Tools for Prototyping

Reference for Question No: 15 _The Inventors Challenge-2024_ Idea Submission Form

1) 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-U585I-IOT02A: ARM Cortex M33 with TrustZone / 160 MHz / Ultra-low power MCU with FPU

STM32U5 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-u585i-iot02a.html

(OR)

STM32MP157F-DK2: Arm Cortex – A7 / Dual-Core 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/stm32mp157f-dk2.html

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

2) 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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Disclaimer – For tools and the development 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.

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