

## You are searching for an easy way to run your Simulink® model on your MPSoC?

SIRIUS OS Target closes the gap between Simulink® and the deployment of the model on the MPSoC with the following new features:

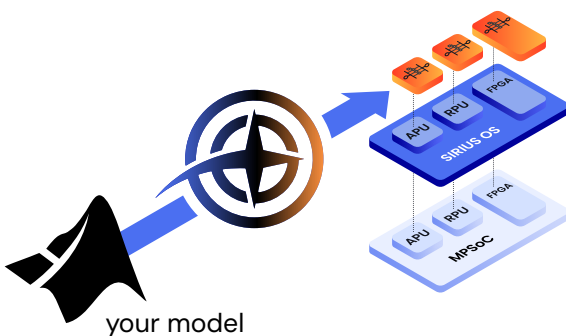
- ✓ **Inter-Core Communication** between APU, RPU & FPGA
- ✓ **Real-Time Task Scheduling**
- ✓ **MATLAB®'s external mode** for **FreeRTOS**
- ✓ **Integrated build process** with **Vitis™**
- ✓ **Simulink® library blocks** for external communication
- ✓ **Easy model upload and deployment**

## Simulink® With SIRIUS Is the Best Choice

- Easy application development **without embedded programming skills or hardware knowledge**
- **Strong acceleration** of the entire engineering process
- Clear presentation and quick interpretation of results
- Ongoing development and updates
- **Fast and personal support** in case of difficulties
- Access to many years of experience of our developers

## Technical Features

- **More than one model** can run on each core
- **Real-time communication** between models via an Inter-Core Communication manager
- Time- or update-based model triggering
- Simple parameter management
- **Easy and automatic deployment** on hardware
- Simulink® library blocks for external bus protocols
- Additional features can be supported on request



## Areas of Application

- Sensor Processing
- Ultrasound
- Flight Navigation
- IIoT & Cloud Computing Security
- Networking & Industrial Communication
- Industrial Vision
- Medical Engineering
- Image & Video Processing
- Collaborative Robotics
- Motion & Motor Control
- Frequency Converter
- Automotive (ADAS)

## Features of SIRIUS OS Target

- Embedded Real-Time Environment & RT-Communication
- Xilinx Vitis™ - Integrated Build Process
- FreeRTOS
- Raw Ethernet
- External Mode
- OPC-UA
- Time- or Update-Based Triggering
- CAN
- UDP
- ICC
- Real-Time Task-Scheduling
- PROFINET
- MATLAB® Simulink®
- Individual features on request
- AXI Communication
- Data & Event Logging
- TSN



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