



CERTIFICATION

This is to certify that

Abdallah Ibrahim Kishk

has successfully completed the course

Advanced Digital Hardware Design

Date **6 APR 2026**

Course tutor

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

Philip Salmony



Course duration: 11h 30min **Course content:** 1) System-Level Design 2) Part Selection 3) Schematic Fundamentals 4) PCB Design Fundamentals 5) Build-Up, Stack-Up, and Controlled Impedance 6) Power 7) FPGA/SoC Config & I/O 8) DDR3 Memory & Termination 9) Gigabit Ethernet 10) USB 2.0 HS & eMMC Memory 11) Final Touches & Manufacturing