



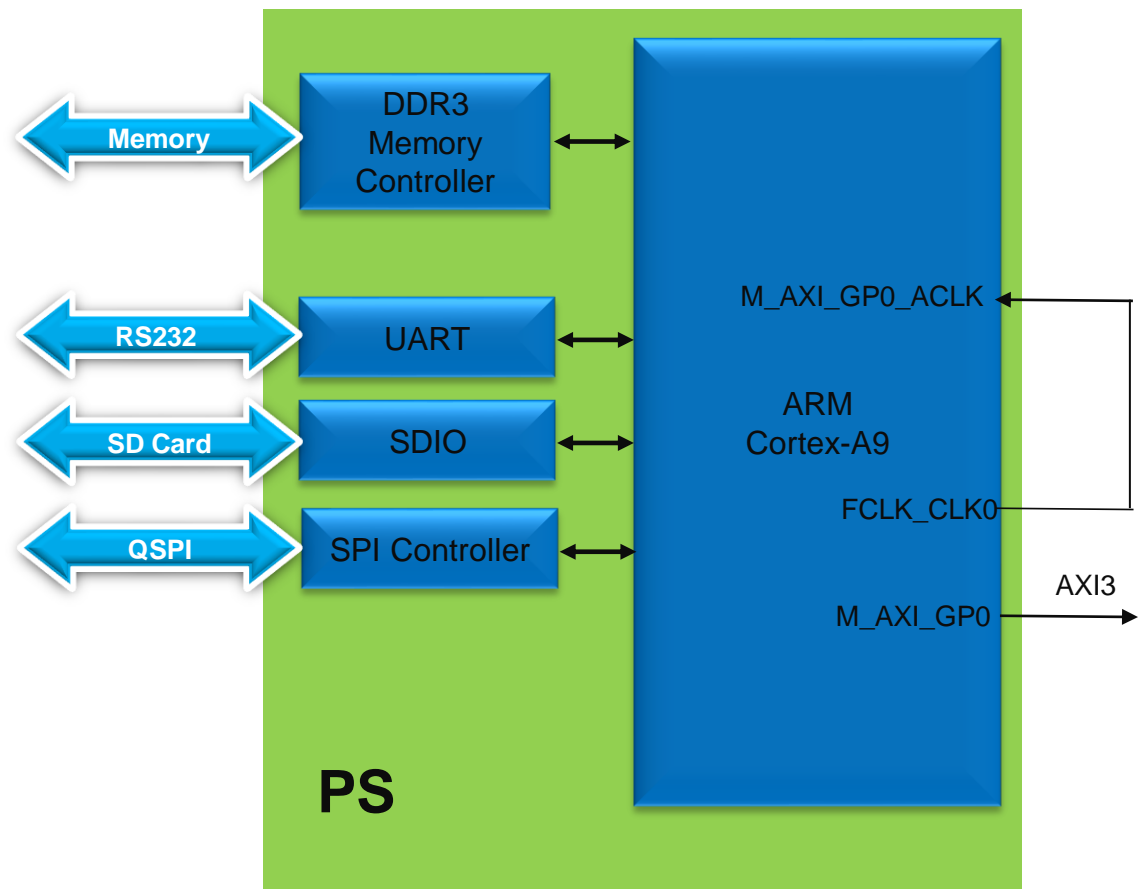
Lab8 Intro

Configuration and Booting

Introduction

- ▶ This lab guides you through creating a bootable system capable of booting off the SD card or the QSPI flash memory located on the board. It also demonstrates how different bitstream can be loaded in the PL section after the board boot up and the corresponding application can be executed.

ARM Cortex-A9 based Embedded System Design Configuration and Booting



Procedure

- ▶ Creating a Vivado project
- ▶ Creating the hardware system using IP Integrator
- ▶ Export to Vitis, create a bootloader, and a hello world application
- ▶ Create the Boot images and test in hardware using SD card and QSPI flash memory
- ▶ Prepare for multi-applications boot
- ▶ Create the boot application
- ▶ Create the SD card image and test

Summary

- ▶ This lab led you through creating the boot images which were capable of booting standalone applications from either the SD card or the QSPI flash memory.
- ▶ You then created the design capable of booting multiple applications and configurations which you developed in the previous labs.



Thank You

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