

Diecimila/Duemilanove has (electrically) with more analog input pins and onboard +5V AREF jumper.

- Nano's got the breadboardability (Arduino Compatible) and the Mini+USB with smaller footprint than either, so users have more breadboard space. It's got a pin layout that works well with the Mini or the Basic Stamp (TX, RX, ATN, GND on one top, power and ground on the other).
- The Nano can be powered via the Mini-B USB connection, 6-20V unregulated external power supply (pin 30), or 5V regulated external power supply (pin 27). The power source is automatically selected to the highest voltage source.

Report incorrect product information.

2,323

Ad feedback

Noctua NH-D15, Premium CPU Cooler with 2x NF-A15 PWM 140mm Fans (Brown) 2,743

Ad feedback

## Sponsored products related to this item



Kuman 37-in-1 Sensor Kit Compatible with Arduino Raspberry Pi Mega 2560 Kits Compat...

CDN\$ 35.98



Kuman 2 pcs NodeMCU LUA WiFi Internet ESP8266 Development Board Wi-Fi wireless micr...

27

CDN\$ 26.49



ELEGOO Robotic Project(Arduino-Compatible),Penguin Bot Biped Robot Kit with...

CDN\$ 49.99



Kuman K19 10pcs nRF24L01+ 2.4GHz Antenna Wireless Transceiver RF...

55

CDN\$ 16.99



Kuman Development Board ATMEGA16U2 ATmega328P with USB Cable for Arduino Mega...

85

CDN\$ 11.89

Ad feedback

Page 1 of 29

## Special offers and product promotions

• Save 4% each on ANY PRODUCT offered by Elegoo when you purchase 5 or more. Here's how (restrictions apply)

# Have a question?

Find answers in product info, Q&As, reviews

Type your question or keyword

## **System Requirements**

Media: Electronics

#### **Product information**

#### **Technical Details**

Brand Name	ELEGOO
Model	CA-EL-CB-005
Part Number	CA-EL-CB-005
Are Batteries Included	No
Batteries Required	No

#### Additional Information

Item Weight	4.54 g
Shipping Weight	18.1 g
Item model number	CA-EL-CB-005
ASIN	B071NMD14Y
Date First Available	May 3 2017
Customer Reviews	122 customer ratings
Amazon Bestsellers Rank	#654 in Electronics (See Top 100 in Electronics) #11 in Desktop Barebones

## Feedback

Would you like to tell us about a lower price?

## **Product Description**

The Elegoo Nano Board is a small, complete, and breadboard-friendly board based on the ATmega328P and it works with a mini USB cable.

The Elegoo Nano can be powered via USB connection, 6-12V unregulated external power supply (pin 30), or 5V regulated external power supply (pin 27).

The Elegoo Nano has a variety of facilities for communicating with a PC or other microcontrollers.

The Elegoo Nano is allowed to be reset by software running on a connected computer.

Download the driver of Elegoo Nano V3.0 on Elegoo's site or: http://bit.ly/2pMF4in and install the driver before using the Nano board.

## **Input and Output**

Each of the **14 digital pins** on the Nano can be used as an input or output, using pinMode(), digitalWrite(), and digitalRead() functions. Some pins have specialized functions:

Serial: 0 (RX) and 1 (TX). Used to receive (RX) and transmit (TX) TTL serial data. These pins are connected to the corresponding pins of the CH340G USB chip.

External Interrupts: 2 and 3. PWM: 3, 5, 6, 9, 10, and 11.

SPI communication: 10 (SS), 11 (MOSI), 12 (MISO), 13 (SCK). LED: 13. HIGH value, the LED is on; and LOW for off.

Each of **8 analog inputs** provide 10 bits of resolution, some pins have specialized functions: I2C: 4 (SDA) and 5 (SCL).

Other pins on the board: AREF and Reset.

#### Classic LED Project with Nano Board

This example project shows the simplest thing you can do with an Elegoo Nano to see physical output: it blinks the on-board LED just like the star in the sky.

Hardware needed for this project:

- 1 x Nano Board
- 1 x Mini USB Cable
- 1 x Breadboard
- 2 x Wires
- 1 x 5MM LED
- 1 x 220 ohm Resistor

The Nano is a small, complete, and breadboard-friendly board based on the ATmega328 (Arduino Nano 3.x). It has more or less the same functionality of the Arduino/Genuino UNO, but in a different package. It lacks only a DC power jack, and works with a Mini-B USB cable instead of a standard one.

