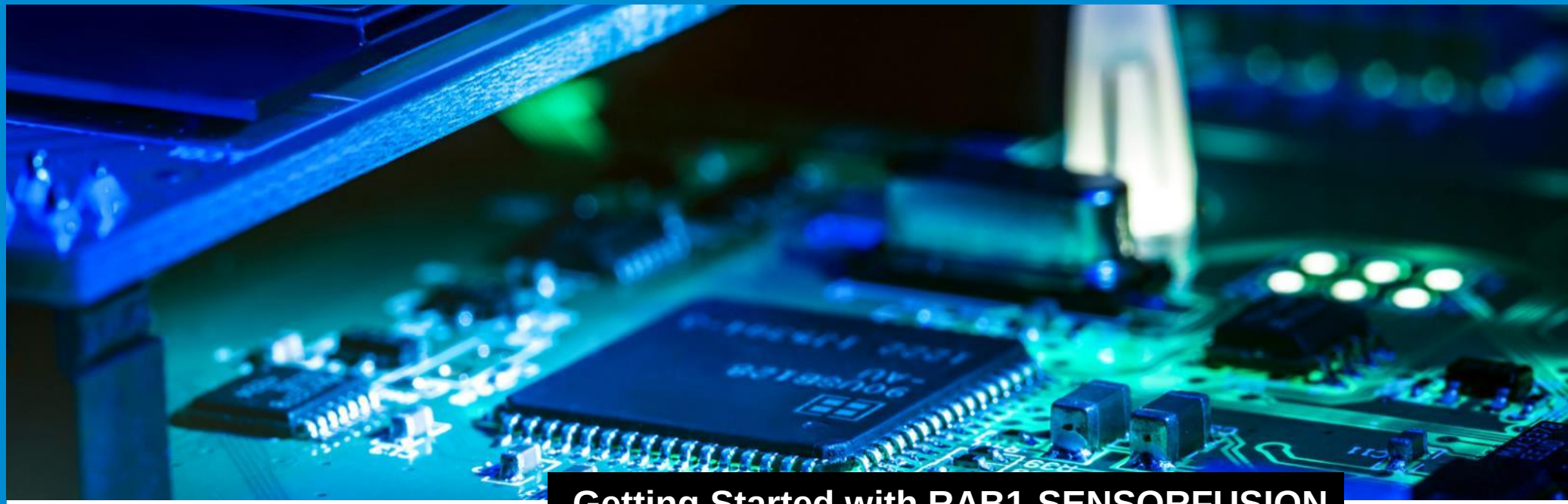

Getting Started with RAB1-SENSORFUSION

Getting Started with Rutronik Adapter Board – RAB1-SENSORFUSION.

Registration & Download

1.) Register or/and login to the Infineon website, press on „myInfineon“ tab.
https://www.infineon.com

2.) Download and install the latest ModusToolbox™ software.

3.) Get the firmware example from the RAB1-SENSORFUSION homepage (Press the „Download Area“ and login/register to access the data).

