

007 - DIE FIRMWARE AKTUALISIEREN

Die Firmware, die mit der Controllerplatine des Druckers verwendet wird, ist Open Source-Software. Dies bedeutet, dass jedermann einen geänderten Code herunterladen, ändern, übersetzen und hochladen kann.

(Velleman unterstützt nur die Originalfirmware und Aktualisierungen, die Velleman zur Verfügung gestellt hat. Die Garantie erlischt NICHT wenn Sie die Firmware ändern. Um zur Originalsoftware zurückzukehren, folgen Sie den Hinweisen.)

Sie brauchen die Arduino-Software, um sich die Firmware anzuschauen, zu ändern, zu übersetzen und zu laden.

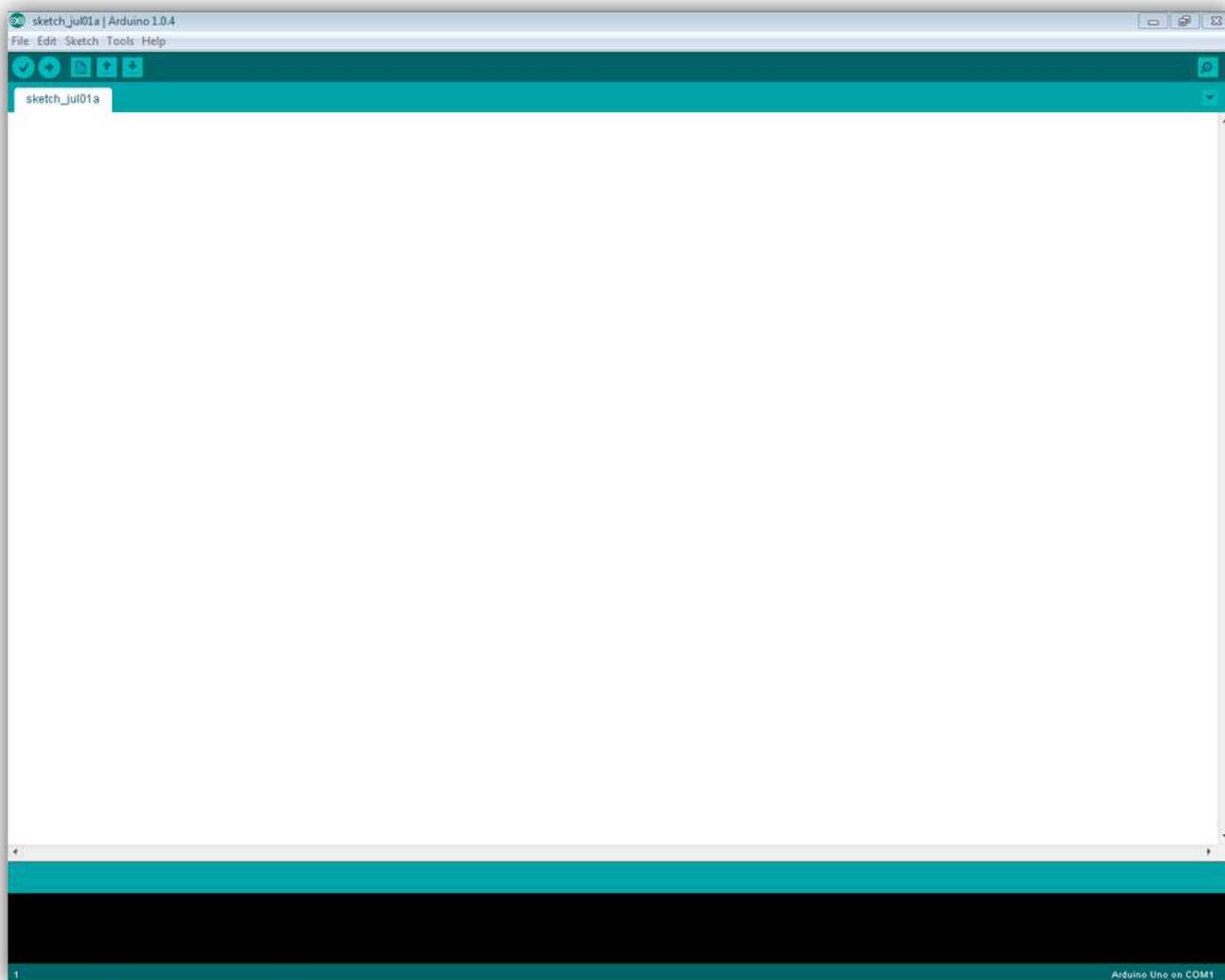
Hier finden Sie den Download-Link und die Installationshinweise:

