LANGER
EMV-Technik

DE-01728 Bannewitz
mail@langer-emv.de
www.langer-emv.com

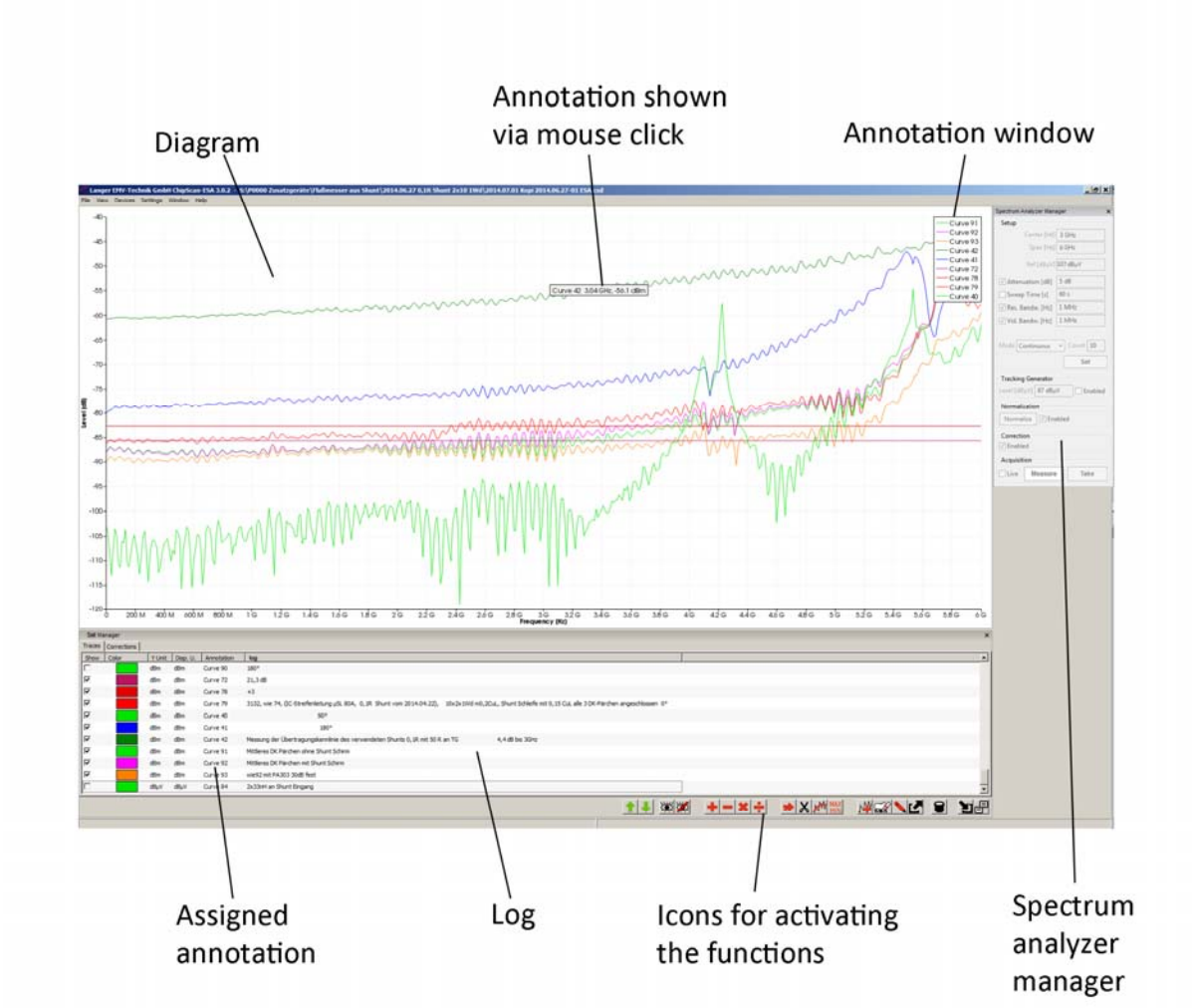
Phone: +49 351 43 00 93 23
Fax: +49 351 43 00 93 22
E-mail: kaule@langer-emv.de
Sales: Susanne Kaule

