

CERTIFICATION

This is to certify that

Alexander Phillip Norman

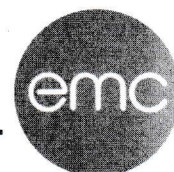
has successfully completed
EMCSTANDARDS course

Essential PCB design/layout
techniques for good EMC

Date: 29 MAR 2022

Course tutor:

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