

CAMInspector2.0



Powerful capture system for DVB-CI and CI+

CAMInspector2.0 is a unique tool for debugging and testing DVB-CI or CI+ interfaces. It gives a precise insight into all activities occurring on the command interface to enable troubleshooting and validation of both the CAM and Host devices.

New! Compatible with CI+1.4

Precise hardware level analysis

The CAMInspector2.0 probe contains our proprietary transaction analyzer which records all bus activities into a compact binary stream. This stream is processed by an onboard CPU which displays the basic interface status on the integrated TFT screen. This mode is functional even when not connected to a PC. It enables a quick overview of the interface by just powering the probe from any USB power source.

The data stream generated by the analyzer contains sub microsecond time stamps of all events.

The probe also includes a 16 channels logic analyzer to automatically capture each type of access at insertion, as well as the TS in and TS out signals. Logic analyzer signals are displayed together with other traces with time and frequency measurements. Traces can be recorded to the embedded SD card reader for standalone operation

New! CAMInspector 2.0 can capture partial in and out TS on the PC Card interface.

Software analyzer

Our Windows based software analyzer displays a complete view of all communication layers. You can quickly zoom in and out on the captured data and look at every bit transferred on the bus. The software is able to display traces live as they are captured. You can run it on any number of machines without even installing it since it's packed in a single executable. Our flexible licensing also enables you to share the software with your client or subcontractor.

You can also save the traces for later analysis or export them in text format.

Extensible software

Our analysis software is extensible through DLL plugins. You can write supplementary export filters, parsers or simulation plugins. This is especially useful if you have some proprietary protocol you want to analyse (for instance an SAS Extension or a private resource).

Compatible with the future

CAMInspector2.0 is compatible with our SideCAM USB adapter for any future evolution



Features

Physical format

- PCCard extender format
- CI+1.4 Compatible
- USB 2.0 connection
- On probe color OLED screen
- SD card reader
- Feature connector
- Compatible with USB adapter

Capture capabilities

- Records all CI register transaction
- Records Reset/Ready/Power/CD
- Event timestamped with microsecond precision
- Analysis of TS In and Out packet
- Logic analyzer capture on CI and TS signals
- CAM Power measurement
- Partial MPEG TS capture

PC Software

- Standalone executable
- Chronogram view of captured data
- Fast event browsing
- Parsing of all protocol layers
- Automatic fragmentation of trace files for ultra long record time
- Data export
- SDK for plugin (parsing, simulation or export)

To purchase a CAMInspector2.0, or to find out more, contact us: contact@rabbitlabs.com



Frequently Asked Questions

What does the CAMInspector2.0 package contain?

A CAMInspector2.0 probe, a USB cable, an SD memory card, a USB key with software and quickstart manual

Which version of Windows is required?

CAM Inspector can run on any version of Windows above Vista.

How much memory is needed to run the CAM Inspector?

As much as possible if you want to record long sessions. However, the software itself has low memory requirement. Periodic dump of trace files allow recording of very long sessions only limited by disk space

What type of CPU do I need to run CAMInspector2.0?

Any CPU is fine. Our demo machines are AMD single core at 1.6Ghz (C60) and they work like a breeze.

Do I need to get an extra license with CAMInspector2.0?

Our basic package includes 12 Months license. We offer license renewals for 12, 24 or 36 months. There are also perpetual and rental license offered to selected customers.

What happens when the license expires?

The probe stops sending data to the PC software and there is no more support from Rabbit Labs.

What additional benefits come with a valid license?

With a valid license you receive technical support from us if you have trouble with some traces. Sometimes interpreting recorded traces requires a deep understanding of the specifications, this is why we are here to help.

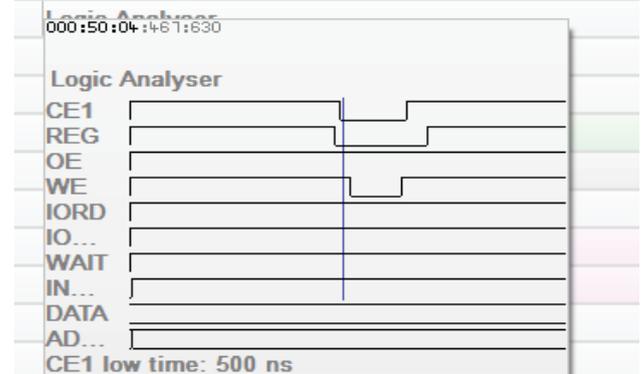
Do I need to get one license for every machine I use?

No, the CAMInspector2.0 license is attached to the probe, you can use the software on as many computers as needed.



What can I see in the logic analyzer?

You will see a little popup window with bus signal waveform and some timing measurement.



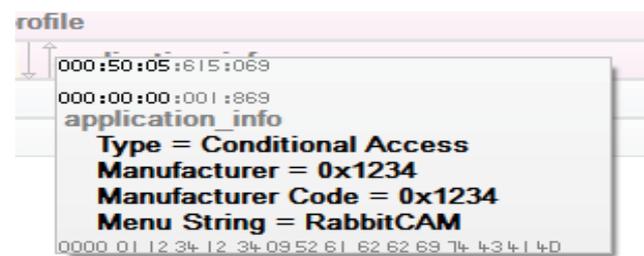
What does the low level information look like?

When you hover over low level register event you get detailed information about last control and status values and current transaction.



What does APDU level information look like?

When you hover over APDU event you get information about detailed APDU content.



What does the text export format look like?

```
< 00:50:04.467.611 HARD Cl S = 0x14#0x00FE
< 00:50:04.467.618 HARD Cl S = 0x00#0x0100
< 00:50:05.546.975 LINK Buffer size 512
> 00:50:05.578.966 LINK Buffer size 512
> 00:50:05.603.142 TRSP Create_T_C 1
0x0000 82 01 01 ...
< 00:50:05.603.889 TRSP C_T_C_Repl y 1
0x0000 83 01 01 80 02 01 80 .....
> 00:50:05.604.001 TRSP Rcv 1
0x0000 81 01 01 ...
< 00:50:05.604.740 SESS Open_Sessi on_Request Resource Manager_1 V1
0x0000 91 04 00 01 00 41 .....A
> 00:50:05.604.958 SESS Open_Sessi on_Response Resource Manager_1 V1 on 104
0x0000 92 07 00 00 01 00 41 00 68 .....A.h
< 00:50:05.605.805 APPL profil e_enq
0x0000 80 02 01 80 .....
> 00:50:05.606.631 TRSP SB 1 (data avai l)
0x0000 80 02 01 80 .....
> 00:50:05.606.631 TRSP Rcv 1
0x0000 81 01 01 ...
```

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