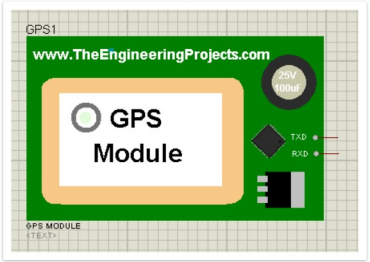
GPS Library for Proteus

A complete step by step tutorial on How to download GPS Library for Proteus.



Hello friends, hope you all are fine and having fun with your lives. In today's tutorial, I am gonna share another awesome library designed by our team for Proteus, which is GPS Library for Proteus. It's my second library for Proteus, the first one was Arduino Library for Proteus which I have already shared. I am really enjoying designing these modules in Proteus because its a new and quite challenging thing. I haven't found even a single website who has designed these modules in Proteus already. So, now for the first time, you can have the GPS Library for Proteus using which you can easily simulate your GPS module in Proteus and can design your code for Arduino, PIC Microcontroller or 8051 Microcontroller.

Other bloggers are welcome to share this library and its my humble request that do mention our blog in credits. 🙂 The GPS module, I have designed for Proteus is a simple GPS which has TX and RX pins and when you start the simulation, this module starts sending the NMEA data on its TX pin, which you can easily check using Virtual Terminal. I am gonna show you how to check it in today's post. Another important thing, obviously in Proteus Simulation we can't get the actual values of longitude,latitude etc, so in our model, I have used the dummy values for all these data. The benefit of this module is that you can easily design your code for GPS and can test it in your simulation. Plus, its design is cool as well. 😉

Note:

Other Proteus Libraries are as follows:

- Arduino Library for Proteus.
- Genuino Library for Proteus.
- GPS Library for Proteus.
- GSM Library for Proteus.
- XBee Library for Proteus.
- Ultrasonic Sensor Library for Proteus.
- PIR Library for Proteus.
- Bluetooth Library for Proteus.
- DS1307 Library for Proteus.

You should also check Interfacing of GPS Module with Arduino in Proteus ISIS, in which I have shared How to use this GPS Module with Arduino board.

GPS LIBRARY FOR PROTEUS

First of all, click on the below button and download GPS Library for Proteus.

Download Library for Proteus

After downloading, you will get a zip file containing three files in it.

Now extract all these three files named as:

GpsTEP.LIB

GpsTEP.IDX

GpsTEP.HEX

Place these files in Libraries folder of your Proteus software.

Note:

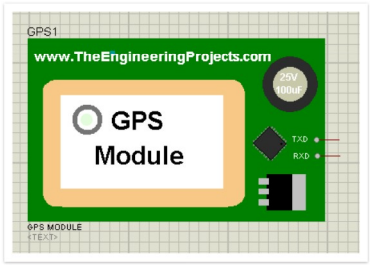
If you are using Proteus 7 Professional, then the library folder link will be something like this: **C:Program Files (x86)Labcenter ElectronicsProteus 7 ProfessionalLIBRARY**

If you are using Proteus 8 Professional, then the library folder link will be something like this: **C:ProgramDataLabcenter ElectronicsProteus 8 ProfessionalDataLIBRARY**

Now open your Proteus software, if you have already opened it then restart your Proteus software.

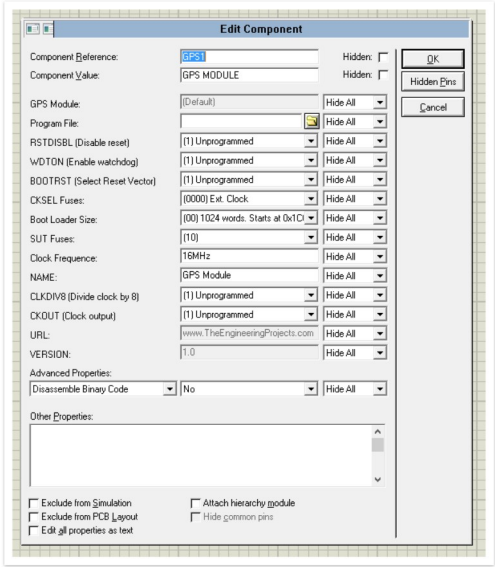
Now in components list search for GPS Module and place it in your workspace.

If everything's fine then you will get your module as shown in below figure:



As you can see in the above figure, it has two pins in total which are TX and RX.

