

# Redirection in STM32CubeIDE

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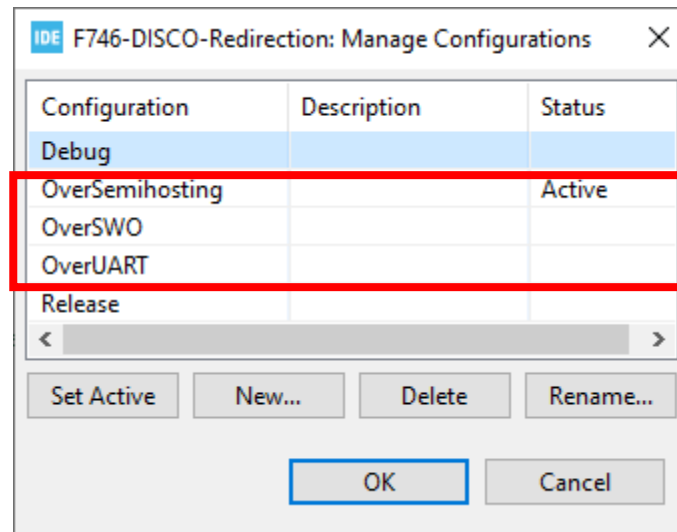
# Reference

[https://github.com/ethanhuanginst/STM32CubeIDE-Workshop-2019/tree/master/hands-on/03\\_printf](https://github.com/ethanhuanginst/STM32CubeIDE-Workshop-2019/tree/master/hands-on/03_printf)

