Trace

Welcome back to Cypress Academy, PSoC 6 101. In this video, I will show you how to add and use an extremely useful debug tool, especially when using an RTOS in your application, Tracealyzer by Percepio. This tool will help us understand what’s happening in the RTOS application, what tasks are utilizing the CPU and by how much and help with tuning an application for the best performance. Let’s get started.

For this lesson, you will need to install an additional software tool called Tracealyzer by Percepio. You can find download it from the Percepio folks at [www.percepio.com](http://www.percepio.com).

As we’ve done in the previous videos, we’re going to pickup where we left off and add the code required to interface to the Percepio toolset.

[Add the percepio code]

[Build and run; use the percepio tool to see what’s going on; identify that the percepio tool is now maxing out the cpu utilization (no DMA yet)]

[Add DMA and go over that peripheral and how to use it]

[Build and run; use the percepio tool to see that now we’ve been able to greatly reduce the CPU utilization to a fraction of what was—success]

Now we have our fully functional and debug-friendly robotic arm.

You can post your comments and questions in our PSoC 6 community or as always you are welcome to email me at alan\_hawse@cypress.com or tweet me at @askioexpert with your comments, suggestions, criticisms and questions.