RF measuring and recording with ChipScan-ESA 3.0

Software for documenting and analysing measurements of a spectrum analyzer

The ChipScan-ESA software from Langer EMV-Technik GmbH has been designed to record, document and analyse the measurement curves of a spectrum analyzer in a clear and comparable way.
The ChipScan-ESA software can record any number of measurement curves of a spectrum analyzer during the measurement. The measurement curves of a project are summarized in a set and stored in a file. The measurement curves which have been recorded at different points in time can be displayed in one diagram. They can thus be compared quickly and easily. Important information is entered for each measurement step and assigned to the respective measurement curve simultaneously to the measurement. A log is thus produced for the entire measurement.

ChipScan-ESA user interface



The ChipScan-ESA software has been developed primarily for measurements in the field of electromagnetic compatibility (EMC). It is tailored to working with the ESA1 interference emissions development system from Langer EMV-Technik GmbH. Easy and

LANGER
EMV-Technik
DE-01728 Bannewitz
mail@langer-emv.de
www.langer-emv.com
Phone: +49 351 43 00 93 23
Fax: +49 351 43 00 93 22
E-mail: kaule@langer-emv.de
Sales: Susanne Kaule

quick comparison on the basis of pre- and post-measurements is especially important during the emissions analysis and EMC optimisation of the equipment under test at the development stage. The measurement curves recorded in a set, the log linked to them and the analysis functions of the ChipScan-ESA software make this comparison feasible.

The following features of the ChipScan-ESA software allow the developer to compare measurement curves efficiently and quickly:

- The software can record any number of measurement curves at any time, present them in a diagram, compare them directly and store them in a file.
- Each individual measurement curve can be shown or hidden and assigned a certain colour (set manager, image).
- Selected measurement curves can be added, subtracted, smoothed or trimmed. New curves can be calculated from the maximum or minimum values of selected curves (icons, set manager, image).
- A description can be added to each measurement curve in the log (set manager, image).
- The measurement values can be corrected automatically with correction curves. Correction curves can be imported into ChipScan-ESA or edited as defined by the user (tab corrections, set manager, image). The correction curves can be shown in the diagram.
- The ChipScan-ESA can be used to set and control the basic functions of the spectrum analyzer (spectrum analyzer manager, image).

The LiveTrace function (spectrum analyzer manager, image) triggers a live transfer of the values measured by the spectrum analyzer to the diagram. During the live transfer, any number of measurement curves recorded previously can be shown for comparison. This function allows the developer to verify the effectiveness of an EMC countermeasure immediately while the measure is being taken and to further optimize it.

The ChipScan-ESA software can be used to generate and export the image data that is required for a documentation or presentation, for example. Furthermore, all measurement curves can be exported as a comma separated value list (.csv) for further processing in R, Matlab or Excel.

ChipScan-ESA is not limited to the analysis of EMC issues or work with the ESA1. The ChipScan-ESA software is a versatile tool for data acquisition and data processing in conjunction with the measurement curves of a spectrum analyzers. ChipScan-ESA can be used to document the following measurements, for example:

- with an antenna
- with a line impedance stabilisation network
- with a coupling clamp
- with an RF current transformer
- with near-field probes
- with probe heads
- magnetic field measurements
- electric field measurements
- measurements of ICs (1 Ohm and 150 Ohm method and other methods)
- TEM cell
- stripline

To obtain the ChipScan-ESA viewer free of charge, please contact us at

mail@langer-emv.de.

Look at our homepage for further information about our IC Test System

https://www.langer-emv.de/en/category/ic-measurement-technology/12