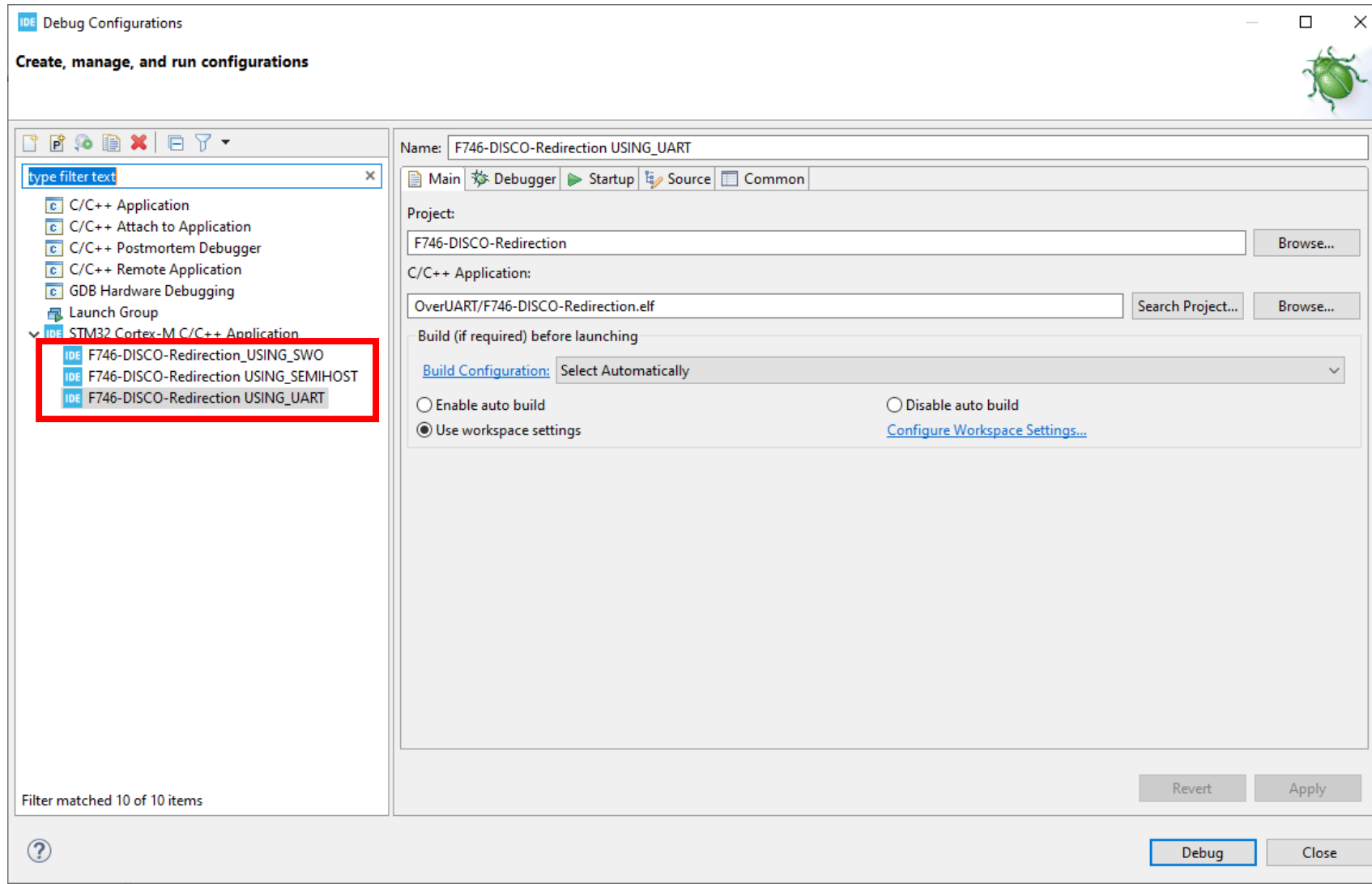
# Project Folder

C:\00\_myProjects\STM32CUBEIDE\20211013\_Redirection

# Build Configurations



# Debug Configurations



IDE Debug Configurations

Create, manage, and run configurations

type filter text

- C/C++ Application
- C/C++ Attach to Application
- C/C++ Postmortem Debugger
- C/C++ Remote Application
- GDB Hardware Debugging
- Launch Group
- STM32 Cortex-M C/C++ Application
  - F746-DISCO-Redirection\_USING\_SWO
