

# HIGH-SPEED DIGITAL DESIGN

WITH EXPERT CHUCK CORLEY



8 - 11  
September 2025

FRANKFURT

# GERMANY

# HIGH-SPEED DIGITAL DESIGN

## WITH EXPERT CHUCK CORLEY

This comprehensive 4-day course covers all key aspects of high-speed digital design. If you could only attend one course on this subject, this is the one for you!

**This course draws extensively from the decades of hands-on experience of global expert, Chuck Corley.**

## ABOUT CHUCK:

Chuck Corley spent 35+ years getting his fingers dirty designing bleeding-edge wired routers, wired & microwave & fiber-optic tele-communications products, and the highest frequency instrumentation used for making microwave measurements.

Chuck was given the nickname "MacGyver" for his ability to tackle and solve complex problems that other engineers had given up on.

Virtually every single product Chuck designed included the words "leading edge" and "high frequency". Chuck developed these products at companies including Cisco Systems, Hewlett Packard, National Instruments, Mahi Networks, Agilent Technologies, and Keithley Instruments!

At almost all of these companies Chuck was a primary signal integrity expert and high speed design consultant who taught design classes and techniques to new and experienced engineers.



### Price

€ 2 499 \*

\*10% EARLY BIRD DISCOUNT AVAILABLE

### Dates

8 - 11  
SEPTEMBER 2025

### Location

FRANKFURT  
GERMANY

**BOOK YOUR  
SEAT NOW**

✉ [seminar@edatech.co.za](mailto:seminar@edatech.co.za)

☎ +27 12 665 0375

🌐 [www.edatech.co.za](http://www.edatech.co.za)



# HIGH-SPEED DIGITAL DESIGN

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### Topics That Will Be Covered

- Blind and Buried Vias
- Bypass Capacitors and Inductors
- Calculating Impedance
- Copper Roughness
- Crosstalk
- Design Rule Creation Using Noise Margin Analysis
- Design Tools
- Designing PCB Pad Stacks
- Determining Drilled Hole Dimensions
- Designing the PCB Stackup
- Developing Routing Rules
- Differential Signaling
- Differential Skew & Weave Effect
- EMI
- Gathering Design Data
- Getting to 56 Gb/S
- PAM4 Signaling
- PCB Design
- PCB Dielectric Losses
- PCB Fabrication
- PCB Structures, right angle bends, vias
- PCI Express
- Plane Capacitance
- Post Layout Checking
- Power Delivery System Design
- Receive Equalization
- Reflections
- Review Fundamentals
- Terminations
- Testing Fabricated PCBs
- Transmission Line Definition
- Types of Transmission Lines
- IC Package Effects
- Modeling the PDS
- **\*Bonus day 4 - Designing 5G PCBs presented by Expert Nechan Naicker**

### What Others Had To Say

“The content around power distribution systems and effect on EMI was new to me.”

“Chuck's tips on designing good power planes, as well as his guidance on capacitor usage. It's very different from what we usually do.”

“Lots of Practical Insights in the field of Signal Integrity has been gained. I'm using these principles everyday.”


“It was a good experience to learn from someone who is an expert in the field.”

“Chuck's insight and teaching has already elevated my ability to produce quality boards. I find the information very applicable and usable to PCB design.”

“I saw a lot of real-world examples used in this class.”

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