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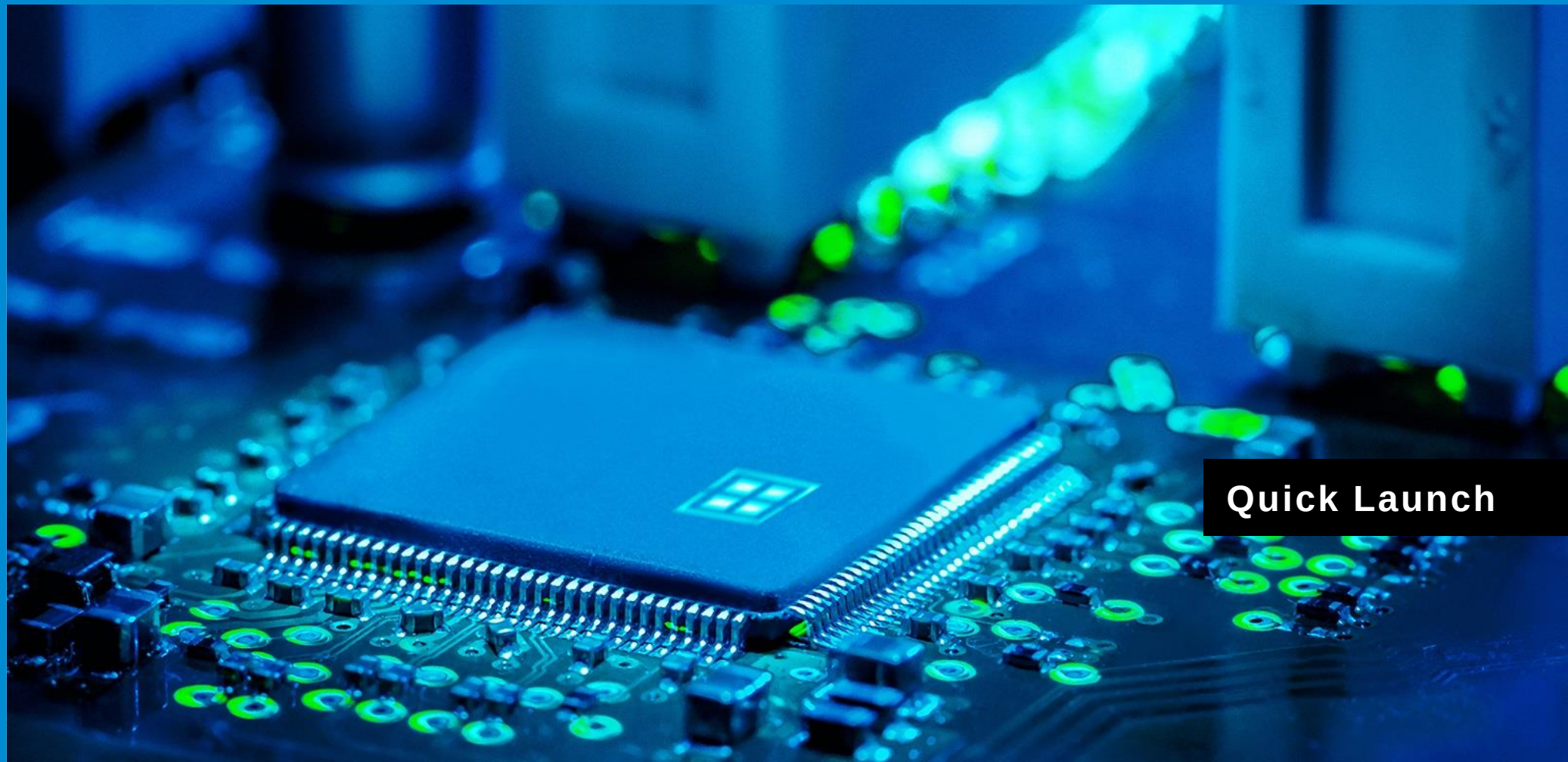
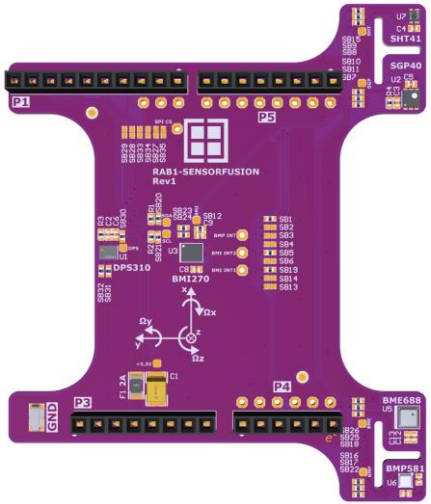


Quick Launch

1.) Required hardware.



RAB1-SENSORFUSION evaluation board

RDK2 Rutronik evaluation board

Micro USB Cable (A to Micro B)