  - F746-DISCO-Redirection USING\_SEMIHOST
  - F746-DISCO-Redirection USING\_UART

Filter matched 10 of 10 items

Name: F746-DISCO-Redirection USING\_UART

Main Debugger Startup Source Common

Project: F746-DISCO-Redirection

C/C++ Application: OverUART/F746-DISCO-Redirection.elf

Build (if required) before launching

Build Configuration: Select Automatically

Enable auto build  Disable auto build

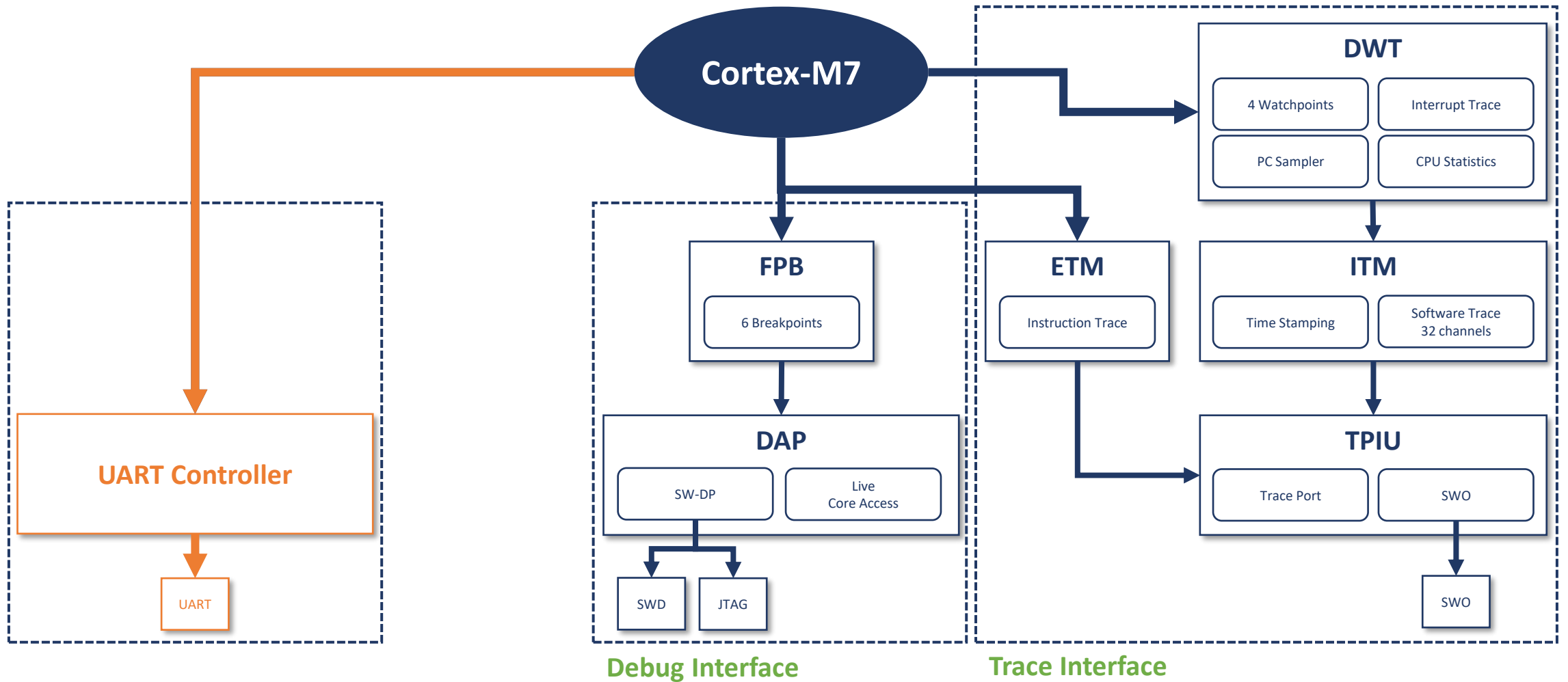
Use workspace settings [Configure Workspace Settings...](#)