<http://arduino.cc/en/Main/Software>

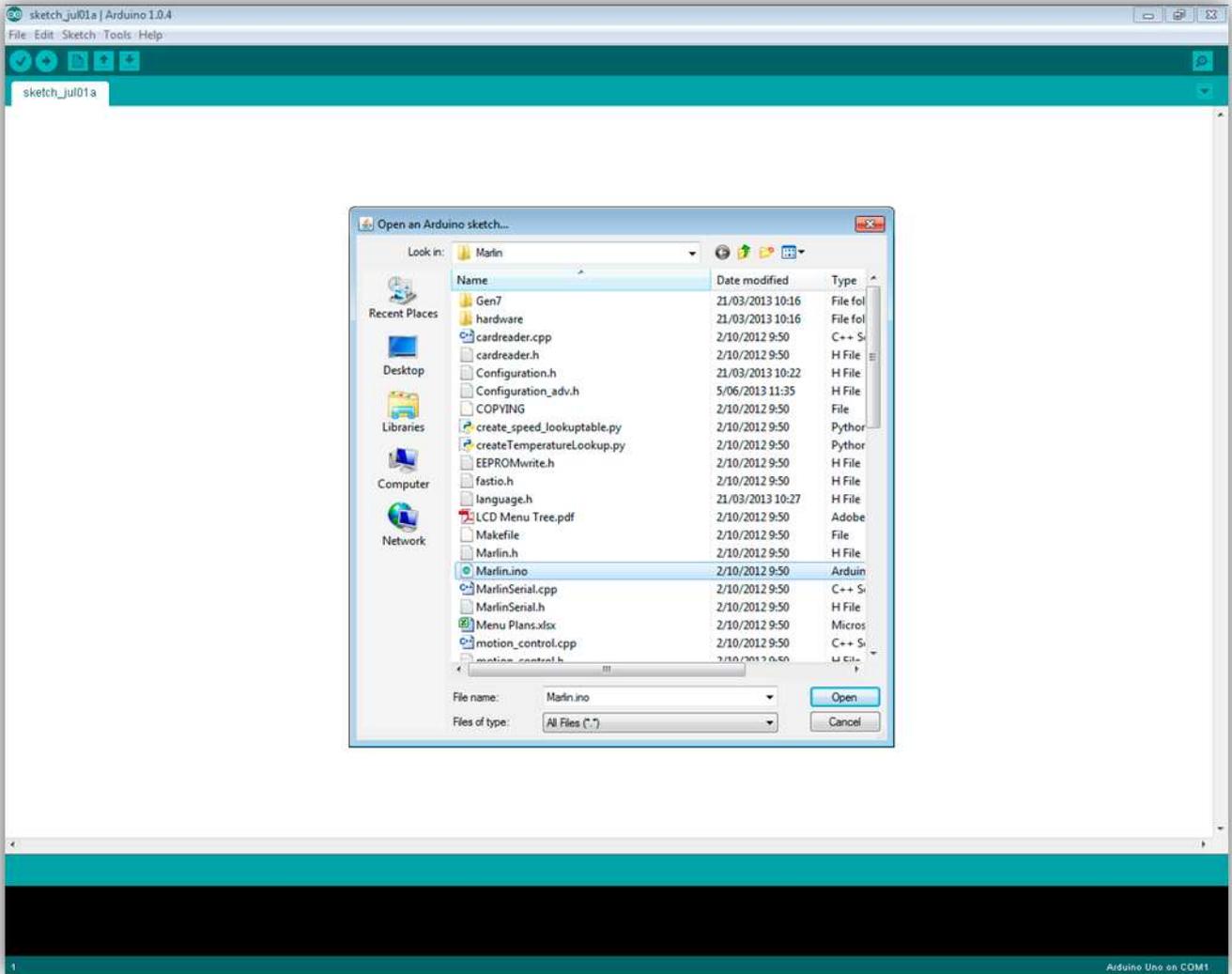
Sie brauchen auch den Quellcode der Firmware. Laden Sie diese auf der Website (Downloads) herunter.