A Laptop/PC PC

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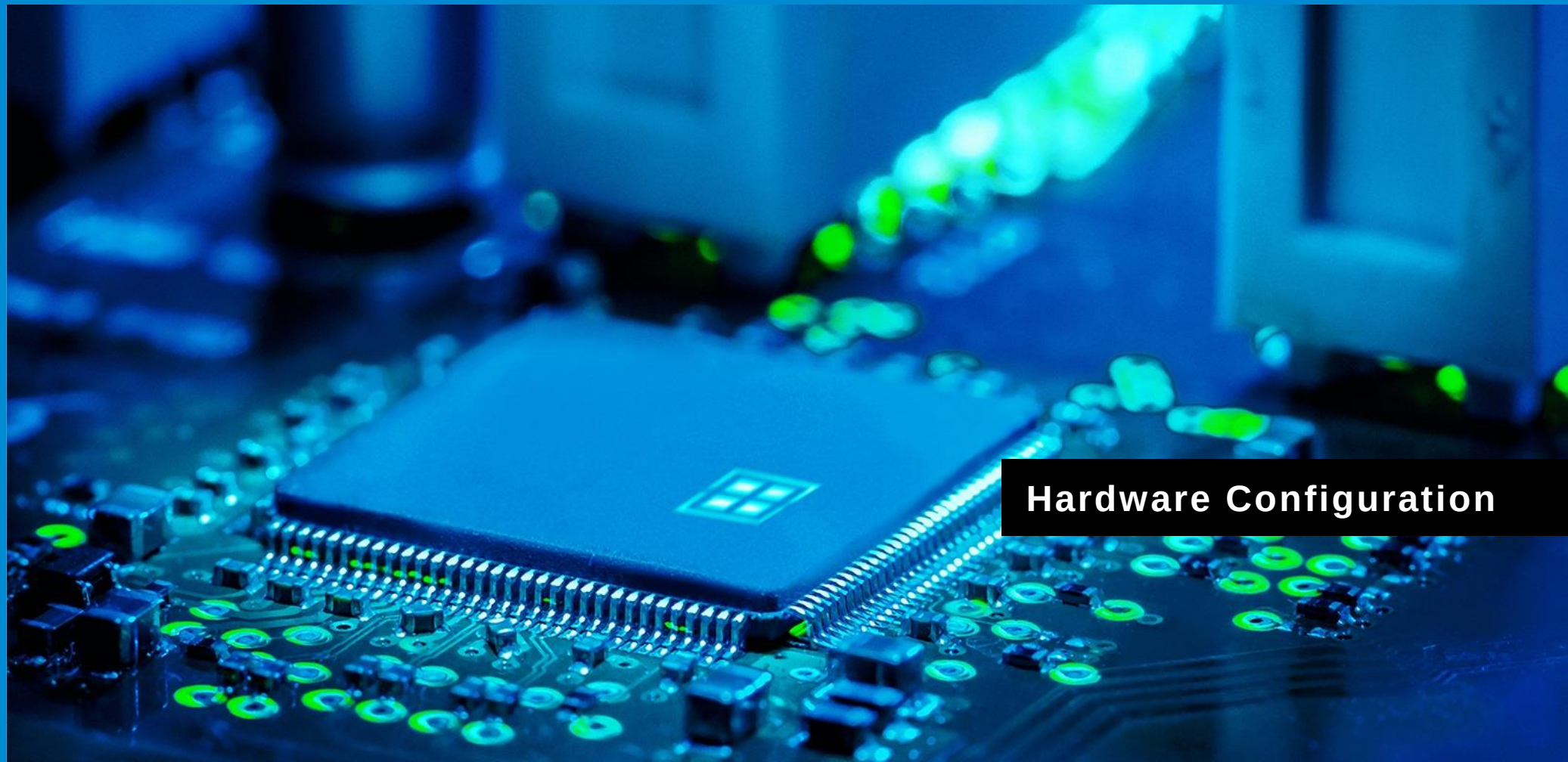
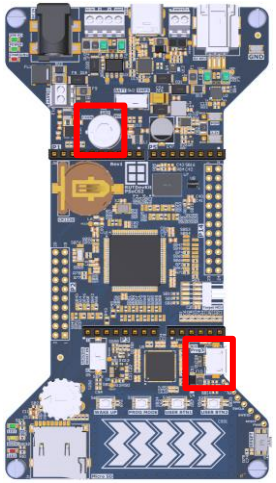
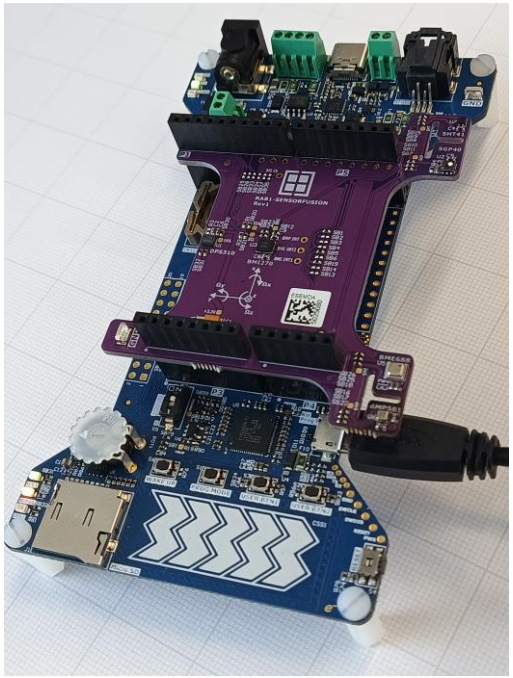


Hardware Configuration

Connect the RDK2 and RAB1-SENSORFUSION assembly with a PC



Ensure the switch SW1 is set to “3.3V” and connect the USB cable to “KitProg3”.



