micros()

[Time]

Description

Returns the number of microseconds since the Arduino board began running the current program. This number will overflow (go back to zero), after approximately 70 minutes. On 16 MHz Arduino boards (e.g. Duemilanove and Nano), this function has a resolution of four microseconds (i.e. the value returned is always a multiple of four). On 8 MHz Arduino boards (e.g. the LilyPad), this function has a resolution of eight microseconds.

Syntax

time = micros()

Parameters

None

Returns

Returns the number of microseconds since the Arduino board began running the current program. Data type: unsigned long.

Example Code

The code returns the number of microseconds since the Arduino board began.

unsigned long time;

void setup() {

Serial.begin(9600);

}

void loop() {

Serial.print("Time: ");

time = micros();

Serial.println(time); //prints time since program started

delay(1000); // wait a second so as not to send massive amounts of data

}

Notes and Warnings

There are 1,000 microseconds in a millisecond and 1,000,000 microseconds in a second.