Wenn Sie die Arduino-Software starten, beachten Sie dann, dass die Platine mit Strom versorgt ist und mit dem Computer verbunden (**Treiber muss installiert sein**) und die Repetier-Software ist geschlossen.

Es sollte so aussehen:



Klicken Sie auf **File -> Open** und wählen Sie im heruntergeladenen Firmware-Ordner die **"Marlin.ino"**-Datei.



```
Marlin | Arduino 1.0.4
File Edit Sketch Tools Help

Marlin Configuration.h Configuration_adv.h EEPROMwrite.h Marlin.h MarlinSerial.cpp MarlinSerial.h Sd2Card.cpp Sd2Card.h Sd2PinMap.h SdBaseFile.cpp SdBaseFile.h SdFat.cpp

/* -*- C++ -*- */

/*
  Reprap firmware based on Sprinter and grbl.
  Copyright (C) 2011 Camiel Gubbels / Erik van der Zalm

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  */

/*
  This firmware is a mashup between Sprinter and grbl.
  (https://github.com/klaivent/Sprinter)
  (https://github.com/simen/grbl/tree)

  It has preliminary support for Matthew Roberts' advance algorithm
  http://reprap.org/pipermail/reprap-dev/2011-May/003323.html
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#include "Marlin.h"

#include "ultralod.h"
#include "planner.h"
#include "stepper.h"
#include "temperature.h"
#include "motion_control.h"
#include "cardreader.h"
#include "watchdog.h"
#include "EEPROMwrite.h"
#include "language.h"
#include "pins_arduino.h"

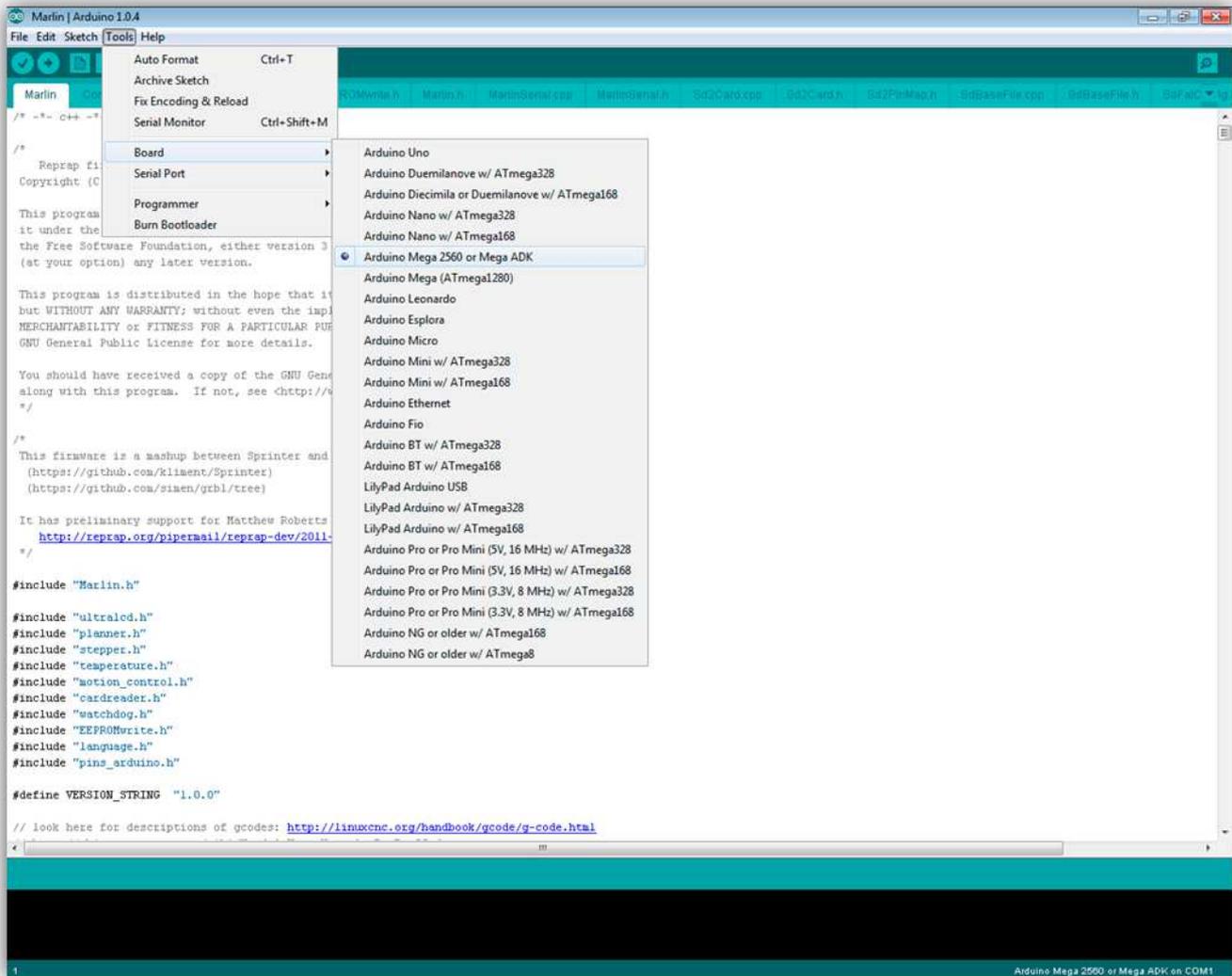
#define VERSION_STRING "1.0.0"

// look here for descriptions of gcodes: http://linuxcnc.org/handbook/gcode/g-code.html

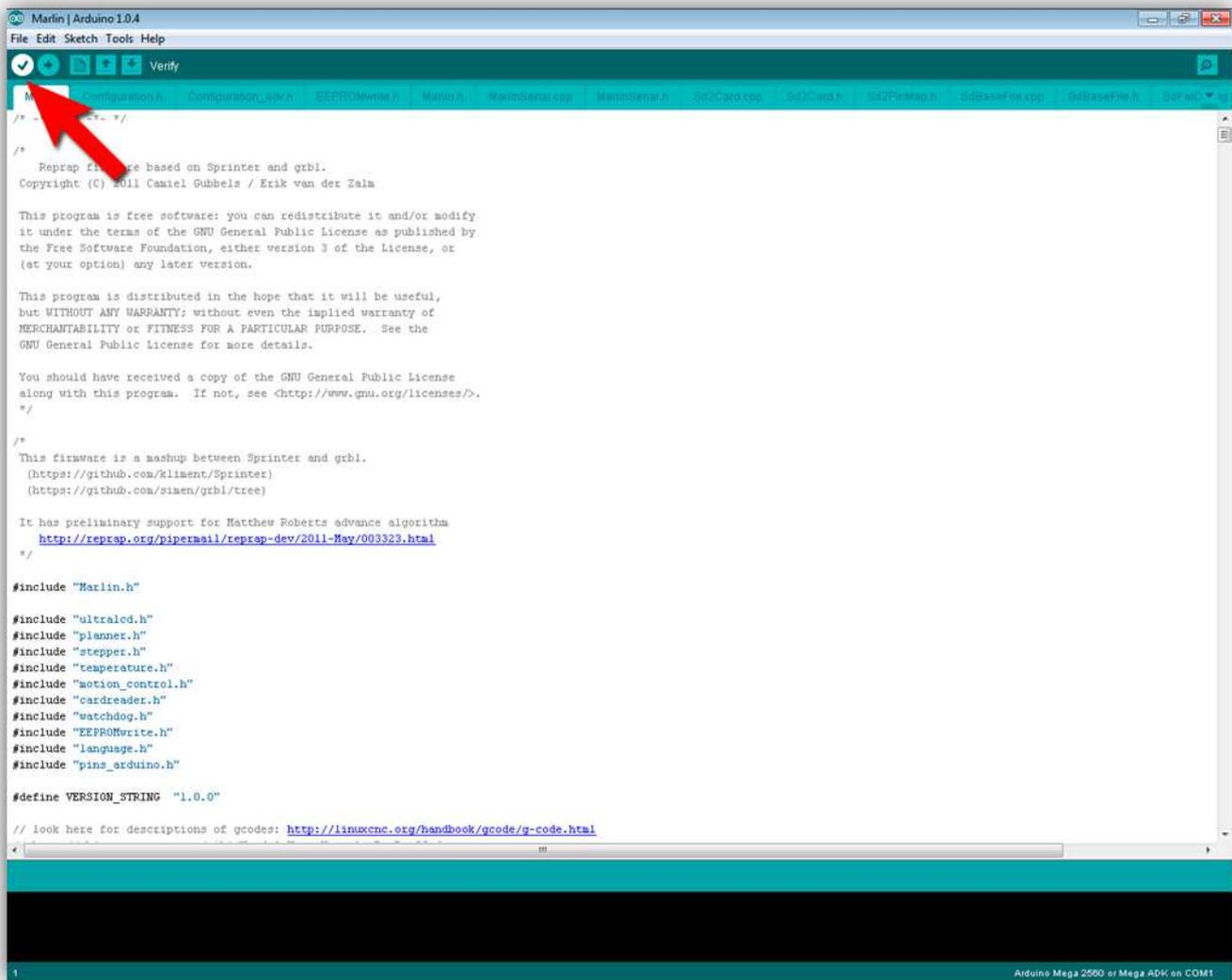
Arduino Uno on COM1
```

