



Developing & Deploying Software with the AMD Embedded Development Framework (EDF)

This How-To Video Covers . . .



Install AMD
Application and
Machine SDK
on Host PC



Develop “Hello
world”
Application and
a Kernel Module



Compile
Application and
Kernel Module
on X86 Host PC



Deploy
Application and
Kernel Module
to AMD Versal™
VEK385 Board



Explore QEMU
Flow for
Application and
Kernel
Deployment

Why Use an SDK?



SDK – A software development kit for cross development on a host machine



Downloadable as a shell script, which is part of EDF



Or can re-create the SDK using EDF



Access to development board is not required



Faster build times in comparison to on-target development



Drawback

Fixed content: Adding new tools or packages requires building and installing a new SDK, which can be done using EDF

Follow Along:

Requirements

- 1 Set up EDF Linux® environment using “*Getting Started with AMD Embedded Development Framework*” how-to video
- 2 Download EDF Application and Machine SDK Install script
- 3 Download QEMU prebuilt artifacts to enable full system emulation

Text-based
Guide

Software Application Development using SDK - Wiki

Watch the full Demo video

<https://www.amd.com/en/products/software/adaptive-socs-and-fpgas/embedded-software/embedded-development-framework.html#resources>

Summary - What We Just Showed

1

Install AMD EDF application and machine SDK by running the downloaded installer script

2

Clone and cross-compile the “hello world” application for ARM® cores on X86 host PC

3

Deploy and run “hello world” executable on the AMD Versal™ VEK385 evaluation board

4

Clone and make Xilinx HDMI kernel module

5

Deploy HDMI kernel module to Versal VEK385 board

6

Explore deploying “hello world” application on a Versal VEK385 board running a Linux system emulated by QEMU

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