Overview

The **Arduino Due** is the newcomer microcontroller board in the Arduino boards family. It's the first board based on a 32 bit ARM core processor, the Atmel **SAM3X8E ARM Cortex-M3** MCU, that improve all the standard Arduino functionalities and add more new features.

It offer 54 digital input/output pins (of which 16 can be used as PWM outputs, with selectable resolution), 12 analog inputs with 12 bit of resolution, 4 UARTs (hardware serial ports), and two DAC outputs (digital to analog converter), 84 MHz crystal oscillator, two USB connections, a power jack, an ICSP header, a JTAG header, and a reset button. The maximum voltage that the I/O pins can provide or tolerate is 3.3V. Providing higher voltages, like 5V to an input pin could damage the board.

The Due has two usb connectors, the one with the micro-usb B connector is the native one capable to act as an usb host, that means you can connect compatible external usb peripherals to the board, such as mouse, keyboards, smartphones. While the other ubs port with the type A connector is intended for debugging purposes.

Summary

Microcontroller	AT91SAM3X8E
Operating Voltage	3.3V
Input Voltage (recommended)	7-12V
Input Voltage (limits)	6-20V
Digital I/O Pins	54 (of which 16 provide PWM output)
Analog Input Pins	12
Analog Outputs Pins	2 (DAC)
Total DC Output Current on all I/O lines	130 mA
DC Current for 3.3V Pin	800 mA
DC Current for 5V Pin	theoretical 1A, realistic 800 mA
Flash Memory	512 KB all available for the user applications
SRAM	96 KB (64 + 32 KB)
DataFlash	2 Mbit (250 KB)
Clock Speed	84 MHz

If you want to give a closer look to this board we advise you to visit the official Arduino Due page in the Hardware Section.