

ASK GENXXX Development kit

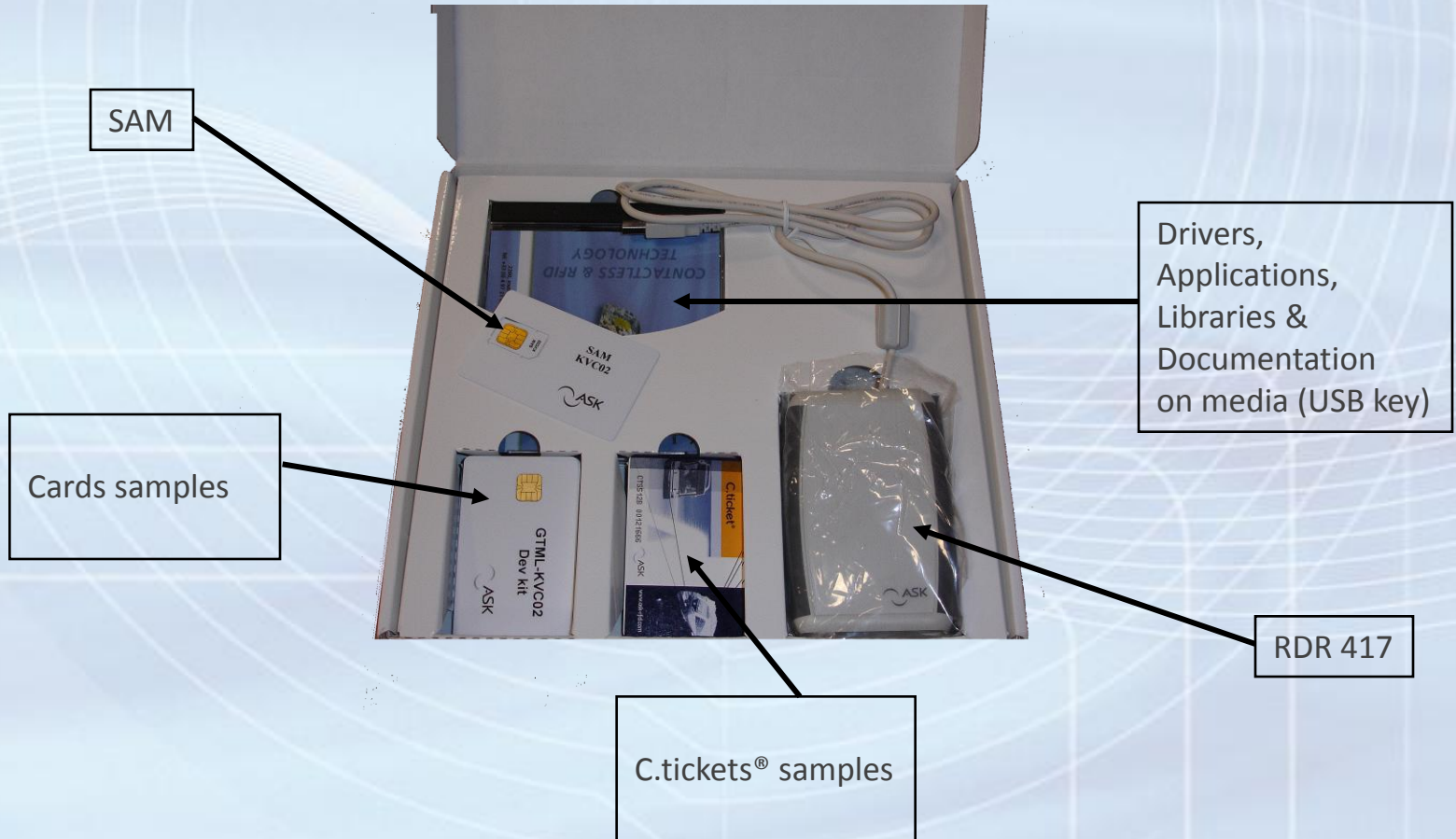
Quick startup



- Development kit content & description
- ASK GENXXX functionalities & description
- Software and drivers installation
- Media (USB key) contents

