Keyboard

[USB]

Description

The keyboard functions enable 32u4 or SAMD micro based boards to send keystrokes to an attached computer through their micro’s native USB port.

**Note: Not every possible ASCII character, particularly the non-printing ones, can be sent with the Keyboard library.**  
The library supports the use of modifier keys. Modifier keys change the behavior of another key when pressed simultaneously. [See here](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardmodifiers) for additional information on supported keys and their use.

Notes and Warnings

These core libraries allow the 32u4 and SAMD based boards (Leonardo, Esplora, Zero, Due and MKR Family) to appear as a native Mouse and/or Keyboard to a connected computer.

**A word of caution on using the Mouse and Keyboard libraries**: if the Mouse or Keyboard library is constantly running, it will be difficult to program your board. Functions such as Mouse.move() and Keyboard.print() will move your cursor or send keystrokes to a connected computer and should only be called when you are ready to handle them. It is recommended to use a control system to turn this functionality on, like a physical switch or only responding to specific input you can control. Refer to the Mouse and Keyboard examples for some ways to handle this.

When using the Mouse or Keyboard library, it may be best to test your output first using [Serial.print()](https://www.arduino.cc/reference/en/language/functions/communication/serial/print). This way, you can be sure you know what values are being reported.

Functions

[Keyboard.begin()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardbegin)  
[Keyboard.end()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardend)  
[Keyboard.press()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardpress)  
[Keyboard.print()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardprint)  
[Keyboard.println()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardprintln)  
[Keyboard.release()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardrelease)  
[Keyboard.releaseAll()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardreleaseall)  
[Keyboard.write()](https://www.arduino.cc/reference/en/language/functions/usb/keyboard/keyboardwrite)