Mount the RDK1-SENSORFUSION board on the RDK2 Arduino headers.

Connect the assembled kit to the PC

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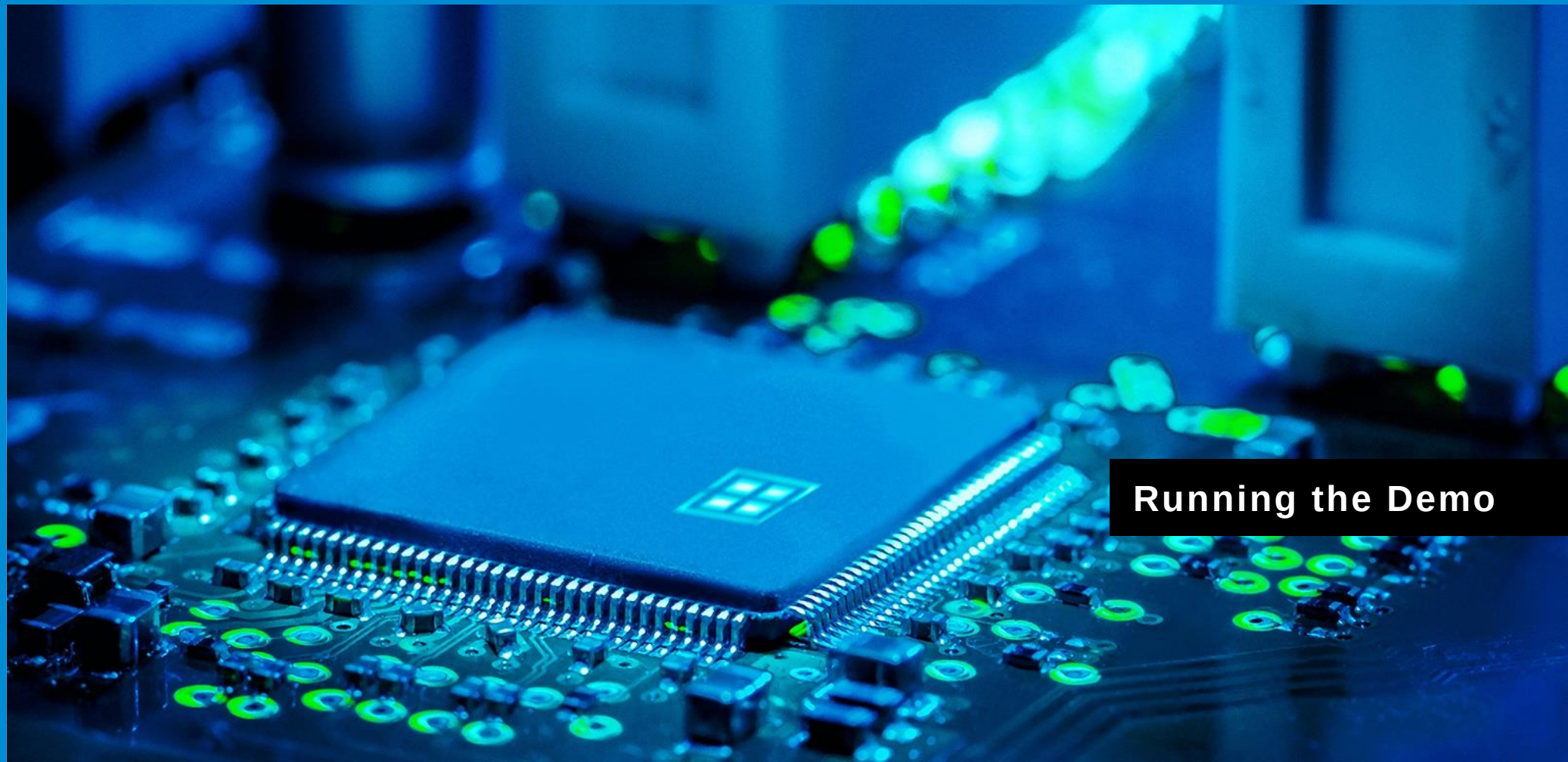
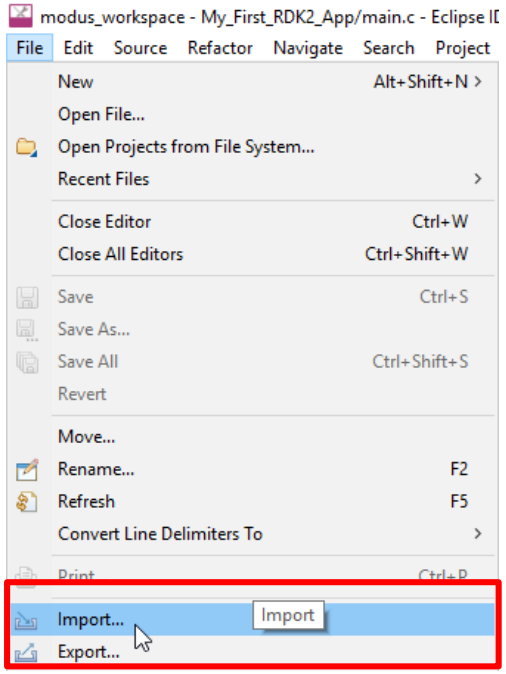