Revert Apply

Debug Close

Over UART

# printf over UART

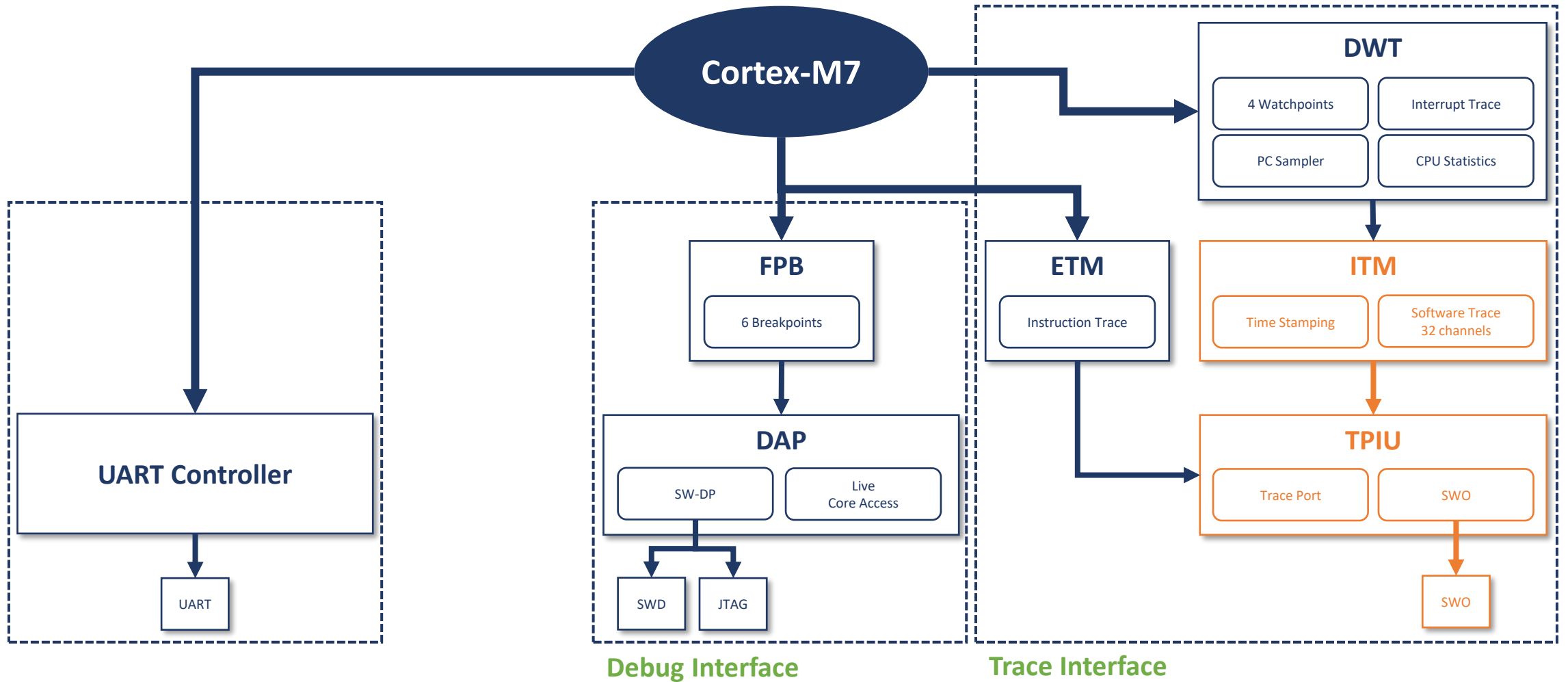




