ESHD: Assignment 4

1. Use LibreOffice's Writer for your report. Select a dedicated SPI interface from IoT board to the external FRAM Module MB85RS64V, 8kB, Serial SPI, from Adafruit. Justify your selection.

2. Design and describe in a **table** all connections between the STM IoT Board (connector #, pin #) and FRAM Module (pin names of the **connector)**. It can be done in a form of a table in LibreOffice's Writer and converting the report (File -> Export AS → PDF). FRAM Module (**not the chip)** must be connected by jumper wires to a **connector of IoT board** going to the uC. Disable /WP by connecting that pin to 3.3V; do not connect pin HOLD – it has its pull-up resistor to 3.3V.

3. Finish the schematic in Page 2 with microcontroller and all its connections to our selected modules (Wi-Fi, Bluetooth, and SPSGRF) and sensors (U2, U3, U5, U6, U7, U10), and connectors (including PMOD). Use Global Labels on Page 2. Put a "no connection" flag on all unused pins of the uC. Do not forget to use **all passives** from Sheets 2 and 3 of the IoT board schematic.

4. Create a **separate new** project for the FRAM Module, draw a schematic with all properties of all components assigned. You can use FRAM project to try your layout skills in KiCAD for extra 5 points, if you make everything correctly.

5. Zip all project files, and submit the zipped file together with answers to Q1 and Q2 (in PDF) to Canvas.