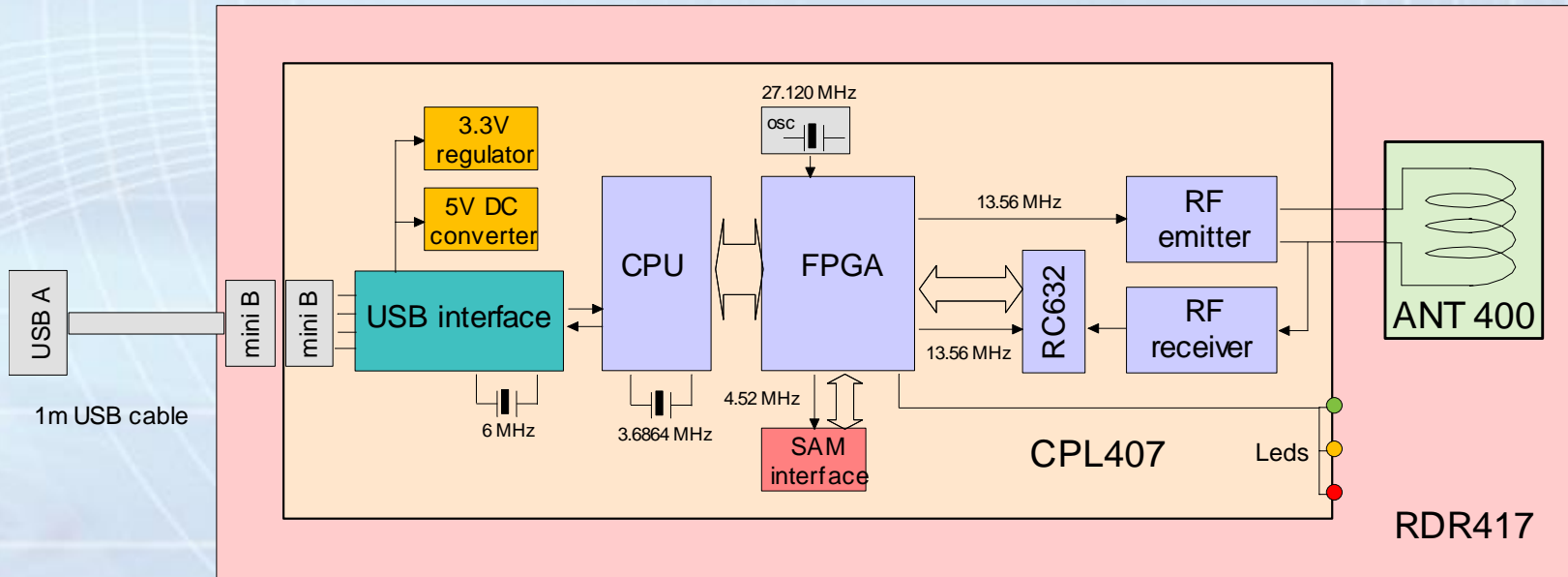
- 1 RDR417 reader (GEN4XX platform) or 1 RDR518 or 1 CPL108 coupler + USB and serial cables (GEN5XX platform)
- 1 Security Application Module (CSAM) with test keys (KVC02)
- 1 Security Application Module (Mifare NXP SAM[®] AV2) with test keys
- 2 GTML, 2 GTML2 and 2 CD97 with test keys (KVC02)
- 2 Mifare Classic[®] 1K, 2 Mifare Classic[®] 4K
- 2 Mifare Plus[®] 2K, 2 Mifare DESFire[®] 2K,
- 15 C.ticket[®] (5 CTS512B, 5 CTS512A, 5 SRT512)
- 1 media (USB key) containing drivers, applications, libraries and documentation
- 1 FDC102 Field Detector Card

