☁ FEDEVEL EDUCATION

CERTIFICATION

This is to certify that

Anas Ahmed Mohammed Metwally

has successfully completed
EMCSTANDARDS course

Essential PCB design/layout techniques for good EMC

Date: **7 FEB 2023**

Course tutor: *Keith Armstrong*   emc

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

Certificate number: 1a67785c7913950b595a4d265