

- [variables](#)
- [structure](#)
- [Libraries](#)
- [IoT Cloud API](#)
- [Glossary](#)

The Arduino Reference text is licensed under a [Creative Commons Attribution-Share Alike 3.0 License](#).

Find anything that can be improved? [Suggest corrections and new documentation via GitHub](#).

Doubts on how to use Github? Learn everything you need to know in [this tutorial](#).



Last Revision: 2020/09/24

Last Build: 2020/04/10

[Edit This Page](#)

[Reference](#) > [Language](#) > [Functions](#) > Communication > Serial > Begin

Serial.begin()

Description

Sets the data rate in bits per second (baud) for serial data transmission. For communicating with Serial Monitor, make sure to use one of the baud rates listed in the menu at the bottom right corner of its screen. You can, however, specify other rates - for example, to communicate over pins 0 and 1 with a component that requires a particular baud rate.

An optional second argument configures the data, parity, and stop bits. The default is 8 data bits, no parity, one stop bit.

Syntax

```
Serial.begin(speed)
Serial.begin(speed, config)
```

speed: in bits per second (baud). Allowed data types: long.

config: sets data, parity, and stop bits. Valid values are:

SERIAL_5N1

SERIAL_6N1

SERIAL_7N1

SERIAL_8N1 (the default)

SERIAL_5N2

SERIAL_6N2

SERIAL_7N2

SERIAL_8N2

SERIAL_5E1: even parity

SERIAL_6E1

SERIAL_7E1

SERIAL_8E1

SERIAL_5E2

SERIAL_6E2

SERIAL_7E2

SERIAL_8E2

SERIAL_5O1: odd parity

SERIAL_6O1

SERIAL_7O1

SERIAL_8O1

SERIAL_5O2

SERIAL_6O2

SERIAL_7O2

SERIAL_8O2

Returns

Nothing

Example Code

```
void setup() {  
    Serial.begin(9600); // opens serial port, sets data rate to 9600 bps  
}
```

```
void loop() {}
```

Arduino Mega example:

```
// Arduino Mega using all four of its Serial ports  
// (Serial, Serial1, Serial2, Serial3),  
// with different baud rates:
```

```
void setup() {  
    Serial.begin(9600);  
    Serial1.begin(38400);  
    Serial2.begin(19200);  
    Serial3.begin(4800);  
  
    Serial.println("Hello Computer");  
    Serial1.println("Hello Serial 1");  
    Serial2.println("Hello Serial 2");  
    Serial3.println("Hello Serial 3");  
}  
void loop() {}
```

Thanks to Jeff Gray for the mega example

Notes and Warnings

[Terms Of Service](#)

© 2023 Arduino

[Privacy Policy](#)

[Contact Us](#)

[Trademark](#)

[Distributors](#)

[Careers](#)

[Security](#)