Development kit description

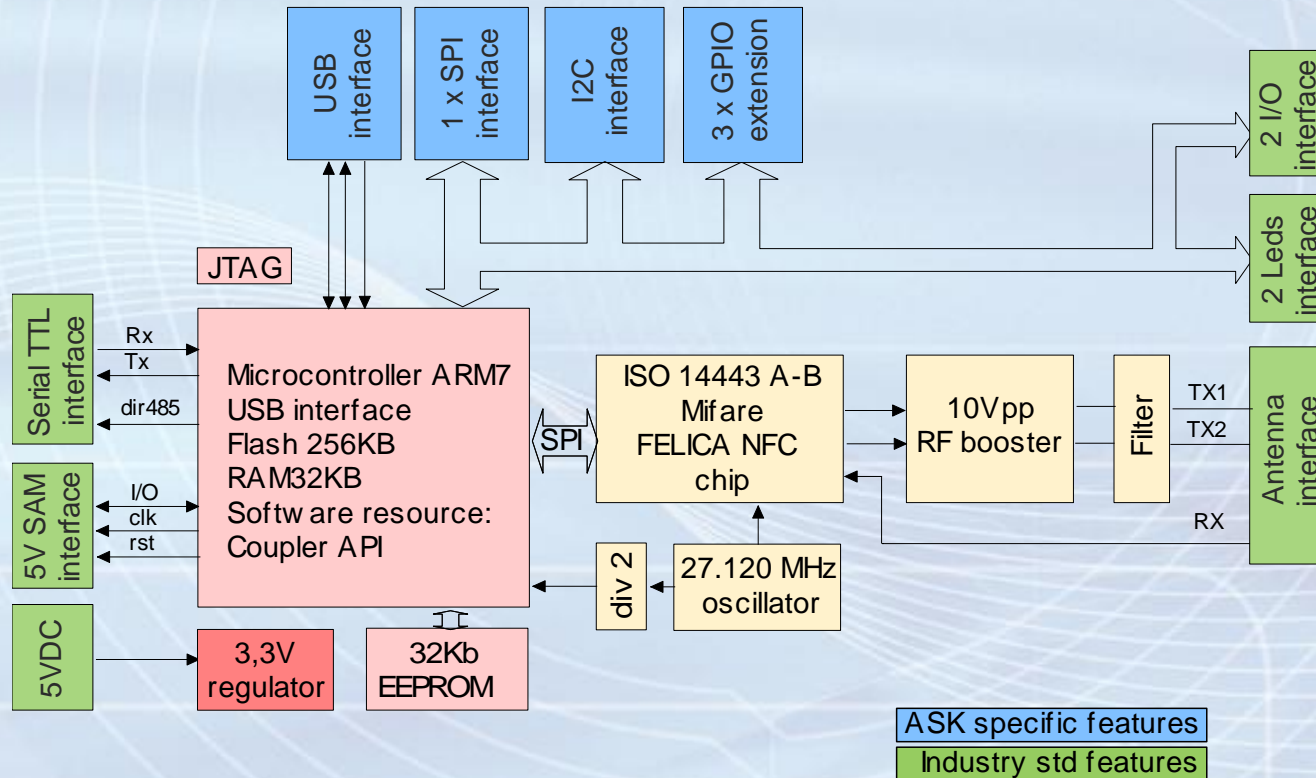


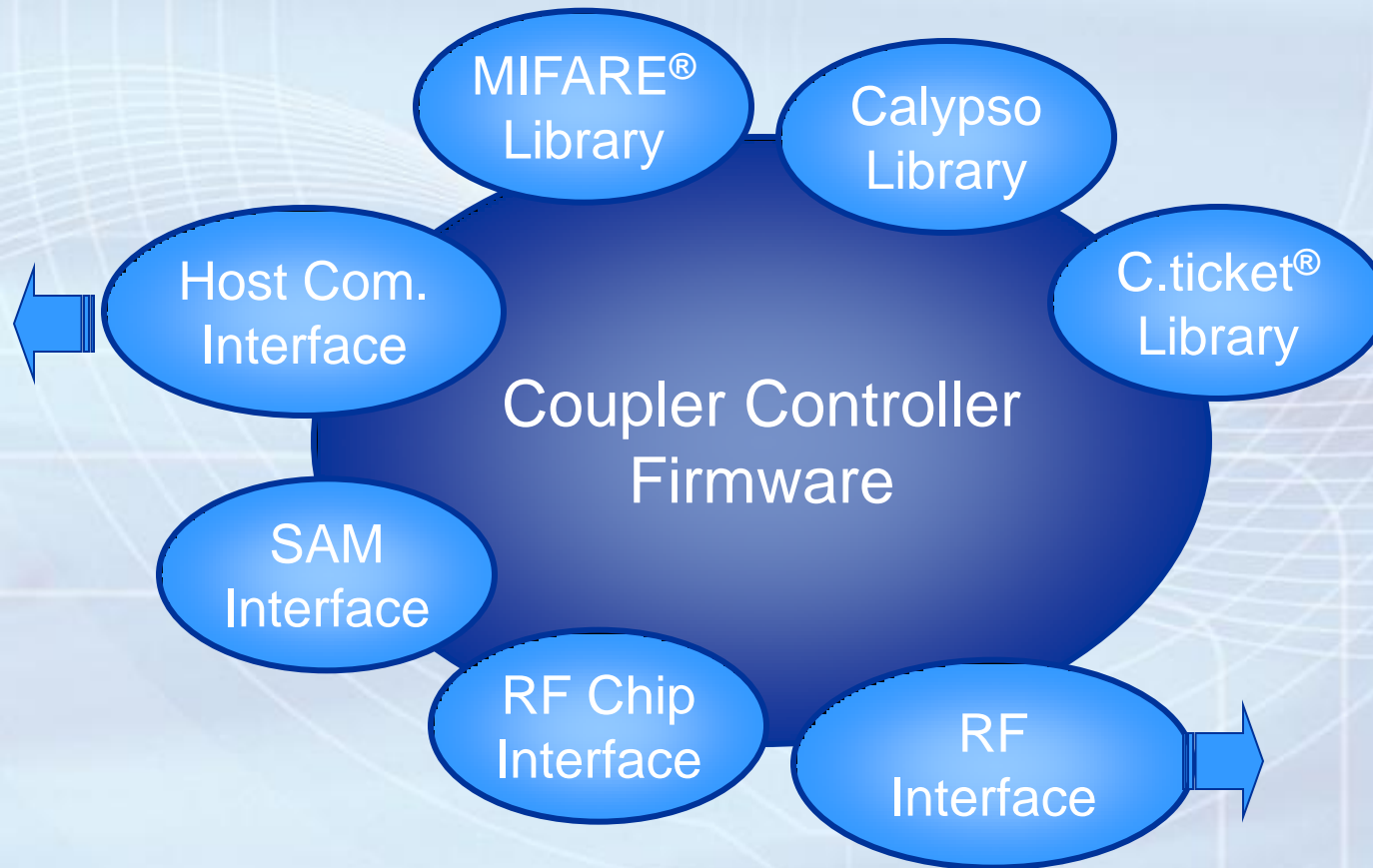
- ISO 14443 A/B/B' & ISO 15693 for GEN4XX platform (CPL407, CPL417, CPL427, RDR417, RDR437 and RDR447)
- ISO 14443 A/B/B' & Felica for GEN5XX platform(UCM108, CPL108, CPL118, MTB108, CPL528, CPL508 and RDR518)
- Calypso compliant
- Cryptographic security with integrated SAM + Mifare® ASIC
- Serial, TTL or USB2 full speed host interface
- High power RF interface
- High speed RF communication 106 up to 848 kb/s