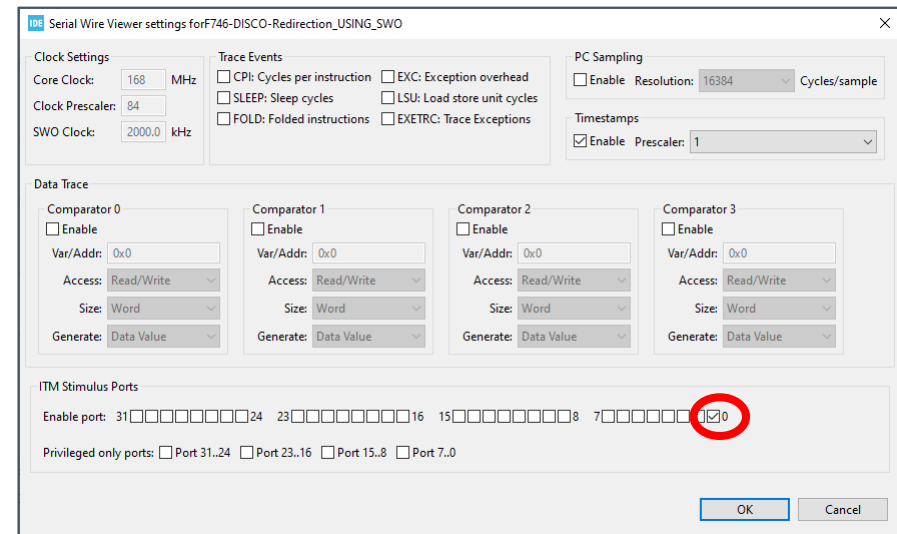
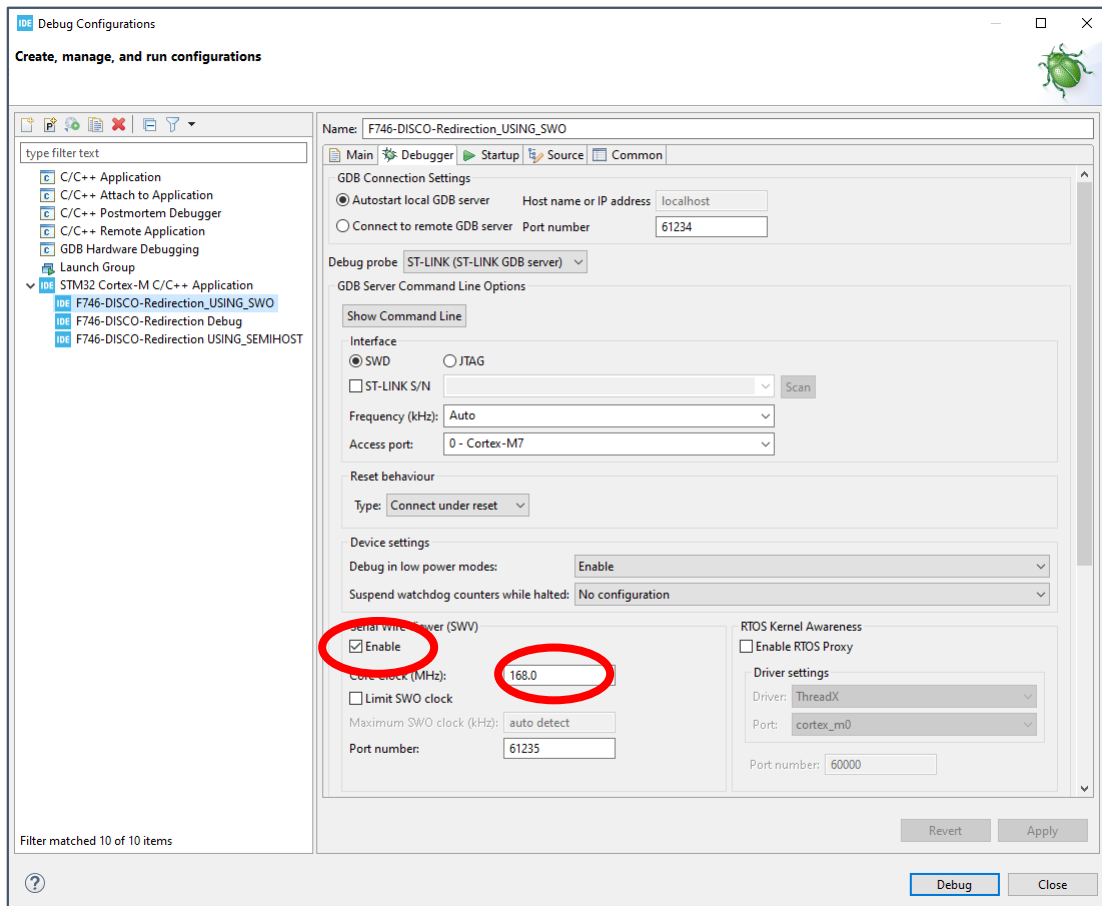


