

USART Communication Peripherals

Introduction:

This laboratory will require you to configure USART peripheral for UART protocol. You are required to keep laboratory **logbook**. It is for keeping notes, results, analysis other work. This includes a laboratory **worksheet** that should be completed as a part of the logbook. You may also wish to include screen capture of programs and results to clarify your results. Work through the activities at your own pace, recording what you do in your logbook and referring to the worksheet, completing the tasks.

Aim:

Configuring USART communication peripheral for UART protocol with DMA channel to transfer block of code.

Equipment and sundries:

Hardware:

- 1- STM32L476VG-DISCO
- 2- Cable Type A to Mini Type B
- 3- Logic Analyzer

Software:

- 1- STM32CubeIDE
- 2- PulseView

Logbook Entries:

- 1- Briefly explain the USART peripheral. (Max 200 words).
- 2- Briefly explain the LPUART peripheral and its advantages. (Max 200 words).
- 3- Document the to do task.
- 4- Summaries your work and reflect your learning.