Contribution ID: **130**   Type: **Speed talk**

Integration of Yocto and Jupyter Lab into the MSK Firmwarework for MPSoCs

Thursday 8 September 2022 15:23 (3 minutes)

With the advent of modern systems on chips (SoCs) and multiprocessor systems on chips (MPSoCs), there are clear advantages to using embedded Linux as an operating system. It is an open-source operating system that supports multiprocessing, and there are a variety of open-source hardware drivers and application software. The most important advantage, however, is that chip vendors provide extensive libraries and high-level APIs for Linux to take advantage of features such as hardware acceleration and heterogeneous processing.

DESY MSK has chosen the Yocto Project framework to create custom embedded Linux images for the SoC/MPSoC-based Advanced Mezzanine Cards within the MicroTCA systems. We will present our approach to integrating the Yocto build process into the existing framework of MSK for building FPGA artifacts. We will show how we plan to add, update, and maintain software components and the status of this work.

Summary

Primary authors: RANDALL, Michael (MSK (Strahlkontrollen)); OMIDSAJEDI, Seyed Nima (MSK (Strahlkontrollen))

Presenters: RANDALL, Michael (MSK (Strahlkontrollen)); OMIDSAJEDI, Seyed Nima (MSK (Strahlkontrollen))

Session Classification: Session 3: Controls/Seeding/DAQ

Track Classification: ST - Beam controls