Over ITM/SWO

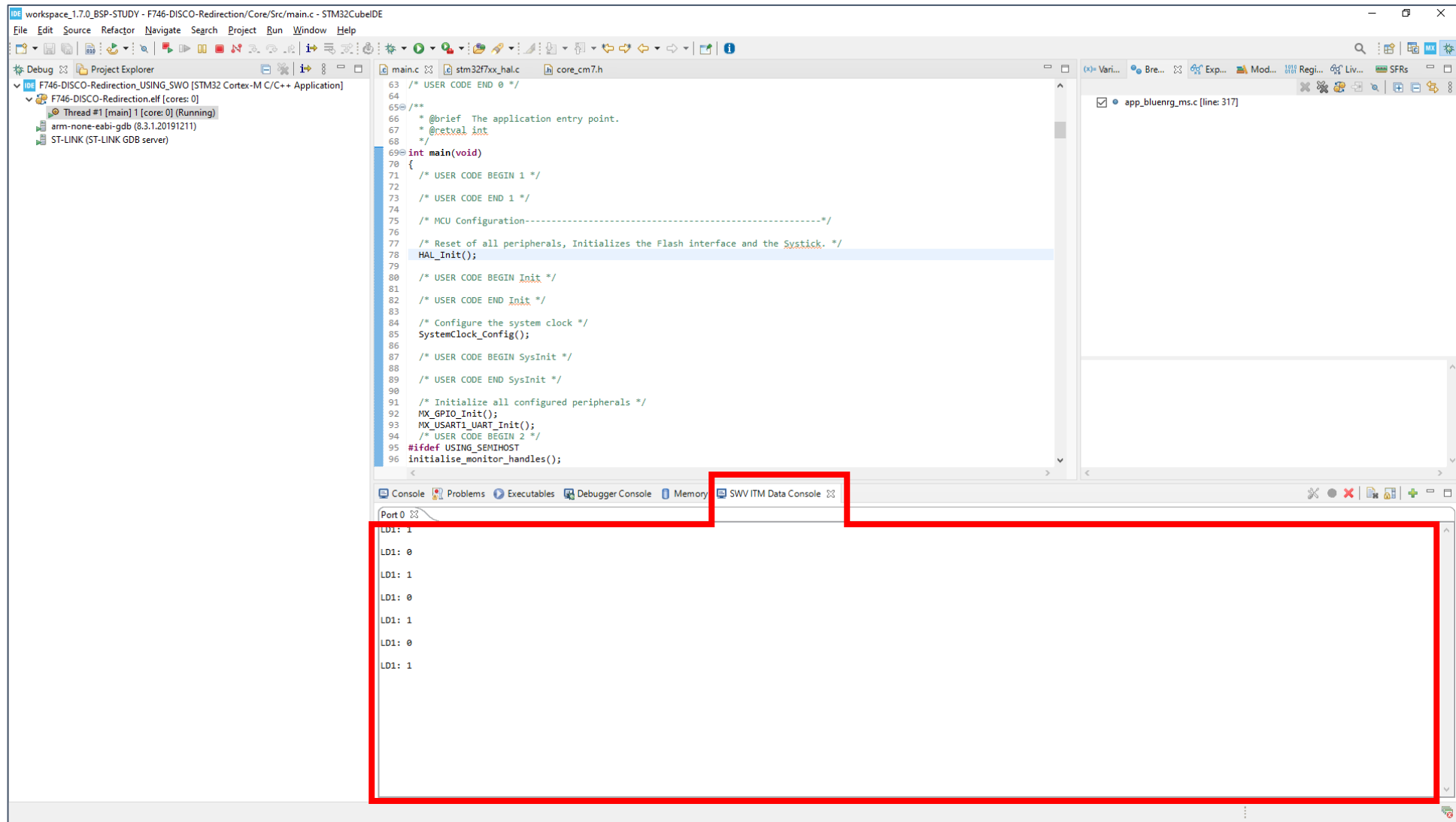
# printf over ITM/SWO



# See SWO over STM32CubeIDE (1)



# See SWO over STM32CubeIDE (2)



# See SWO w/o Running STM32CubeIDE

The screenshot displays the STM32CubeProgrammer Serial Wire Viewer (SWV) interface. The main window shows the SWV configuration and a list of received data points. The 'System clock (Hz)' field is set to 168 and is circled in red. The 'Status' is 'Running' and 'Printf data num...' is set to 253. The 'SWV' button in the left sidebar is also circled in red. The log at the bottom shows the following entries:

```
Log
16:08:07 : Data read successfully
16:08:07 : Time elapsed during the read operation is: 00:00:00.006
16:08:11 : SWV reception started.
16:08:11 : Trace history will be logged in real time in the file: C:/Users/huanget1/STMicroelectronics/STM32CubeProgrammer/SWV_Log/swv.log
```

The right sidebar shows the ST-LINK configuration and target information:

