

Tools for Prototyping

Reference Question No:14_The Inventors Challenge_ Idea Submission Form

For IoT related Idea :-

Microcontroller Board :-

Nucleo-L496ZG :STM32L496 Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer.

For more details please check below link. <https://www.st.com/en/evaluation-tools/nucleo-l496zg.html>

Connectivity Board (Any One) :-

X-NUCLEO-IDB05A1 :- BLE 4.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link. <https://www.st.com/en/ecosystems/x-nucleo-idb05a1.html>

(OR)

X-Nucleo-BNRG2A1 :- BLE 5.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link. <https://www.st.com/en/ecosystems/x-nucleo-bnrg2a1.html>

(OR)

ESP_X_BOARD :- ESP8266 based Expansion board compatible with STM32 Nucleo/Discovery board

Sensor Board (Any One) :-

X-NUCLEO-IKS02A1:- 3-Axis Accelerometer, 3-Axis Gyroscope, 3-Axis Magnetometer, Digital Microphone Sensor Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link. <https://www.st.com/en/ecosystems/x-nucleo-iks02a1.html>

(OR)

X-NUCLEO-IKS01A2:- 3-Axis Accelerometer, 3-Axis Gyroscope, 3-Axis Magnetometer, Humidity, Temperature, Pressure Sensor Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link <https://www.st.com/en/ecosystems/x-nucleo-iks01a2.html>

For AI related Idea (Option1) :- For Sensor related ideas.

Microcontroller Board :-

Nucleo-L4R5ZI : STM32L4R5 Microcontroller development board with Arduino compatible expansion connector and inbuilt debugger/programmer.

For more details, <https://www.st.com/en/evaluation-tools/nucleo-l4r5zi.html>

Connectivity Board (Any One):

X-NUCLEO-IDB05A1 :- BLE 4.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link, <https://www.st.com/en/ecosystems/x-nucleo-idb05a1.html>

(OR)

X-Nucleo-BNRG2A1 :- BLE 5.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link <https://www.st.com/en/ecosystems/x-nucleo-bnrg2a1.html>

(OR)

ESP_X_BOARD:- ESP8266 based Expansion board compatible with STM32 Nucleo/Discovery board

Sensor Board (Any One):-

X-NUCLEO-IKS02A1:- 3-Axis Accelerometer, 3-Axis Gyroscope, 3-Axis Magnetometer, Digital Microphone Sensor Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link, <https://www.st.com/en/ecosystems/x-nucleo-iks02a1.html>

(OR)

X-NUCLEO-IKS01A2:- 3-Axis Accelerometer, 3-Axis Gyroscope, 3-Axis Magnetometer, Humidity, Temperature, Pressure Sensor Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link, <https://www.st.com/en/ecosystems/x-nucleo-iks01a2.html>

For AI related Idea (Option2):- For AI-Vision related ideas.

Microcontroller Board :-

STM32H747I-DISCO : STM32L4R5 Microcontroller development board with Arduino compatible expansion connector, TFT Display, Camera, Ethernet, and inbuilt debugger/programmer.

For more details, please check below link, <https://www.st.com/en/evaluation-tools/stm32h747i-disco.html>

Connectivity Board :

X-NUCLEO-IDB05A1 :- BLE 4.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link, <https://www.st.com/en/ecosystems/x-nucleo-idb05a1.html>

(OR)

X-Nucleo-BNRG2A1 :- BLE 5.2 Expansion board compatible with STM32 Nucleo/Discovery board.

For more details please check below link, <https://www.st.com/en/ecosystems/x-nucleo-bnrg2a1.html>

(OR)

ESP_X_BOARD:- ESP8266 based Expansion board compatible with STM32 Nucleo/Discovery board

Camera Module :-

B-CAMS-OMV: 5-Mpixel resolution with 8-bit color Module compatible with STM32H747I-DISCO board.

For more details please check below link, <https://www.st.com/en/evaluation-tools/b-cams-omv.html>

Note: STMicroelectronics would be providing the tools as mentioned above **only**. For any additional hardware and software participants will have to have make their own arrangements.