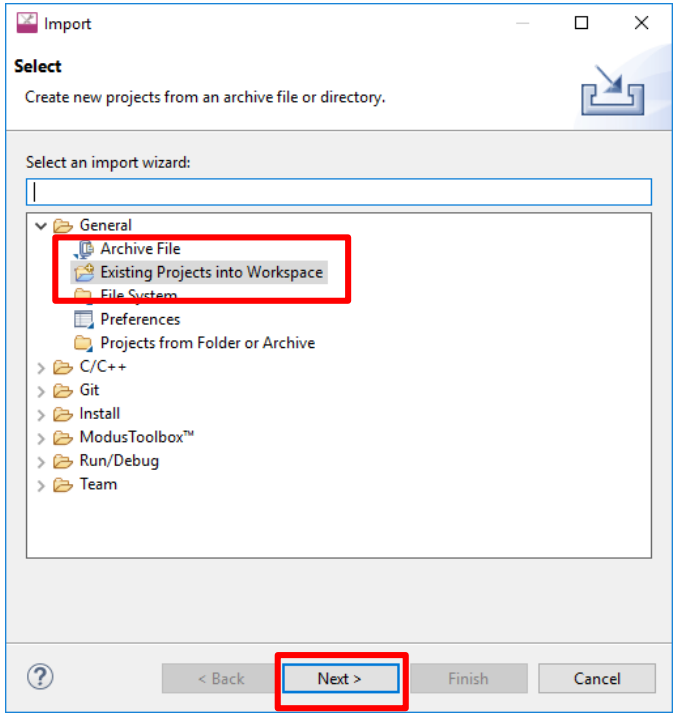
Running the Demo

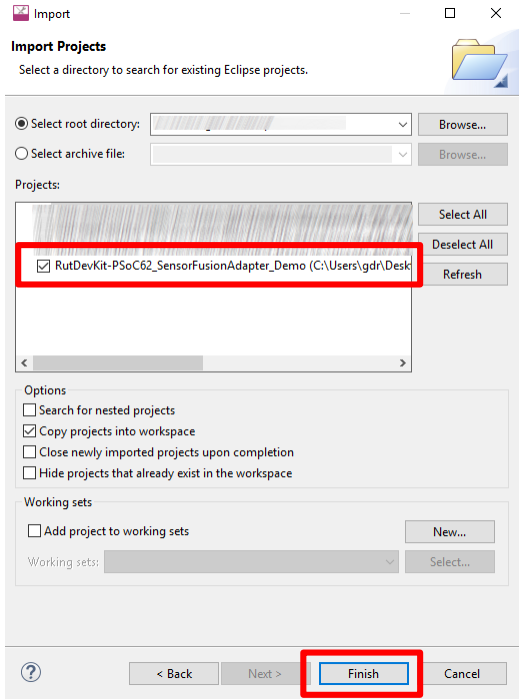
Importing a SensorFusionAdapter_Demo into the MTB Workspace

1.) Go File → Import… → Existing Projects into Workspace → Next.

