Tools for Prototyping

Reference Question No: 9 _The Inventors Challenge-2023_ Idea Submission Form

Microcontroller / Microprocessor Board: (Select one MCU / MPU board)

NUCLEO-U575ZI-Q: **ARM Cortex M33 with Trust zone / 160MHz / Ultra-low power MCU with FPU/ higher Security**

STM32U575 Series Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer

For more details: https://www.st.com/en/evaluation-tools/nucleo-u575zi-q.html

(OR)

NUCLEO-H563ZI: **ARM Cortex M33 with Trust zone / 250MHz/ High performance MCU with FPU/ higher Security**

STM32H563 Series Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer

For more details: https://www.st.com/en/evaluation-tools/nucleo-h563zi.html

(OR)

STM32H747I-DISCO: Dual Core ARM cortex M7 (480MHz)+ M4(240MHz) / High performance with Double precision FPU / Graphics

STM32H747 Series Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer

For more details: https://www.st.com/en/evaluation-tools/stm32h747i-disco.html

(OR)

B-L475E-IOT01A: ARM Cortex M4 / 80MHz / Ultra-low power MCU with FPU

STM32L4 Series Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer, connectivity, and sensors.

For more details: https://www.st.com/en/evaluation-tools/b-l475e-iot01a.html

(OR)

STM32MP135F-DK: Arm Cortex – A7 / 1GHz Processor / advanced peripherals and security

STM32MP1 Series Microprocessor development board inbuilt debugger/programmer and sensors. Suitable for applications requiring higher processing and Linux developments.

For more details: https://www.st.com/en/evaluation-tools/stm32mp135f-dk.html

Disclaimer: Please select this STM32MP1 MPU tool for PoC if requiring Linux. Pre- requisite to have know-how on Linux ecosystem.

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Other Board Options: (To be selected as per application needs)

X-NUCLEO-IKS02A1: Motion MEMS and microphone MEMS expansion board for STM32 Nucleo

For more details: https://www.st.com/en/ecosystems/x-nucleo-iks02a1.html

B-CAMS-OMV: Camera module bundle for STM32 boards

For more details: https://www.st.com/en/evaluation-tools/b-cams-omv.html

Disclaimer: Can be used with **STM32H747I-DISCO** only.

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Note:

- Please follow the disclaimer while selecting the boards.
- The evaluators team have the right to change the board options selected, based on the idea being submitted by the team and the availability of the board.