

# Software design of embedded systems with the Vitis™ tool

2 days - 14 hours

## OBJECTIVES

- After completing this training, you will have the skills to:
  - 1 - Use the tools and techniques necessary to design and develop software using the Vitis™ Unified Software Platform.

## PREREQUISITES

- C or C++ programming experience, including general debugging techniques
- Conceptual understanding of embedded processing systems as it relates to the AMD ecosystem (specifically writing and modifying scripts, user applications, and boot loader operation)

## CONCERNED PUBLIC

- Technicians and Engineers in Digital Electronics
- All our training courses are given at a distance and are accessible to people with reduced mobility.
- Our partner AGEFIPH accompanies us to implement the necessary adaptations related to your disability.



## NOTES

- Release date: 22/05/2023

## CHAPTERS

### DAY 1

- Objective 1
  - Overview of Embedded Software Development {Lecture}
  - Driving the Vitis Software Development Tool {Lecture, Lab}
  - Standalone Software Platform Development and Coding Support {Lecture, Lab}

- Linux Software Application Development Overview {Lecture}
- Building a Linux Application in the Vitis IDE {Lecture, Lab}

### DAY 2

- Objective 1
  - System Debugger {Lecture, Lab}
  - Software Profiling Overview {Lecture, Lab}
  - Debugging Using Cross-Triggering {Lecture, Lab}

## TEACHING METHODS

- Inter-company online training :
  - Presentation by Webex by Cisco



- Provision of course material in PDF format
- Labs on Cloud PC by RealVNC

## METHODS OF MONITORING AND ASSESSMENT OF RESULTS

- Attendance sheet
- Evaluation questionnaire
- Evaluation sheet on:
  - Technical questionnaire
  - Result of the Practical Works
  - Validation of Objectives
- Presentation of a certificate with assessment of prior learning

## SUPPORT

- Authorized Trainer Provider AMD : Engineer Electronics and Telecommunications ENSIL
  - Expert AMD FPGA - Language VHDL/Verilog - RTL Design
  - Expert AMD SoC & MPSoC - Language C/C++ - System Design
  - Expert DSP & AMD RFSoc - HLS - Matlab - Design DSP RF
  - Expert AMD Versal - AI Engines - Heterogenous System Architect

## PC RECOMMENDED

- Software Configuration :
  - WebEx Cisco
  - RealVNC Viewer
- Hardware configuration:
  - Vitis 2022.2
  - Recent computer (i5 or i7)
  - OS Linux 64-bits (Windows 10 compatible)
  - At least 16GB RAM
  - Display resolution recommended 1920x1080

## PARTNERS



Authorized Training Provider

## CONTACT

Administratif / Formateur : (+33) 06 74 52 37 89  
info@mvd-training.com