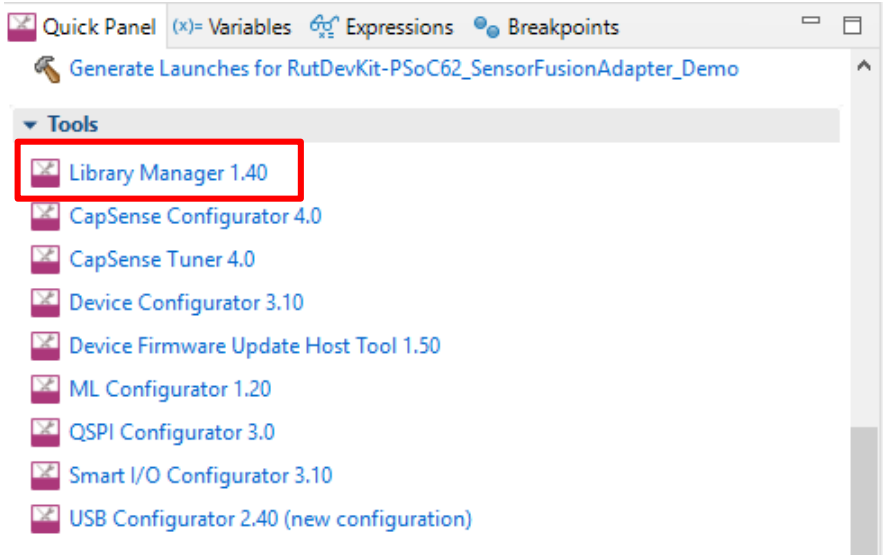
2.) Select a directory and the project to import, then select “Copy projects into workspace” then click on “Finish”.

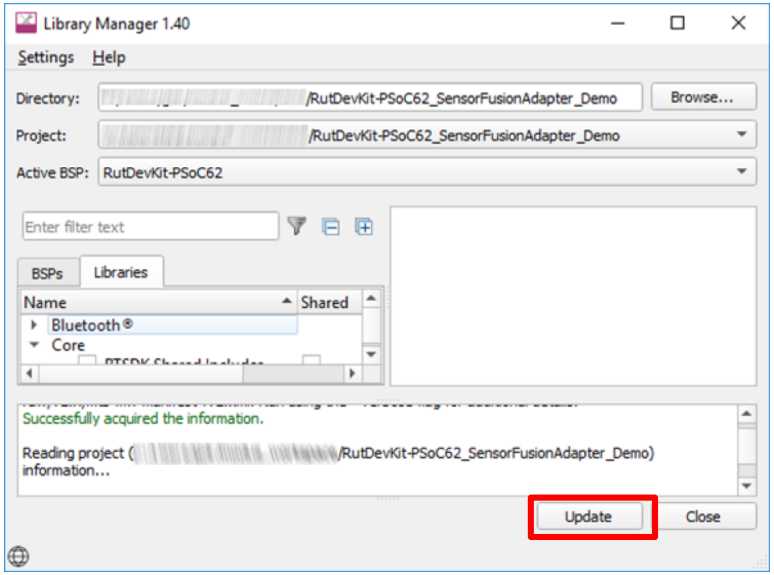






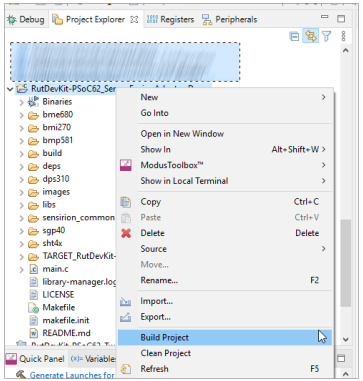
3.) Update the libraries using the “Library Manager”.



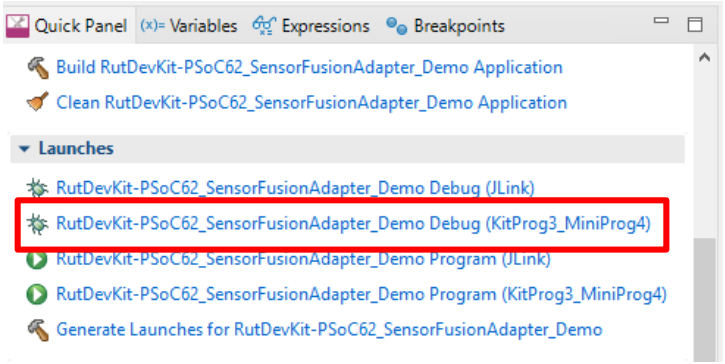


Build and Debug Imported Example

1.) Build: Right Click on the project and click “Build Project”.

