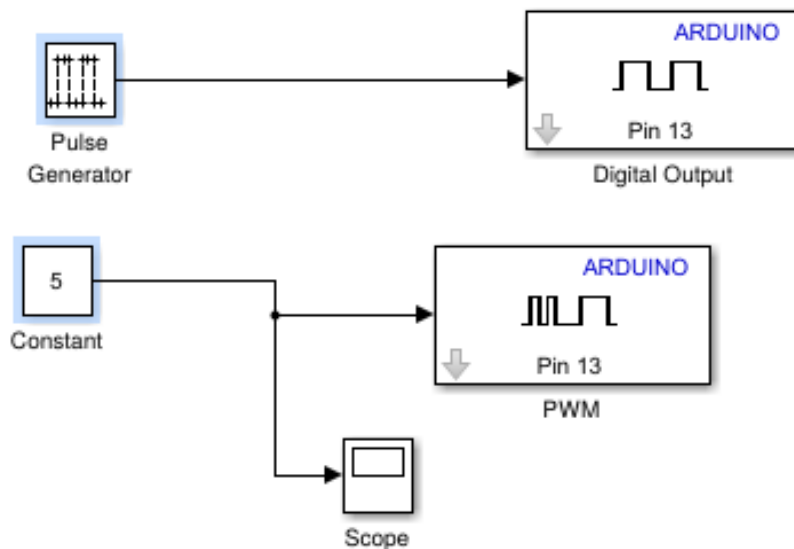


1 Matlab und Arduino

Beispiel auf:

<http://www.mathworks.com/help/releases/R2015b/supportpkg/arduino/examples/getting-started-with-arduino-hardware.html>

- menu://Add-Ons/Get Hardware Support Package/m oder Manuell mit den Blöcken aus der Bibliothek „Simulink Support Package for Arduino Hardware“
- `>arduinomega2560_gettingstarted` ... in Matlab eintippen
- auf Pin 13 umstellen
- menu://tools/run on target hardware/options
 - Board auswählen
 - unter Linux comport manuell /dev/ttyACM0
 - Serial Port Properties → baud rate 115200
- menu://Deploy to Hardware



2 DSP and Arduino

2.1 DSP Library for Arduino

<http://wiki.openmusiclabs.com/wiki/ArduinoFFT> FFT Arduino Lib

2.2 Cortex Microcontroller Software Interface Standard (CMSIS)

CMSIS-DSP library <http://www.keil.com/pack/doc/CMSIS/DSP/html/index.html>; set up CMSIS for Arduino <http://forum.arduino.cc/index.php?PHPSESSID=t46sbolt2km849unr8jgfmjdc1&topic=140107.0>

Atmel CMSIS Intro http://www.atmel.com/Images/Atmel-42144-SAM4E-FPU-and-CMSIS-DSP-Library_AP-Note_AT03157.pdf

Download at http://asf.atmel.com/docs/latest/uc3a/html/group__group__dsplib.html