GEN4XX hardware architecture



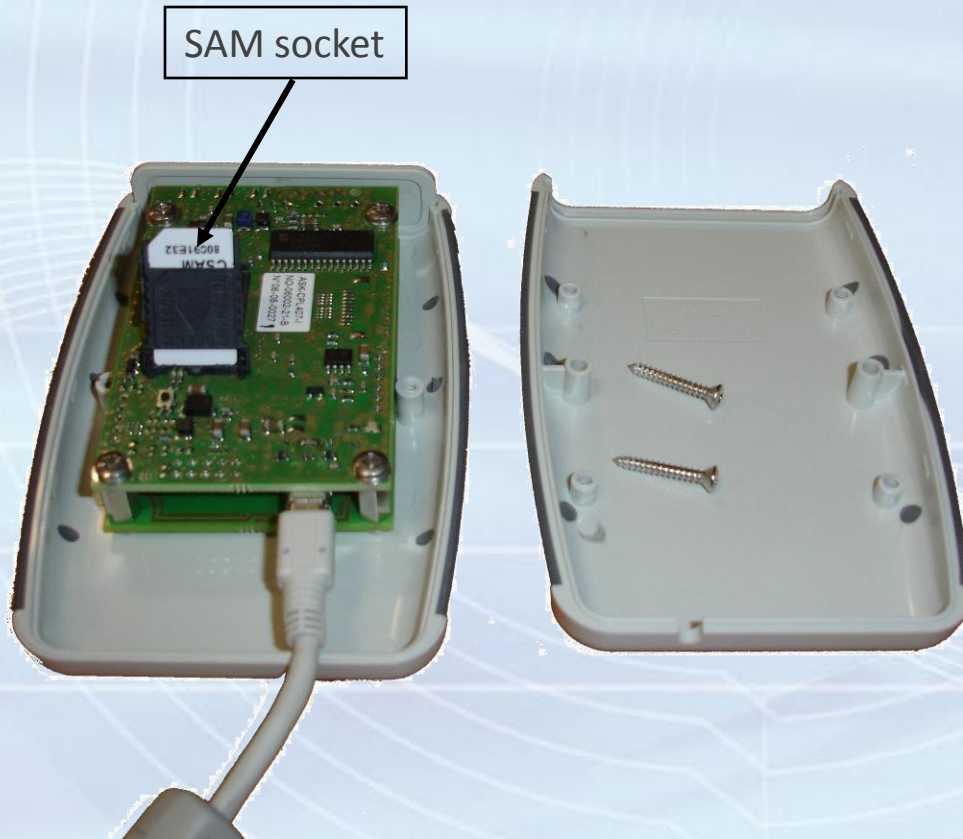
GEN5XX hardware architecture





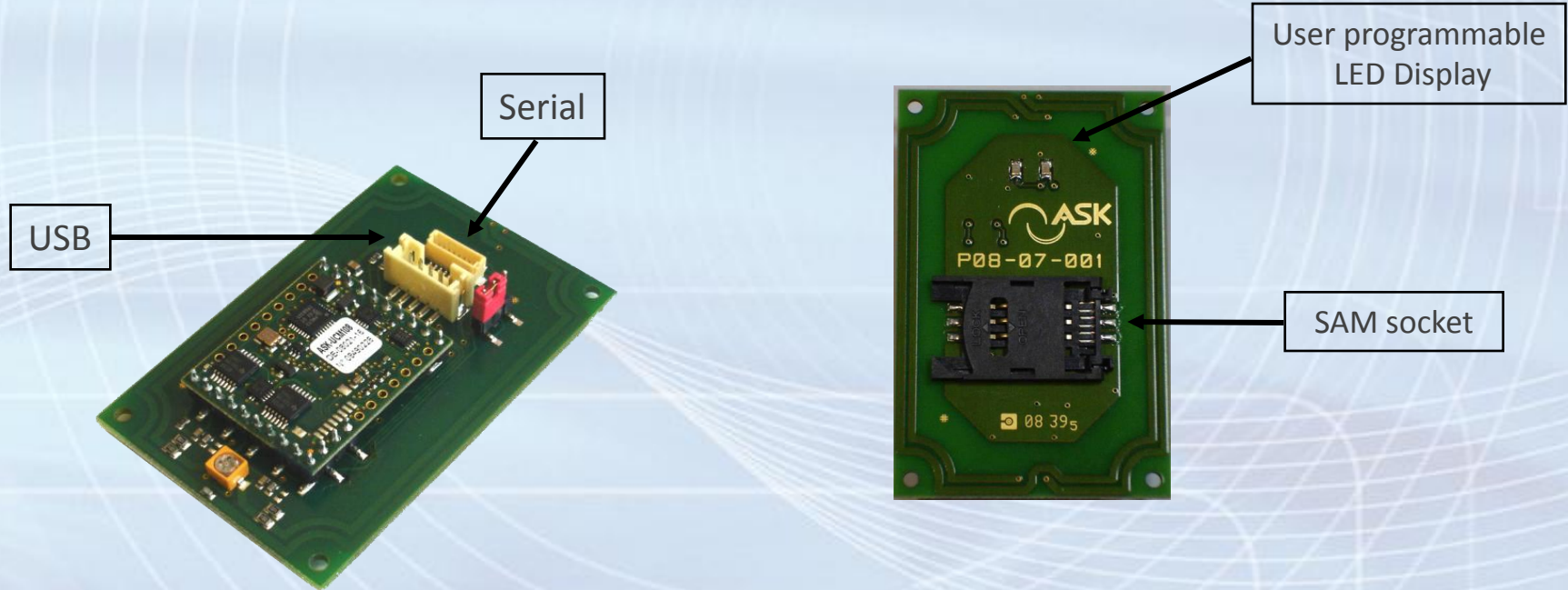
RDR 417 description