ST-LINK configuration

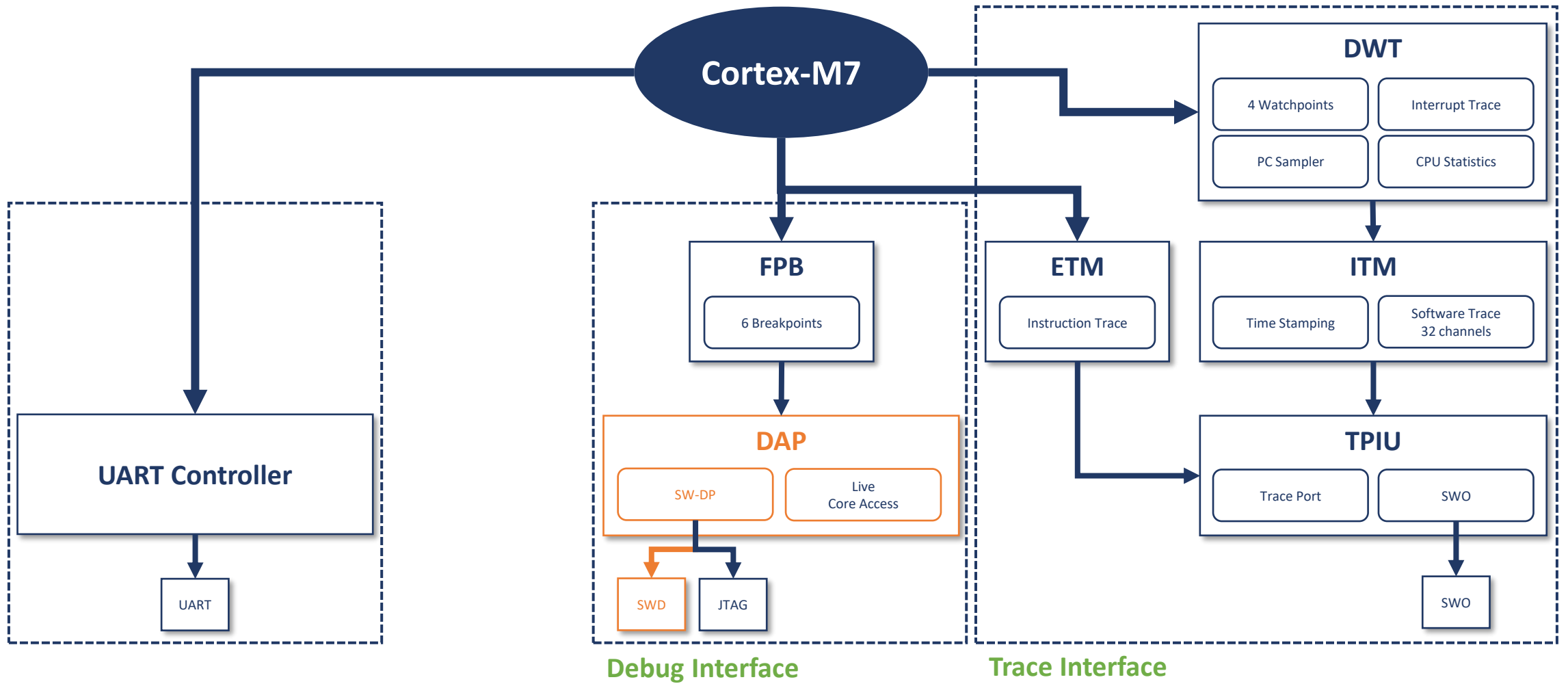
- Serial number: 066CFF54...
- Port: SWD
- Frequency (kHz): 4000
- Mode: Normal
- Access port: 0
- Reset mode: Software reset
- Shared: Disabled
- Debug in Low Power mode:
- External loader: NUCLEOG071\_W25Q128.stldr
- Target voltage: 3.21 V
- Firmware version: V2J38M27

