

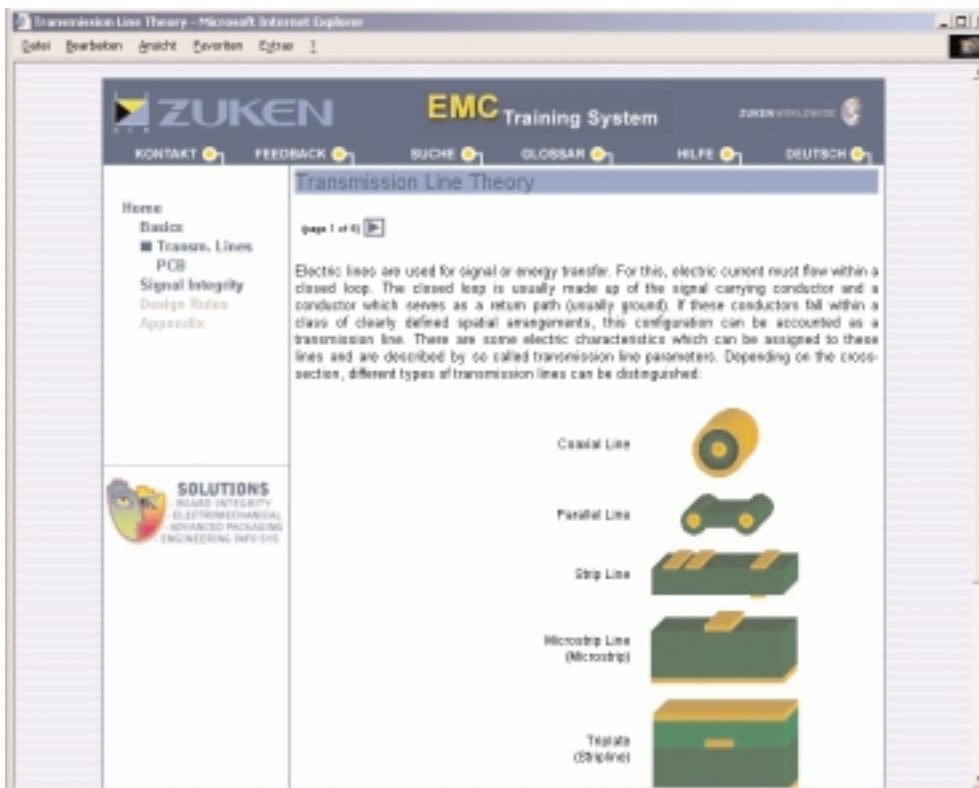
# EMC Training System

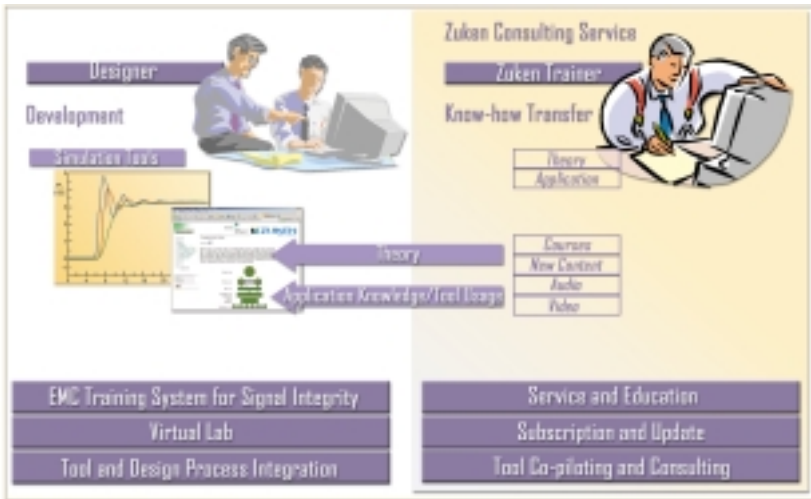
Keeping up to date with the technological advancements in the PCB Design industry is of critical importance to both development engineers and their managers alike. This is especially the case with high-speed design and specifically in the areas of Signal Integrity, EMI and manufacturing issues. However, traditional training methods are very often inappropriate in this highly technical and specialized field. To overcome this problem, Zuken has introduced the EMC Training System, an online, interactive training system for high-speed PCB design engineers.

