



Lab5 Intro

Software Writing for Timer and

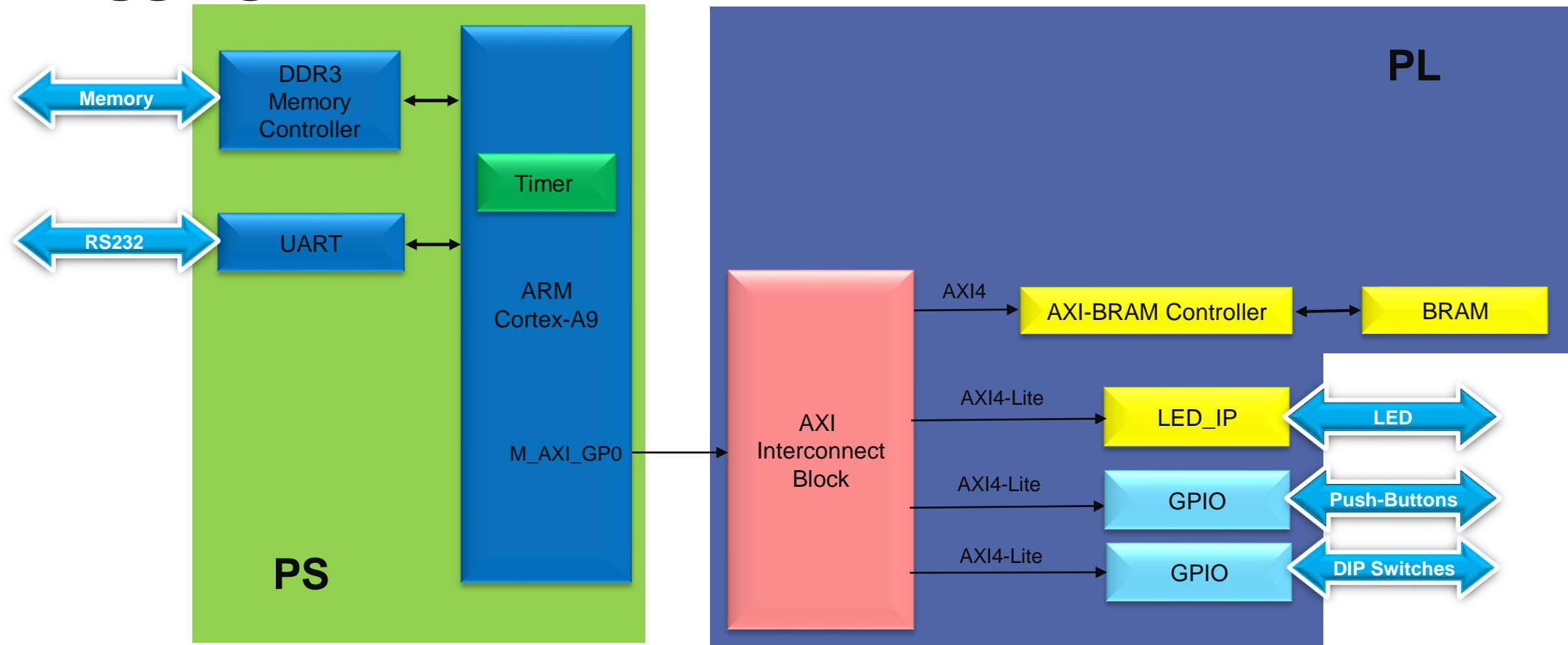
Debugging

2021.2

Introduction

- ▶ This lab guides you through the process of writing a software application that utilizes the private timer of the CPU.
- ▶ You will refer to the timer's API in Vitis to create and debug the software application.
- ▶ The application you will develop will monitor the dip switches settings and increment the count on LED.
- ▶ The application will exit when the center push button is pressed.

Lab5: Utilize system timer and perform software debugging



Procedure

- ▶ Open the project in Vivado
- ▶ Create an Vitis Software Project
- ▶ Verify Operation in Hardware
- ▶ Launch Debugger

Summary

- ▶ This lab led you through developing software that utilized the CPU's private timer.
- ▶ You studied the API documentation, used the appropriate function calls and achieved the desired functionality.
- ▶ You verified the functionality in hardware. Additionally, you used the Vitis debugger to view the content of variables and memory, and stepped through various part of the code.



Thank You

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