

# Rochester Institute of Technology

## Real Time and Embedded Systems: UART Demo

### Overview:

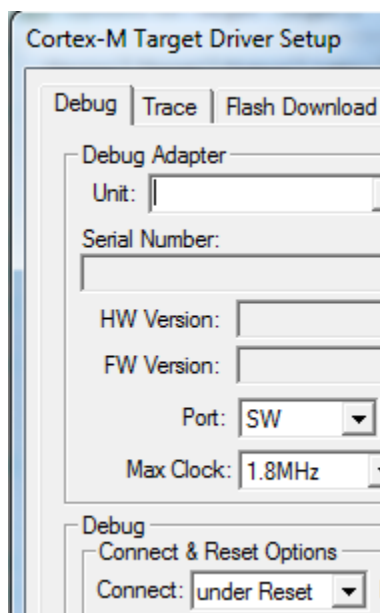
Using provided demo code do bi-directional communication with the STM32 Discovery board.

### Procedure:

1. Download the UART\_demo.zip folder and unzip it to a folder on your Z drive.
2. Open the project file using the Keil uVision 5 IDE.
3. Build the project and observe that there are no errors and no warnings.
4. On the Options menu for Target 1 check that ST-Link Debugger is selected:



5. Then select the Settings button next to the ST-Link Debugger selection and check that the Connect & Reset Options setting is “under Reset”:



6. Connect the STM32 board to a USB port.
7. Using the Load button in the uVision IDE download the code to your STM32.
8. Set up a terminal session to connect to your STM32. Refer to the STM32 UART Connection document for instructions.
9. Observe output on the puTTY terminal. You may need to press the Reset button on the board to get it running.
10. Swap the commented sections of code in the main.c file to now try out providing commands through the puTTY terminal to your program.
11. Show that you have accomplished this to your instructor or Course Assistant.