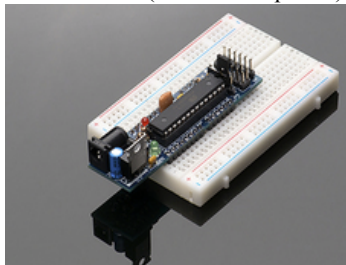_adafruit learning system_ _learn.adafruit_

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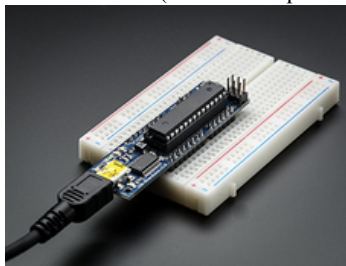- [DC & USB Boarduino Kits](#)/
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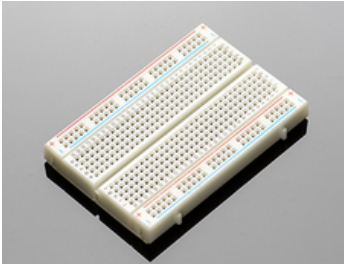
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# DC & USB Boarduino Kits

Solderless Breadboard Arduino Clone

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Feedback? Corrections?

DC Parts List Created by Ladyada

Check to make sure your kit comes with the following parts.Sometimes we make mistakes so double check everything and email support@adafruit.com if you need replacements!

Image	Name	Description	More Info	Qty
	IC1	Microcontroller (preprogrammed with Arduino bootloader when purchased in a kit).	ATmega328P-20PU (unprogrammed) Adafruit (Programmed)	1
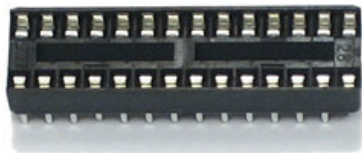
IC1'	28-pin socket	[28 pin socket](#)	1
X1	16.00 MHz ceramic oscillator	[16 mhz ceramic resonator](#)	1
	2.1mm Power Jack	[CUI PJ-202AH](#)	1
D1	1N4001 diode	[Generic 1N4001](#)	1
IC2	5V regulator 7805 TO-220 package	[7805](#)	1

C1 C2 C5 C6 (opt)	Bypass capacitor 0.1uF ceramic	Ceramic Capacitor	3 or 4
C3	Electrolytic capacitor 47uF / 25V (or higher)	Electrolytic Capacitor	1
C4	100uF/6.3V capacitor (or higher) (the image shows a 10V but 6.3V is fine)	Electrolytic Capacitor	1
R1	10K ohm 1/4W 5% resistor (brown black orange gold)	Generic Resistor	1
R2 R3	1.0K 1/4W 5% resistor (brown black red gold)	Generic Resistor	2
D3	3mm red LED	3mm red diffused	1

	D2	3mm green LED	3mm green diffused	1

	SW1	6mm tact switch button	6mm tact switch	1

	ICSP	6 pin header, 0.1"x0.1" spacing	2x3 pin header	1

		40 pin male header, 0.1" spacing	0.1" male header strip	1

		Jumper		1
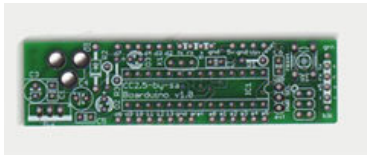
	PCB	Circuit board	Adafruit Industries	1

< Preparation DC Boarduino Assembly >
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Adafruit was founded in 2005 by MIT engineer, Limor "Ladyada" Fried. Her goal was to create the best place online for learning electronics and making the best designed products for makers of all ages and skill levels.
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The Adafruit Learning System

In 2012, after years of coding tutorials by hand, Limor put together a small team to build a custom tutorial management system from the ground up. The Adafruit Learning System allows us to make a wide range of awesome tutorials fast and efficiently. We hope these tutorials will help you learn something new, and inspire you to make something great!

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