Beachten Sie, dass Sie die richtige Platine ausgewählt haben, bevor Sie etwas ändern. Diese Einstellung finden Sie unter:

Tools -> Board -> Arduino Mega 2560 oder Mega ADK



Drücken Sie auf "Verify", um zu überprüfen, ob der Quellcode korrekt kompiliert.



```
Marlin | Arduino 1.0.4
File Edit Sketch Tools Help
Verify
Configuration.h Configuration.gch EEPROMwrite.h Marlin.h MarlinSerial.cpp MarlinSerial.h Sd2Card.cpp Sd2Card.h Sd2PinMap.h SdBaseFile.cpp SdBaseFile.h SdFat.cpp
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 *
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 *
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1
Arduino Mega 2560 or Mega ADK on COM1
```

Ist alles gut gelaufen, so erscheint "Done compiling" (unten).

```
Marlin | Arduino 1.0.4
File Edit Sketch Tools Help

Marlin Configuration.h Configuration.gch EEPROMwrite.h Marlin.h MarlinSerial.cpp MarlinSerial.h Sd2Card.cpp Sd2Card.h Sd2PinMap.h SdBaseFile.cpp SdBaseFile.h SdFat.cpp

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 * it under the terms of the GNU General Public License as published by
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 *
 * This program is distributed in the hope that it will be useful,
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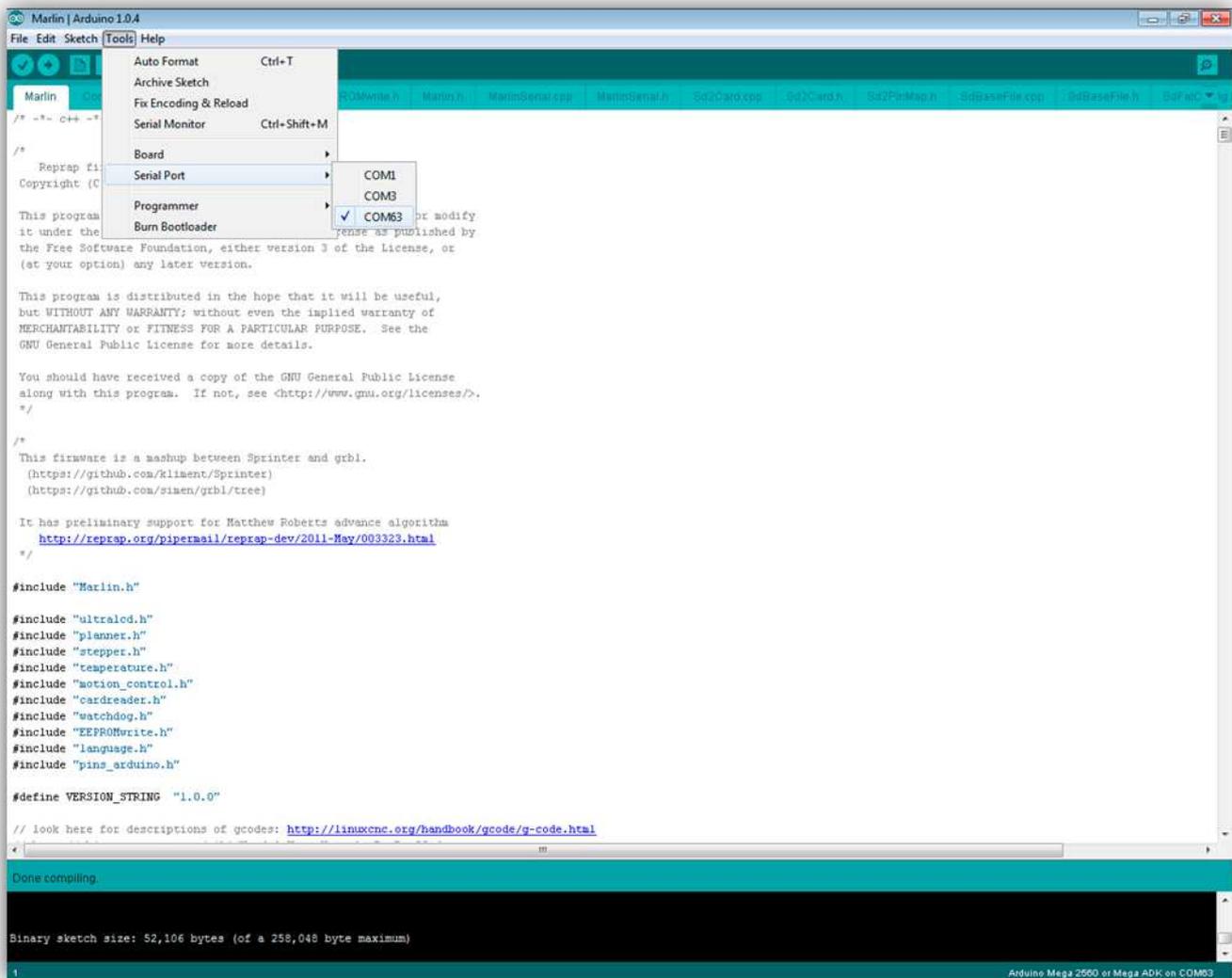
Done compiling.

Binary sketch size: 52,106 bytes (of a 258,048 byte maximum)

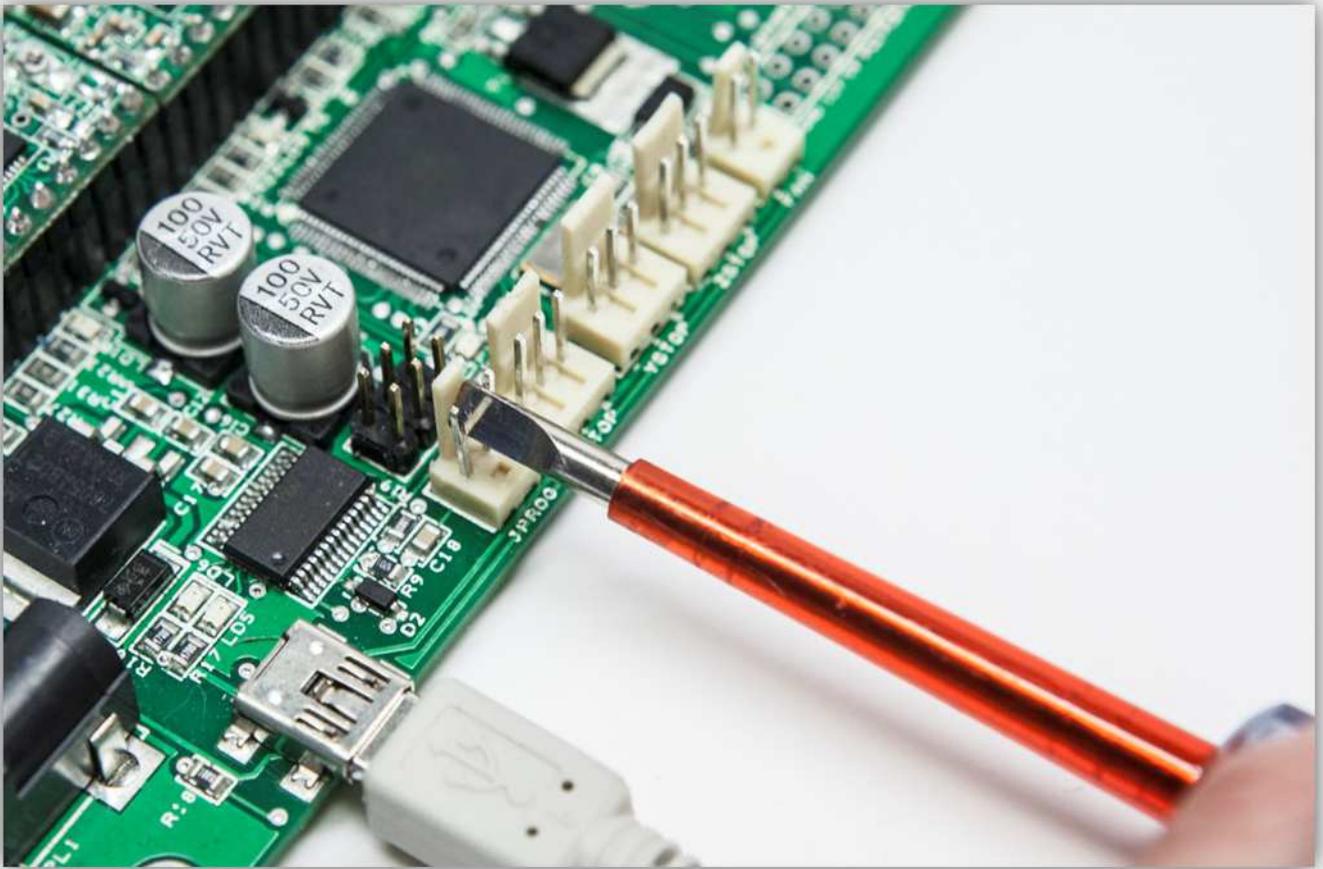
Arduino Mega 2560 or Mega ADK on COM1
```

