Part Number: XK13
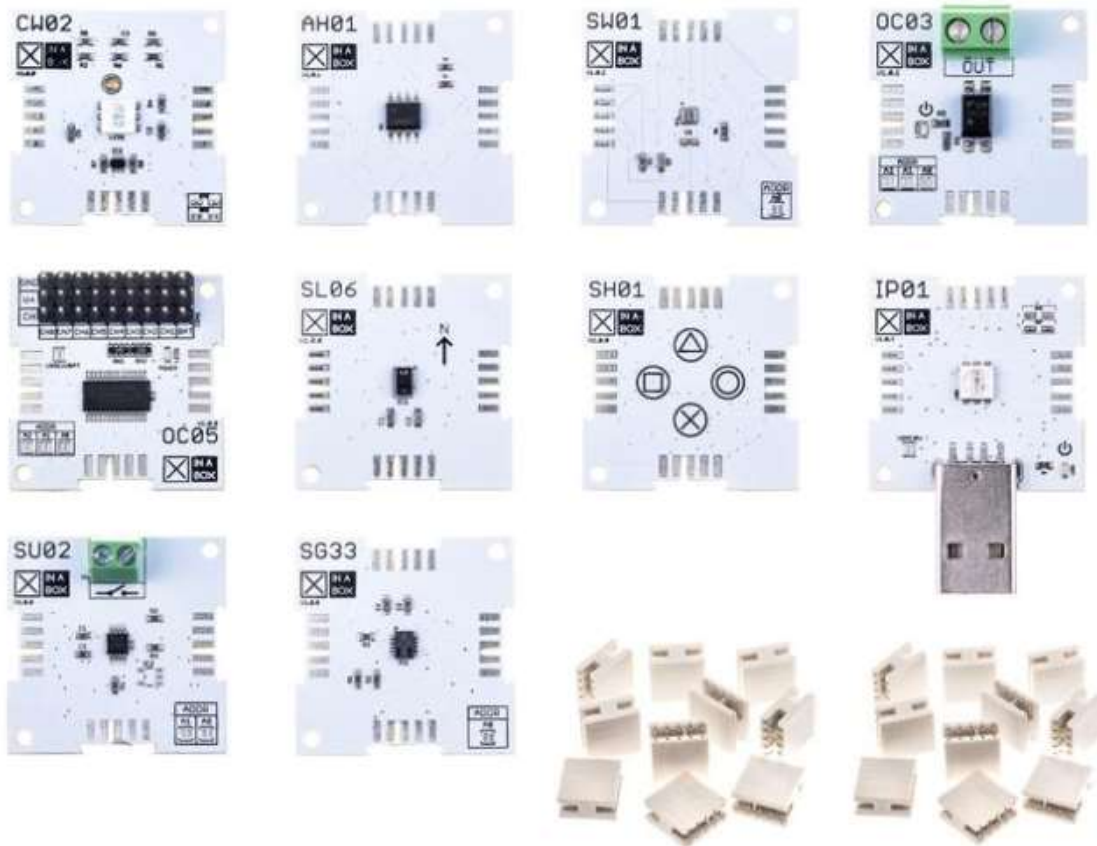
Description: IoT Plus Kit, powered by Zerynth

XinaBox has partnered with Zerynth to deliver a revolutionary Internet of Things (IoT) Kit, which dramatically simplifies building electronic devices. By combining modular electronics with an ecosystem of software tools in Python, we aim to dramatically cut development time, speed to market, and costs.

The XK13 - IoT Kit Plus, powered by Zerynth, consists of the following:

- 1 x AH01 - SHA-256 Hardware Encryption (ATECC508A)
- 1 x CW02 - Wi-Fi & BLE Core (ESP-WROOM-32)
- 1 x IP01 - USB Programming Interface (FT232R)

- 1 x OC03 - Relay Out (PCA9554A)
- 1 x OC05 - Servo Driver (PCA9685 & BU33SD5)
- 1 x SG33 - VOC and eC02 Sensor (CC811)
- 1 x SH01 - Capacative Touch Sensor (CAP1296)
- 1 x SL06 - Gesture and Proximity Sensor (APDS-9960)
- 1 x SU02 - Universal Digital Input (ADC081C021)
- 1 x SW01 - Advanced Weather Sensor (BME280)
- 2 x XC10 - 10-Pack xBUS Connectors
- 1 x Zerynth Starter FreeRTOS license (see below)

In addition to the kit components above, we currently support integration with Zerynth through libraries for the following additional xChips: OC01 HighCurrent DC Switch, SL19 IR Temperature Sensor, SW03 Weather Sensor, SW10 Temperature Sensor.

Check out these tutorials to get you making devices in minutes:

Getting Started with Zerynth on XinaBox – Blinking an LED using Python

Controlling the relay of XinaBox OC03 using Python and Zerynth Studio

How to build and code a temperature controlled desk fan in just 15 minutes!

Zerynth Starter FreeRTOS: 1 license for CW02 Wi-Fi & BLE Core (ESP-WROOM-32)

XinaBox has partnered with Zerynth (www.zerynth.com) to deliver a revolutionary IoT kit, which dramatically simplifies building electronic devices. By combining modular electronics with an ecosystem of software tools in Python, we aim to dramatically cut development time, speed to market, and costs. The CW02 xChip includes a Zerynth license and it's ready for all your ideas.

To activate the onboard Zerynth license, insert the code provided in Zerynth Studio during the registration phase of the device. More info at: https://docs.zerynth.com/latest/official/board.zerynth.xinabox_esp32/docs/index.html

Users who need licenses for Premium Zerynth Virtual Machines can buy them on Zerynth's store https://store.zerynth.com/. In particular, Premium Zerynth Virtual Machines available for XinaBox are:

- "Firmware Over the Air update (FOTA)" version, that allows end-user to update the firmware remotely and "over the air".

- "Secure Firmware" version, that allows to detect and recover from malfunctions.

Please see https://www.zerynth.com/get-started/#licensing for further details.