Target information

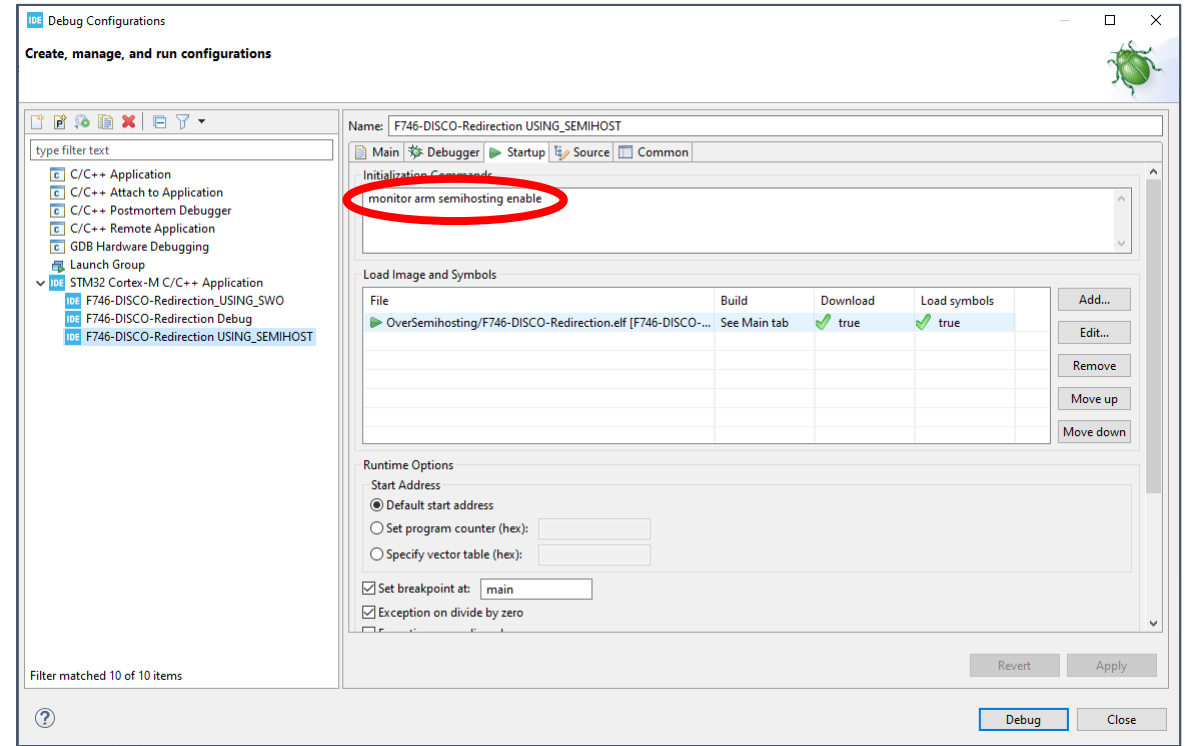
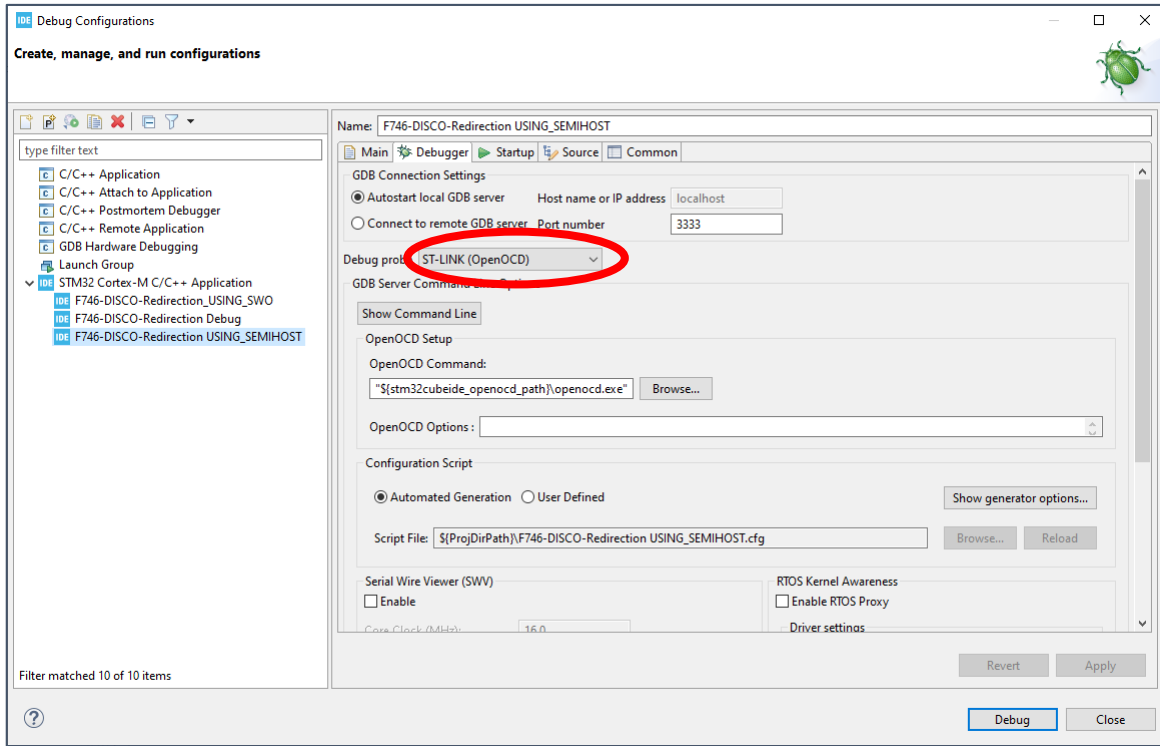
- Board: 32F746GDISCOVERY
- Device: STM32F74x/STM32F75x
- Type: MCU
- Device ID: 0x449
- Revision ID: Rev Z
- Flash size: 1 MB
- CPU: Cortex-M7
- Bootloader Version: -

Over Semihost

# Semihosting



# See Semihosting over STM32CubeIDE (1)





# See Semihosting over STM32CubeIDE (2)

