STM3240G-Eval_OS2

Download Link	Micrium_STM3240G-Eval_OS2.zip

STM3240G-Eval Example Project

MCU			
Manufacturer	**Family**	**Part Name**	**Architecture**
ST	STM32F4x	STM32F407IG	ARM_Cortex_M4

PROJECT INSTRUCTIONS

PRODUCTS AND VERSION REFERENCE

TOOLCHAIN IDEs	
IDE Name	**Version**
IAR EW for ARM	7.10
MICRIUM	
Micrium Product	**Version**
uC/CPU	1.30.01
uC/LIB	1.38.01
uC/OS-II	2.92.10
uC/Probe	3.2.14.8502

LOADING & RUNNING THE PROJECT ON THE BOARD

[WARNING]: Make sure to open the project using the mentioned IDE(s) version or later.

IAR Embedded Workbench™

1. Click on **File**→**Open Workspace...**
2. Navigate to the directory where the workspace is located:
   $\Micrium\Examples\ST\STM3240G-Eval\OS3\IAR\OS3.eww
3. Click **Open**.
4. For Safety, clean the project by clicking on **Project**→**Clean**. (If Available)
5. Compile the Project by clicking on **Project**→**Make**.
6. Have the board connected via J-Link into the board input (JTAG) **before** downloading the project to the board.
   a. Make sure (JP18) jumper is selected to PSU and provide 5v DC power to CN18.
7. Download the project to the board by clicking on **Project**→**Download and Debug.**
8. Run the project by clicking **Debug**→**Go**. To stop the project from running click **Debug**→**Stop Debugging**.

µC/Probe

µC/Probe, a Micriµm Windows™ application to graphically view the internals of any embedded system, included in any Micriµm example project will also include a pre-configured µC/Probe workspace found in the following folder directory:

- *$\Micrium\Examples*ST*STM3240G-Eval\OS3\<IDE>\OS3*

> ⚠ Please compile the project prior to opening a pre-configured µC/Probe workspace. Refer to the **LOADING & RUNNING THE PROJECT ON THE BOARD** section of this document for further details.

If opening Micriµm's µC/Probe Windows™ application and creating a new µC/Probe workspace, the user must configure µC/Probe with the prop communication protocol used in his/her project. There are four ways to communicate with Micriµm's µC/Probe:

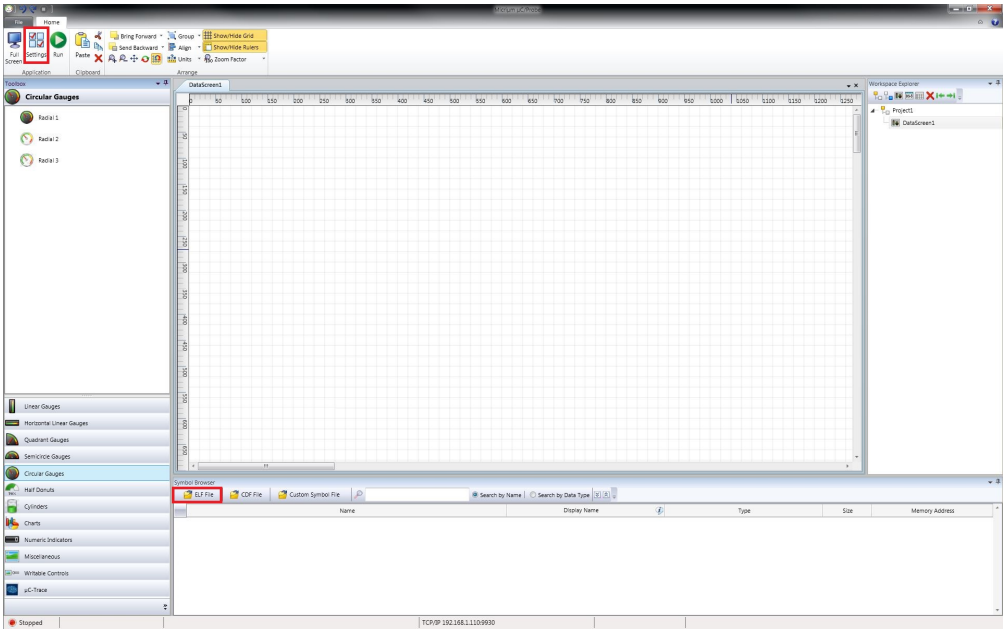
- Through a J-Link debugger
- Through a TCP/IP connection
- Through an RS-232 connection
- Through a USB connection

> ⓘ The image below shows where the **Settings** (highlighted in RED) button is found to configure µC/Probe's settings. Please note that this README file will only show which connections are possible/configured with the STM3240G-Eval.

µC/Probe also requires the use of an **ELF File** from the IDEs compiler to obtain the variables to display. Search for your project's ELF File, which can usually be found under the following folder directory:

- *$\Micrium\Examples*ST*STM3240G-Eval\OS3\<IDE>\FLASH*

> ⓘ The image below shows where the **ELF File** (highlighted in RED) button is found to search for the project's ELF File.



Once the proper µC/Probe settings have been configured, and the project is running on the Target Board, the user may start to configure his workspace. Once the workspace has been completed, press the **"RUN"** button to the right of the settings to initialize the connection and transfer of variables between µC/Probe and the Target Board.

Each of the ways to communicate with µC/Probe is explained below.

Running with J-Link
When running a Micriµm example project that is using the J-Link debugger to interface with µC/Probe, there is no additional set-up necessary

other than to configure µC/Probe's settings to "J-Link".

In µC/Probe's settings, under the **Communication** tab, select **"J-Link"** under the **Interfaces** section and configure the Speed & Interface Mode you desire that suits your project's needs. Along with the **"J-Link"** settings, the µC/Probe settings allow you to change the Endianness of the device, how to receive the Statistics, and the rate at which µC/Probe does it's Data Collection.

- The following image is an example of how it should look.