

RA and FSP Curriculum : High Performance with RA8 Arm Cortex-M85 Helium Lab

Last Updated: 24th Sept 2024

This lab material showcase the performance and the advantages of Renesas RA8 MCU and CM85 core. Helium intrinsics and Arm ® CMSIS DSP Library functions are benchmarked to highlight the improvements versus the scalar version of these intrinsics. It also utilizes Tightly Coupled Memory (TCM) and cache together with Helium for further performance improvement.

High Performance with RA8 Arm Cortex-M85 Helium Lab for FSP 5.5.0

- a hands on lab using FSP 5.5.0 and EK-RA8M1. It uses Arm CMSIS DSP Library and calculates the dot product of two vectors. The Helium version of this function is used to emphasize the performance improvement over using the scalar version of this function. It also utilizes the DTCM and Data cache memory together for further performance improvement.

All lab materials are available in a single zip file

[here](#)

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High Performance with RA8 Arm Cortex-M85 Helium Lab for FSP 5.4.0

- a hands on lab using FSP 5.4.0 and EK-RA8M1. It uses Arm CMSIS DSP Library and calculates the dot product of two vectors. The Helium version of this function is used to emphasize the performance improvement over using the scalar version of this function. It also utilizes the DTCM and Data cache memory together for further performance improvement.

All lab materials are available in a single zip file

[here](#)

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High Performance with RA8 Arm Cortex-M85 Helium Lab for FSP 5.2.0

- a hands on lab using FSP 5.2.0 and EK-RA8M1. It uses Arm CMSIS DSP Library and calculates the dot product of two vectors. The Helium version of this function is used to emphasize the

performance improvement over using the scalar version of this function. It also utilizes the DTCM and Data cache memory together for further performance improvement.

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All Courses

All RA and FSP courses are listed

here.

Tutorial workshop how-to guide quickstart getting started course

Suitable Products

RA8M1, RA8D1, RA8T1