Now double click this GPS module and you will get to its properties as shown in below figure:



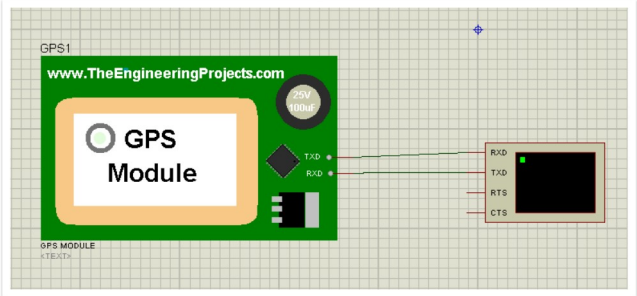
Now, one last thing you need to do is to upload the **GpsTEP.HEX** file, which you got in the downloaded zip file, in the **Program File** section.

This GpsTEP.HEX file is essential for this model as its adding the functionality of GPS in this model.

So, after adding the link of GpsTEP.HEX file in the Program File section, now your Gps module is ready to use in your circuit.

So, now let's add a Virtual terminal and check the output of this GPS Module. If you haven't worked on Virtual Terminal before then you should read How to use Virtual Terminal in Proteus ISIS.

Design a small circuit as shown in below figure:



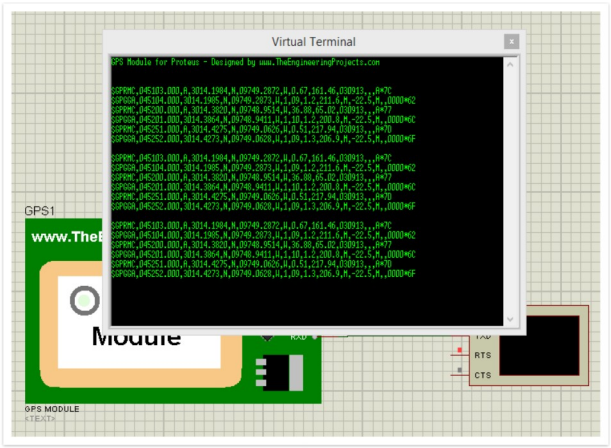
Note:

The baud rate of this GPS Module is 9600.

The data sent by this GPS module is dummy as we can't get these values in simulation.

Now let's run the simulation and check the Virtual Terminal and if everything goes fine then you will get results as shown

in below figure:



The first line is just the intro for this module and after that you will start receiving data which is in NMEA format.

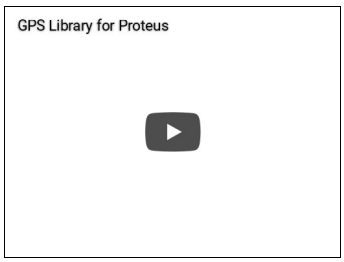
NMEA data will remain constant but will keep on coming.

Now, instead of using this Virtual Terminal, you can use any microcontroller here like Arduino, PIC Microcontroller or 8051 Microcontroller etc. and can write your code easily and test it.

Leave a message

In my coming tutorials, I am gonna share examples for this GPS module in which I will interface it with different microcontroller.

In the below video, I have explained this tutorial again so if you got any trouble then watch it as well.



That's all for today. You should also have a look at Interfacing of GPS Module with Arduino in Proteus ISIS. I hope you guys have enjoyed today's post and are gonna get benefit from it. Let me know your views about today's tutorial and also give your suggestions and help us in making this GPS Library for Proteus more smarter.

Category: Proteus By Syed Zain Nasir December 22, 2015 6 Comments

Author: Syed Zain Nasir

I am Syed Zain Nasir, the founder of The Engineering Projects (TEP). I am a programmer since 2009 before that I just search things, make small projects and now I am sharing my knowledge through this platform.I also work as a freelancer and did many projects related to programming and electrical circuitry. My Google Profile+

PREVIOUS
XBEE LIBRARY FOR PROTEUS

NEXT
ARDUINO LIBRARY FOR PROTEUS

6 Comments

Tesla
December 27, 2015 at 12:56 am

How Make library to Proteus ?

Reply

Andrew
December 27, 2015 at 1:06 am

You could make a tutorial how to make libraries for Proteus. You just teach how to install the libs, but not create, you could please make a tutorial how to create a library

Reply

Christophe
January 15, 2016 at 7:55 am

Hello,
Thank you for your work. It helps me a lot.
Is it possible to change the baud rate of the GPS (to 4800) ? Is it possible to change datas from the GPS (to have more variety) ?
Thanks again

Leave a message

Reply

Syed Zain Nasir
January 15, 2016 at 5:49 pm

Hi,

Yeah it can be done but we have to specially design it. Add me on Skype and let me know your details and I will help you out. My Skype id is "theenggprojects".

Thanks.

Reply

toheeb
March 29, 2016 at 5:42 am

thanks, it intresting. pls i simulate d gps using arduino both i dbt get result.
can u pls giv m a link to hw i can do this, i hav downloaded ur gps library and tinygps

Reply

حمزة
December 2, 2016 at 8:08 am

believe me you are doing great jobs
thanks so much.

Reply

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