

XK70 – LoRaWAN IoT Starter Kit

xChip Boards

XinaBox (pronounced “X in a box”) produces a range of 80+ modular “xChips”, which includes cores/CPU’s, sensors, power, communication, output, and storage.

xChips can be clipped together in seconds using a connectivity standard without wires, soldering, breadboards or any consumables: no hardware knowledge is required to build digital instruments with XinaBox.

Coding xChips is as easy as connecting them. Get started with block coding in MakeCode or microPython on Mu, or use professional tools such as mBed, Visual Studio or Zerynth. ArduinoIDE and Raspbian Lite are also supported. And for people who want access to digital tools without wanting to code them first we provide “no-code” options, which are pre-compiled programs you can flash onto your XinaBox core.

xChips are compatible with a broad range of platforms: bridges are available that connect to Raspberry Pi, Minnowboard, Beaglebone, BBC micro:bit, Pixhawk and 96 Boards. And for Arduino we offer compatible cores: for Arduino Uno the CC01, and for Arduino Zero the CC03.

Whether you are in the classroom or a university lab and whether you are learning or prototyping, XinaBox provides a sophisticated, robust, flexible and open-ended system that will meet all your needs.

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XinaBox Starter XK70 includes sensors for temperature, humidity, pressure and navigation. A Cortex M0+ Core xChip (ATSAMD21G18), LoRa with ATmega328P Core xChip, dual AA battery power pack, relay-out, connectors and a programming interface (which also acts as a USB power source) complete the kit.

Kit contents

- 2 x AM02 - Antenna Monopole 868/915 MHz
- 1 x BR01 - Raspberry Pi Bridge
- 2 x CC03 - Cortex M0+ Core (ATSAMD21G18)
- 1 x IP02 - Advanced USB Programming Interface (FT232R)
- 1 x OC03 - Relay Out (PCA9554A)
- 1 x PB04 - Dual AA Intelligent Battery Power Pack
- 1 x PL02 - 3.7v LiPo Battery Power Supply Solar (MCP73831, PAM2305 & XC9141)
- 2 x RL02 - LoRa Radio (868 MHz) (RFM95W & SC18IS602B)
- 1 x SN01 - GNSS (GPS) (NEO-6M)

1 x SW02 - VOC and Weather Sensor (BME680)

1 x XC10 - 10 pack of xBUS XinaBox Connectors

1 x XS02 - 2 pack of xPDI XinaBox Connectors