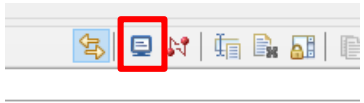


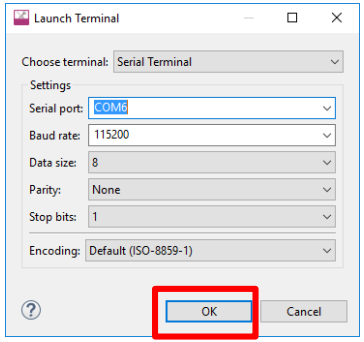
2.) Debug: Click on the “KitProg3” debug option in “Quick Panel”.



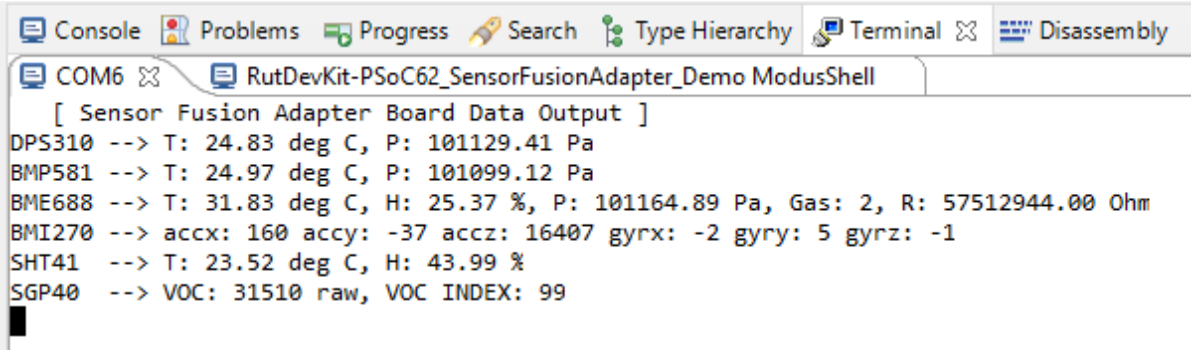
Launch a Terminal for Debug Output Monitoring

1.) Click on the terminal button and select the KitProg3 COM port.