- 4 Open the case with a “Poizidriv” screw driver.
- 4 Put the SAM into the SAM socket

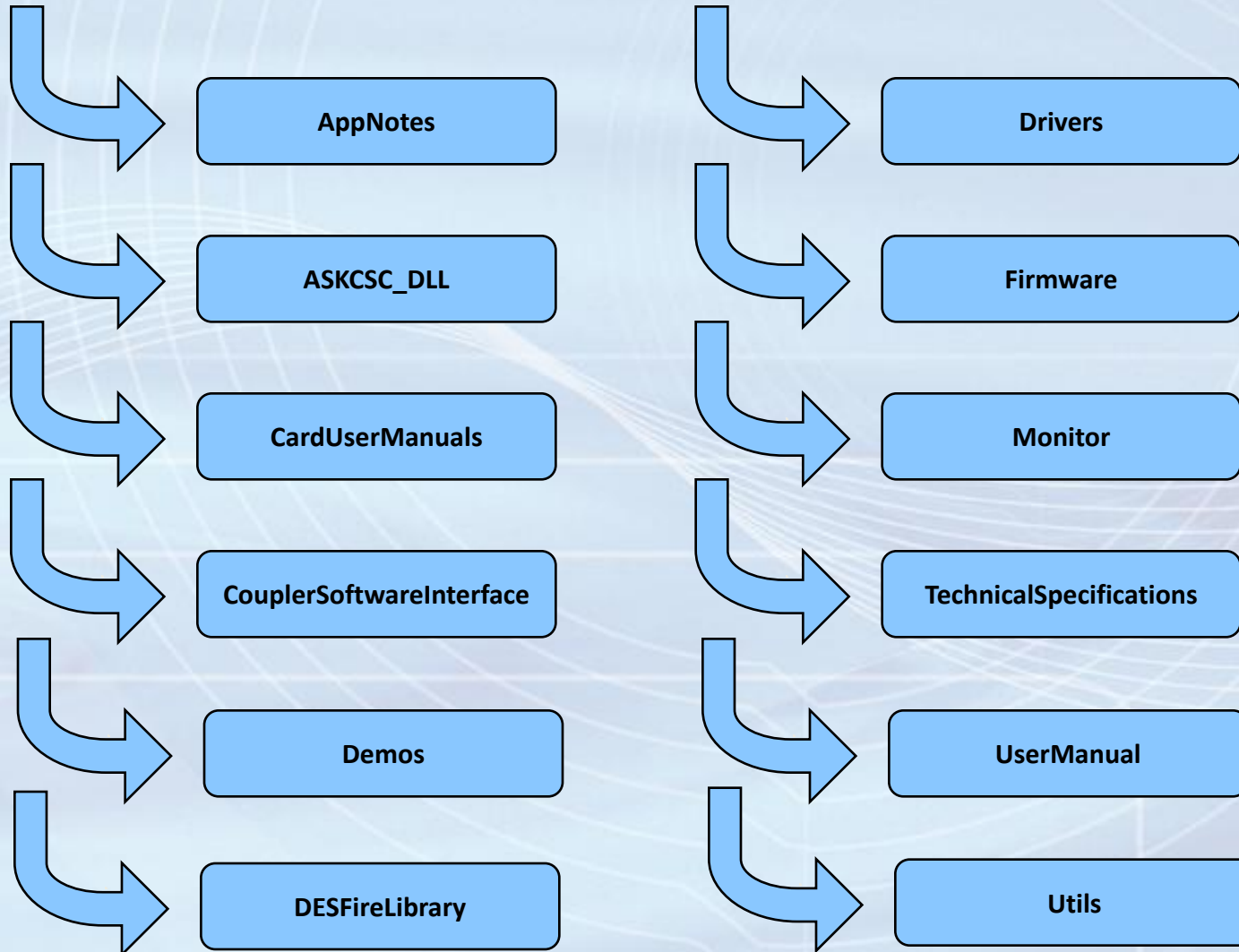
CPL108: description and SAM installation

