



CERTIFICATION

This is to certify that

ABDULLAH J. ESSA

has successfully completed the course

Mixed-Signal Hardware Design with KiCad

Date **17 JUN 2024**

Course tutor

A handwritten signature in blue ink that reads 'Philip Salmony'.

Philip Salmony



Course duration: 5h 20min **Software used:** KiCad V6 **Course content:** 1) System-Level Design 2) Part Selection 3) Understanding Datasheets 3) Power Supply Design 4) MCU and USB Circuitry 5) ADCs, DACs, and Analogue Circuitry 6) Symbol and Footprint Creation 7) Circuit Simulation with LTSpice 8) PCB Design, Layout, and Routing 9) Product Manufacturing