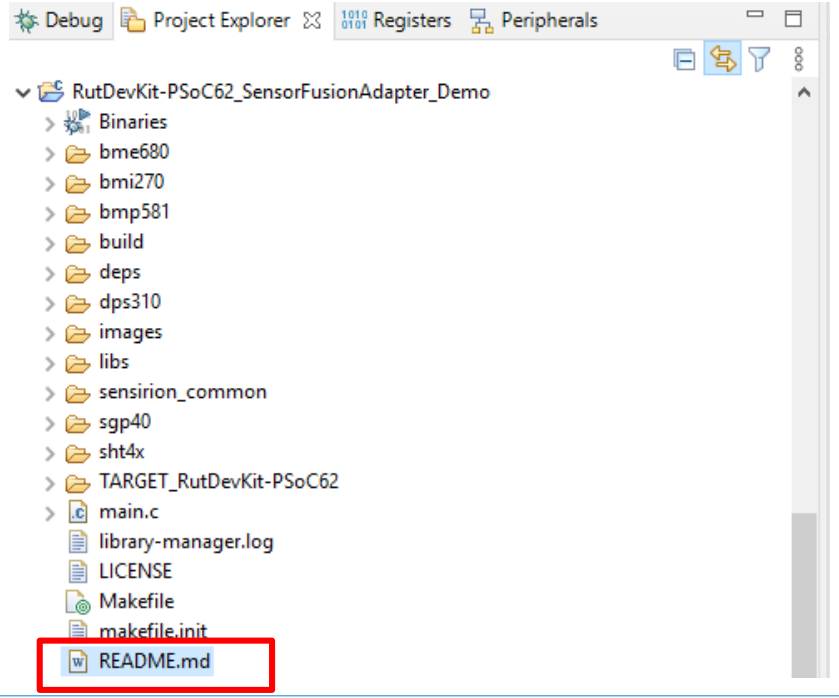




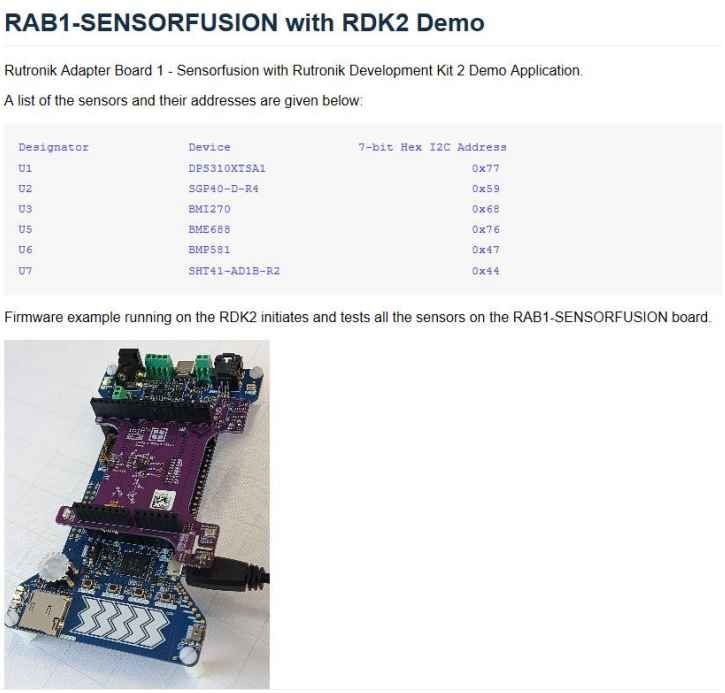
2.) The sensor data is refreshed every second in the COM terminal window.



Check the README.md file before starting to explore the code example. You may find important hints or what else is needed to have firmware running properly.



→



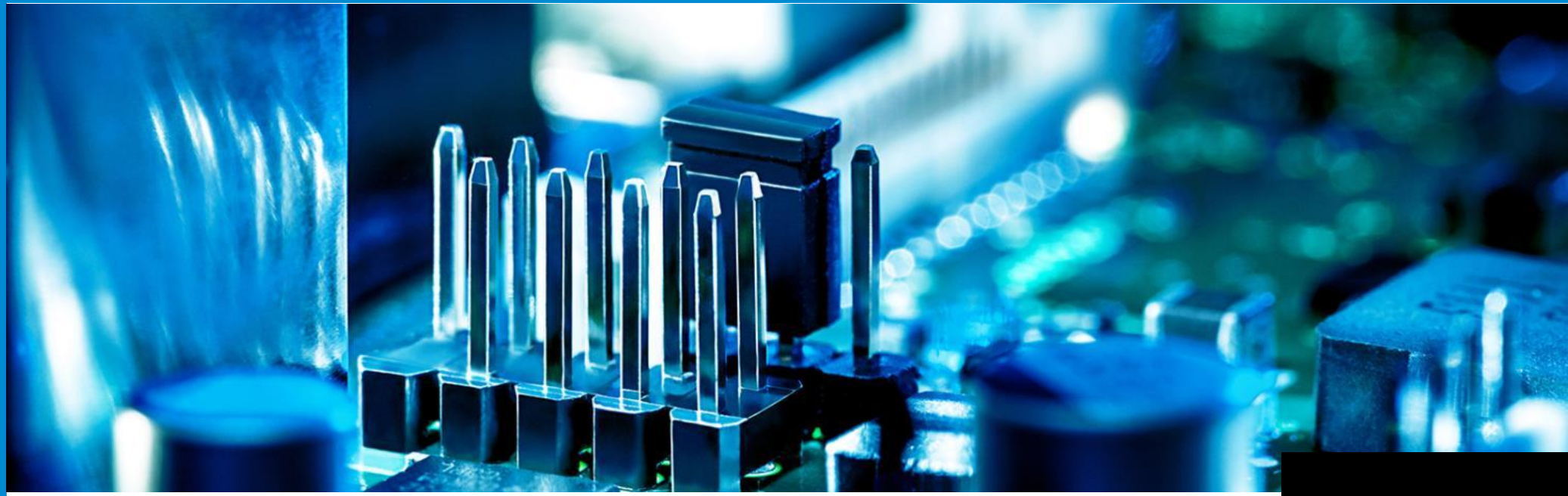
RAB1-SENSORFUSION with RDK2 Demo

Rutronik Adapter Board 1 - Sensorfusion with Rutronik Development Kit 2 Demo Application.

A list of the sensors and their addresses are given below:

Designator	Device	7-bit Hex I2C Address
U1	DPS310XTSA1	0x77
U2	SGP40-D-R4	0x59
U3	BMI270	0x68
U5	BME688	0x76
U6	BMP581	0x47
U7	SHT41-AD1B-R2	0x44

Firmware example running on the RDK2 initiates and tests all the sensors on the RAB1-SENSORFUSION board.



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