This new Physicaloid library is built on the latest and most updated library found on github (Apache License, Version 2.0). It has been modified to accept more USB to serial chips and a number of problems has been resolved and some code has been rewritten. I has been extended with method bytesInReadBuffer().

It has been tested with a Lenovo 3500FL/Android 7.1 and the most common adapters: It has also been checked on devices with Android 4.1, Android 8.1, Android 10.

CdcAcm (original Arduino Uno)
PL2303, PL2303HX, (PL2303HXN not implemented yet)
FTDI FT232
CP210x
CH341, CH341 ("fake")

There are two versions of the library:

PhysicaloidLibrary-master_AI This version of the library is used for an extension to Appinventor. It has been refactored to make it coexist with the built-in Serial component and Physicaloid library in Appinventor. This version can also be used with AI Companion.

PhysicaloidLibrary-master This version is a direct replacement for the original PhysicaloidLibrary and can be used in Appinventor and in other applications.

Note:

I have not tested the callback function and other functions like bluetooth and wifi. Arduino downloading of hex file have been tested for some boards.

How to compile:

export ANDROID_HOME=~/Android/Sdk/

~/gradle/gradle-3.3/bin/gradle

~/gradle/gradle-3.3/bin/gradle assembleRelease (or assembleDebug)

in build/outputs/aar, extract classes.jar in file PhysicaloidLibrary-debug.aar (orPhysicaloidLibrary-release) and rename to physical-library.jar (or physicaloid-library-ai.jar)

Here you can found src and pre-compiled libraries.