



# CERTIFICATION

This is to certify that  
**ERHAN KIZAR**

has successfully completed the course

**Essential PCB design/layout techniques for good EMC**

Date **17 JUN 2024**

Course tutor

*Keith Armstrong*

**Keith Armstrong**



**Course duration:** 5h 25min **Course content:** Saving time and money, Scope and application of these design techniques, EM Zoning (i.e. segregation), Interface analysis, filtering, and suppression), Planes for 0V(GND) and other power rails (PWR), RF-bonding PCB Reference Planes at EMZ boundaries, Power supply decoupling, Switching power converters (AC/DC, DC/DC, DC/AC, etc.), Matched transmission line techniques, Layer stacking and trace routing, Devices with BGA packages and/or multiple DC rails, Some useful references, sources, and webinars

[www.fedevel.com](http://www.fedevel.com)

**Certificate number:** 1a77187c7993155b099a0d065