

Due

The Arduino Due is the first Arduino board based on a 32-bit ARM core microcontroller. With 54 digital input/output pins, 12 analog inputs, 2 DAC and 2 CAN it is the perfect board for powerful larger scale Arduino projects.

SETUP GUIDE

GET STARTED

[PINOUT](#) 

Main Features

The Arduino Due is a microcontroller board based on the Atmel SAM3X8E ARM Cortex-M3 CPU. It is the first Arduino board based on a 32-bit ARM core microcontroller. It has 54 digital input/output pins (of which 12 can be used as PWM outputs), 12 analog inputs, 4 UARTs (hardware serial ports), a 84 MHz clock, an USB OTG capable connection, 2 DAC (digital to analog), 2 TWI, a power jack, an SPI header, a JTAG header, a reset button and an erase button.



ARM® Cortex®-M3 processor, this 32-bit microcontroller has 84 MHz clock and 96kb of SRAM.

of which support PWM (Pulse Width Modulation).

(Controller Area Network) buses.

and 2 DAC pins.



Keyboard / Mouse support

Use the Due as USB host for peripherals such as mice connected to the SerialUSB port.



Battery Connector

The Arduino Due features a barrel plug connector, that works great with a standard 9V battery.

DOCUMENTATION

LIBRARY

Tech Specs



Compatibility



First Steps

Quickstart Guide

All you need to know to get started with your new Arduino board.

Suggested Libraries

USBHost

The USBHost library allows an Arduino Due board to appear as a USB host, enabling it to communicate with peripherals like USB mice and keyboards.

Servo

The Servo library allows an Arduino board to control RC (hobby) servo motors.

Wire

This library allows you to communicate with I2C / TWI devices.

Arduino Basics

Built-in Examples

Built-in Examples are sketches included in the Arduino IDE and demonstrate all basic Arduino commands.

Learn

Discover interesting articles, principles and techniques related to the Arduino ecosystem.

Language References

Arduino programming language can be divided in three main parts: functions, values (variables and constants), and structure.

Tutorials

Extended SPI Library Usage with the Arduino Due

The SAM3X has advanced SPI capabilities. It is possible to use these extended methods, or the AVR-based ones.

SPI

Due Motor Shield Example

This example shows how to drive a DC motor in forward and backward directions, using the Arduino Due and Motor Shield.

Due

DC Motor

Arduino Due Keyboard Controller

This example demonstrates the use of the KeyboardController library.

USB

Mouse Controller

Use the Arduino Due as a USB host for a mouse.

USB Host

Computer Mice

Due Multiple Blinks Example

The Scheduler library allows the Arduino Due to manage multiple tasks at the same time.

Due

Scheduler

Simple Waveform Generator with Arduino Due

Generate waveforms by using the Arduino Due and its DAC features

Waveforms

Frequency

Keyboard Controller

Use the Arduino Due as a USB host for a keyboard.

USB Host

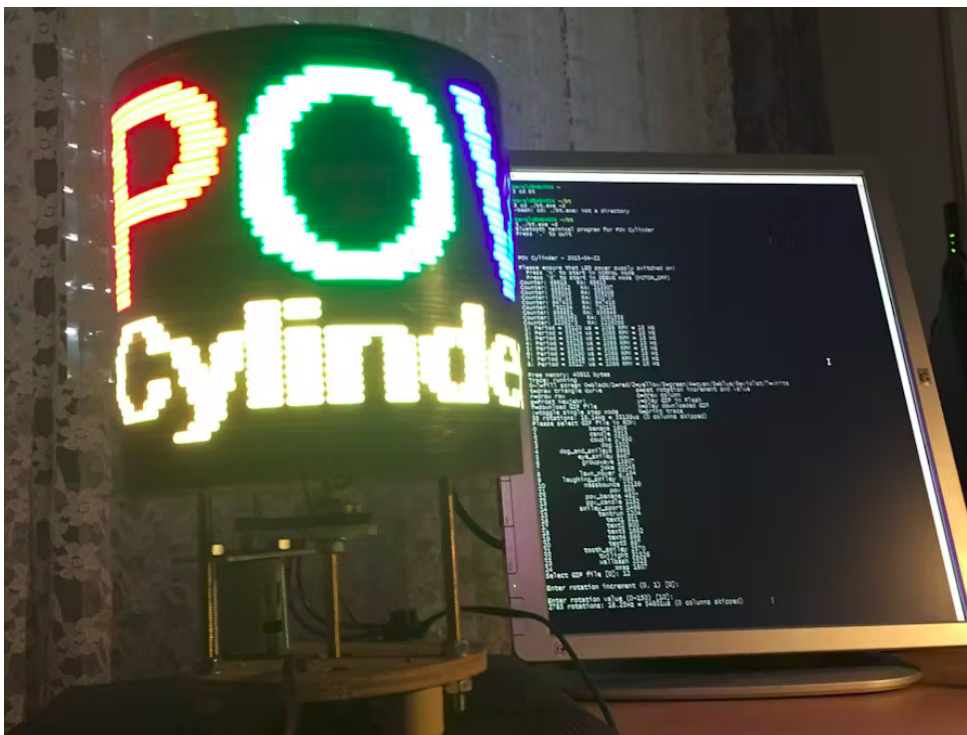
Keyboard

In this tutorial you will update the ATmega16U2 firmware using an Arduino UNO or Mega as an AVR-ISP (in-system programmer).

Get Inspired

Ideas for your next project

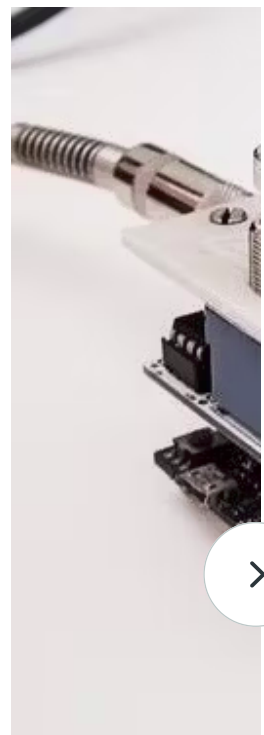
[↗ PROJECT HUB](#)



POV Cylinder with Arduino Due © MIT

Project tutorial by **Harald Bauer**

26894 VIEWS 30 COMMENTS 80 RESPECTS



Arduino DUE P



Project tutorial by

15439 VIEWS 2 COI



VGA library - now with TV output

 Started by: **stimmer**  Last post: **May 6, 2021 2:35:25 PM**

Timer Interrupts on Due

 Started by: **bg94**  Last post: **Sep 2, 2021 2:18:03 AM**

Building a CAN API for Arduino DUE

 Started by: **Palliser**  Last post: **May 6, 2021 2:34:33 PM**



bug on CS line using SPI library

 Started by: **schwingkopf**  Last post: **May 6, 2021 2:35:19 PM**

Arduino Due libraries (official and 3rd party)

 Started by: **cmaglie**  Last post: **Mar 8, 2023 10:35:26 PM**

Due pinout diagram

 Started by: **graynomad**  Last post: **Aug 31, 2021 10:54:37 AM**


Resources

Interactive Viewer


Interact with the schematics, the PCB and a 3D model of the product.


 [Open Viewer](#)


arrangement of the pins on your product.


 [Open Diagram](#)

Downloads

[Fritzing Files](#)

[Full Pinout](#)

[Schematics](#)

[CAD Files](#)