You could download the driver of Elegoo Nano V3.0 at: http://bit.ly/2pMF4in

## **Technical specs**

Microcontroller: ATmega328 Architecture: AVR Operating Voltage: 5 V\

Flash Memory: 32 KB of which 2 KB used by bootloader

SRAM: 2 KB

Clock Speed: 16 MHz Analog I/O Pins: 8 EEPROM: 1 KB

#### Professional and in-time after-sale service

We have professional engineering supporting team, pls. reach us at service@elegoo.com if you need any help and we'll do our best to give you a great experience with our products and service.

Your any comment will be highly regarded.

Ad feedback

## **Customer Questions & Answers**

See questions and answers

## **Customer reviews**

## 4.6 out of 5

122 customer ratings

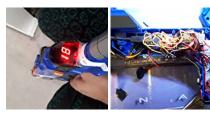
5 star	81%
4 star	10%
3 star	4%
2 star	2%
1 star	3%

How does Amazon calculate star ratings?



Ad feedback

## **Customer images**



See all customer images

Top Reviews



Martin R. Green

#### Seems like a quality board

Reviewed in Canada on August 22, 2018

### **Verified Purchase**

These boards seem well made. Soldering is good and the silkscreening is clearly readable. The header and ISCP pins are supplied but not installed. Packaging is attractive with each Nano in its own colorful "matchbox" within an outer box that also contains the pins for all three boards.

Like a genuine Nano, programming is via a mini-usb socket, but UNLIKE the genuine boards the on-board serial chip is a CH340/341, not FTDI. This means that you may need to install a driver (available from elegoo.com), but if you are using Windows 10, or a recent Linux, such as Ubuntu 18.04 (and probably OSX too, but I don't know for sure) then you probably already have the needed driver. Also, unlike a genuine Nano, these devices use the old Arduino bootloader, so when you select the target board in your IDE make sure you choose "ATmega328P (Old Bootloader)" for the processor type, else you will not be able to load sketches to the board. Note that this kit does NOT include the usb programming cable so if you don't have any USB2 standard to mini cables on hand you will need to order one too.

## Read more

11 people found this helpful

Helpful

Comment Report abuse



Zuhayr Sarker

## Amazing for price, created an ammo counter:D

Reviewed in Canada on March 16, 2019

### **Verified Purchase**

These are awesome. Soooo cheap so you can literally get 3 for the price of one and if you blow up one somehow then you still have another 2. They function the same as does any ordinary Arduino, the only difference being you need to install CH340 drivers as well as use the old bootloader in the IDE. I already did my research beforehand for these things so it didn't bother me at all. It's a LOT

smaller than I thought and I'm honestly shocked you can power so much with so little. The build quality is also decent, I'm surprised I didn't fry the board with the amount of heat I put on it during soldering. I used it to create an ammo counter for my nerf gun and although the wiring looks like mom's spaghetti and my glue gun looks like it barfed all over the gun after eating said spaghetti, IT WORKS.

Safe to say I am REALLY happy with buying this. I look forward to doing other projects with the other three I still have in the future. Highly recommend.

4 people found this helpful

Helpful

Comment Report abuse

Canadian Buzzard

### Three will not be enough once you realize what you can do

Reviewed in Canada on October 2, 2018

#### **Verified Purchase**

Warning: You may quickly become hooked on this technology and start thinking of all the cool projects you can make with these stick-of-gum sized devices. The quality of these are excellent. Everything is labelled as well as can be expected on such a small item. I bought a magnifier with a light to sometimes help see the pins when the room lighting isn't the best. They work fantastic on a breadboard. I noticed the TX pin on one of mine wasn't working when everything else seemed to work fine, but reloading the sketch cleared the problem. I believe it was caused by mishandling it (not removing power before moving wires around). I just finished a proof-of-concept network using all three nanos that I ordered, and now I need to order more. They are addictive! I only have one minor criticism: the onboard LEDs are all red which makes it difficult to know which one is lit since they're right next to each other. It's not a big deal for the price. Of course you have to solder the header pins yourself, but this can be fun challenge to master.

