smart card protocols.
- Micro-programmable filtering machine.
- HW platform suitable for smart card-less conditional access systems without compromising security.
- ARM-7 internal host integrate in K1 chipset
- 256 Kbytes flash (with One-Time-Programming area) and 144 Kbytes SRAM integrated in K1 chipset. No external memory is needed to implement a conditional access system.
- Integrated key-server in K1 ready to protect Control Words. Access to decrypted keys from CPU can be blocked.
- Integrated cypto-processor engines: TDES, RWG, DES, CSA and proprietary cypto-engine.
- Support for up to 64 PID's simultaneous descrambling.
- Support for up to 32 simultaneous control words.
- Support for up to 16 simultaneous programmable filters
- Customized security level in factory.
- Unique identifier set in factory for traitor-tracing purposes.
- 1 Mbyte external flash for Over The Air upgrades.

SPECIFICATIONS

- o **PCMCIA**
 - ✓ Connector: F-type female, 75 Ω
 - ✓ Includes 256 bytes Card Information Structure
 - ✓ Includes 256 bytes FIFO
 - ✓ Transfers compliant with PC Card-Based Physical Layer (Normative) of DTR/JTC-DVB-14
- o **SMART CARD:**
 - ✓ Automatic card activation/deactivation sequence.
 - ✓ Automatic convention detection and translation.
 - ✓ Automatic guard times and timing checks.
 - ✓ Independent and configurable smart card clock.
 - ✓ LRC/CRC checking
 - ✓ Complete support for T= 0 and T=1
 - ✓ Support for synchronous cards
 - ✓ Short-circuit protection.
- o **SECURITY PROCESSOR:**
 - ✓ General purpose Triple DES engine.
 - ✓ Random Word Generator
 - ✓ CSA-DVB descrambler
- o **MPEG-2 filtering engine**
 - ✓ Proprietary cryptographic engine connected to MPEG filter module for secure management of control words.
 - ✓ Unique chip identifier set in factory.
 - ✓ Integrated fuses for security level configuration.
 - ✓ Based on micro-programmable machine.
 - ✓ Upgradable via OTA.
 - ✓ Maximum number of PID's for simultaneous descrambling: 64
 - ✓ Maximum number of Control Words for simultaneous descrambling: 32
 - ✓ Maximum number of simultaneous programmable filters: 16.
- o **Input & output**
 - ✓ MPEG-2 transport stream up to 60 Mbps. For upper bitrates, please ask bc-techs.
- o **Physical:**
 - ✓ Height x Width x Depth: 58 x 4 x 100 mm
 - ✓ Weight: 50 gr.

bc-techs

Príncipe de Vergara 71, 1º D
28006 Madrid
SPAIN

Tel. +34 91 564 77 82
Fax. +34 91 564 21 04

www.bc-techs.com