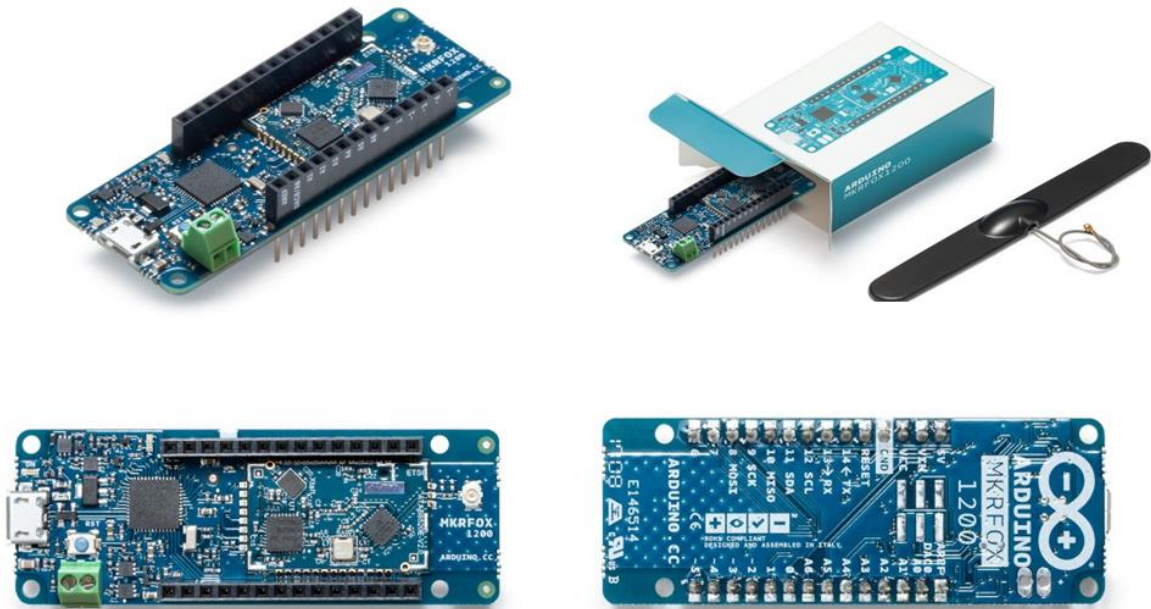# ARDUINO MKR FOX 1200
Code: ABX00014-B

MKR FOX 1200 is a powerful board that combines the functionality of the Zero and SigFox connectivity. It is the ideal solution for makers wanting to design IoT projects with minimal previous experience in networking having a low power device. You'll get 2-year free subscription to Sigfox network with the board (for up to 140 messages per day), as well as free access to Spot'it geolocation service that allows you to track the board without GPS or any extra hardware.

OVERVIEW:

Arduino MKR FOX 1200 has been designed to offer a practical and cost effective solution for makers seeking to add SigFox connectivity to their projects with minimal previous experience in networking. It is based on the Atmel $SAMD21$ and a $ATA8520$ SigFox module.

The design includes the ability to power the board using two 1.5V AA or AAA batteries or external 5V. Switching from one source to the other is done automatically. A good 32 bit computational power similar to the $Zero$ $board$, the usual rich set of I/O interfaces, low power SigFox communication and the ease of use of the Arduino Software (IDE) for code development and programming. All these features make this board the preferred choice for the emerging IoT battery-powered projects in a compact form factor. The USB port can be used to supply power (5V) to the board. The Arduino MKR FOX 1200 is able to run with or without the batteries connected and has limited power consumption.

Warning: Unlike most Arduino & Genuino boards, the MKRFOX1200 runs at 3.3V. The maximum voltage that the I/O pins can tolerate is 3.3V. Applying voltages higher than 3.3V to any I/O pin could damage the board. While output to 5V digital devices is possible, bidirectional communication with 5V devices needs proper level shifting.

TECHNICAL SPECIFICATIONS:

Microcontroller	SAMD21 Cortex-M0+ 32bit low power ARM MCU
Board Power Supply (USB/VIN)	5V
Supported Batteries(*)	2x AA or AAA
Circuit Operating Voltage	3.3V
Digital I/O Pins	8
PWM Pins	12 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, A3 - or 18 -, A4 -or 19)
UART	1
SPI	1
I2C	1
Analog Input Pins	7 (ADC 8/10/12 bit)
Analog Output Pins	1 (DAC 10 bit)
External Interrupts	8 (0, 1, 4, 5, 6, 7, 8, A1 -or 16-, A2 - or 17)
DC Current per I/O Pin	7 mA
Flash Memory	256 KB
SRAM	32 KB
EEPROM	no
Clock Speed	32.768 kHz (RTC), 48 MHz
LED_BUILTIN	6
Full-Speed USB Device and embedded Host	
LED_BUILTIN	6
Antenna power	2dB
Carrier frequency	868 MHz
Working region	EU
Length	67.64 mm
Width	25 mm
Weight	32 gr.