

Arduino MKR FOX 1200

MKR ZERO has an on-board SD connector with dedicated SPI interfaces (SPI1) that allows you to play with MUSIC files with no extra hardware!

Watch out music makers, we've got some news for you! We have released two libraries for your enjoyment:

Arduino Sound library – a simple way to play and analyse audio data using Arduino on SAM D21-based boards. I2S library – to use the I2S protocol on SAMD21-based boards. For those who don't know, I2S (Inter-IC Sound) is an electrical serial bus interface standard for connecting digital audio devices.



The MKR ZERO brings you the power of a Zero in the smaller format established by the MKR form factor. The MKR ZERO board acts as a great educational tool for learning about 32-bit application development. It has an on-board SD connector with dedicated SPI interfaces (SPI1) that allows you to play with MUSIC files with no extra hardware! The board is powered by Atmel's SAMD21 MCU, which features a 32-bit ARM Cortex® M0+ core.

Warning: Unlike most Arduino & Genuino boards, the MKRZero 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.

The board contains everything needed to support the microcontroller; simply connect it to a computer with a micro-USB cable or power it by a LiPo battery. The battery voltage can also be monitored since a connection between the battery and the analog converter of the board exists.

For information on getting started see <http://arduino.cc/en/Guide/HomePage>.

Microcontroller	SAMD21 Cortex-M0+ 32bit low power ARM MCU
Board power supply (USB/VIN)	5V
Supported batteries (not supplied)	Li-Po single cell, 3.7V, 700mAh minimum
DC Current	600mA
Circuit operating voltage	3.3V
Digital I/O pins	22
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
Flash memory for bootloader	8 KB
SRAM	32 KB
EEPROM	No
Clock speed	32.768kHz (RTC), 48MHz
LEDs	32