The embedded online background material includes explanations of the fundamentals of transmission lines and printed circuit boards, as well as information on EMC effects relating to signal integrity, design rule guidelines and also a range of technical papers. The interactive elements of the system allow engineers to change physical and as well some electrical characteristics of conductors and other printed circuit board or device parameters, either by entering numerical data or by using a mouse to adjust physical sizes and spacings in the browser window.

## BENEFITS

- Training on demand at the engineer's desk
- Computer based training using web technology
- Practical examples delivered interactively
- Illustrated design practice and easy to follow guidelines
- Flexible content and easy, regular updates
- Reduced training costs
- Freedom from location and time constraints

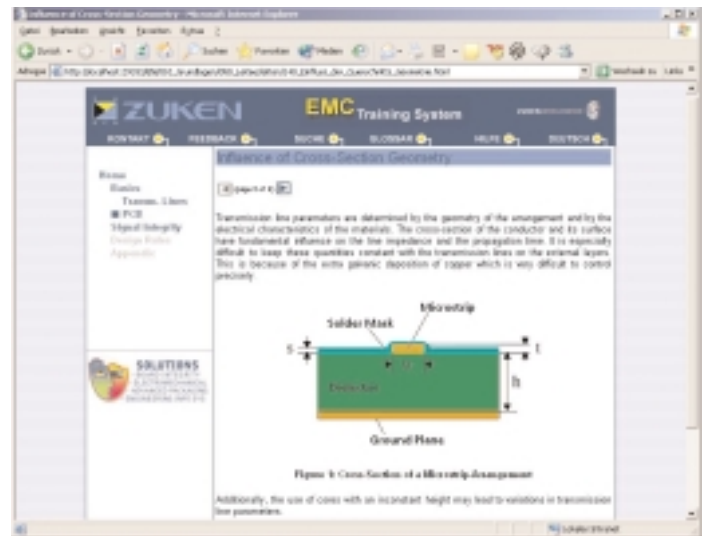




The System covers everything from the basic principles right up to the latest perceptions in the areas of EMC-adequate design of PCB's and MCM's. Constant updates guarantee that the latest information and learning modules are available on CD-ROM and via the internet and have even been combined in a net-based training system. The EMC Training System is easy to install and to license and requires minimal maintenance effort from the customer. An installation in the customer's Intranet is also an option.

The resulting impedance changes for instance are automatically charted in real-time. Conductor width and length, conductor spacing, substrate height, substrate material data, terminal impedances and characteristics of the transmitting signal are just some of the parameters with which the engineer can experiment.

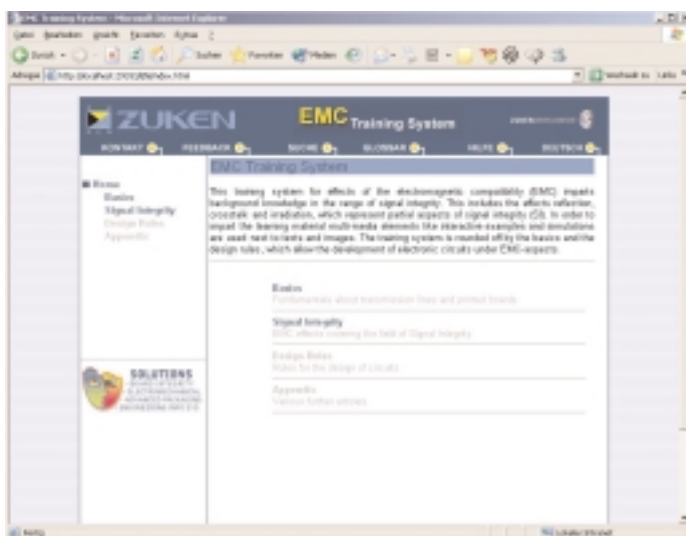
Zuken's EMC Training System, developed in conjunction with the Fraunhofer Institute IZM Paderborn, Germany, supports hands-on learning to solve practical state-of-the-art design problems. Interaction is supported at various levels and the use of design/analysis methods allows practical knowledge about the analysis procedure for SI and EMC effects under certain boundary conditions to be gained through real design examples.



Example showing the PCB Design sessions

Support is available via Zuken's EMC Training Centre in Paderborn, Germany.

For more information or to book a training, please contact your local Account Manager, or visit [www.zuken.com/emctraining](http://www.zuken.com/emctraining)



Main dialog of EMC Training System displaying the various chapters