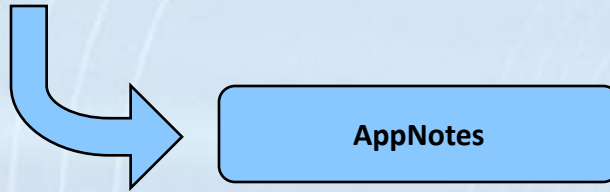


- Copy the USB key root directory to a directory on your hard drive.
- Some application and tools required standard “Setup” (Monitor, EpassportViewer)
- Software installation is described in the document “RD-NT-05180_xx_RDR 4X7 software installation note.pdf”

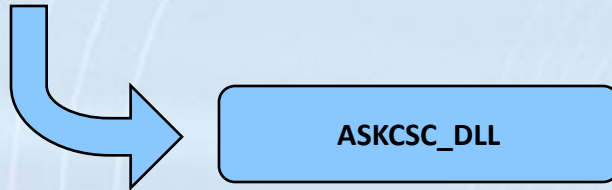
- Uses the Windows Operating System standard for driver installation.
- Described in the document “RD-NT-05180_xx_RDR 4X7 software installation note.pdf”

- Documentation
 - User manuals (Reader & Software installation)
 - Technical specifications (GEN4XX and GEN5XX)
 - Cards User Manuals (GTML, GTML2, CD97, Mifare®)
 - C.ticket® User Manuals
 - Application Notes
- Software
 - Drivers & demonstration applications
 - API DLL, Tools and documentation

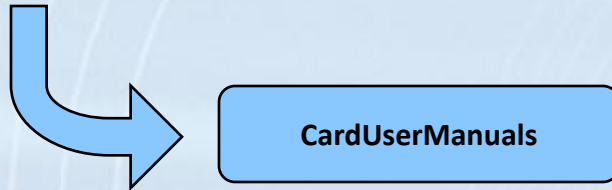




- Communication Scenarii
- C.SAM KVC 02 Mapping
- Applicative Security on CTx
- ASK CSC downloading
- Managing RF data rate
- Managing Card Detection
- Using Mifare® cards through PCSC API
- ASK MONITOR CSC Sequences Scripting
- Managing field exposure on CTS256B & CTX512B



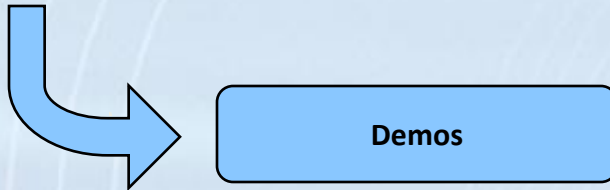
- ASK standard Application Programming Interface (API)
- Distributed as binaries and full source code
- Low level functions: coupler communication, cards handling, SAM operation, LEDs.
- Calypso high level functions
- Mifare[®] high level functions