Wählen Sie nun den korrekten COM-Port mit dem der Platine verbunden ist. Diese Einstellung finden Sie unter:

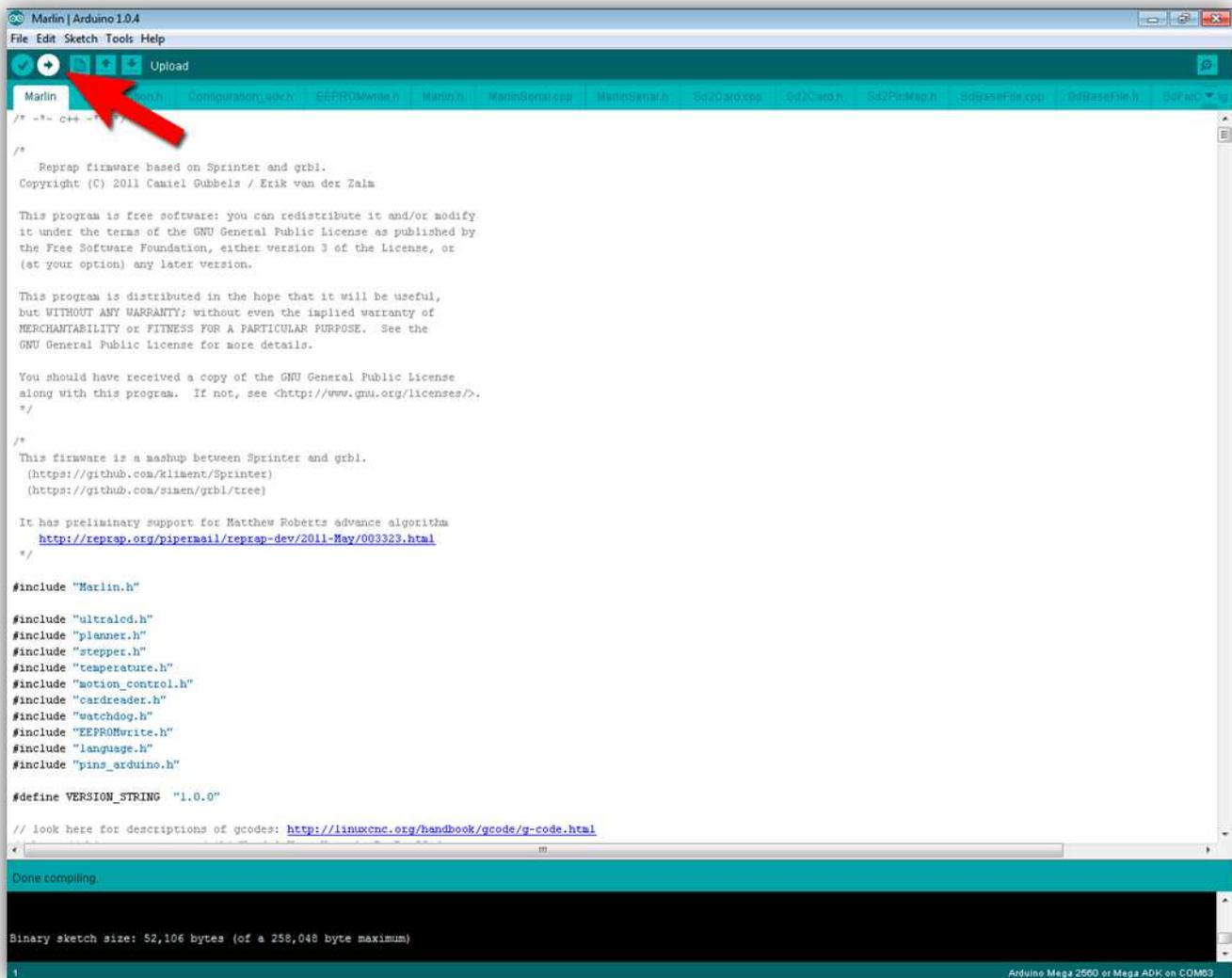
Tools -> Serial Port



Bevor Sie die Platine programmieren zu können, müssen Sie die Pins der JPROG-Anschluss kurzschließen. Tun Sie das, indem Sie einen Schraubendreher zwischen den Pins stecken. **Tun Sie das kontinuierlich während die Arduino-Software die Platine programmiert.**



Klicken Sie auf "Upload", um die Platine über USB zu programmieren.



Normalerweise blinken die LEDs. Die Arduino-Software zeigt "Done uploading" an, wenn fertig.

```
Marlin | Arduino 1.0.4
File Edit Sketch Tools Help

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Done uploading.
Binary sketch size: 52,106 bytes (of a 258,048 byte maximum)
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Arduino Mega 2560 or Mega ADK on COM6
```