2 people found this helpful

Helpful

Comment Report abuse



Mohammed

#### Does not come presoldered very difficult to do without frying the board

Reviewed in Canada on March 3, 2020

#### **Verified Purchase**

Bought this device for a university robot car project in order to take advantage of the arduino ide. However right out of the packaging I knew I was in for an eye opener. Since I was using a breadboard I needed to solder the pins onto the arduino nano board and that was no easy task since the

Arduino is very sensitive I managed to fry all 3 boards while in the process of soldering. I would absolutely under no circumstances recommend the purchase of a arduino board that has not already been presoldered at the time of purchase. Fortunately a colleague had an extra one laying around that was pre soldered which saved my grade

One person found this helpful

Helpful

Comment Report abuse



## Need to download drivers for comm

Reviewed in Canada on September 11, 2018

#### Verified Purchase

i tried to get this to work, and found out that i needed to download drivers because it has the cheaper chipset in it.

google search for: CH341SER drivers

after installing the drivers, these worked like a charm! i need to swap out my ESP8266 with one of these for more outputs. these have a lot more outputs than my ESP has, so once i rewrite a bunch of my code, ill be able to give it a better review. my ESP has been stable for months, which is important because im using it as an aquarium monitor system that controls heaters on 4 aquariums, as well as displays temps for each. im wanting to add a 5th aquarium onto the monitor system, as well as lighting controls, and this is where i ran out of outputs on the ESP.

so far, so good though. no complaints. nice and cheap, and so far, they work great. i uploaded a demo script, and it wrote to the device quick, and without any issues.

2 people found this helpful

Helpful Comment Report abuse

### These are so versatile in circuit design.

Reviewed in Canada on February 11, 2019

#### **Verified Purchase**

They are small. I like to solder in ribbon cable instead of the pins. At this low price I don't feel bad when I accidentally destroy one in an experimental circuit. The inexpensive cost allows me to use these instead of TTL logic in counters etc.

Don't apply more than 7 volts to vin.

3 people found this helpful

Helpful Comment Report abuse



A little over \$5 each and a bit of soldering to have a working microcomputer. Not a bad deal....I just ordered a 5 pack as well.

Reviewed in Canada on August 19, 2017

#### **Verified Purchase**

You will have to solder the header pins to these boards but that only takes a few minutes. Best method is to press the pins in to a breadboard and then set the board on to the pins. This will ensure the pins are properly aligned for installing on a breadboard.

These boards have all worked perfectly for me with the exception that they did require a CH340 driver for the USB connection. Not a big deal, it just took a few minutes to locate and install the self-extracting zip file from the manufacturer of that chip.

These boards do have the bootloader installed so once the above driver is on your system they boot up just fine.

Of note is that they do not show a serial number on the IDE interface when connected. This may be a function of the CH340 chip for the USB port. However, it's easy enough to find the right USB port, select it and then start uploading sketches.

2 people found this helpful

Helpful Comment Report abuse

See all reviews from Canada

Pages with related products. See and discover other items: mini desktop, Best Rated in Desktop Barebones, Best Rated in Computer Components, mini usb, mini usb cable, mini hurdles

Back to top

Get to Know Us

oct to Know os

Amazon and Our

Planet

Careers

Investor Relations

Press Releases

Make Money with Us

Sell on Amazon

Sell Under Amazon Accelerator

Amazon Associates

Sell on Amazon Handmade

Advertise Your Products

Independently Publish

with Us

**Amazon Payment Products** 

Amazon.ca Rewards Mastercard

Shop with Points

Reload Your Balance

Amazon Currency Converter

Gift Cards

Amazon Cash

Let Us Help You

Shipping Rates &

Policies

Amazon Prime

Returns Are Easy

Manage your Content

and Devices

**Customer Service** 

English

Canada

Amazon Music Stream millions of songs

Goodreads Book reviews & recommendations Amazon Advertising Find, attract, and engage customers

IMDb Movies, TV & Celebrities

Whole Foods Market We Believe in Real Food Amazon Drive Cloud storage from Amazon

> Amazon Photos Unlimited Photo Storage Free With Prime

Amazon Renewed Like-new products you can trust Amazon Web Services Scalable Cloud Computing Services

Shopbop Designer Fashion Brands

Amazon Second Chance Pass it on, trade it in, give it a second life Book Depository Books With Free Delivery Worldwide

Warehouse Deals Open-Box Discounts

Conditions of Use Privacy Notice Interest-Based Ads © 2008-2020, Amazon.com, Inc. or its affiliates