- CD97 external specifications
- GTML external specifications
- GTML2 external specifications
- CTS512B and CTM512B user manuals
- Mifare Classic® (CMC 1K) user manual
- Mifare Ultralight® (CTS512A) functional specifications



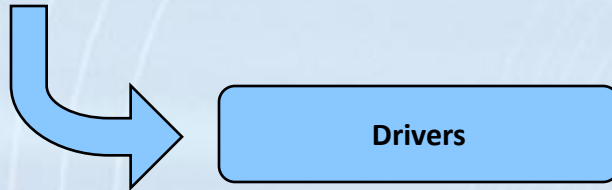
- GEN4XX and GEN5XX coupler software interface
- Communication protocol description
- Class oriented high level protocol
 - Download class : Flash update and Eeprom configuration
 - System class : card, SAM and UI low level handling
 - Calypso classes : Calypso high level commands
 - Mifare® class



- Evaluation applications user manual
- Polling: card detection and identification
- Visucard: display a Calypso card mapping
- CTx512B evaluation application
- ASKMifare: Mifare cards read and write
- ASK ePassport Viewer: display ICAO cards contents
- Golden Reader: standard tool for ICAO cards
- Keyring Reader: dual interface card evaluation
- Calypso Demo: transport and ePurse
- ASKPCSC: PCSC utility



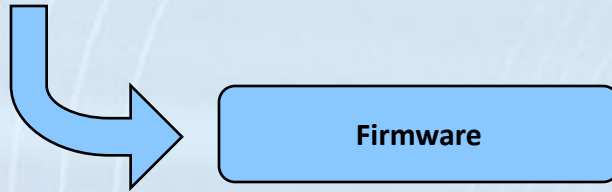
- Desfire high level commands
- Embedded Desfire crypto algorithm
- Available through PC/SC interface



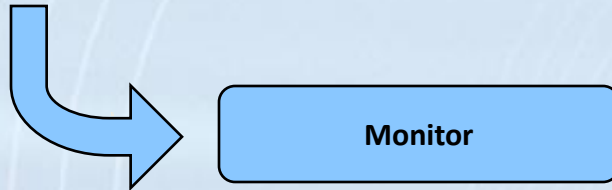
- Combined driver VCP and native USB (GEN4XX)
- PC/SC driver (GEN4XX)
- USB CDC driver (GEN5XX)

Notes:

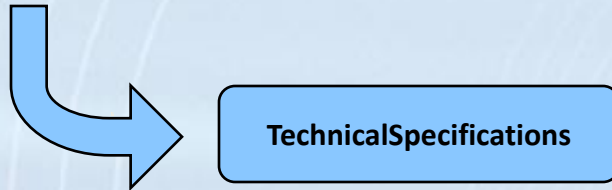
- The drivers are Microsoft WHQL certified.
- The PC/SC CCID driver is provided by Microsoft.



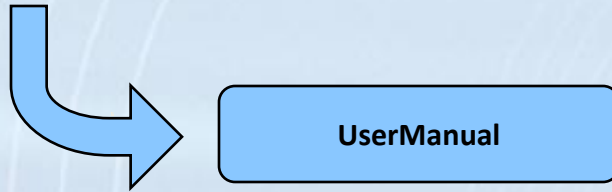
- GEN4XX and GEN5XX firmware binary files
- Version history



- ASK Windows utility
- Communication with ASK couplers
- Low level communication handling
- Send and Receive functions
- SAM and cards communication
- High level commands with script capabilities
- Firmware download and configuration



- RDR417, RDR437 & RDR447 readers
- CPL407, CPL417 & CPL427 couplers
- ANT400, ANT440 & ANT441 antennas
- UCM 108 universal module
- CPL108 & CPL118 couplers
- CPL528 coupler
- MTB108 coupler evaluation board
- CPL508 & RDR518



- Readers user manuals
- Software installation manual



- AskCdcCcid: allows to switch between CDC and CCID USB mode for GEN5XX Readers

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